

## ACCREDITATION:

St. Philip's College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097: Telephone number 404-679-4501: Website www.sacscoc.org) to award degrees in Associate of Arts, Associate of Science, Associate of Applied Science, and Certificates of Completion.

St. Philip's College is also approved and accredited by the Texas Higher Education Coordinating Board, National Accrediting Groups for Allied Health and Nursing Programs, and the Federal Aviation Administration.

## MEMBER:

American Association of Community and Junior Colleges
Texas Junior College Association
Texas Public Community and Junior College Association
Texas Community College Teachers Association
The Association of Texas Colleges and Universities

This catalog contains policies, regulations, procedures, and general course content effective with the beginning of the Fall 2004 semester. The college reserves the right to make changes at any time to reflect current Board policies, administrative regulations and procedures, and applicable State and Federal regulations.

St. Philip's College is a member of the Alamo Community College District and is an equal opportunity college. The Alamo Community College District does not discriminate on the basis of race, color, national origin, sex, religion, age, or disability in employment or the provision of services. Persons with disabilities who plan to attend St. Philip's College who may need reasonable accommodations as per the Vocational Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 should contact the Educational Support Services (210) 531-3502 at least four (4) working days prior to the program or activity so appropriate arrangements can be made. Alternate formats of this document are available upon request.

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## ST. PHILIP'S COLLEGE

1801 Martin Luther King
San Antonio, Texas 78203-2098,
Telephone: (210) 531-3200.

## Disclaimer

This catalog has been carefully prepared to assure that all information is accurate and as complete as possible.
However, the college reserves the right to make changes which may result in deviation from the information which is given here (e.g., changes in degree or certificate programs and graduation requirements).

## WELCOME TO <br> ST. PHILIP'S COLLEGE

TABLE OF CONTENTS
SECTION 1. ACADEMIC CAIPNAR. ..... 3
SECTION 2. G-NERAL INEORVAIICN. ..... 10
SECTION 3. ADMISSION AND REGISTRATION. ..... 17
SECTION 4. TUITION AND FEES. ..... 44
SECTION 5. STUDENT SERVICES AND ACTIVITIES. ..... 56
SECTION 6. FEGIATIONS. ..... 85
SECTION 7. GRADATION. ..... 94
SECTION 8. ACADEMIC PROGRAMS. ..... 106
SECTION 9. COURSE DESCRIPIIONS. ..... 256
SECTION 10. ADMINISTRATION, FACULTY, AND STAFF ..... 454
SECTION 11. $\mathbb{I N E X}$ ..... 486

## A Message from the President



Welcome to an exciting school year!
Thank you for selecting St. Philip's College as your choice to pursue your dreams and achieve your goals. It is my heartfelt desire to do what I can to help you walk in your passion. St. Philip's values and welcoming environment create a spirit of belief and hope that together, we can all be successful. As an institution nationally recognized for effectively engaging students, St. Philip's truly is "A Point of Pride in the Community." (CCSSE 2005 and 2007)

As you begin your studies at St. Philip's College, I encourage you to do your best and to take advantage of the many opportunities available to you to be successful. As you complete your studies, I invite you to continue your engagement with this wonderful institution and become a "friend of St. Philip's College" through our alumni association.

Your experience at St. Philip's will not only help you be successful in life, it will also afford you the opportunity to build lifelong friendships and memories and most importantly, it will help you realize your dreams and walk in your passion. My wish for you this year is that you take to heart the words of our first president, Artemisia Bowden, It takes faith, hope and persistence to make a dream a reality.

Have a wonderfully engaging school year.
Sincerely,


Adena Williams Loston, Ph.D.
President

*FALL 2006 SEMESTER (16 Weeks)
Consult class schedule for registration.

| Aug. 21 | Monday | Faculty Convocation. |
| :---: | :---: | :---: |
| Aug. 28 | Monday | Classes begin. |
| Sept. 2-4 | Sat.-Mon. | LABOR DAY HOLIDAY. WEEKEND COLLEGE CLOSED. |
| Sept. 9 | Saturday | Weekend classes begin. |
| Sept. 13 | Wednesday | Census date. |
| Sept. 13 | Wednesday | Last day to apply for December graduation. |
| Oct. 9 | Monday | Employee Development Day. <br> COLLEGE CLOSED 6:00 a.m. - 5:00 p.m. <br> Evening classes will meet. |
| Nov. 17 | Friday | Last day to withdraw. |
| Nov. $23-26$ | Thur.-Sun. | THANKSGIVING HOLIDAY. WEEKEND COLLEGE CLOSED. |
| Dec. 10 | Sunday | Last day of classes. |
| Dec. 11-17 | Mon.-Sun. | FINAL EXAMINATIONS. |
| Dec. 14 | Thursday | FALL COMMENCEMENT. |
| Dec. 17 | Sunday | End of Fall 2006 Semester. |

December 2006/January 2007
Dec. 21-Jan. 3 Thurs.-Wed. CHRISTMAS/NEW YEAR HOLIDAY COLLEGE CLOSED.
April 2007
Apr. 16 Monday Last day to complete Fall 2006 incomplete (I) grades.
*FALL FLEX I 2006 (First Eight Weeks)

| Aug. 28 | Monday | Classes begin. |
| :--- | :--- | :--- |
| Sept. 2 | Saturday | Weekend classes begin. |
| Sept. 2-4 | Sat.-Mon. | LABOR DAY HOLIDAY. COLLEGE CLOSED. |
| Sept. 5 | Tuesday | Census date. |
| Sept. 13 | Friday | Last day to apply for December graduation. |
| Oct. 6 | Friday | Last day to withdraw for Flex I. |
| Oct. 9 | Monday | Employee Development Day. <br> COLLEGE CLOSED 6:00 a.m - 5:00 p.m. <br>  <br> Oct. 17 |
| Tuesday | Evening classes will meet. <br> Oct. 18-19 day of classes. <br> Oct. 19 | Wed.-Thur. |
|  | Thursday | FINAL EXAMINATIONS. |
| End of Fall Flex I 2006. |  |  |

February 2007
Feb. 16 Friday Last day to complete Flex I 2006 incomplete (I) grades.

[^0]*FALL FLEX II 2006 (Second Eight Weeks)

| Oct. 23 | Monday | Classes begin. |
| :--- | :--- | :--- |
| Oct. 30 | Monday | Census date. |
| Nov. 23-26 | Thur.-Sun. | THANKSGIVING HOLIDAY. <br> WEEKEND COLLEGE CLOSED. <br>  <br> Nov. 27 |
| Monday | Last day to withdraw for Flex II. |  |
| Dec. 10 | Sunday | Last day of classes. |
| Dec. 11-17 | Mon.-Sun. | FINAL EXAMINATIONS. |
| Dec. 17 | Sunday | End of Fall Flex II 2006. |

December 2006/January 2007
Dec. 21-Jan. 3 Thurs.-Wed. CHRISTMAS/NEWYEAR HOLIDAY COLLEGE CLOSED.
April 2007
Apr. 16 Monday Last day to complete Flex II 2006 incomplete (I) grades.
*SPRING 2007 SEMESTER (16 Weeks)
Consult class schedule for registration.

| Jan. 4 | Thursday | College Opens. |
| :--- | :--- | :--- |
| Jan. 8 | Monday | Faculty Convocation. |
| Jan. 15 | Monday | MARTIN LUTHER KING DAY HOLIDAY. <br> COLLEGE CLOSED. |
| Jan. 16 | Tuesday | Classes begin. <br> Jan. 20 |
| Saturday | Weekend classes begin. |  |
| Jan. 31 | Wednesday | Last day to apply for May graduation. |
| Jan. 31 | Wednesday | Census date. |
| Mar. 12-18 | Mon.-Sun. | SPRING BREAK. COLLEGE CLOSED. |
|  |  | Alladministrative offices will be closed Thursday - Sunday. |
| Apr. 6-8 | Fri.-Sun. | EASTER HOLIDAY. COLLEGE CLOSED. |
| Apr. 16 | Monday | Last day to withdraw. |
| Apr. 27 | Friday | FIESTA HOLIDAY. COLLEGE CLOSED. |
| May 6 | Sunday | Weekend classes will meet. |
| May 7-13 | Mon.-Sun. | Fast day of classes. |
| May 11 | Friday | SPRING COMMENCEMENT. |
| May 13 | Sunday | End of Spring 2007 Semester. |
| May $26-28$ | Sat. - Mon. | MEMORIAL DAY HOLIDAY. COLLEGE CLOSED. |

September 2007
Sept. 10 Monday Last day to complete Spring 2007 incomplete (I) grades.
*SPRING FLEX I 2007 (First Eight Weeks)

| Jan. 15 | Monday | MARTIN LUTHER KING DAY HOLIDAY. <br> COLLEGE CLOSED. |
| :--- | :--- | :--- |
| Jan. 16 | Tuesday | Classes begin. |
| Jan. 23 | Tuesday | Census date. |
| Jan. 23 | Tuesday | Last day to apply for May graduation. |
| Feb. 16 | Friday | Last day to withdraw. |
| Mar. 6 | Tuesday | Last day of classes. |
| Mar. 7-8 | Wed.-Thur. | FINAL EXAMINATIONS. |
| Mar. 8 | Thursday | End of Spring Flex I 2007. |
| July 6 | Friday | Last day to complete Flex I 2007 incomplete (I) grades. |
|  |  |  |
| *Tentative--dates are subject to change. |  |  |

*SPRING FLEX II 2007 (Second Eight Weeks)

| Mar. 12-18 | Mon.-Sun. | SPRING BREAK. COLLEGE CLOSED. <br> All Administrative Offices will be closed Monday-Sunday |
| :---: | :---: | :---: |
| Mar. 19 | Monday | Classes begin. |
| Mar. 26 | Monday | Census date. |
| Apr. 6-8 | Friday-Sunday | EASTER HOLIDAY. COLLEGE CLOSED. |
| Apr. 20 | Friday | Last day to withdraw. |
| Apr. 27 | Friday | FIESTA HOLIDAY. COLLEGE CLOSED. <br> (Weekend classes will meet). |
| May 6 | Sunday | Last day of classes. |
| May 7-13 | Mon.-Sun. | FINAL EXAMINATIONS. |
| May 13 | Sunday | End of Spring Flex II 2007. |
| May 26-28 | Sat.-Mon. | MEMORIAL DAY HOLIDAY. COLLEGE CLOSED. |
| September 2007 |  |  |
| Sept. 10 | Monday | Last day to complete Flex II 2007 incomplete (I) grades. |

*FIRST SUMMER SESSION 2007 (Six Weeks)
Consult class schedule for registration.

| June 4 | Monday | Classes begin. |
| :--- | :--- | :--- |
| June 7 | Thursday | Census date. |
| June 26 | Tuesday | Last day to withdraw. |
| July 4 | Wednesday | INDEPENDENCE DAY HOLIDAY. COLLEGE CLOSED. |
| July 6 | Friday | Last day of classes. |
| July $9-10$ | Mon.-Tue. | FINAL EXAMINATIONS. |
| July 10 | Tuesday | End of Summer I 2007 Six-Week. |

November 2007
Nov. 7 Wednesday Last day to complete First Summer 6-week 2007 incomplete (I) grades.
*FIRST SUMMER SESSION 2007 (Eight Weeks)

| June 4 | Monday | Classes begin. | Census date. |
| :--- | :--- | :--- | :--- | :--- |
| June 11 | Monday | CendEPENDENCE DAY HOLIDAY. COLLEGE CLOSED. |  |
| July 4 | Wednesday | INDEPE |  |
| July 12 | Thursday | Last day to withdraw. |  |
| July 24 | Tuesday | Last day of classes. |  |
| July $25-26$ | Wed.-Thur. | FINAL EXAMINATIONS. |  |
| July 26 | Thursday | End of Summer I 2007 Eight-Week. |  |

November 2007
Nov. 26 Monday Last day to complete First Summer 8 week 2007 incomplete (I) grades.

[^1]*SECOND SUMMER SESSION 2007 (Six Weeks)
Consult class schedule for registration.

| July 12 | Thursday | Classes begin. |
| :--- | :--- | :--- |
| July 17 | Tuesday | Census date. |
| Aug. 8 | Wednesday | Last day to withdraw. |
| Aug. 15 | Wednesday | Last day of classes. |
| Aug. $16-17$ | Thursday-Friday | FINAL EXAMINATIONS. |
| Aug. 17 | Friday | End of Summer II 2007. |

December 2007
Dec. 15 Saturday $\quad$ Last day to complete Second Summer 2007
*FALL 2007 SEMESTER (16 Weeks)
Consult class schedule for registration.

| Aug. 20 | Monday | Faculty Convocation. |
| :---: | :---: | :---: |
| Aug. 27 | Monday | Classes begin. |
| Sept. 1-3 | Sat.-Mon. | LABOR DAY HOLIDAY. COLLEGE CLOSED. |
| Sept. 8 | Saturday | Weekend classes begin. |
| Sept. 12 | Wednesday | Census date. |
| Sept. 12 | Wednesday | Last day to apply for December graduation. |
| Oct. 8 | Monday | Employee Development Day. COLLEGE CLOSED 6:00 a.m. - 5:00 p.m. Evening classes will meet. |
| Nov. 16 | Friday | Last day to withdraw. |
| Nov. $22-25$ | Thur.-Sun. | THANKSGIVING HOLIDAY. COLLEGE CLOSED. |
| Dec. 9 | Sunday | Last day of classes. |
| Dec. 10-16 | Mon.-Sun. | FINAL EXAMINATIONS. |
| Dec. 14 | Friday | FALL 2007 COMMENCEMENT. |
| Dec. 16 | Sunday | End of Fall 2007 Semester. |
| December 2007/January 2008 |  |  |
| Dec. 20-Jan. 2 | Thurs.-Wed. | CHRISTMAS/NEW YEAR HOLIDAY COLLEGE CLOSED. |
| April 2008 |  |  |
| Apr. 14 | Monday | Last day to complete Fall 2007 incomplete (I) |

*FALL FLEX I 2007 (First Eight Weeks)

| Aug. 27 | Monday | Classes begin. |
| :---: | :---: | :---: |
| Sept. 4 | Tuesday | Census date. |
| Sept. 8 | Saturday | Weekend classes begin. |
| Sept. 12 | Wednesday | Last day to apply for December graduation. |
| Sept. 1-3 | Sat.-Mon. | LABOR DAY HOLIDAY. COLLEGE CLOSED. |
| Oct. 5 | Friday | Last day to withdraw for Flex I. |
| Oct. 8 | Monday | Employee Development Day. <br> COLLEGE CLOSED 6:00 a.m - 5:00 p.m. <br> Evening classes will meet. |
| Oct. 16 | Tuesday | Last day of classes. |
| Oct. 17-18 | Wed.-Thur. | FINAL EXAMINATIONS. |
| Oct. 18 | Thursday | End of Fall Flex I 2007. |
| February 2008 |  |  |
| Feb. 15 | Friday | Last day to complete Flex I 2007 incomplete (I) grades. |


| *FALL FLEX II 2007 | (Second Eight Weeks) |  |
| :--- | :--- | :--- |
| Oct. 22 | Monday | Classes begin. |
| Oct. 29 | Monday | Census date. |
| Nov. 26 | Monday | Last day to withdraw for Flex II. |
| Nov. 22-25 | Thur.-Sun. | THANKSGIVING HOLIDAYY. |
|  |  | COLLEGE CLOSED. |
| Dec. 9 | Sunday | Last day of classes. |
| Dec. 10-16 | Mon.-Sun. | FINAL EXAMINATIONS. |
| Dec. 16 | Sunday | End of Fall Flex II 2007. |

December 2007/January 2008
Dec. 20-Jan. 2 Sat.-Sun. CHRISTMAS/NEW YEAR HOLIDAY COLLEGE CLOSED.

April 2008
Apr. 14 Monday Last day to complete Flex II 2007 incomplete (I) grades.
*SPRING 2008 SEMESTER (16 Weeks)
Consult class schedule for registration.

| Jan. 3 | Thursday | College Opens. |
| :---: | :---: | :---: |
| Jan. 14 | Monday | Classes begin. |
| Jan. 19 | Saturday | Weekend classes begin. |
| Jan. 21 | Monday | MARTIN LUTHER KING DAY HOLIDAY. COLLEGE CLOSED. |
| Jan. 30 | Wednesday | Last day to apply for May graduation. |
| Jan. 30 | Wednesday | Census date. |
| Mar. 17-23 | Mon.-Sun. | SPRING BREAK. COLLEGE CLOSED. <br> All administrative offices will be closed Thursday-Sunday |
| Mar. 24 | Monday | EASTER HOLIDAY. COLLEGE CLOSED. |
| Apr. 17 | Thursday | Last day to withdraw. |
| Apr. 25 | Friday | FIESTA HOLIDAY. COLLEGE CLOSED. Weekend classes will meet. |
| May 4 | Sunday | Last day of classes. |
| May 5-11 | Mon.-Sun. | FINAL EXAMINATIONS. |
| May 9 | Friday | SPRING COMMENCEMENT. |
| May 11 | Sunday | End of Spring 2008 Semester. |
| May 24-26 | Sat. - Mon. | MEMORIAL DAY HOLIDAY. COLLEGE CLOSED. |
| September 2008 |  |  |
| Sept. 8 | Monday | Last day to complete Spring 2007 incomplete (I) grades. |

*SPRING FLEX I 2008 (First Eight Weeks)

| Jan. 14 | Monday <br> Jan. 21 | Classes begin. <br> MARTIN LUTHER KING DAY HOLIDAY. <br> COLLEGE CLOSED. |
| :--- | :--- | :--- |
| Jan. 22 | Tuesday | Census date. |
| Jan. 30 | Wednesday | Last day to apply for May graduation. <br> Feb. 15 |
| Friday | Last day to withdraw. |  |
| Mar. 4 | Tuesday | Last day of classes. |
| Mar. 5-6 | Wed.-Thur. | FINAL EXAMINATIONS. |
| Mar. 6 | Thursday | End of Spring Flex I 2008. |
| July 2008 |  |  |
| July 7 | Thursday | Last day to complete Flex I 2008 incomplete (I) grades. |
| *Tentative--dates are subject to change. |  |  |

*SPRING FLEX II 2008 (Second Eight Weeks)

| Mar. 10 | Monday | Classes begin. |
| :--- | :--- | :--- |
| Mar. 17-23 | Mon.-Sun. | SPRING BREAK. COLLEGE CLOSED. <br> All Administrative Offices will be closed Monday-Sunday <br> EASTER HOLIDAY. COLLEGE CLOSED. <br> Mar. 24 |
| Mar. 25 | Monday | Thursday |
| Census date. |  |  |
| Apr. 18 | Thursday | Last day to withdraw. |
| Apr. 25 | Friday | FIESTA HOLIDAY. COLLEGE CLOSED. |
| May 4 | Sunday | Last day of classes. |
| May 5-11 | Mon.-Sun. | FINAL EXAMINATIONS. |
| May 11 | Sunday | End of Spring Flex II 2008. |
| May 24-26 | Sat.-Mon. | MEMORIAL DAY HOLIDAY. COLLEGE CLOSED. |

September 2008
Sept. 8 Monday Last day to complete Flex II 2007 incomplete (I) grades.
*FIRST SUMMER SESSION 2008 (Six Weeks)
Consult class schedule for registration.

| June 2 | Monday | Classes begin. |
| :--- | :--- | :--- |
| June 5 | Thursday | Census date. |
| June 26 | Thursday | Last day to withdraw. |
| July 3 | Thursday | Last day of classes. |
| July 4 | Friday | INDEPENDENCE DAY HOLIDAY. COLLEGE CLOSED. |
| July $7-8$ | Wed.-Thur. | FINAL EXAMINATIONS. |
| July 8 | Thursday | End of Summer I 2008 Six-Week. |

## November 2008

Nov. 4 Tuesday Last day to complete First Summer 6 week 2008 incomplete (I) grades.
*FIRST SUMMER SESSION 2008 (Eight Weeks)

| June 5 | Monday | Classes begin. |
| :--- | :--- | :--- |
| June 9 | Monday | Census date. |
| July 4 | Friday | INDEPENDENCE DAY HOLIDAY. COLLEGE CLOSED. |
| July 15 | Tuesday | Last day to withdraw. |
| July 22 | Tuesday | Last day of classes. |
| July $23-24$ | Wed.-Thur. | FINAL EXAMINATIONS. |
| July 24 | Thursday | End of Summer I 2008 Eight-Week. |

November 2008

Nov. 21 Monday | Last day to complete First Summer 8 week 2008 in |
| :--- |
| complete (I) grades. |

*SECOND SUMMER SESSION 2008 (Six Weeks)

| July | 10 | Thursday | Classes begin. |
| :--- | :--- | :--- | :--- |
| July | 15 | Tuesday | Census date. |
| Aug. | 6 | Wednesday | Last day to withdraw. |
| Aug. | 13 | Wednesday | Last day of classes. |
| Aug. | $14-15$ | Thursday-Friday | FINAL EXAMINATIONS. |
| Aug. 15 | Friday | End of Summer II 2008. |  |

December 2008
Dec. 12 Friday Last day to complete Second Summer 2008 incomplete (I) grades.
*Tentative--dates are subject to change.



## A MISSION OF ST. PHILIP'S COLLEGE

As one of the colleges of the Alamo Community College District, St. Philip's College fosters the stated mission of the District and expresses this commitment through the following mission:

St. Philip's College, founded in 1898, is a comprehensive, public community college whose mission is to provide a quality educational environment which stimulates leadership, personal growth, and a lifelong appreciation for learning.

As a Historically Black College and as a Hispanic Serving Institution, St. Philip's College strives to be an important force in the community, responsive to the needs of a population rich in its ethnic, cultural, and socioeconomic diversity. St. Philip's College seeks to create an environment fostering excellence in academic and technical achievement, while expanding its commitment to opportunity and access.

The College takes pride in its individual attention to students in a flexible and sensitive environment. As a dynamic and innovative institution, St. Philip's College values the role of creative and critical thought in preparing its students, campus, and community to meet the challenges of a rapidly changing world.

## The College Fulfills its Mission by Providing

- General education courses in arts and sciences.
- Transfer education for students desiring to attend a senior institution.
- Developmental courses that improve the basic skills of students whose academic foundations need strengthening.
- Applied science and technical programs designed to prepare students for employment or for the updating of skills.
- Special occupational training and upgrading programs for business, industry, government and workforce development needs.
- Continuing education programs for occupational or cultural enrichment.
- Counseling and guidance designed to assist students in achieving
 their educational and professional goals.
- Educational support services that include library services, tutoring, and open-use computer labs.
- Services and appropriate accommodations for special needs individuals.
- Quality social, cultural, and intellectual enrichment experiences for the community.
- Opportunities for participation in community research and economic development.
- Dual credit partnerships with independent school districts.


## MISSION OF THE ALAMO COMMUNITY COLLEGE DISTRICT

The Alamo Community College District provides educational opportunities for the citizens of Bexar and surrounding counties, thus contributing to the economic, academic, social, and cultural development of the region. The colleges, catalysts for changing lives, serve as centers of academic excellence and technological advancement.

In order to fulfill our mission as a public community college district, we are committed to the following:

## Providing educational opportunities through:

- Lifelong learning opportunities for occupational, personal, and basic skills development
- General education courses in the liberal arts and sciences
- Educational experiences in the use of current and developing technologies
- Discovery of training opportunities in areas of economic growth


## Establishing linkages with:

- Business, industry, governmental, and community groups
- Public school systems, colleges, and universities
- Other nations


## Enhancing quality of life through:

- Public presentations in the fine arts, sciences, and humanities
- Availability of recreational opportunities
- Facilities which are available for community use or joint sponsorship of events


## Practicing fiscal responsibility by:

- Leadership/coordination for the planning, acquisition, and allocation of ACCD resources necessary to meet district objectives
- Increased productivity
- Continual assessment and improvement of all operations
- Maintenance of aesthetically pleasing, safe, and functional facilities and grounds


## Changing lives through:

- Access to all populations
- Increased cross-cultural understanding and appreciation
- Empowerment of students and employees as full participants in the life of the institution and society
- Promotion of global awareness


## HISTORICAL SKETCH

St. Philip's College was founded in 1898 by Bishop James Steptoe Johnston of St. Philip's Episcopal Church of the West Texas Diocese. Formed as a means of educating and training young African Americans, the school rapidly expanded its mission and grew to become a vital resource in the local community. From 1898 to 1900 , instruction was directed by Mrs. Alice G. Cowen. Mrs. Perry G. Walker succeeded her in 1900.

In 1902, Miss Artemisia Bowden, a teacher and daughter of a former slave, assumed leadership of the school. Under her direction over the ensuing 52 years, St. Philip's would evolve from its humble beginnings as a parochial school to an accredited two-year college. Among notable milestones, in 1917 St. Philip's moved from its original site to a new location just east of downtown, and, in 1942, agreed to affiliate itself with San Antonio College and the San Antonio Independent School District, thus making the transition from private to public college.

A few years later in 1945, St. Philip's College and San Antonio College formed the San Antonio Union Junior College District (later to be called the Alamo Community College District) under the direction of a newly formed district board of trustees.

St. Philip's grew again in 1987 when Southwest Campus, a district extension site on the former East Kelly Air Force Base, was designated as an official campus of the college. More recent additions include: a multi-million-dollar capital expansion in the early 90s that added four major new buildings to the main campus. Other expansions include the Northeast Learning Center in 1996, the Learning and Leadership Development Center in 1997 in collaboration with the City of San Antonio, and a Child Development Center in 2000. In 2001, the Northeast Learning Center closed and transitioned to a new ACCD Northeast Campus, a collaboration of St. Philip's College and San Antonio College. In 2002, St. Philip's collaborated with the ACCD again to help open the new Advanced Technology Center at Kelly USA.

Today, St. Philip's College is a comprehensive community college focused on meeting the educational needs of the greater Bexar County region. St. Philip's has distinguished itself for academic excellence in the arts and sciences and for outstanding programs in applied science and technology fields. A Historically Black College and a Hispanic Serving Institution, St. Philip's is one of the most diverse and oldest community colleges in the nation, and one of the most dynamic in Texas.

## COLLEGE LOCATION

St. Philip's College is located on the east side of San Antonio, two miles from the center of town and is easily accessible from all parts of San Antonio and its surrounding areas. The College also operates the Southwest Campus located at 800 Quintana Road and at the ACCD Northeast Campus at 7980-7990 Pat Booker Road.

## PHYSICAL PLANT

St. Philip's College continues to expand and change as it strives to fulfill the diverse needs of the community. The facilities comprise the main campus and the Southwest Campus. The facilities include:

## APPLIED SCIENCES AND TECHNOLOGY (ASB)

Completed in 1992, this structure houses laboratories for Electronics, Biomedical Equipment Technology, CISCO Academy, Foreign Language, and the Automotive Technology Department.

## BOWDEN BUILDING (BOWD)

The Bowden Building, built in 1953 and dedicated in honor of Miss Artemesia Bowden in 1954, underwent major renovations in 1996 in order to accommodate the Business Information Solutions Department. The department currently consists of the following programs: Accounting Information Systems, Business Management, Information Technology (previously known as Computer Information Systems) and Administrative Computer Technology (previously known as Office Systems Technology). Business Information Solutions is also home to the Corporate and Entrepreneurial Training Center, the Microsoft Information Technology Academy, the Certified Internet Webmaster Program, as well as the Microsoft Office Specialist Testing Center.

## CAMPUS CENTER (CC)

Built in 1953 and renovated in 1978 and 1987, this building houses the bookstore, the hospitality management laboratory and the cafeteria. The Heritage Room, one of the college's major venues, is also located in this building.

## CHILD DEVELOPMENT CENTER (CDC)

Built in 2000, the Child Development Center is located on the northwest corner of the campus for optimal convenience and can accommodate up to 57 children.

## CONTINUING EDUCATION BUILDING (CEB)

Completed in 1992, this structure houses classrooms, laboratories, and offices.

## FACILITIES BUILDING

Completed in 1977, this building houses the offices for the Facility Superintendent for SPC/SWC and maintenance. Additionally, it includes the shop areas for electrical, general maintenance, grounds, housekeeping, structural, and HVAC.

## HEALTH AND FITNESS CENTER (HFC)

Built in 1949 and remodeled in 1986, this structure containing a basketball court, a volleyball court, an aerobic studio, an indoor swimming pool, a weight room, dressing rooms, computer laboratories and instructors' offices.

## NORRIS TECHNICAL CENTER BUILDING (NTB)

Built in 1970 and originally completed with three floors, the Norris Technical Center Building received a fourth was added in 1972. Dedicated in honor of Clarence W. Norris, Dean Emeritus, in 1975, the NTB underwent a complete renovation in 1996 and now houses the Math, Reading and English Departments, Educational Support Services, Instructional Technologies and the Center for Distance Learning. This building is also home to the Learning Lab, the Reading Lab, the Instructional Innovation Center, the Center for Educational Research and the Rose R. Thomas Writing Center.

## PUBLIC SAFETY (CAMPUS POLICE)

Completed in 1977, this structure houses the offices and operational facilities of the Department of Public Safety.

## SCIENCE BUILDING (SCI)

This structure, which was completed in 1992, houses laboratories for Allied Health programs, Nursing, Biology, Chemistry, Physics and the Dr. Frank Bryant, Jr., Human Patient Simulator Lab. It also includes numerous lecture rooms and instructors' offices.

## G. J. SUTTON LEARNING CENTER (SLC)

Completed in 1977, this building contains Enrollment Management, the Office of Records and Registration, Admissions, Counseling, Advising and Assessment, Business Office, classrooms, the Learning Resource Center, Veterans Affairs, and instructors' offices. The President's office, Vice-Presidents' offices and Deans' offices are also located in this building. The building was dedicated in honor of G. J. Sutton in 1979.

## E. L. TURBON STUDENT CENTER (TURB)

This building, constructed in 1953 and renovated in 1976 and 1996, houses a student conference room, the student government office, the student newspaper office, study areas, lockers, lounge areas, and a variety of recreational features. This building is the center of co-curricular activities. In 1996, the E. L. Turbon Student Center (formerly The Watson Fine Arts Center) was renamed for Everett L. Turbon who devoted 36 years of service to St. Philip's College.

## WATSON FINE ARTS CENTER (WFAC)

Completed in 1992, this structure features a 600 seat theatre and instructional facilities for the study of art, music, dance, and drama. This Center boasts studios, practice rooms, a gallery/conference room, and instructors' offices. In 1996, WFAC was dedicated in honor of Leonidas Watson, Associate Dean Emeritus.

## NORTHEAST CAMPUS (NECMP)

## (to be known as Northeast Lakeview College)

The Alamo Community College District's (ACCD) Northeast Campus began offering classes in the Spring 2001 semester with an enrollment of more than 300 students. The current enrollment exceeds 2000 . The campus, located at 7980-7990 Pat Booker Road, near the intersection of IH 35 and Loop 1604, is a joint venture of two ACCD colleges, St. Philip's and San Antonio College. The campus conducts classes in two buildings on the approximately 3.5 acre site with a total of 16 classrooms, including four computer labs, plus a learning resource center, and a student services area. Students enrolled at St. Philip's or San Antonio College will have their credits transcripted to the college they choose.

## SOUTHWEST CAMPUS (SWC)

The Southwest Campus has been a vital part of St. Philip's College since the mid-1980s. Located at 800 Quintana Road, the Southwest Campus is the site of the Multi-Modal Transportation, Allied Construction Trades, and Repair and Manufacturing Departments, with ten programs of study. In 1996, the Alamo Career Transition Center joined Southwest Campus as the primary location for Kelly AFB dislocated workers seeking career counseling and retraining. In 2005, partnered with Toyota to develop and implement technical training for the opening of the new plant in San Antonio. The three main buildings of Southwest Campus also house administrative offices, the Learning Resource Center, Advising and Enrollment Services, Continuing Education/Contract Training, SAISD Phoenix High School, Youth Opportunity Program, Workforce Development Skills and GED Academy, the Alamo Academies (Alamo Area Aerospace Academy, Manufacturing Technology Academy and the Information Technology and Security Academy), Texas One Stop Workforce Center, and other specialized workforce development training programs. Several of these programs offer students the opportunity to train at community sites at the San Antonio Housing Authority, and MAUC locations.



As an open-admission institution of higher education, St. Philip's College maintains the policy to admit students without regard to age, race, gender, religion, national origin, color, disability, or the provision of services.

To be formally admitted to the college, the student must furnish the necessary credentials to the Office of Records and Registration. These documents are (1) a completed Student Data Form; (2) the most recent placement test scores; (3) residency documentation; and (4) official high school, General Educational Development (GED), or college transcript(s). Students who have earned a high school diploma, a GED, or academic college credit, but are unable to obtain high school, GED, or college transcript(s) will be granted Conditional Admission to the College (See "Conditional Admission" later in this chapter). Admission to St. Philip's College does not guarantee admission to a specific vocational/technical or Allied Health program. A student should consult the program brochure, program coordinator, department chairperson, or counselor for additional information on admission requirements for the program of his or her choice.

## TEXAS SUCCESS INITIATIVE (TSI)

The TASP law was repealed during the summer of 2003 and was replaced by the Texas Success Initiative (TSI), which became effective September 1, 2003. The TSI requires students to be assessed in reading, writing and mathematics skills PRIOR to enrolling in college, and to be advised based on the results of that assessment.

A student will NOT be denied admission to St. Philip's College if he or she does not pass the test for TSI; however, the student will not be permitted to enroll in any class until the test (Accuplacer or THEA) has been attempted, and the scores are posted on the college's Student Information System.

All new students, full-time and part-time, must take a test for TSI, UNLESS they are transferring from another college and submit a transcript which documents completion of college-level reading, mathematics and English, OR they enter a certificate program that consists of NO MORE THAN 43 semester credit hours. A student who does not pass all sections of the college placement test or has not completed college-level coursework that directly relates to the sections or the test, must complete developmental coursework in order to meet departmental pre-requisites for college-level courses. Placement scores must be less than three years old prior to enrollment and must include a writing sample in conjunction with the multiple choice test. The Accuplacer and Asset are the tests administered by St. Philip's College. For further information regarding TSI, please contact an advisor in the Office of Advising and Assessment at 210-531-3263.

## TRANSCRIPT OF RECORD

The term "transcript of record" refers to the recorded results of the student's coursework at the College only. This record is sent directly to other colleges at the request of the student. Requests must be directed to the Office of Records and Registration. A minimum of five (5) work days is required for the processing of transcript requests. All transcript requests must be signed by the student. The transcript will be withheld if the student has not settled all financial and transcript obligations with the College.

## COURSE NUMBERING SYSTEM

Arts and Sciences courses offered by the college are identified by fourdigit numbers. The first digit indicates the level of the course ("0" signifies a developmental course, " 1 " signifies a freshman level course, and " 2 " signifies a sophomore level course). The second digit indicates the number of semester hours, and the last two digits identify the departmental sequence.

Certain courses in the Applied Science and Technology programs do not comply with this numbering system. Applied Science and Technology courses
 use the course numbering system described in the Texas Higher Education Coordinating Board Workforce Education Course Manual(WECM). The WECM is available for review in the office of the Dean of Applied Science and Technology.

In the Fall 1993 semester, the College adopted the state-wide Common Course Numbering System, designating all courses with identical numbers as equally transferable among schools in Texas that have joined this system. A non-common numbered college-level course will have a " 7 " in the third position of its course number.

Courses beginning with the number zero (0) are developmental (pre-college) level courses and do not fulfill requirements for any degrees or certificates offered by the College.

## IDENTIFICATION CARD (PHOTO ID)

Effective September 1, 2004, all students, credit or non-credit, are entitled to a St. Philip's College photo identification card. A student seeking a college photo ID must be registered with his/her tuition paid or have no tuition balance.

There will be a limit of one original photo identification card per student. A maximum of two replacement photo identification cards may be provided at no charge to a student if his/her identification cards are lost, stolen, or damaged. Any subsequent photo identification cards will be provided only after a replacement fee of $\$ 5.00$ is paid for each new card.

## ADMISSION OF NEW STUDENTS

A. A graduate of an accredited high school must submit the following credentials to the Office of Records and Registration:

1. An official high school transcript including date of graduation. Transcripts must be forwarded from the high school to the College. Transcripts received become the permanent property of the College.
2. ACT or SAT test scores, if taken, or alternate placement tests selected by the College.
3. All students are responsible for meeting requirements for the Texas Success Initiative (TSI).
4. St. Philip's College will not release students' official St. Philip's College transcripts until all admission requirements are met.
B. In lieu of a high school transcript, a student can submit the General Educational Development (GED) Test (high school equivalency). Effective January 1, 2002, the minimum passing standard score on the GED Tests is now no less than 410 on each of the five tests, with an average of 450 (2250 total) on the five tests in the battery. January 1, 1997 through December 31, 2001, GED candidates had to earn a total score of 225 (45 average) on all five tests with no sub-test score less than 40. Prior to January 1, 1997, GED passing scores were 40 on each test or a total score of 225 on all five sub-tests.
C. A student graduating from an unaccredited high school or completing a non-traditional high school program may be granted Individual Approval admission by the Dean of Enrollment Management (See "Admission of NonTraditional High School Students" later in this chapter).
D. A person may be waived from the admission requirements and admitted on Individual Approval by the Dean of Enrollment Management provided that the applicant's record indicates ability to complete the college work assigned, and receipt of GED test scores. Students admitted on this condition shall be subject to the same policies and regulations as all other students, including appropriate testing.

## ADMISSION OF TRANSFER STUDENTS

A. A student transferring from another college must submit an official, complete transcript from the regionally accredited college or university last attended, bearing the impression of the seal and the college official's signature. However, for graduation purposes and to meet prerequisites, a student must submit official transcripts from all colleges or universities previously attended. Official transcripts must be forwarded directly to the Office of Records and Registration.
B. A transfer student must:

1. Meet the minimum academic standards of the College as published in this catalog.
2. Continue on academic probation if that was the status at the last college or university attended.
C. Courses taken ten (10) or more years prior to a student's last enrollment at the College will not count as semester credit hours towards the award of the degree or certificate in the Applied Science area of major concentration. These courses will only be transferred or credited as elective credits towards the fulfillment of degree/certificate requirements. However, a student may challenge, by examination, courses that were not accepted for credit.
D. A student must not knowingly falsify or suppress registration information or in other ways attempt to enter this college by fraudulent enrollment.

## CONDITIONAL ADMISSION

A. A student who cannot obtain an official copy of his or her high school or college transcript or GED score may be admitted conditionally to the College. A student in this category will be placed in conditional admission status for one (1) semester, pending receipt of the transcript by the College. A student will not be permitted to register for future semesters until all previous official college transcripts, high school transcripts, or GED passing test scores are received by the Office of Records and Registration. A student will not be permitted to register for future semesters until all previous official college transcripts are received by the Office of Records and Registration. An official St. Philip's College transcript will be withheld until all admission requirements are met.
B. A student not formally admitted to the College will not be allowed to take certain courses without proof of the appropriate placement cut-off scores and/or prerequisites.

## EARLY ADMISSION

A. Early admission applications will be accepted from students who have completed the high school junior year.

1. An applicant must have completed the sophomore year in high school.
2. Applicants must be at least 16 years of age by the start of the academic year in which they wish to enroll.
3. An applicant must complete the application process for early admission and submit the application to the Admissions Office.
4. Applicants must submit to the Office of Records and Registration an official transcript of all high school courses completed prior to registration.
5. An applicant must present letters of recommendation from the high school principal or counselor and from the parent(s) giving parental approval and addressing the applicant maturity and ability to function well in a college environment.
6. An applicant must be eligible to graduate from his or her respective high school by the close of his or her senior year.
7. The applicant must submit THEA, Alternative THEA (Accuplacer or Asset, or Compass) or ACT/SAT/TAAS or TAKS test scores exempting TSI requirements, and/or demonstrating college level ability in the subject area(s) requested. St. Philip's College is not permitted to remediate students in high school or below.
Note: Applicants to vocational/technical programs must meet departmental and placement guidelines.
8. The number of courses to be taken will be determined by the high school course load and the recommendation of a college counselor.
9. The class load at the college must not exceed the equivalent of eighteen (18) semester hours, counting each high school course as the equivalent of one (1) three-hour course.
10. An official transcript from St. Philip's College will not be released until the students' complete official high school transcript graduation date is on file.
B. Gifted students in the 11 th grade or below may apply to the Office of Records and Registration for early admission.
11. Applicants must be at least 16 years of age by the start of the academic year in which they wish to enroll.
12. Letters of recommendation from teachers, counselors, and/or principals must be submitted requesting participation in a specific program or course and attesting to the applicant's maturity and adaptability to a college environment.
13. A letter of permission must be submitted from the parent(s) addressing the applicant's maturity and adaptability to function well in a college environment.
14. The applicant must submit THEA, Alternative THEA (Accuplacer or Asset, or Compass) or ACT/SAT/TAAS or TAKS test scores exempting TSI requirements, and/or demonstrating college level ability in the subject area(s) requested. St. Philip's College is not permitted to remediate students in high school or below.
Note: Applicants to vocational/technical programs must meet departmental and placement guidelines.
15. An applicant will take any departmental tests deemed advisable or necessary by counselors or department chairpersons.
16. An applicant approved for early admission may enroll in academic courses or certain vocational/technical programs based upon completion of appropriate sections of above referenced tests and with the approval of a specific department and/or program as required.
17. Department chairperson and instructor approval is necessary for admission.
18. The class load at the college must not exceed the equivalent of eighteen (18) semester hours, counting each high school course as the equivalent of one (1) three-hour course.
19. The approval for admission to the college of a gifted student in the 11th grade or below will be determined by the Early Admissions Committee comprised of the Vice President for Student Affairs, Dean of Enrollment Management, Director of Student Life, a counselor within Counseling and Student Development, and a full-time faculty member selected by the Dean of Arts and Sciences or the Dean of Applied Science and Technology.
20. The Admissions Committee will convey its decision in writing to the student and his/her parents within a week of the submission of the fully completed application and all required supporting letters and test scores.

## ADMISSION OF NON-TRADITIONAL HIGH SCHOOL <br> STUDENTS

A non-traditional high school student is a person enrolled in home school programs or a student from a high school which is non-accredited or not recognized by the Texas Education Agency (TEA).
A. A high school completion student who is under eighteen (18) years of age and who is applying for admission based on the completion of an independent
study equivalent to the high school level in a non-traditional setting (rather than through a public high school or accredited private high school) will be considered for Individual Approval admission by the Admissions Committee chaired by the Dean of Enrollment Management.

1. Submit a recommendation by the principal or superintendent of the last high school attended (if a public or private high school was attended by the student).
2. Present notarized record of the high school equivalent work completed and the date of successful completion. This work should meet the TEA minimum requirements for high school completion.
3. Comply with institutional testing requirements.
4. Agree to limitations or conditions of admission established by the College. A non-traditional high school student who is still enrolled in his/her secondary school program may not enroll in the college for more than half time study until the student has documented successful completion of the non-traditional high school curriculum and the awarding of the high school diploma or equivalent.
5. The approval for admission to the college of a gifted student in the 11th grade or below will be determined by the Early Admissions Committee comprised of the Vice President for Student Affairs, Dean of Enrollment Management, Director of Student Life, a counselor within Counseling and Student Development, and a full-time faculty member selected by the Dean of Arts and Sciences or the Dean of Applied Science and Technology.
6. The Admissions Committee will convey its decision in writing to the student and his/her parents within a week of the submission of the fully completed application and all required supporting letters and test scores.

## READMISSION TO COLLEGE

A. A student who was previously enrolled at the College, but did not attend during the last 12 months, may apply for readmission by meeting the following criteria:

1. Be in good academic standing or have been unenrolled for the mandatory one (1) semester following an Academic Dismissal status.
2. Present official transcripts from any college or university attended since the last enrollment at the College.
B. A returning or transfer student failing to meet the academic criteria stated in the current College catalog may appeal through the Admission Appeal Procedure.
C. A returning or transfer student whose last status was Disciplinary Suspension must petition the Vice President for Student Affairs for readmission.
D. Courses taken ten (10) or more years prior to the student's last enrollment at the College in the student's specific subject area of concentration within the curricular offerings of Applied Science \& Technology will not count as semester credit hours towards the award of the degree or certificate. These
courses will only transfer in or be credited as elective credit toward the fulfillment of degree/certificate requirements. However, a student may challenge, by examination, courses that were not accepted for credit.

## ACADEMIC FRESH START

Under the provisions of Senate Bill 1321, any resident of Texas is entitled to seek admission to public institutions of higher education without consideration of courses undertaken ten (10) or more years prior to enrollment. This "right to an academic fresh start" gives a student the option of electing to have course work taken ten (10) or more years prior to the starting date of the semester in which the applicant seeks to enroll either counted as usual OR ignored for admission purposes. A student who elects an "academic fresh start" must notify the Office of Records and Registration during his or her first semester of enrollment at the College.

An applicant who elects an "academic fresh start" will also have all collegelevel work that was completed at an earlier date eliminated from the computation of the grade-point average, and none can be applied toward a degree or certificate for credit at the College. Additionally, such work will not be removed from the student's academic records and transcripts. Students electing an "Academic Fresh Start" must meet with the Dean of Enrollment Management.

## NON-CREDIT OR AUDIT ADMISSION

A. A student registering only for audit courses need not provide admission credentials. A grade of "AU" (audit) is assigned to an auditing student.
B. An audit fee of $\$ 10.00$ per course is charged at the time of registration in addition to the tuition and fees normally charged.
C. A student wishing to change to audit status must pay the $\$ 10.00$ audit fee by the census date of the semester. A student cannot change to audit status after the semester's census date has passed.

## ADMISSION TO SUMMER SCHOOL

A student desiring admission to summer school must meet the same requirements which apply to any other semester. The normal full-time student load is six (6) semester hours or nine (9) semester hours for a student with an above average GPA. A maximum of twelve (12) semester hours is allowed for summer eight (8) week sessions. A student cannot exceed more than fourteen (14) semester hours for any combination of summer sessions. A student wishing to finish his or her associate's degree in the minimum time can receive instruction year round by attending the regular semesters and summer terms.

## ADMISSION TO ALLIED HEALTH

A student enrolling in Allied Health or Nursing Education Programs is required to submit an application form to the respective department. Placement tests are required.

An interested person should contact the Allied Health or Nursing Education department at leastsix (6) months prior to enrolling to obtain application information. Several Allied Health programs have college-level prerequisite course requirements that must be completed prior to admission to the programs.

# ADMISSION TO VOCATIONAL NURSING PROGRAM 

## Admission Criteria

The applicant must be 18 years of age. High school diploma or GED. Individuals who have completed High School requirements in a foreign country must submit an official high school transcript translated in English. Contact the office of Advising \& Assessment for information regarding foreign transcripts. (210) 531-3263.

## Requirements for Admission.

Entrance Exam / Pretest: Program requirement and BNE requirement (Rule 233.65)

Pass the required entrance exam with the scores established by the program as acceptable for admission. Any one of the following exams may be taken:

Accuplacer, ACT, ASSET and SAT scores (valid for (3) years).
TASP/THEA (scores do not have expiration date).
In an effort to admit students that are adequately prepared in the skills assessed by the entrance exam/s, the entrance exam required by the program will not be waived.

Individuals with college degrees, ( regardless of the degree or type of degree), must still qualify for admission by taking an entrance exam and must pass with the qualifying scores established by the program for admission.

Applicants must meet the entrance exam requirement before the application for admission is requested.

## Eligibility for Licensure Issues

Persons planning to enroll in the Vocational Nursing Program who may have eligibility issues that could result in denial of licensure would not be eligible for admission. The following are considered potential ineligibilities; criminal conduct and or conviction; mental illness; chemical dependency including alcohol.

Persons with eligibility issues would not be eligible for admission until the declaratory order process is completed with the Board of Nurse Examiners and proof of eligibility for licensure is provided.

## Eligibility for licensure information go to www.bne.state.tx.us see

 BNE rules and regulations Texas Administrative code rule 213.30
## Criminal background check:

Applicant must consent for background check
Applicant is responsible for the cost
Persons with adverse report will be counseled by the program director to contact the BNE to confirm licensure eligibility.

An applicant with declaratory orders pending will be eligible for admission if the BNE determines that the applicant would be eligible for licensure.

When the applicant shows proof that eligibility for licensure has been granted by the BNE, the applicant will be placed in the order of current applicant roster for admission.

## Drug Screen:

Applicant must consent to drug screen
Applicant is responsible for the cost Applicants with a positive drug screen not eligible for admission.

## ProgramInformation:

1. Immunizations must have documentation of two MMRs, current TD, TB screening or chest X-Ray. Hepatitis-B series
2. Applicants must complete Hepatitis B series (series of three) before application is submitted.
3. Must have current CPR (BCLS) card Infant, child and adult
4. All required immunizations as well as CPR must remain current while enrolled in the program.
5. Physical examination must be completed and signed by a physician.
All questions on the physical exam must be answered.
6. Reference letters (3) - All references must be verifiable, can include employer, co-worker (no family members)
7. Applicant must provide evidence of health insurance
8. A grade of C $(77 \%)$ or grater must be earned in all nursing courses
9. All transcripts submitted must be official. College transcripts that indicate name of high school \& date of graduation will be accepted.
10. GED certificates must include GED scores
11. High School transcripts from a foreign county must be translated in English before transcript is accepted. (see office of Advising and Assessment for more information)
12. All required documents must be completed.
13. Placement scores: ACT, ASSET, SAT, (valid or 3 years) TASP/ THEA (scores do not have expiration date)
14. Incomplete applications will not be accepted.

## ADMISSION OF NURSING STUDENTS TO ADN MOBILITY PROGRAM

## Admission Criteria

The applicant must be admitted to St. Philip's College prior to being accepted into the Associate Degree Nursing (ADN) Mobility Program. Please refer to the current college catalog for the general admission criteria. The LVN to ADN Mobility Program is subject to the Texas Success Initiative (TSI). Call the Office of Advising and Assessment for current information regarding TSI at 210-531-3263.

Minimum Requirements for Application to the LVN to ADNMobility Program
The applicant desiring admission to the LVN to ADN Mobility Program must:

1. Hold a current license to practice vocational nursing in the state of Texas or be eligible for reciprocity.
2. Submit an official transcript from an accredited Vocational Nursing program.
3. Complete all of the required prerequisite courses with a grade of C or above and a cumulative Grade Point Average of 2.5 or above.
4. Have a minimum overall Grade Point Average of 2.0 or above.
5. Submit three letters of reference, and one letter of reference must be from a Registered Nurse (RN) who has worked closely with the applicant; a letter from a direct supervisor is preferred.
6. Hand carry official copies of college-level academic transcripts to the Nursing Education Department, be present when transcripts are evaluated for prerequisite courses, then obtain an application for admission to the program.
7. Complete the application in accordance with the instructions.
8. Have work experience validated, if the applicant has been licensed for more than two years, by fulfilling one of the following criteria:
$\checkmark 6$ months recent full time clinical practice in a hospital or long-term care facility at the level of Licensed Vocational Nurse.
$\checkmark 1$ year of recent part time clinical practice in a hospital or nursing home at the level of Licensed Vocational Nurse.
$\checkmark$ Completion of a nursing refresher course with a clinical component in a hospital or long-term care facility at the level of Licensed Vocational Nurse.
9. Work experience validation is not required of applicants who have been licensed for less than two years.
10. Transfers of nursing courses will be considered on a case-by-case basis per review of the Program Director, Nursing Admissions Council, and Records and Registration Office.
11. The LVN-ADN Mobility Program student with two failures in nursing courses will be dismissed from the program without the option of readmission.
12. The LVN-ADN Mobility Program applicant who has failed two courses in another nursing program will have met the threshold for being dropped from St. Philip's nursing program and is therefore ineligible for transfer or admission to St. Philip's LVN-ADN Mobility Program.

## Application Process

The applicant desiring admission to the LVN to ADN Mobility Program must:

1. Fulfill all requirements as stated above.
2. Submit a completed application packet by the posted deadline.
3. After the deadline, the Nursing Admission Council, composed of at least two faculty members and the program director, will review completed applications.

## Program Information

1. The applicant for this program must be potentially eligible to take the NCLEX-RN. Any potential student who has been convicted of a felony, implicated in substance abuse or driving while intoxicated (DWI), must submit a declaratory order to the Board of Nurse Examiners and receive permission prior to being approved to take the NCLEX-RN. This process may take up to eighteen months. Potential students are encouraged to discuss their situation with the Board of Nurse Examiners in Austin (512) 305-7400, prior to entering the program.
2. All prerequisites must be completed prior to application to the LVN to ADN Mobility program.
3. Applicants must hold current basic CPR certification while enrolled in the program.
4. Applicants admitted into the program must purchase liability insurance at premium rates applicable to current academic year.
5. Uniforms and necessary accessories must be purchased upon admission to the program.
6. The applicants selected for admission must have current immunizations, including Hepatitis B-3 series vaccinations. Refer to the admission packet for full details on required immunizations.
7. A grade of $\mathrm{C}(77 \%)$ or greater must be earned in all nursing courses. The student must earn a grade of $\mathrm{C}(70 \%)$ or greater in all required academic courses.
8. A student must maintain the grade of C or greater in all courses in order to prorgress in/out graduate from the program.

## INTERNATIONAL STUDENT ADMISSION

International students are welcome at the College because such students bring with them a variety of cultures and languages which ultimately enrich the campus community and help prepare all students for the challenges of an increasingly interdependent world. All international students are expected to show evidence of communication and proficiency in English. The College requires a minimum score of: 500 on the Paper-based test (PBT), 173 on the Computer-based test (CBT), Reading-17, Listening-17, Speaking-18, Writing-17 with a total score between 69-70 or the Internet-based test (iBT) or a level 109 ELS Language Certificate.

International student applicants who have not completed college level courses at a U.S. college or university are required to take either the Accuplacer, ASSET, or THEA examination available through the Office of Advising and Assessment.

The placement exams, Accuplacer or ASSET, must be taken before the start of the first semester of enrollment. A student who fails any one (1) of three (3) areas (Reading, Math, or Writing) may enroll in some program courses, but may also be required to enroll in developmental courses as needed. For more information concerning the placement examination requirements, contact International Student Services at (210) 531-3262.
A. Admission: To be considered for admission, the following documents must be submitted prior to the application deadlines (June $1^{\text {st }}$ for Fall; October $1^{\text {st }}$ for Spring; March $1^{\text {st }}$ for Summer):

1. Application for International Student Admission, please attach one current passportsize photograph.
2. Signed "Statement of Understanding,"
3. Verification of financial resources (must be signed by the student, and his/her sponsor). Total expenses are approximately $\$ 15,000$ for twelve months.
4. INS Form I-134 Affidavit of Support (follow printed instructions).
5. Bank Letter from the student's and/or sponsor's bank stating when the student's and/or sponsor's account(s) were established. The current balances must be included. All financial documents must be less than six months old.
6. Original TOEFL exam score results.
7. Evidence of high school graduation (transcripts/diplomas, etc.). Originals must be provided.
8. High School documents, after translated in English, must be evaluated by an evaluation company; please use World Education Services, Inc. (WES) for evaluation of foreign transcripts. Results should be mailed both to the student and to St. Philip's College.
9. $\$ 15.00$ (non-refundable) processing fee. Make money order payable to St. Philip's College.
B. After the above requirements are fulfilled: The candidate will then be eligible for evaluation toward official admission and enrollment. If approved, the Form I-20 will be issued. In order to be and remain a bonafide student, the candidate must do the following:
10. Take the Accuplacer examination.
11. Enroll for and complete a minimum of twelve (12) semester hours per Fall and Spring semester.
12. Pay for illness and accident insurance each semester.
13. Not work off campus without authorization.
14. Provide current address and telephone number for residence in San Antonio. (P.O.boxes are not acceptable).
C. Transfer Students: An international student transferring to the College must comply with the same policies and requirements as an international student applying from his or her home country. However, before an official transfer is granted, a transferring student is given a Notification of Transfer form which his or her current advisor must complete and return to the College.

When the Notification of Transfer form is on file and the student is determined to be In Status (or good standing), the transfer can be finalized.
D. Non-residential alien or student with visa status other than F-1 must:

1. Submit official accredited U.S. high school or college/university transcripts.
2. Submit foreign credentials indicating U.S. high school equivalency (as determined by the Office of Records and Registration or by consultancy).
3. Provide proof of current immigration and naturalization status.
4. Participate in college placement testing as recommended by counselor or advisor.
E. Resident Alien and Permanent Resident: Must provide Form 1-551 (Permanent Resident Card). The student pays international student tuition rates until residency requirements are fulfilled.
F. Start of Registration Process: All international students with non-resident visas must begin the registration process in the International Student Services Office in the Sutton Learning Center, $2^{\text {nd }}$ floor, office 205-D.
G. Revision: The above requirements are subject to periodic revisions as may be necessary due to changes in Department of Homeland Security (DHS) regulations, ACCD Board Policies, etc. The International Student Services Office may be contacted at (210) 5313262.

## EVALUATION OF FOREIGN CREDENTIALS

All foreign credentials submitted to the College must be the original or a certified English translation. An official evaluation of foreign credentials and translated transcript must be provided before transfer credits can be granted. The student is responsible for arranging for credential evaluation and/or translation. Please use World Education Services, Inc. (WES) for evaluation of foreign transcripts. The student must pay all costs of translation and/or evaluation of credentials.

Evaluations completed by evaluation services are subject to review and approval by the Records and Registration Office.

## ADMISSION APPEAL PROCEDURE

Should a transfer or returning student fail to meet the academic criteria stated in the current College catalog, a petition for admission/readmission to the College must be processed in the following manner:

## A. First or Second Academic Dismissal Status

1. A student may petition in writing through the Counselor and appropriate dean (Dean of Enrollment Management, Dean of Applied Science, or the Dean of Arts and Sciences). The student may submit other colleges' transcripts where applicable.
2. A student must petition in advance of the on-campus registration days. The class schedule contains specific dates.
3. A student who has not been enrolled for one (1) semester following an Academic Dismissal is eligible to enroll without petitioning in writing.
4. The Dean's decision may be appealed, if necessary, to the Vice President of Academic Affairs.

## B. Third or Subsequent Academic Dismissal Status

1. A student may petition to the appropriate Dean after the lapse of one (1) calendar year from the date of the last Academic Dismissal Status.
2. A student must complete an Admissions Petition form in the Office of Records and Registration prior to meeting with the Committee. The class schedule contains specific dates.
3. Where applicable, other colleges' transcripts must be submitted.
4. Committee appointments must be made at least fifteen (15) working days prior to the first day of registration.
5. The Committee interview will include:
a. A brief written petition by the student
b. Committee discussion and decision
6. The Committee's decision may be appealed, if necessary, to the Vice President of Academic Affairs.
7. Students readmitted and failing to meet the imposed requirements may not petition again for one (1) calendar year.

## HIGH SCHOOL TRANSITION PROGRAMS

The transition from high school to college is often a difficult process, and the type of preparation needed for this change varies among students. To meet these challenges, the College utilizes several approaches:

- College Partnerships
- The Dual Credit Program
- Tech-Prep


## College Partnerships

The Office of College Partnerships, established in January 2002, is responsible for coordinating/scheduling classrooms, campus conference rooms, and buildings for non-academic purposes and coordinates community events held on campus. The Director represents the President and College within the community and strives to enhance the partnerships that currently exist and works enthusiastically to develop new ones.

The office has partnerships with the following: Hispanic Chamber of Commerce; the Alamo City Chamber of Commerce; the Greater San Antonio Chamber of Commerce; the George Gervin Youth Center; the East Area Business Council; Parent Child Incorporated; University Health System; Healy Murphy Center; City of San Antonio; Community of Churches for Social Action; Communities in Schools; Southwest Texas State University; and Samuel Clemens and Sam Houston High Schools.

The Bridge Builder's Program is a partnership between Sam Houston High School and St. Philip's College. The objective of the program is to encourage

9th through 12th grade students to focus on education and college. College Preparation courses, college-level courses and technical certificates are offered.

## Dual Credit Program with High Schools

The Dual Credit Program enables high school students to earn college credit while they are completing their high school requirements. St. Philip's College waives tuition for dual credit eligible high school students in articulated courses for which they receive joint high school and community college credit.

Students desiring to take courses for dual credit will need to take a statemandated test* for TSI, submit a Student Data Form (SDF) and a partial high school transcript documenting tests taken, i.e., SAT, ACT, etc.
*High school students are exempt from TSI if they meet the following scores on: SAT: Total 1070, with a minimum of 500 on each of the Verbal and Math; ACT: Verb 19; Math 19; Comp 23; The scores on either of the above tests will be invalid if they are more than five (5) years old. Students using the exit level TAKS test and will need to score a minimum of 2200 on math, and 2200 on English with a writing score of 3. TAKS scores will be valid for three years.

High school students who take a test for TSI may enroll only in dual credit courses related to the section(s) of the test which they pass according to college standards.

High school students are NOT allowed to take developmental courses while they are still in high school. If such students enroll in courses in a Certificate of Completion for dual credit, then they will need to score high enough on the placement test to meet or exceed pre-requisites set by the college for the desired courses. High school students enrolled in dual credit courses have the same rights, responsibilities and opportunities as all other St. Philip's College students.

A dual credit agreement or Memorandum of Understanding (MOU) is developed between a high school and the College. Curriculum content, in compliance with the MOU and Course Articulation agreements, addresses the competencies or learning outcomes of the college course, as well as the secondary essential elements as required by the Texas Education Agency (TEA). Dual credit courses are usually offered in the participating high schools during the normal scheduling of classes.

A successfully completed dual credit course earns the student college credit which may be applied toward an associate's degree, certificate of completion, and/or may transfer to other colleges or universities. Students should verify with the colleges they plan to attend after graduation that courses will apply toward the degrees sought and, if applicable, that courses will transfer.

## Tech-Prep

St. Philip's College has entered into approved Tech-Prep articulation agreements with several area high schools in the areas of Automotive Technology, Business Information Solutions, Hotel Management, Restaurant Management, Tourism, and Culinary Arts. Agreements in additional Tech-Prep areas of study are forthcoming pending approval by the Texas Education Agency (TEA) and the Texas Higher Education Coordinating Board(THECB). Because each agreement may vary slightly, students who have completed the high school portion of a TEA and THECB
approved Tech-Prep program and wish to complete the post-secondary portion must obtain approval from the appropriate department chairperson prior to registering for classes at St. Philip's College.

## CONTINUING EDUCATION WORKFORCE DEVELOPMENT, AND EXTENDED SERVICES

Within the framework of the College's philosophy, mission, and goals, and in cooperation with government and military agencies, Continuing Education provides education, training, and employment programs. In addition, seminars, workshops, conferences, and certification updates are provided for community organizations, business, industry, military, and professional groups. A Continuing Education Unit(CEU) is the basic unit of measurement for an individual's participation in the College's offerings of non-credit classes, courses, and programs. A CEU is defined as ten (10) contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction.

Continuing Education has the flexibility and technology to respond rapidly to the needs of the community and to implement courses in programmatic areas, such as adult basic education, internet, allied health, business, industry, and social services. Continuing Education also serves as an outreach mechanism for directing prospective students into appropriate credit programs within the College.

Bringing the College into the community by using satellite locations, St. Philip's College Continuing Education offers a wide variety of short, non-traditional courses independent of the credit certificate or degree programs.

Vocational/Technical-Occupational courses, seminars, and workshops provide opportunities to refresh knowledge or gain specific skills for job preparation. Available courses focus on computers, business and office skills, industrial, law enforcement, manufacturing and technical skills, medical profession skills, and other areas of emphasis for professionals.

Classes in Self-Improvement and Personal Development-Students may learn more about foreign languages, parent education, driver safety, or the art of the manicure. Students may also enroll in classes designed to develop basic reading, writing, and math skills.

Leisure Time, Special Interest Courses for Hobbies, Recreation,
and Diversion - concealed handgun to middle eastern dance classes.
Learning Opportunities Designed for Groups with Special Needs - older adults, women, businesses and organizations, and summer youth groups.

Workforce Development - Proactively collaborate with business community, governmental entities, non-profit organizations, and other educational institutions to provide opportunities for adults and youth to develop knowledge and skills that will provide access to job opportunities or career advancement. The department provides proposal development; application process; grant management and compliance training; contract process and approval; budget approvals; and grant
negotiations and process. Call (210) 531-4770 for more information.

## EVENING PROGRAMS

Evening Programs provide an opportunity for a student to pursue his or her educational goals in the evening. Educational Support Services that include library services, tutoring, open-use computer labs, and a writing center are available to evening students. Student services, such as counseling and student development, student financial services, career services, and the transfer center are designed to assist students in achieving their educational and professional goals.

General education courses in the Arts and Sciences are offered for students desiring to complete an associate degree and transfer to a senior institution for a baccalaureate degree. Developmental courses that improve the basic skills of students whose academic foundations need strengthening are available. Applied Science and Technology programs designed to prepare students for employment and updating their technical skills are available as well.

## EXTENDED SERVICES - OFF CAMPUS PROGRAMS

As the outreach arm of the college, Extended Services is dedicated to serving learners, wherever demonstrated need prevails, with quality educational programs. Off-campus satellites provide systematic support service systems that can assist adult, part-time students in adjusting to the college learning experience. Satellites are vehicles for providing convenient, personalized services and a nonthreatening supportive environment for adults. The on-site outreach personnel supply many of the traditional campus support services. As the community college population shifts to serving additional adult, part-time students, colleges that provide adequately staffed and service supported satellites have the opportunity of serving adult students in an inviting and supportive alternative learning environment. Call (210) 531-4770 for a location near you.

Brooke Army Medical Center Lackland Air Force Base<br>Fort Sam Houston<br>Northeast Campus<br>Judson High School<br>Randolph Air Force Base

Judson Learning Academy
At St. Philip's College, the convenience of the satellites can go a long way to help students adjust to the stresses of balancing families, jobs, and school.

## OPEN ENTRY/OPEN EXIT

Open Entry/Open Exit courses are offered in the Business Information Solutions Department. The courses are available in an eight-week or a sixteen-week format. The students must attend a mandatory orientation session and sign a contract at the time of orientation. Students work independently to complete all coursework with guidance provided by the instructor on an "as needed" basis. The student may arrange one-on-one tutoring sessions with the instructor. Most teacher/ student communication is accomplished through e-mail. The student is responsible
for submitting coursework to the instructor and meeting with the instructor to take exams based on the timelines established in the course syllabus.

Please see the class schedule for semester offerings and the orientation schedule.

Additional information may be obtained by calling (210) 531-3452 or by visiting the Business Information Solutions Department in the Bowden Building.

## DISTANCE LEARNING

Distance Learning is a form of education, where students work interactively with faculty and other students via the use of a combination of communication tools which include but are not limited to: e-mail, electronic forums, videoconferencing, chat rooms, bulletin boards, audio conferencing, telecourses and other forms of computer-based and telecommunication.

Students with scheduling or distance problems can benefit, as can employees, because distance learning can be more flexible in terms of time and can be delivered virtually anywhere. Distance Learning Courses are the same as on comapus courses in terms of academic quality, credit hours, transferability, and cost. Instructors will guide students through the format and usage of technologies used to deliver their courses.

Popular distance learning delivery methods used at St. Philip's College include:

## Internet Courses

Internet courses require a student to access class lessons, and lecture notes through the World Wide Web and through electronic communications tools.

Internet Course Requirements include accessing weekly lecture notes, resource materials, and assignments through the Internet; reading and studying textbook materials; and taking exams. Course requirements may vary by instructor. A complete list of Internet Course offerings can be found in the class schedule. Additional information may be obtained by calling (210) 531-3239/3228 or visiting the St. Philip's College website at www.accd.edu/edu/spc/it/distance (effective January 2007, the new website address is http://www.accd.edu/spc/admin/distance).

## Telecourses

Telecourses require that a student view professionally produced television lessons at home instead of attending regular classes on campus.

Telecourse TV lessons are broadcasted several times each week on KLRN Channel 9 (cable channel 10), cable channel 19, and UHF Channel 48. If the broadcast times are not convenient, a student may record the lessons with a VCR or TiVO and view them according at a more convenient time. The TV lessons are also available in the library for check out.

Telecourse Requirements include viewing several TV lessons per week at home, reading, studying the textbook and study guide material, taking exams on campus, and attending optional review sessions. Please see the class schedule for semester offerings.

## Video conferencing courses

Video Conferencing Courses are conducted on two or more campuses or locations and are linked by the use of two-way audio and video equipment. These courses allow the instructor to be at one campus while students may be at a different campus. The instructor and students interact in "real time." Video conferencing allows students to attend a college campus that is nearby while taking courses being offered at a distant location.

## STUDENT LOAD

A full-time student has met all entrance requirements and is carrying a normal load of no less than twelve (12) semester hours of college-level work or no less than twenty-two (22) clock hours.

A part-time student has satisfied the entrance requirement and carries less than the number of hours per semester required of the full-time student.

No student enrolled in college-level work may enroll for more than nineteen (19) semester hours except by written authorization of the deans.
(Aircraft students are permitted to enroll in up to 25 semester hours in the spring and fall semester and up to 18 semester hours in the summer due to FAA program completion guidelines).

## CLASSIFICATION OF STUDENTS

## Freshman:

1. Must have graduated from high school with a minium of fifteen (15) credits; or
2. Must have been admitted on the basis of an acceptable admission examination; and
3. Must have completed not more than twenty-nine (29) semester hours in collegiate level subjects at the College or other recognized college.

## Sophomore:

1. Must have graduated from high school with a minimum of fifteen (15) credits; or
2. Must have been admitted on the basis of an acceptable admission examination; and
3. Must have completed thirty (30) or more semester hours in collegiate level subjects at the College or other recognized colleges, but not more than sixty-six (66) credit hours.

## Associate Degree:

A student whose highest degree previously earned is an associate.

## Baccalaureate or Above:

A student whose highest degree previously earned is a baccalaureate or higher.

## CREDIT TRANSFERABILITY

The purpose of the Coordinating Board rules is to facilitate the transfer of lower division courses and to clarify for a student what his or her rights and responsibilities are as a potential transfer student. The procedure for the resolution of transfer disputes was formerly codified as Subchapter A, Section 5.4. It is now codified as Subchapter S, Section 5.393.

## TRANSFER OF LOWER DIVISION COURSE CREDIT <br> General Provisions

All lower division academic courses shall be fully transferable among public institutions and must count toward the same degree at any public college or university in Texas.

## Requirements and Limitations

A. Each institution of higher education shall identify in its undergraduate catalog each lower division course that is substantially equivalent to an academic course listed in the current edition of the Community College General Academic Course Guide Manual.
B. Each university must identify at least forty-eight (48) semester credit hours of academic courses that are substantially equivalent to courses listed in the Community College General Academic Course Guide Manual and fulfill the lower-division portion of the institution's Core Curriculum.
C. All public colleges and universities must accept transfer of credit for successfully completed courses identified in (A) and (B) above as applicable to an associate or baccalaureate degree in the same manner as credit awarded to a nontransfer student in that major.
D. Each institution shall be required to accept in transfer into a baccalaureate degree the number of lower division credit hours in a major which are allowed for a non-transfer student in that major; however,

1. No institution shall be required to accept in transfer more credit hours in a major than the number set in the applicable Coordinating Board approved Transfer Curriculum for that major, as prescribed by the current
issue of the Coordinating Board's guide to transfer curricula and transfer of credit, "Transfer of Credit Policies and Curricula."
2. In any major for which there is no Coordinating Board approved Transfer Curriculum, no institution shall be required to accept in transfer more lower division course credits in the major applicable to a baccalaureate degree than the institution allows a non-transfer student in that major.
3. A university may deny the transfer of credit in courses with a grade of "D" as applicable to the student's major.
E. All senior institutions of higher education in Texas shall provide support services for a transfer student equivalent to those provided to a non-transfer student regularly enrolled at the institutions, including an orientation program for all transfer students equivalent to that provided for all entering freshman enrollees.
F. No university shall be required to accept in transfer or toward a degree more than sixty-six (66) semester credit hours of academic credits earned by a student at a community college. Universities, however, may choose to accept additional credit hours.

## Penalty for Noncompliance with Transfer Rules

If it is determined by the Coordinating Board that an institution inappropriately or unnecessarily has required a student to retake a course that is substantially equivalent to a course already taken at another institution, formula funding for credit hours in the repeated course will be deducted from the institution's appropriations.

## Resolution of Transfer Disputes for Lower Division Courses

A. The following procedures shall be followed by the public institutions of higher education in the resolution of credit transfer disputes involving lower division courses:

1. If an institution of higher education does not accept a course credit earned by a student at another institution of higher education, the receiving institution shall give written notice to the student and to the sending institution that transfer of the course credit is denied.
2. The two institutions and the student shall attempt to resolve the transfer of the course credit in accordance with the Board rules and/or guidelines.
3. If the transfer dispute is not resolved to the satisfaction of the student or the sending institution within forty-five (45) days after the date the student received written notice of denial, the institution whose credit is denied for transfer shall notify the Commissioner of Higher Education of the denial.
B. The Commissioner of Higher Education or the Commissioner's designee shall make the final determination about the dispute concerning the transfer of course credit and give written notice of the determination to the involved student and institutions.
C. All public institutions of higher education shall publish the procedures described in subsections (A) and (B) of this section in their undergraduate course catalogs.
D. All public institutions of higher education shall furnish data to the Board on transfer disputes as the Board may require in accordance with its statutory responsibilities under Section 61.078(e) of the Education Code.
E. If a receiving institution has cause to believe that a course being presented by a student for transfer from another institution of higher education in Texas is not of an acceptable level of quality, it should notify the Commissioner of Higher Education. The Commissioner may investigate the course. If its quality is found to be unacceptable, the Board may discontinue funding for the course.

A student planning to transfer to another institution must accept the responsibility of securing approval in advance from the institution to which he or she wishes to transfer.

A student planning to transfer to an senior institution should make certain he or she takes courses at the College that will be accepted by the institution he or she wishes to attend. In general, Arts and Science courses with a first number of one (1) or two (2) (for example, Psychology 1XXX, Biology 2XXX) are accredited by senior institutions as fully transferable. Courses beginning with a zero (0) (for example English 0301) generally are not accepted for transfer by four-year colleges or universities. Occupational and technical courses may or may not be accepted for transfer, depending on the requirements of the senior institution.

Senior institutions usually will accept a maximum of sixty (60) to sixty-six (66) lower division general education and specific subject matter courses. However, what will be accepted and how it will transfer is determined by the senior college or university.

Lower division courses included in the Academic Course Guide Manual and specified as "lower division course credit" shall be freely transferable to and accepted as comparable degree credit by any Texas public institution of higher education where the equivalent course is available for fulfilling baccalaureate degree requirements. However, it should be understood that each Texas institution of higher education may have limitations that invalidate courses after a specific length of time.

For the College, these freely transferable courses are identified in the Coordinating Board publication Community CollegeGeneral Academic CourseManual. Specifically excluded are courses designated as vocational, ESL/ESOL, developmental or remedial, and courses listed as "basic skills."

Transfer disputes may arise when the College's lower division course is listed in the course manual and is not accepted for credit by a Texas public institution of higher education. The student should then contact the Dean of Arts and Sciences (SLC 152), who will attempt to resolve the transfer dispute in accordance with the Board rules and/or guidelines. In all disputes, CB form "Transfer Dispute Resolution" must be completed to initiate a dispute action. This form must be completed and forwarded to the receiving institution within fifteen (15) calendar days after the evaluation has been submitted to the student. From the date a student is notified of credit denial (date evaluation is sent by the receiving institution), the law allows a maximum of forty-five (45) calendar days for the resolution of the dispute by the sending and receiving institutions.

## EVALUATION OF COLLEGE TRANSCRIPTS

An official evaluation of college transfer work will be processed by the Office of Records and Registration during the first semester of enrollment at the College.

## CONCURRENT ENROLLMENT

A student of the College may register at another accredited institution for a course not listed in the current College catalog. However, the College must first authorize or approve that course before it can fulfill the College's degree requirements. Approval is not automatic.

A student enrolling concurrently at the College and San Antonio College, Palo Alto College, or Northwest Vista College does not pay duplicate fees and tuition. For details contact the Business Office at (210) 531-3246.

## CREDIT BY EXAMINATION

Enrolled students may satisfy the requirement of certain courses by passing proficiency examinations. Procedures for credit in such courses are as follows:

1. Student must be enrolled at St. Philip's College for the current semester and must have paid tuition and fees for that semester.
2. Student must set up a conference with the department chairperson and receive written departmental approval.
3. Student must obtain approval from the Office of Records and Registration.
4. Student must earn a grade of "C" or better to receive credit. Credit earned in this manner will not be posted on a student's transcript until the student has successfully completed three (3) semester hours in the traditional manner at the College.
5. If a student needs to apply for credit by exam after enrolling in a course, he or she must take the exam by the census date of the semester. If a student wishes to drop the course, he/she must do so before paying the credit by exam fee, and before the exam is administered. Credit by exam fee is non-refundable.
6. Student must pay examination fee to the Business Office for each course on which the applicant wishes to be tested (See Section 4 on Tuition and Fees under Nonrefundable Fees).
7. Student must take a comprehensive written examination. The exam may include prescribed performance tests.

## ADVANCED PLACEMENT (AP) GUIDELINES

Not more than sixteen (16) semester hours of credit earned by advanced placement may apply toward graduation. There is no refund of fees if the applicant fails to pass either the written examination or the performance test.

| AP SUBJECTS | GRADE REQUIRED TO <br> RECEIVE CREDIT | SCORE/CLASSES <br> CREDITED |
| :--- | :--- | :--- |
| English | 3 or higher | $3-5 /$ ENGL 1301 |
| Government | 3 or higher | $3-5 /$ GOVT 2305 |
| European History | 3 or higher | $3-4 /$ HIST 2311 |
|  |  | $5 /$ HIST 2311\& 2312 |


| United States History | 3 or higher | 3-4 / HIST 1301 |
| :---: | :---: | :---: |
|  |  | 5 / HIST 1301\& 1302 |
| Psychology | 3 or higher | 3-5 / PSYC 2301 |
| Spanish | 3 or higher | 3-4/SPAN 1411 |
|  |  | 5 / SPAN 1411 \& 1412 |
| French | 3 or higher | 3-4 / FREN 1411 |
|  |  | 5 / FREN 1411 \& 1412 |
| Art History | 3 or higher | 3-4/ ARTS 1303 |
|  |  | 5 / ARTS 1303 \& 1304 |
| Art Studio | 3 or higher | 3-5 / ARTS 1316 |
| Music Theory | 3 or higher | 3-5/ MUSI 1216 \& 1311 |
| Calculus AB | 3 or higher | 3-5 / MATH 2413 |
| Calculus BC | 3 or higher | 3-5 / MATH 2413\& 2414 |
| Computer Science A | 3 or higher | 3-5 / COSC 2315 |
| Computer Science B | 3 or higher | 3-5 / COSC 2318 |
| Macroeconomics | 3 or higher | 3-5 / ECON 2301 |
| Microeconomics | 3 or higher | 3-5 / ECON 2302 |
| Biology | 3 or higher | 3-5 / BIOL 1408 |
| Chemistry | 3 or higher | 3-5 / CHEM 1411 |
| Physics B | 3 or higher | 3-5 / PHYS 1401 |
| Physics C | 3 or higher | 3-5 / PHYS 1570 |

The student should have the official AP score sent to the College by the AP College Board. The student will receive the college credit based on the SPC guidelines, not a grade. No more than (16) sixteen semester hours of credit may be earned by advanced placement.

## CREDIT BY NON-TRADITIONAL METHODS

Persons may satisfy portions of the associate degree requirements through non-traditional modes as follows:

## NON-TRADITIONAL MODE

## MAXIMUM CREDIT

 ALLOWEDACE Guide $\qquad$ 32 semester hours
Advanced Placement (AP) Credit......................................... 32 semester hours
Advanced Standing Credit.................................................... 16 semester hours
ASE Certification .................................................................... 16 semester hours (Contact Auto. Tech. Dept. Chairperson or MMTT Chairperson for Diesel)
CLEP and/or DANTES Subject Examinations ...................... 32 semester hours
FAA A \& P License (Contact MMTT Dept.) ................... 26 semester hours
Tech-Prep Articulated Credit (Contact applicable Applied
Science Department Chairperson)
16 semester hours
USAFI courses (Relevant to program)
32 semester hours

Maximum credits allowed through above modes $\qquad$ 32 semester hours
Minimum credits required for associate's degree $\qquad$ 60 semester hours
Credit earned by non-traditional methods are not posted on the transcript until the student has satisfied the three (3) semester hours resident requirement. Students must earn a 50 or higher on CLEP examinations. Consult the Dean of Arts and Sciences or department chairperson in the discipline.

## CREDIT BY THE TEXAS HIGHER EDUCATION COORDINATING BOARD (THECB) APPROVED TECH PREP ARTICULATION AGREEMENT

College credit for certain technical courses may be requested after satisfactory completion of the secondary portion of a curriculum detailed in a Tech Prep articulation agreement. All Tech Prep agreements must be approved by the Texas Higher Education Coordinating Board (THECB). It is the student's responsibility to contact the appropriate department chairperson to request Tech Prep credit within the time limits detailed in the agreement. The student must provide the chairperson with proper documentation of satisfactory completion of the secondary portion of the curriculum.

It is the responsibility of the chairperson to review the documentation provided relative to the agreement, and either approve or disapprove the credit request. The department chairperson will forward all approved requests through appropriate administrative channels to the Office of Records and Registration.

Tech Prep credits approved by the department chairperson are not posted on the transcript until the student has satisfied the minimum semester credit hour resident requirement specified in the agreement. In no case will a Tech Prep semester credit hour resident requirement be less than three (3) semester credit hours. While the number of semester credithours may vary between agreements, in no case will the maximum credit earned through a Tech Prep agreement exceed sixteen (16) semester credit hours. All credit earned through a Tech Prep agreement is included in the thirty-two (32) maximum semester credit hours that may be earned by non-traditional means and advanced standing.

## WORK EXPERIENCE CREDIT

Work experience is a viable means for earning credit at St. Philip's College. After students are admitted to the College, they should consult with their departmental academic advisors to determine which work experience may be applicable for college credit. In most cases such credit is earned through prior employment, extensive technical training in high school, trade or proprietary school, or military service. It should be remembered that students must be enrolled in the current semester for which they are applying for work experience credit.
Careful academic advising and thorough knowledge of the curricula within applied science programs and courses are vital for a student to receive the appropriate college credit for work experience. Identifying the St. Philip's College courses which clearly
match the work experience accumulated by the student remains the responsibility of the department advisor, program director, and department chairperson.
The Application for Work Experience Credit may be obtained from the department in which the student is majoring or the corresponding area dean. Before work experience credit can be awarded and posted on a student's official college transcript, final approval must be received from the department chairperson, area dean, and the Vice President of Academic Affairs. Such approval should be recorded on the Application for Work Experience Credit which must also be accompanied by all documentation and sufficient justification.



## RESIDENCE VERIFICATION

A student declaring Texas residency for tuition purposes must complete an "Oath of Residency" form. In addition, if requested by the Office of Records and Registration, he or she must submit documentation that indicates Texas residence of ONE YEAR prior to the registration date. At a minimum, a student must submit for file in his or her record one or more appropriately dated documents that is/are acceptable for this purpose as determined by the Chief Residency Official of the College: (1) Texas high school transcript, (2) Texas college or university transcript, (3) Employer statement of date of employment, (4) Permanent driver's license (the license should be at least one year old; generally, the license expiration date minus the date of enrollment should not exceed three years), (5) Texas voter registration (at least one year old), (6) Lease agreement which includes student's name and time period covered, and (7) Property tax payments. A student must also submit documentation of current address to be eligible to pay In-District fee(s). A Texas Driver's License, Texas Voter Registration Card, apartment lease, Bexar County Property Tax Appraisal, and other appropriate documents will be accepted as proof of status. Military personnel and his or her dependents must complete an "Active Duty Military Verification" form prior to registration.

The responsibility for registering under the proper residence classification is that of the student, and any question concerning his or her right to classification as a resident of Texas or of the District must be clarified prior to the time of his or her enrollment at the College.

A student who can qualify as a resident of the State for educational purposes will pay the resident tuition rate. Any other student who is a citizen of the United States is classified as a nonresident and will pay the maximum tuition for the course he or she takes.

Once a student has been found to be a nonresident, his or her status is frozen as long as he or she remains in attendance at the College or until a petition for change of status has been approved by the Dean of Enrollment Management.

Tuition for a student who is a citizen of any country other than the United States of America is $\$ 152.00$ per semester credit hour. Texas Education Code Sec. 54.057 (a). An alien who is living in this country under a visa permitting permanent residence or who has applied to or has a petition pending with the Immigration and Naturalization Service to attain lawful status under federal immigration law has the same privilege of qualifying for resident status for tuition and fee purposes under this subchapter as has a citizen of the United States. The student must provide proof of identification at the time of Application for Admission to the college.


# RESIDENCE VERIFICATION OF INTERNATIONAL STUDENTS (Citizens of any country other than the United States of America) 


#### Abstract

Statute: Section 54.057--An alien who is living in this country under a visa permitting permanent residence or who has filed with the proper federal immigration authorities a declaration of intention to become a citizen has the same privilege of qualifying for resident status for fee purposes under this ACT as has a citizen of the United States. A resident alien residing in a junior college district located immediately adjacent to Texas boundary lines shall be charged the resident tuition by that junior college.


A citizen of any country other than the United States of America who is in this country on a student visa or a visa other than one entitling him or her to immigrant status and who enrolls in an institution of higher education covered by Section 54.051 of the Texas Education Code shall be classified as "...a student who is a citizen of any country other than the United States of America..." for purposes of Section $1(\mathrm{a})(7)$ of Article 1654 c , V.T.C.S. Such a student who is in this country on an immigrant visa can be classified as a resident student if he or she has resided in the state for a period of twelve (12) months under circumstances indicating his or her intention to reside permanently in Texas and not merely to complete his or her education. To this extent, a citizen of any country other than the United States of America residing in Texas on an immigrant visa shall be in no different position than a citizen of the United States who has been a resident of another state. A citizen of any country other than the United States of America residing in a state other than Texas on an immigrant visa and having established his or her intent to reside permanently in such other state shall be classified as a nonresident.

## TUITION REIMBURSEMENT

Under Section 54.0065 of the Texas Education Code, students graduating from a Texas public baccalaureate-granting university may be entitled to a partial tuition rebate if all of the following conditions are met:
a. They must have enrolled for the first time in an institution of higher education in the Fall 1997 semester or later;
b. They must have received a baccalaureate degree from a Texas public university;
c. They must have been a resident of Texas and entitled to pay resident tuition at all times while pursuing the degree; and
d. They must have attempted no more than three hours in excess of the minimum number of semester credit hours required to complete the degree under the catalog under which they graduated. Hours attempted include transfer credits, course credit earned exclusively by examination, courses that are dropped after the official census date, and for-credit developmental courses.

Students desiring to qualify for tuition rebates are responsible for enrolling only in courses that will qualify them for the rebates. Contact the Dean of Enrollment Management for additional information.

## INSTALLMENT PAYMENT PLAN

Students may use the installment plan to pay for their Fall and Spring Semester tuition. The plan consists of a one-half ( $50 \%$ ) payment of tuition and fees (excluding the parking permit fee) in advance of the beginning of the semester and two (2) separate one-fourth ( $25 \%$ ) payments prior to the sixth and eleventh weeks of class.

Payments for these bills must be received in full by the due date, or the student will be placed on delinquency status. A student will owe late charges associated with each delinquent installment. If a student installment plan account is not paid in full, their account will be sent to our collection agency.

Students electing to pay by the installment plan will be charged an administrative fee of $\$ 25.00$.

For additional information, contact the Bursar's Office at (210) 531-3246.

## REFUND OF TUITION

A student officially dropping a course or withdrawing from the College will have his or her tuition and refundable fees returned according to the following schedule:

Fall and Spring Semesters
Prior to the first academic calendar day. 100\%
During days 1-15 of the academic calendar ..................... $70 \%$
During days 16-20 of the academic calendar .................. 25\%
After the twentieth academic calendar day ................... None
Flex Terms and Eight-Week Summer Sessions
Prior to the first academic calendar day ........................ 100\%
During days 1-8 of the academic calendar ...................... $70 \%$
During days 9-10 of the academic calendar ..................... $25 \%$
After the tenth academic calendar day ........................... None

## Six-Week Summer Sessions

Prior to the first academic calendar day . $100 \%$
During days 1-5 of the academic calendar ....................... 70\%
During days 6-7 of the academic calendar ....................... $25 \%$
After the seventh academic calendar day...................... None
Note: For refund purposes, all the academic calendar days are used to compute refunds, not only the days the student attends class. Refunds for other non-standard-length courses shall be made based on the table provided by the Coordinating Board.

# ALAMO COMMUNITY COLLEGE DISTRICT TUITION AND FEES SCHEDULE 2006-2007* <br> (Subject to Change) <br> TEXAS RESIDENTS <br> NON-TEXAS RESIDENTS <br> In-District Out-of-District \& International Students 

| Semester <br> Hrs. Taken | Tuition | General | Fee |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |$\quad$ Tuition | General |
| :---: |
| Fee |$\quad$ Tuition | General |
| :---: |
| Fee |

The College reserves the right to change its tuition and fees in keeping with the acts of the Texas State Legislature and official interpretations thereof.
$1-6$ credits are priced at a flat rate of $\$ 264.00$ for In-District Tuition, $\$ 528.00$ for Out-of-District Tuition, $\$ 1,056.00$ for Non-Resident and International Student Tuition.
$7-21$ credits at a rate of $\$ 44.00$ per credit for In-District-Tuition, $\$ 88.00$ per credit for Out-of-District Tuition, and $\$ 176.00$ per credit for Non-Resident and International Student Tuition.

For each summer term, the General Fee will be $\$ 116.00$.
Minimum tuition for each summer term will be $\$ 132.00$ for In-District Texas residents, $\$ 264.00$ for Out-of-District Texas residents, and $\$ 528.00$ for Non-Texas residents and International Students.

Student Activity Fee of $\$ 1.00$ per credit hour.
Any student currently enrolled (as of the official census) date who subsequently enrolls in a Flexible Entry class organized in the same semester will be assessed tuition and fees as though another class was being added to the student's current load.

The Registration Fee will be $\$ 12.00$ for fall and spring semesters and $\$ 6.00$ for each summer session.

A Library Fee of $\$ 12.00$ will be charged per student per semester and each summer term.

Parking Fees for the full year will be $\$ 21.00$, and after January 1, $\$ 11.00$. Parking fines will be $\$ 12.00$ and if not paid within 10 days, $\$ 18.00$.

A Student Accident Fee of $\$ 4.00$ will be charged for the Fall and Spring semester and $\$ 1.00$ for each Summer term. For International Students, an Accident Fee of $\$ 66.00$ will be charged for the Fall and Spring semester and $\$ 22.00$ for each Summer term.
*Tuition and Fees are subject to change.

## FEES FOR EACH SEMESTER

(Subject to change)

## Fees Refundable

Registration Fees*
Fall and Spring Semester, per semester .............................................. \$12.00
Summer Sessions, per term......................................................................... $\$ 6.00$

* If the college deletes all the classes, this fee is refundable.


## Applied Music Fee

One hour lessons per week, per semester ........................................ \$95.00
One hour or two half-hour lessons per week, per summer term .... $\$ 21.00$
Class lessons, two lessons per week, per semester .......................... \$25.00
Private lessons, one half-hour lesson, per week, per semester ....... $\$ 63.00$
Private lessons, sixteen hours of lesson, per summer term .............. $\$ 95.00$
Private lessons, eight hours of lesson, per summer term ................ \$63.00
Class lessons, thirty hours of lessons, per summer term ..................... $\$ 25.00$
Auditing
Fee ........................................................................................................ \$12.00
Auditing by its definition is listening. Students who would like to enroll
in a class for the purpose of listening may do so. However, auditing
is restricted to theoretical classes unless authorized by the area dean. As
a rule, activity classes and "hands on" activity classes are restricted.
Computer Use Fee
Laboratory Fee ......................................................................... \$2.00 to \$4.00
Special Fee ............................................................................. \$8.00 to \$25.00
Continuing Education Fees
Adult Vocational Programs ...................... \$2.10 to \$3.50/instructional hour Apprenticeship Training (B.A.T.) Programs .......... \$2.00/instructional hour
Community Service Programs .................. \$1.50 to \$3.50/instructional hour
Sponsored Programs
Contract Courses ............................... Instructor cost plus all direct costs and indirect costs divided by minimum number of students needed.
Continuing Education Instructional
Technology ......................................... $\$ 5.00$ to $\$ 20.00 /$ instructional hour Based Courses ( $\$ 10$ maximum per course)
Criminal Justice Fee
Laboratory Fee.
Special Fee ................................................................................................................................................... 0
Criminal Justice Fee

## General Fee

1-6 hours ............................................................................................. \$116.00
7 or more hours ................................................................................. $\$ 121.00$
Summer and Mini-Semester .............................................................................................. \$116.00
Laboratory
Fees ..... $\$ 2.00$ to $\$ 24.00$
Library Upgrade Fee
Per Semester ..... $\$ 12.00$
Nursing and Allied Health Fee
Per Semester ..... $\$ 10.00$
Radiology Badge Fee
Per Semester ..... $\$ 6.00$
Per Summer Term ..... $\$ 3.00$
Student Activity Fee
Per Semester Hour Fee ..... \$1.00
Special Fee
Fees for the defrayal of unusual supply or participationvary for certain courses (e.g., customized training, golf,photography, data processing, music, nursing education
phography, data processing, music, nursing education
assessment fees, etc.) ..... Varies
Student Insurance Fees
Fall or Spring Semester ..... $\$ 4.00$
Per Summer Semester ..... $\$ 1.00$
International Student Insurance Fees
Per Semester ..... $\$ 66.00$
Summer and Mini-Term ..... \$22.00
For all types of programs, other direct and/or indirect costs of a particular coursemay be prorated and added to the basic fee.
Refund checks will be prepared as soon as possible after the end of the refund period.

## NON-REFUNDABLE FEES

Biology and Chemistry Breakage Fee:
All Biology and Chemistry students will pay a $\$ 2.00$ breakage fee. The fee is not refundable. In the event breakage of chemical equipment exceeds $\$ 2.00$, the student will be required to pay the additional amount prior to receiving credit in the course.
Examination Fees (subject to change)
Credit By Exam Fee. $\$ 42.00$ per credit hourwith $\$ 126.00$ minimum
Re-Exam Fee (if failed) ..... $\$ 7.00$
CLEP (per test) ..... $\$ 50.00$
............................ ..... Plus a registration fee $\$ 15.00$
Assessment Test ..... $\$ 15.00$
THEA ..... \$29.00
Installment Payment Plan
Administrative Fee Per Semester ..... \$25.00
For Fall \& Spring Semesters Only
Late Fee Per Each Late Payment ..... $\$ 10.00$
(Late Fee applied each time not paid by due date for 1st and 2nd payments)
$\qquad$\$4.00/transaction
Late Registration
Fee ..... \$27.00
Parking Permits
Full Year ..... \$21.00
After January 1 ..... $\$ 11.00$
Summer Term ..... $\$ 7.00$
Replacement ..... $\$ 8.00$
GED Test
GED Battery ..... $\$ 65.00$
.......................................................................................... or each test $\$ 7.00$
Parking Fines
Regular ..... $\$ 12.00$
If not paid in 10 days ..... \$18.00
For Falsification of Information on Motor Vehicle Registration ..... $\$ 10.00$
Returned Check
Fee ..... $\$ 35.00$
Return Automated Clearing House (ACH) Fee ..... $\$ 35.00$
All returned checks not cleared within the semester written will be sent tothe collection agency.
Library Fines
Books $\$ .10$ per day
Reserved Books and A-V Materials ..... $\$ .50$ per day
Schedule Change
Fee ..... $\$ 4.00$
Installment Payment Plan
Administrative Fee, per semester ..... \$25.00
Late Fee, per each late payment ..... \$10.00
Student Insurance Fees
Fall or Spring Semester .....  $\$ 4.00$
Per Summer Semester ..... \$1.00
Workshop Fees
A fee is charged for workshops organized for special groups that may ormay not carry semester credit hours. The amount of the fee, which is inaddition to required tuition, is announced at the time of the workshop.
Foreign Student Registration ProcessingFee$\$ 15.00$
Registration Receipt Copy Fee .....  $\$ 2.00$
Credit Card Usage Fee Fee \$4.00/transaction
Planetarium
Admission ..... Free
Transcript ..... FreeAll transcripts will be issued without charge.

No reductions are allowed for any part of a term lost due to late registration. A student expecting to receive full credit for the semester's work should pay full tuition charges from the beginning of the semester. Fees are subject to change without notice.

## \$1000 TUITION REBATE POLICY

The Texas Education Code authorizes tuition rebates for students who complete baccalaureate degrees with no more than 3 credits in excess of those required for their degrees.

## Eligible Students

(must meet all four requirements)

1. Must have enrolled for the first time in a institution of higher education in Fall 1997 or later.
2. Must be requesting a rebate for work related to a first baccalaureate degree received from a Texas public university.
3. Must have been a resident of Texas, must have attempted all course work at a Texas public institution of higher education, and must have been entitled to pay resident tuition at all times while pursuing the degree.
4. Must have attempted no more than three hours in excess of the minimum number of semester credit hours required to complete the degree detailed in the catalog under which they were graduated. Hours attempted include transfer credits, course credit earned by examination, courses dropped after the official census date, for-credit developmental courses, optional internship and cooperative education courses and repeated courses. Courses dropped for reasons that are determined by the institution to be totally beyond the control of the student shall not be counted.

If you qualify, contact your university.

## VETERANS UNDER FEDERAL PROGRAMS

A student who plans to attend the College under one of the public laws for a veteran and his or her dependents must go to the Office of Veterans Affairs located in SLC 104 to complete the required application.

A veteran who is enrolled and receiving benefits MUST submit to the Office of Records and Registration official transcripts from all colleges and universities previously attended. Failure to provide the official transcripts by the second semester will result in interruption of VA Educational Benefit payments.

A veteran must declare a major to receive educational benefits from the Department of Veterans Affairs. The VA will only pay for courses in the declared major program. Exceptions: (1) Departmental Letter of Substitution, (2) valid prerequisite for required course, and (3) during the last semester before graduation, all credit hours taken can be certified if 1 (one) or more of the credits satisfy a graduation requirement.

Federal law prohibits payment for courses which a student previously completed with a passing grade. A veteran student electing Academic Fresh Start under Texas Senate Bill 1321 WILL NOT receive payment for repeat courses, even if transfer credit is not awarded by the College.

A veteran may be awarded payment for developmental, refresher, or remedial courses if Placement Test Scores justify the need for these courses. Developmental courses are those whose numbers begin with a zero (0), such as English 0300 or Math 0300. HUMD 0310 is not payable by the VA. A veteran who is registered under Chapter 1606 (reservist) may be awarded payment for remedial courses if he or she executes a six (6)-year enlistment contract after October 1, 1990.

The Office of Veterans Affairs (VA) assists students attending this institution, who are using educational benefits under the Department of Veterans Affairs' Educational Assistance Programs, in the pursuit of their educational goals. Services include certifying approved courses in their declared major for receipt of benefits (it is the student's responsibility to request certification every semester and to inform this office of any changes in enrollment status); reporting additions and deletions in course certification and enrollment, and notifying students of the impact resulting from these changes. Services also include: preparing and submitting necessary documentation to the VA regional office within established time frames; procuring textbooks and other miscellaneous supplies (tools and uniforms may be approved and paid for by the VA Vocational Rehabilitation Program Case Manager), for students receiving benefits under the VA Vocational Rehabilitation program (Chapter 31), and the billing of all costs to the VA; recruiting new veteran students; and referring students to appropriate school and other agencies for resolution of personal, financial, or other problems which could interfere with achievement of educational goals. This office also administers the Hazlewood Tuition and Fees Exemption Program for qualifying Texas veterans. The Certification Specialisthandles Chapter30(Montgomery GI Bill(MGIB) Active/Veteran), Chapter 32 (Veteran's Education Assistance Program), Chapter 35 (Survivors' and Dependents' Educational Assistance), Chapter 1606 (Selected Reserve MGIB), and Chapter 1607 (Reserve Educational Assistance Program, REAP).

Any student enrolling under any of the various provisions for VA Educational Benefits should bring sufficient funds to cover the initial cost of tuition and fees, since there is usually a period of six to eight (6-8) weeks before the student receives the first payment from the Department of Veterans Affairs.

To be considered a full-time student under one of these programs, a student must be enrolled for a minimum of twelve (12) semester hours during the regular 16 week Fall or Spring semester or the equivalent for a Summer term. A student will also be considered full time if enrolled in six hours during a flex term. The Office of Veterans Affairs can be consulted for details as to what constitutes a full summer load. The Office of Veterans Affairs may be contacted at (210) 5313515 or www.accd.edu/spc/va (effective January 2007, the new website address is http://www.accd.edu/spe/admin/va).

## THE HAZLEWOOD ACT

The Hazlewood Act aids a Texas veteran who has exhausted all of his or her VA Educational Benefits. A legal resident of Texas is exempt from payment of tuition and certain required fees when ALL of the following conditions are met:

1. To be eligible to attend the College under the Hazlewood Act (Article 2654 B-1), the applicant must have served a portion of their active duty during: the Cold War which began on June 27, 1950; the Vietnam era which began on December 21, 1961, and ended on May 7, 1975; the Grenada and Lebanon era which began on August 24, 1982, and ended on July 31, 1984; the Panama era which began on December 20, 1989, and ended on January 21, 1990; the Persian Gulf War which began on August 2, 1990, and ended on March 3, 1991; the National Emergency by Reason of Certain Terrorist Attacks, which began on September 11, 2001; and any future national emergency declared in accordance with federal law.
2. The applicant must have resided in Texas one (1) year prior to entering the service and must have entered the service from Texas. The applicant must have been a resident of Texas for one (1) year prior to the date of registration.
3. The applicant must have served on active military duty (other than for training) for 181 or more days.
4. The discharge must be HONORABLE or under HONORABLE CONDITIONS.
5. VA Educational Benefits must have been exhausted or the veteran must be ineligible for VA benefits.
6. A person is not eligible for the exemption if the person is in default on a loan made or guaranteed for educational purposes by the State of Texas or the Federal government.
7. Exemptions under the Hazlewood Act shall not exceed a cumulative total of 150 credit hours, beginning with the Fall 1995 semester.

An application to attend under the Hazlewood Act should be made through the Office of Veterans Affairs, SLC 104. An applicant must present:

1. A letter from the Department of Veteran Affairs (Muskogee, OK. Regional Office) stating that the veteran is ineligible or has no veterans' educational entitlements remaining;
2. A copy of the applicant's DD214 which shows place of entry on initial active duty, dates of active duty and characterization of separation or discharge;
This benefit is also available to children of Texas service members who died while in military service or who are missing in action or prisoners of war; children of a Texas veteran who died of a service-connected disability; and children of a member of the Texas National Guard or the Texas Air National Guard killed since January 1, 1946, while on active duty either in the service of Texas or the United States.

Additional information on the Hazlewood Act can be obtained by contacting the Office of Veterans Affairs at (210) 531-3539.

## VOCATIONAL REHABILITATION

The State Board for Vocational Education, through the Vocational Rehabilitation Division, offers tuition assistance to a student who has certain physical disabilities. The vocational objective selected by the disabled person must be approved by a representative of the Division. An application for Vocational Rehabilitation assistance should be made to the nearest Rehabilitation Office or the Program for Students with Disabilities, (210) 531-3512.

## SENIOR CITIZENS

State Article 52.210 allows citizens 65 years of age or older to audit courses at the College without payment of tuition and fees if space is available. A qualified senior citizen may register after registration has closed.

Students may select one of the two options available:
Option 1 - Enroll in classes as an audit (non-credit) student and NOT receive college credit. Classes are free!!
Option 2 - Enroll in classes for traditional college credit. The student will earn a grade and is required to attend class. The college will not charge tuition; however, the student must pay all other applicable fees.

A transcript is available at the end of each term regardless of the option chosen. Refer to the class schedule for specific registration instructions. Information can be obtained from the Office of Records and Registration at (210) 531-3290.



## STUDENT INFORMATION RELEASE POLICY

Under provisions of recently enacted state and federal laws, educational institutions receiving state and/or federal funds are obligated to release or restrict access to a student's record in a manner established by those laws. The College proposes to fulfill its responsibility regarding release of student information in the following manner:

Procedures to be followed by the College in compliance with all regulations are set forth in the official Student Information Release Policy Bulletin which identifies in detail those records which are accessible to a student and another authorized person, those records which are inaccessible, the specific office in which those records are maintained, the primary person in charge of those records, and the appeal procedure to be followed when a question of accessibility arises.

A copy of this bulletin will be distributed to students at registration and will otherwise be available through designated points of distribution.

## STUDENT FINANCIAL SERVICES

## SATISFACTORY ACADEMIC PROGRESS POLICY

According to federal regulations, students applying for Student Financial Aid (SFA) programs under Title IV are required to maintain satisfactory academic progress in order to receive aid. At the Alamo Community College District, we refer to this policy as Reasonable Academic Progress, or "RAP" for short.

To maintain Reasonable Academic Progress, a student must do the following:

- Maintain a minimum of 2.0 grade point average (GPA), "C" level or better, for each semester enrolled and cumulative.
- Complete sixty-five percent ( $65 \%$ ) of all coursework attempted.
- Complete his or her program of study within 90 semester hours of coursework, including any developmental/remedial courses.


When a student successfully performs at this academic level, a RAP status " 1 " is assigned. At this level, the student continues to be eligible for the aid previously awarded or anticipated eligibility according to qualifications.

## SUSPENSION STATUS

A student who fails to maintain a minimum cumulative GPA of 2.0 and completes less than $65 \%$ of all coursework attempted OR exceeds the limit of 90 attempted hours is said to be failing to maintain a Reasonable Academic Progress. In this situation, the student is placed on "Financial Aid Suspension," or RAP 4, status. A student is sent written notification, and all financial assistance is CANCELLED. A student is not eligible for any financial assistance in "RAP 4" status, including student loans. Additionally, students placed on financial aid suspension (RAP 4) may continue to enroll in classes, however, at their own expense.

## FINANCIAL AID APPEAL

A student can be denied financial aid for numerous reasons, including Financial Aid Suspension (RAP 4); being in default of a student loan; owing a repayment on a federal/state grant; etc. Since there are many extenuating circumstances behind any scenario, the best course of action is for the student to submit a written appeal. A student suspended for the accumulation of over 90 attempted hours must provide a copy of his or her degree plan with an anticipated date of completion. Students are encouraged to use FORM SFA009: APPEAL, or their own paper document(s), to explain their individual situation. The SFS office will reply, conveying its decision or recommendation outlining the suggestions to remedy the student's situation or Appeal.

## STUDENT FINANCIAL SERVICES

Scholarships, grants, loans, college work-study, and on- and offcampus employment are available, under certain conditions, for students at the College. It is the student's responsibility to inform the College that he or she needs financial assistance and provide the necessary data and established qualifications for assistance.

A student applying is requested to submit a Student Aid Report (SAR) to Student Financial Services. Aid is awarded when a need has been established. The size of the financial aid package is determined by financial need.

Special requests for financial aid information required for public agencies must be submitted two (2) days before the document is needed.

## CRITERIA FOR DETERMINING AWARD AMOUNTS

Student selection criteria for the Title IV and State and Institutional funds awarding and packaging policy is exercised on a first-come, firstserved basis, provided the student's application is completed with all documents. These include a current year SAR and the College's General Application. The amounts listed in each program are federal amounts. At the College, depending on this availability of funds, financial aid is awarded in lesser amounts to accommodate a large number of students.

## SCHOLARSHIPS

Award range-\$200 to $\$ 500$ per semester
Based on merit or combination of merit and need
Institutional
Private Donations
Institutional scholarships are available for a student who has completed a minimum of twelve (12) credit hours with a GPA of 3.00 or better in all courses attempted. A limited number of awards are available for tuition, fees, and books. A student must be enrolled for a minimum of six (6) semester hours. An application may be obtained in Student Financial Services.

Private scholarships are submitted to Student Financial Services for processing and maintaining documentation on a recipient. The amounts may vary from donor to donor. The donors set their own criteria and, in some cases, will designate the recipient(s). The financial aid officer conducts the necessary follow-up depending on the requirements.

## Students' Rights and Responsibilities

A student receives financial aid award payments once each semester. CollegeWork Study (CWS) payments are made at least once a month. In some cases, a student may increase enrollment hours or appeal for additional aid. In these instances, additional awards may be processed.

## Institutional Information

The student or individual may contact the president of the College to review documents of accreditation, approval, and licensing bodies.

St. Philip's College General Scholarship. This scholarship was founded for the purpose of recognizing students of academic merit within specific academic or vocational departments. Faculty members select awardees from applicants within their departments who must have and maintain at least a 2.5 GPA. Approximately 35 awardees are chosen each May for the following academic year and may receive an average award of $\$ 750$. Continuing and new students who are full or part-time may apply. Contact Enrollment Management at (210) 531-4670.

Artemisia Bowden Memorial Scholarship. This scholarship was established in honor of Artemisia Bowden, the founding President of St. Philip's College. This highly competitive scholarship is awarded to full-time students who maintain at least a 3.0 GPA. A screening committee of college faculty and staff reviews and selects the finalists who are then interviewed by the Bowden Selection Committee. Approximately two awardees are chosen each year for the $\$ 1,000$ scholarship which is renewable for a second year. Contact Enrollment Management at (210) 531-4670.

Alamo Community College District Foundation Scholarship. This scholarship was conceived as a means of recognizing student academic achievement at each of the district colleges. Students of any academic or vocational major must complete an application which is available from the Office of Financial Aid (210-531-3274). To be eligible, students must have and maintain a 3.0 GPA, register for full-time study, and demonstrate financial need. Selection of awardees is determined by a faculty screening committee at each college with final approval by the Alamo Community College District Foundation Board. The deadline for receipt of the application is March 15 for the following academic year. The amount of each award is $\$ 1,000$ per year and is renewable for a second year.

San Antonio Livestock Exposition, Inc., (S.A.L.E.) Scholarship. This \$1,000 renewable scholarship was designed to aid academically qualified and needy students majoring in agribusiness, agriculture, food and fiber, and life or health sciences. Applicants must be permanent residents or U.S. citizens and must graduate as residents from one of the following counties: Bexar, Atascosa, Bandera, Comal, Gillespie, Guadalupe, Kendall, Medina, Wilson, Frio, Karnes, or Kerr. Finally, applicants must be full-time students, maintain a 2.0 GPA , and, upon completion of their coursework at an ACCD college, plan to transfer to a four-year university within Texas. The deadline for submission of the S.A.L.E. Scholarship Application is April 16 each year for the following academic year.

Kimmelman Child Care Scholarship. This scholarship pays for childcare for one year. Contact the Equity Center Coordinator at (210) 531-3518.

Robert B. Taylor Scholarship. This scholarship awards $\$ 750$ per semester. It was created to assist African-Americans seeking a degree in the Nursing or Allied Health fields. The student must have a cumulative GPA of 3.0. Applications can be obtained in the Office of Financial Aid, SLC 117.

University of Texas System Alliance for Minority Participation Summer Community College to Senior College Bridge Program 2003 Summer Program Guidelines. Contact George Johnson at (210) 531-4892 for more information. Students must be math, science, or engineering majors planning to transfer from SPC to UTSA during the 2003-2004 academic year.

George W. Brackenridge Scholarship. This scholarship was established primarily to assist the student who shows evidence of academic ability, good character, ambition, and financial need. A number of scholarships are awarded annually on recommendations submitted by individual schools in the San Antonio, Texas area.

Valedictorian Scholarship. A full-tuition scholarship for one (1) academic year is awarded to each valedictorian certified from an accredited Texas high school on the list sent by TEA.

Scholarships available through Tourism, Hospitality, and Culinary Arts:

- SA Hotel \& Motel Assn..........Contact Debbie Romeo, (210) 531-3310
- NRA Pro Management...............Contact Will Thornton, (210) 531-3313
- American Dietetic Assn............Contact Mary A. Kunz, (210) 531-3315
- Texas Dietetic Assn..................Contact Mary A. Kunz, (210) 531-3315
- San Antonio Dietetic Assn.......Contact Mary A. Kunz, (210) 531-3315
- American Culinary Federation..........Contact Steve Martin, (210) 531-3319 or Will Thornton, (210) 531-3313
- San Antonio Livestock Exposition. $\qquad$ .Contact Mary A. Kunz,(210)531-3315
- Alamo Area Hospitality Association,Inc. $\qquad$ .Contact Mary A. Kunz, (210)531-3315


## Scholarships available through the LVN Department:

Contact Department Chairperson at (210) 531-3415.

- Jackie Sims Memorial Scholarship through the Licensed Vocational
- Nurses Association of Texas
- Ethnic Minorities in Vocational Nursing through the Texas Higher
- Education Coordinating Board
- TAVNE Scholarship (Texas Association of Vocational Nurse Educators)
- Dr. Frank Bryant, Jr. Scholarship

Scholarships available through the Department of Automotive Technology: Applications are available in the Auto Tech Office, Room 100, Applied Science and Technology Building. Contact Rose Kyle-Bankston at (210) 531-3571.

- Bridgestone/Firestone ACCD Foundation Scholarship Award
- Charles Urschel Guenther Award for Automotive Academic Excellence


## Scholarships available through the Department Fine Arts:

Both acquired through audition/portfolio review. Contact Regis Shephard at (210) 531-4709 or 531-3321.

- Kathryn Walker Morgan Scholarship Fund
- Fine Arts Scholarship Fund


## Scholarships available through the Department of Business Information Solutions: <br> Contact the Department Chairperson at (210) 531-3452.

- Marye B. Gilford Scholarship

For further information on scholarships, visit the:
Minnie Stevens Piper Foundation
800 NW Loop 410
San Antonio, TX 78216
(210) 525-8494

## ACCD STUDENT LEADERSHIP INSTITUTE

"Empowering Today's Students to be Tomorrow's Leaders"
The ACCD Student Leadership Institute (SLI) is a district-wide program that provides free, intensive instruction and overviews of issues that are important to effective leadership in any environment. Beginning each fall, SLI scholars selected via an application process from all ACCD campuses will be given the opportunity to reach levels of personal and public accomplishments and leadership within a climate that recognizes and respects diversity. This yearlong commitment provides training in skills that enables the ACCD representatives to lead a group or work in collaboration with other leaders to accomplish organizational objectives. The students will be able to meet various successful community leaders, use lab models, case studies, and participate in field studies, while drawing upon the expertise of those who have held leadership roles in all sectors of the economy. Students selected to participate in the ACCD SLI will become SLI Scholars and recipients of a scholarship and will have opportunities to travel to Washington DC, thus utilizing the skills and knowledge acquired throughout the year in meetings and presentations with officials from private, non-profit, and government sector headquarters. For applications or further information, contact your student activities office or call the SLI office directly at (210) 220-1656.

## FEDERAL GRANTS

## Pell Grant

Award amounts for an eligible student are determined through the use of a payment schedule published annually by the U.S. Department of Education. Award amounts vary according to: (1) the educational costs at the institution (the cost of attendance), (2) the student's enrollment status (must be at least a half-time student), (3) annual appropriations and award maximums set by Congress, and (4) the Expected Family Contribution (EFC) on the student's SAR. Pell Grant funds are awarded to a student through at last two (2) payments per academic year.

## Supplemental Educational Opportunity Grant (SEOG) <br> Award range- $\$ 100$ annual minimum and $\$ 4,000$ annual maximum

This program provides a grant to an undergraduate student with the lowest expected family contribution who will also receive a Pell Grant in that year. These funds are awarded to an eligible student based on financial need. The College's criteria for awarding SEOG funds to less than full-time students is based on the criteria that awards will be made to a student who has a zero (0) expected family contribution and who will also receive a Pell Grant.

## STATE GRANTS

## State Student Incentive Grant (SSIG)

Award range- $\$ 200$ annual minimum and $\$ 2,000$ annual maximum
Grant-No repayment
For undergraduates; Texas residents
Amount of award based on need and availability of funds
The SSIG provides funds to an undergraduate student who demonstrates financial need as determined by the financial aid officer. The grant is jointly funded by the State and the College.

## Texas Public Educational Grant (TPEG)

Award range- $\$ 200$ annual minimum and $\$ 2,000$ annual maximum
Grant-no repayment
For undergraduates only; Texas residents, out of state, resident aliens Amount of award based on need and availability of funds.
The TPEG provides assistance to an undergraduate student who demonstrates financial need as determined by the financial aid officer. To be eligible for a TPEG, a student must be enrolled for at least six (6) semester credit hours.

## LOANS

There are several long and short-term loan programs available at the College. The amount a student can borrow depends on his or her individual needs. Generally, repayment on a long-term loan begins six (6) months after graduation or from the date of withdrawal. Usually a short-term loan is reserved for the time of registration and must be repaid within thirty (30) days. In order for the student to receive this loan, he or she must complete the necessary application before the deadline dates.

## Federal Family Education Loan Programs (FFELP)

## Stafford Loan (Formerly GSL-Guaranteed Student Loan)

Loan must be repaid
For undergraduate and graduate students
Must show need to qualify for a federally subsidized Stafford Loan. Unsubsidized loans are also available.

A Stafford Student Loan is made to a student at a low interest rate by a lender such as a bank, credit union, or savings and loan association to help a student pay for his or her education. These loans are insured by the guaranteeing agency in the state and reinsured by the federal government. The interest rate for new borrowers is eight percent. A student may borrow up to $\$ 2,625$ for the first year and $\$ 3,500$ the second. The financial aid officer will determine the actual amount a student may borrow. A student must attend a mandatory loan counseling session before loans are disbursed. Loan repayments begin six months after the student leaves school or drops below half-time status. Student Financial Services may be contacted for additional details on the Stafford Loan.

## Federal PLUS (Parent) Loan Program

The PLUS Program allows parents to borrow on behalf of their dependent child who is either an undergraduate or a graduate/professional student. PLUS Loans currently carry a variable interest rate tied to 91 Day Treasury Bill rates. Repayment for parent borrowers begins within sixty (60) days after disbursement of the loan.

The following annual and aggregate loan maximums are in effect:

| Borrower | Loan Amount |
| :--- | :--- |
| Parent, on behalf | $\$ 4,000$ per year for |
| of child | each eligible dependent |
|  | student up to $\$ 23,000$ <br> total for each eligible <br> dependent student |

These loan limits do not include amounts borrowed by a student under the Stafford Program. The PLUS Loan, together with all other financial aid, may not total more than the student's cost of attendance.

Repayment of a PLUS Loan begins within sixty (60) days after disbursement. Borrowers have up to ten (10) years to repay, not counting periods of authorized deferment forbearance.

## The Consolidation Loan Program

Consolidation Loans may be arranged to combine loans made to a student under Title IV programs and the Health Professions Student Loan (HPSL) Program. These loans provide repayment periods appropriate for the total amount outstanding. For example, a student whose total loan debt exceeds $\$ 7,500$ may be given a repayment period longer than ten (10) years. Repayment of a Consolidation Loan must begin within sixty (60) days after the selected loans have been consolidated. A student must contact his or her lender to see if the loan qualifies for Consolidation Loans.

## Short-Term Loans

Loan must be repaid in 30 days
Any student may apply
Separate application required
The Short-Term Loan is an institutional emergency loan which has no interest rate. These funds are to be repaid during the time in which the student receives the funding. The financial aid officer will determine the amount of the loan and devise a payment schedule.

## Part-Time Jobs

Part-time employment is available under several programs: (1) College Work-study (CWS), (2) Student Assistant, and (3) Off-Campus Employment.

The College Work-study Program allows a student to work up to twenty (20) hours a week in a variety of positions, on- or off-campus. The program is monitored under federal regulations.

With some assistance from Student Financial Services, employment for a Student Assistant position is directed by the department which will do the hiring.

Private off-campus employment is administered by many local community or city agencies which hire the College's students. The firms' policies are applied and are not related to the College.

In addition to earning money while attending college, the student has an opportunity to participate in the local work force and gain valuable work experiences.

## College Work-Study Program

Provides jobs to earn money for school
For undergraduates
Campus-based program
Amount of award based on need and availability of funds

CWS Program will provide a job for an undergraduate student who needs financial aid. CWS gives a student a chance to earn money to help with his or her educational expenses. The pay will be at least the current federal minimum wage. The total CWS award depends on the need, the amount of funding the institution has for the program, and the amount of aid the student receives as a financial aid package. A student will be paid at least once a month. CWS checks are picked up at the Bursar's Office. The financial aid officer determines the number of hours a student may work per week. CWS jobs are mainly on campus, but some are off campus at different public and private nonprofit organizations. To be eligible for CWS jobs, a student must be enrolled at least half-time, but some exceptions may be made for a student enrolled less than half-time.

## FINANCIAL AID ELIGIBILITY

Since these programs are considered to be domestic assistance, they are available only to citizens, nationals or permanent residents of the United States, citizens of the Northern Mariana Islands, permanent residents of the Trust Territory of the Pacific Islands, or those who are in this country for other than a temporary purpose. A student who is in this country on an F-1 or F-2 student visa is, by definition, here for a temporary purpose and, therefore, is not eligible. The definitions of "other than temporary purpose" are given below.

A non-citizen with permanent resident status in the U.S. will hold either form K-151 or form I-551 (Alien Registration Receipt Cards). The student is eligible for the above-stated programs.

Either I-171 or I-464A is an appropriate approval notice to apply for permanent residence. Because of new INS procedures, the I-171 or I-464A may not be provided. In these cases, the applicant should have INS endorse his or her I-94 (Arrive-Departure Form), indicating "employment authorized" and "adjustment applicant." This endorsement fulfills the same requirement as an approval notice.

A refugee or immigrant who is admitted to the United States for humanitarian reasons is eligible for federal student financial aid. In these cases, the applicant's I-94 must be endorsed "Conditional Entrant Status" or "Indefinite Parole."

Southeast Asian refugees who were admitted to the United States after 1975 are eligible. In addition, an applicant who has been granted asylum and has been given voluntary departure for a period of one (1) year is eligible.

## COOPERATIVE EDUCATION

Cooperative education provides an excellent vehicle for the development of desired vocational capabilities through a program which enhances skills learned in the classroom. Cooperative education is an opportunity to prepare students for entry into the "world of work."

Local employers selected by the College become responsible for on-the-job instruction and work experiences of the student. A student is recommended by the College in accordance with his or her individual career interests. The College is responsible for the effective coordination and supervision of the total program.

Generally, a student is placed with the employers to work on-the-job for a period each week equaling or exceeding the time spent in school. Other program forms may require work and school attendance on alternate days, weeks, semesters, or other suitable time periods.

Contact the appropriate academic department for more information.

## Student Support Services

A comprehensive system of services that includes, but is not limited to, the following: assessment of academic needs; determination of non-academic needs; development, implementation, and monitoring of support services plans; attention to personal problems; career; employment guidance; assistance with interpersonal relations; academic counseling; proper referral to campus/community resources; culture awareness activity; and student advocacy.

## Student Development

Involves two unique courses, SDEV 0170-Orientation to College and SDEV-0370 Personal and Academic Success; these courses are designed to help students make a successful transition to college. Participation in a Student Development class helps students better understand the College's expectations. These courses are offered during the day and evening to all students meeting the criteria below. The following policy will be effective beginning for the Fall 2006 term.

## SDEV 0170- Orientation to College (1 credit hour)

- Students with less than 15 credit hours at the time of first enrollment at St. Philip's College.
- Students who transfer to SPC from another college with 15 or more semester hours may be exempt from registration in SDEV 0170 and may be required to attend a transfer student orientation.


## SDEV 0370- Personal \& Academic Success (3 credit hours)

- Students with less than 15 credit hours at the time of first enrollment at SPC and that require two or more remedial courses in English, mathematics, or reading.
- SDEV 0370 will substitute for SDEV 0170 and meet the requirement for Orientation to St. Philip's College.

Students who fit the following criteria will be required to enroll in a Student Development course their first semester:

- Students having earned less than 15 credit hours at the time of first enrollment at St. Philip's College.
- Student enrolling in day and evening classes.

A registration hold will be placed on the record of students that do not take SDEV 0170 or SDEV 0370 in their first semester at St. Philip's College. Students who do not successfully complete the course during their first semester will be required to meet with a counselor and re-enroll in the course. For a detailed course description of both classes, refer to Section 9 of the college catalog.

## International Student Services

The Coordinator of Foreign Students is the first point of contact for a prospective international student who seeks information regarding admission procedures for the college. The coordinator serves as a liaison between the college and the United States Citizenship and Immigration Service (USCIS).

Additional purposes of the coordinator are to (1) issue the Form I-20, (2) establish and maintain files for each student, (3) provide counseling and guidance for international students, (4) keep students informed regarding the rules and regulations for the United States Citizenship and Immigration Service (USCIS) and St. Philip's College, (5) serve as a point of contact for all departments on campus on all matters relative to international students, (6) provide services required by this special population of students, such as verification of enrollment to home country, confirm authenticity of documents submitted, granting clearance for registration, etc.

International students must enroll full-time ( 12 semester hours or more) and pay hospitalization insurance (ACCD Board policy) every Fall and Spring semester. The deadline to submit all required documents (application, transcripts, verification of financial resources, TOEFL, etc.) are June $1^{\text {st }}$ for Fall, October $1^{\text {st }}$ for Spring, March $1^{\text {st }}$ for Summer. For additional information, contact the International Student Services Office at (210) 531-3262. (See index for additional information regarding international student).

## COUNSELING

The Department of Counseling Center serves as a starting point for entering students. It's also a source of assistance to all students in adjusting to college, making career decisions, and dealing with academic issues. The Department provides the following services:

1. Comprehensive counseling and guidance designed to assist a student with goal setting and degree planning, as well as provide academic, vocational, personal, and career counseling;
2. College Orientation (an introduction TO THE College Experience) is available for all entering students;
3. Counseling and academic advisement for Liberal Arts and undecided majors;
4. College transfer services to aid students in making their transfer experience more efficient and rewarding;
5. Career services to help student identify, develop, evaluate, and effectively implement career objectives.

## TRANSFER CENTER

The Transfer Center provides a variety of services and information for students who are interested in transferring to a four-year college or university. While attending St. Philip's College, a student may complete a joint admission agreement and follow a degree plan designated by a specific university. The degree plan permits the student to take only those courses which will apply towards a specific major at a specific university. Once the student completes all of the courses on the degree plan (with a minimum of 60 credit hours), he/she will earn an Associate Degree in Liberal Arts.

The objectives of the Transfer Center are as follows:

1. To assist students who are planning to transfer to another college or university by providing them with information for admission, selectivity of specific colleges, financial aid, on and off-campus housing, college costs, and when and where one can apply.
2. To provide a college catalog library.
3. To provide course equivalency sheets, 2+2/Joint Admission Agreements, Transfer Core Curriculum Sheets and Transfer Planning Guides.
4. To assist students in reaching their long-range educational and vocational goals.
5. To aid students in making their transfer experience a seamless process.

The Transfer Center is located in the Counseling Center Office in SLC Room 103-F. For additional information, contact the center at (210) 531-4649.

## ADVISING AND ASSESSMENT CENTER

Assessment Center (Office of Advising and Assessment)
a. High School Equivalency-General Educational Development Test (GED)
b. Accuplacer placement test
c. ASSET
d. THEA Test

Operational Procedure. Individuals desiring to take a test should see an advisor for selection of appropriate examination(s), after which the candidate may be scheduled for testing or receive further information and assistance from the Office of Advising and Assessment, SLC 205 (second floor), (210) 531-3262.

Credit by Examinations. The College will accept test results on the following assessment instruments for the awarding of credit or advanced placement: a. CLEP;
b. Defense Activity for Non-Traditional Education Support (DANTES) and DANTES Subject Standardized Test (SSTs);
c. College Entrance Examination Board Advanced Placement Program (CEEB-APP); and
d. Institutional/Departmental Exams. No more than 32 hours of non-traditional credit may be awarded. With the exception of Advanced Standing Credit, credits earned by non-traditional methods are not posted on the transcripts until the student has satisfied the three (3) semester hours resident requirement. (CREDIT BY NON-TRADITIONAL METHODS may be referred to for additional information.)

The Office of Advising and Assessment was established with the mission to improve and expand faculty academic advising for students across the College and to unite assessment and advisement in support of developmental education and retention programs of the College. Advising and Assessment staff members coordinate and monitor the College faculty's academic advising program, administer the institutional assessment program, including Accuplacer, ASSET, THEA Test, GED, etc., and act as liaison among the Counseling Office, Admission and Enrollment Services, Records and Registration, and the Developmental Education Program.

The Office of Advising and Assessment seeks to integrate the resources and expertise of academic and vocational faculty and professional student service personnel in the delivery of advisement services to students. Areas covered in the academic advising process include exploration of life and educational/career goals, identification of the appropriate education program for the student, selection of courses and scheduling of classes. To improve the advisement skills of the faculty, the Office of Advising and Assessment conducts orientations for students, in-service workshops for faculty, and monitors the placement and progress of developmental students.

## GED PREPARATORY PROGRAM

GED preparation classes will assist individuals to pass the GED examination which is an equivalence exam to a high school diploma. Subjects covered are Language Arts Reading, Language Arts Writing, Mathematics, Social Studies, and Science. Adult Basic Education Classes focuses on Reading, Writing, Language Arts, and Mathematics below the high school level.

These classes are offered free to the community. For further information, please contact the Learning and Leadership Development Center (LLDC) at (210) 531-4853.

## ENGLISH AS A SECOND LANGUAGE (ESL)

English as a Second Language classes focuses on learning how to speak, read, understand, and write the English Language.

These classes are offered free to the community. For further information, please contact the Learning and Leadership Development Center (LLDC) at (210) 531-4853.

Each course has a curriculum that is specifically designed to meet the academic needs of the individual learner.

## LEARNING RESOURCE CENTER (LRC)

## The Learning Resource Center (LRC)

The LRC is located on the third floor of the Sutton Learning Center (SLC). It is comprised of three major areas: the Library, Media Services, and Computer Services. The LRC at St. Philip's College's Southwest Campus is also under the umbrella of the College's LRC.

## SBC Technology Center

The SBC Technology Center is located in the SPC LRC main campus. Computers were given to the LRC through a grant from the SBC Foundation of Southwestern Bell Communications, Inc.

Notebook computers are available for SPC students for in-library use. To check out a notebook computer for in-library use, currently-enrolled SPC students in good standing must have a valid SPC identification card and a second form of current photo identification (i.e., a driver's license or military identification card). "In good standing" means no overdue materials through any ACCD library and no current fines. There is a two-hour loan period.

## The Library

The College library has 150,886 cataloged items, including over 63,500 books in its collection. The main LRC has over 110,000 full text ERIC (Educational Resources) documents which may be accessed free by index available through the LRC 's Web Site: http://www.accd.edu/spc/lrc (effective January 2007, the new website address is http://www.accd.edu/ $\mathrm{spc} / \mathrm{admin} / \mathrm{lrc}$ ).

The LRC's Web Site provides patrons with quick access to an array of Web search engines plus numerous periodical indexes and full-text databases. Other information found on the Web site includes bibliographics, general information, as well as links to other Web sites.

The Library subscribes to over 420 current print periodical and 68 databases.

Music CDs, audio books, and videos may be checked out by patrons free of charge. Videos also may be viewed on campus in the LRC's TV/DVD viewing room.

The LRC offers nearly 100 Dell computers that are available for student projects, email, Internet browsing and research. LRC faculty instruct students on the use of the World Wide Web for research. SPC faculty may contact the Reference Librarian to schedule bibliographic/library instruction.

The Alamo Community College Libraries Catalog is Web-based. Patrons may easily access library holdings from any of the ACCD libraries or from their home or office.

Technical Services is the "behind the scenes" department of the library. It is responsible for ordering new materials, processing them, and entering their bibliographic information into the ACCD Web-based catalog. A student or faculty member interested in having the Library purchase a particular item is invited to write up his or her request and leave it in the suggestion box or with a staff member.

The St. Philip's College Archives is the official repository for historical records created by and about the College. Documentary evidence is maintained on the ongoing life and work of the College and surrounding community. Access is granted on the basis of age, condition, and content of the records. Researchers are required to request permission to publish and to note copyright permission and credit in print.

The LCR's Black Collection contains works by and about AfricanAmericans. The LRC's permanent Diversity Display contains materials on African-Americans, Asian-Americans, Hispanic-Americans, NativeAmericans, Women, and other Special Lifestyles.

A children's area is provided for children while their parents/care givers are in the Library. A child is invited to read, watch children's videos, or play quietly with the Library's toys. Other "Youth" (under-18/nonstudent) policies are covered on the LRC's Web Site: http://www.accd.edu/ spc/lrc (effective January 2007, the new website address is http:// www.accd.edu/spc/admin/lrc).

Other services of the Library include photocopiers, printer(s), pianos, lockers, group and individual study rooms. (A small fee is charged per page for computer prints and photocopies.) The Reference staff periodically gives tours and helps with research needs.

## Media Services

Media Services provide the campus with non-print-oriented instructional support. It supplies and maintains, most of the audio-visual equipment that is used throughout the College.

Another function of this department is to produce instructional and promotional materials for College programs and events. Original materials are created using some of the latest technology in the areas of graphics arts, studio art, photograpy, educational television and sound services.

A student may utilize media production services for class projects by providing technicians with supplies needed for the projects. These services include computer-generated graphics, transparencies, videotape editing and audio recording. Sound amplification for student organization
events can be arranged, as well as darkroom services for student publications. Arrangements should be made well in advance. Certain equipment items may also be checked out or used in the Library.

## Computer Services

LRC Computer Operations supports the highly complex systems that the Library utilizes, as well as being on call for hardware or software problems throughout the LRC. (Main Campus and Southwest Campus)

## SOUTHWEST CAMPUS LEARNING RESOURCE CENTER

The Southwest Campus LRC serves the College's facilities at 800 Quintana Road. Students have access to a collection of over 14,000 items, including over 1,300 videos and over 70 periodicals. Access to the items is provided through the Alamo Community College Libraries Catalog. The Library subscribes to online periodical databases (some full-text) via the LRC's web page. Computers are available in the Library for word-processing, bibliographic instruction, Internet research, and e-mail. The LRC provides audio-visual equipment for library and classroom use.

## ROOM AND BOARD

The College assumes no responsibility for boarding or lodging for a student. The College has no dormitories, so each student is responsible for securing his or her own room and board. The College cafeteria is a contracted vendor serves three (3) meals per day, Monday through Thursday and (2) meals on Friday.

## CHILD DEVELOPMENT CENTER

St. Philip's College Child Development Center is located on the northwest corner of the campus for optimal convenience and can accommodate up to 57 children. The Center is a licensed facility that provides fulltime, quality early care and education for children 12 months to 5 years of age. (Children who are 3-5 years of age must not have attended public or private school). A child-centered approach curriculum is offered along with emphasis on short- and long-term projects. Full-time students, staff, and faculty are eligible to use the facility. Hours of operation are from 7:30 a.m. to 4:30 p.m. during the regular semester schedule. Hours may vary depending on need during the Summer. The facility will be closed on all District holidays. Childcare fees are in accordance with District policy and include breakfast, lunch, and an afternoon snack. Enrollment will be provided on a first-come basis. For additional information, please contact the Center at 210-271-7033.

## SERVICE-LEARNING AT ST. PHILIP'S COLLEGE

Service-learning is a teaching method that links community service with learning objectives in academic and vocational/technical courses at St. Philip's College. This model of learning combines classroom instruction and real-world application, benefiting both the student and the community equally. For example, education majors can develop their skills by spending time serving in an elementary school classroom, or biology students can better understand their subject matter while improving their environment. Reflection activities and critical thought are then used to connect the service experience with the coursework.

Student participating in this educational exprience will be more prepared to face the complexities of the workplace. Service-learning brings together learning and social responsibility to craft a more well-rounded student. The program impacts student academic motivation, needs in the community, leadership development and civic responsibility.

Reasons to enroll in service-learning classes:

- Apply theory learned in the classroom
- Gain real-world experience
- Help your community
- Increase your chances of getting scholarships
- Added experience to your application to four-year institutions and to your resume
For more information about service-learning at St. Philip’s College, please contact 210-531-3244, or CIVENGAG@ACCD.EDU.


## STUDENT LIFE

The Student Life Department is responsible for non-instructional areas of the college that focus on the well being and personal development of the students. Student Life units includes the Student Health Center, Student Activities, Student Government, and Student Organizations. This Department also serves as the Campus Liaison for the Bookstore and The Cafeteria. The Department sees as its primary mission aiding students in the identification and development of leadership skills, a vessel for establishing life-long friendships, and enhancement of acceptable social skills. The Department is housed in the E.L. Turbon Student Center.

## THE E. L. TURBON STUDENT CENTER

The Center is the "home away from home" for students. Here they can relax, study, visit with friends, eat, or merely engage in a competitive games. Short naps between classes is another favorite Center activity. The Center has meeting rooms, a snack area, a big screen TV, viewing area, a lounge, and houses The Student Government Association Office. The Center has pool tables, a wide assortment of video games, and pingpong tables. Table top games such as dominoes, chess, yu-go-yu, and the like are also available.

Entertainment in the Center during a semester offers something for everyone. Live music, caricatures, dance exhibitions, mechanical bull rides, poetry slams, and magicians are but a few of the events that one can expect to see on campus. Most of this entertainment is free to students. Couple this with noted speakers, self-help and development workshops, and one has all the ingredients for a full and action packed semester.

Students are encouraged to get involved in student organizations. There are numerous student clubs on campus. There are Social Clubs, Special Interest Clubs, and clubs organized by Educational Departments. Information on student clubs and organizations can be found in the Center.

## LOCKERS

A limited number of lockers are located in the Center. These lockers are free and issued on a first come first serve basis. Lockers can also be found in the Campus Center.

## STUDENT PUBLICATION

The Tiger, the SPC student newspaper, is printed monthly and in an online version. It provides students interested in journalism and newspaper production with opportunities to be published. Articles in The Tiger often publicize campus events and other topics of concern or importance to students, faculty, and staff. Interested student should send an inquiry to thetiger@accd.edu.

## COLLEGE HEALTH SERVICES

The College Health Center is staffed with professionally trained and licensed Nurses. The Center seeks to inform and educate the campus community in the art of "staying well." The staff is readily available to respond and administer first aid to on-site emergency injuries and illnesses. A wide assortment of health related services are available at the Health Center. They include but are not limited to the following:

* Consultation on health related problems
* Health Information Pamphlets
* Information on the College sponsored Student Accident Insurance
* Information on community-based health organizations

The Center presents health programs in cooperation with area health specific groups. Campus wide Blood Donor Drives are coordinated by this office.

Students with chronic health problems or disabilities are encouraged to consult with the Nurse at the beginning of each semester. All students are encouraged to keep their Diphtheria-Tetanus immunizations up to date.

## College Health Centers Locations:

| Main Campus | Southwest Campus |
| :--- | :--- |
| Sutton Learning Center, Rm. 109 | Building 2030, Rm. A-165 |
| $210-531-3257$ | $210-921-4668$ |

In case of extreme emergencies, individuals should call 210-222-0911.

## STUDENT INSURANCE

The College District maintains a group accident insurance policy on all students enrolled. Coverage includes hospital and doctor's charges in accidental injuries on or off campus. Any charges not related to accidental injury are the responsibility of the student. Hospitalization benefits under a special Student Group Plan are available at a reasonable premium which may be included at the student's option in the payment of tuition. Brochures describing these benefits are available in the College Health Center and the Student Life Office.

## PUBLIC SAFETY AND POLICE SERVICES

- The Department of Public Safety (DPS) has an emergency phone located outside the DPS office for immediate assistance.
- Courtesy Patrol Assistance is available for locked keys and dead batteries during the hours of $7 \mathrm{a} . \mathrm{m}$. to $3 \mathrm{p} . \mathrm{m}$. and $5 \mathrm{p} . \mathrm{m}$. to 10 p.m. Telephone (210) 208-8099 for the Motor Pool.
- Escort service is also available for anyone needing assistance to his or her vehicle.


## EMERGENCY TELEPHONE NUMBER (210) 222-0911 NON-EMERGENCY NUMBER (210) 208-8099

Police protection is afforded 24 hours a day, 365 days a year. The primary objective of the patrol officer is to provide a safe environment for the employees, students, and the community. Protection of life and property.
Police duties include but are not limited to the following:

- Patrol functions (vehicle, foot, and bike);
- Identify suspicious activities and persons;
- Conduct field interviews;
- Conduct field investigations;
- Respond to call(s) for service;
- Provide escorts;
- Non-emergency requests;
- Traffic enforcement;
- Traffic accident investigations;
- Respond to alarms;
- Conduct investigations;
- Community relations;
- Crime prevention activity;
- Disturbance calls;
- Record the above (written reports).

Calls are assigned to the patrol officer on a priority basis. Criminal calls have priority over service calls or non-emergency requests. The DPS also has bike patrols assigned to all campuses between the hours of 6:00 a.m. and 10:00 p.m. The bike officers patrol the interior of all campuses as well as the parking lots.

## CAMPUS PARKING REGULATIONS

Every student attending classes who operates a motor vehicle and parks on the College campus must purchase and properly display a "Student Parking Registration" (see Tuition and Fees Section).

To be valid, the Parking Registration must hang from the inside rearview mirror with the registration number facing the front of the vehicle. A registration placed in any other manner will be classified as "No Registration." Parking registrations are valid for one (1) academic year (September 1 through August 31.)

The purchase of a Parking Registration DOES NOT guarantee the student a parking space on the College campus, but only authorizes the student to park in authorized "student" parking lots if space is available and the Parking Registration is properly displayed.

It is imperative that the student who operates a motor vehicle secures a copy of the Traffic and Parking Rules and Regulations at the time he or she purchases the Parking Registration. This will minimize misunderstandings and penalties involving the issuance of Parking Citations.

The ACCD Department of Public Safety Officers are commissioned Peace Officers vested with the power and authority to issue traffic citations and summons, to arrest and file charges, if necessary in the City or Justice of the Peace Courts. A student found in violation of the Traffic and Parking Rules and Regulations will be issued a Traffic/Parking Citation. Each Campus citation is $\$ 4.00$ if paid within ten (10) days of the issue date on the citation. Fines shall be paid at the Bursar's Office or mailed in. If not paid within ten (10) days of the issue date on the citation, the fine increases to $\$ 10.00$. The ACCD Department of Public Safety Office may be contacted at (210) 208-8099. For citation information call (210) 531-3205. There is a 24 -hour dispatcher on duty for emergency service and may be contacted at (210) 222-0911. If you are issued a Justice of the Peace citation, you must appear in the court stated on the citation. Failure to appear may result in criminal charges.

## MILITARY EDUCATION PROGRAM

## SERVICEMEN'S OPPORTUNITY COLLEGE (SOC)

In recognition of the unique educational problems confronting many Army active-duty military in attaining their educational goals, the College has sought official registration as a Servicemen's Opportunity College. A pledge of continuous effort is made to fulfill the educational commitment to the military by maintaining the standards specified by the criteria of a SOC, using promising new approaches to meet the educational needs of the military.

## GUIDELINES FOR EVALUATION OF MILITARY EDUCATIONAL EXPERIENCES AND SOC ENROLLMENT

The following procedures should be employed by a military person desiring to have his or her educational records evaluated for college credit to participate in the SOC Program.

Step 1: Submit an official Army/ACE Registry Transcript (AARTS) or Sailor/Marine Registry Transcript (SMART) for the evaluation of educational experience during military service. Credit will only be granted if military educational experiences are relevant to the declared subject major.

Step 2: Retain a copy of the AARTS/SMART transcript, and schedule an appointment with Ms. Conyers (Servicemen's Opportunity College Counselor) to discuss the SOC program and the College's degree plans.

## EDUCATIONAL SUPPORT SERVICES

The Educational Support Services Department (ESS) at the College provides academic and psychosocial support services that are designed to promote student success.

## Career Services

Career Services is located in the Sutton Learning Center (SLC) room 102 and offers free assistance to students and graduates alike. We can provide assistance in choosing a career and college major, assistance with finding both full and or part time employment, help in developing a resume and assistance in locating an internship or practicum site. We offer both group and individual sessions on interviewing techniques, dress for success and general labor market information.

Job notices are posted daily and employers are regularly seen on campus recruiting students for both full and part time positions.

We can be reached at 210-531-3397 or please feel free to just stop in room SLC 102.

## The Communication Skills Studio

The Communication Skills Studio, housed in the Counseling Department (SLC 103J), assists both students and members of the surrounding community in their efforts to improve communication of all types--written, oral, and artistic. The Center, which is open on a part-time basis or by appointment, offers a variety of programs and activities.

During the fall, spring, and summer semesters, mini-workshops focusing on study or life skills are offered weekly. Included are topics such as Time Management, Memory Techniques, Improving Concentration, Note-taking Skills, Test-taking Strategies, Dealing with Math Anxiety, etc. Individual counseling and/or visits to individual classes or programs for any of these or related areas are also available.

The One-on-One Tutoring Lab provides assistance to students referred by the St. Philip's College learning disabilities specialist.

To provide a bit of relaxation, a monthly Brown Bag Craft sessions are held throughout the fall and spring semesters. Participants have the opportunity to enjoy some food and fellowship while creating a hand-made item that is sure to be treasured.

Flip the Page, a paperback book club, meets monthly throughout the year and is open to faculty/staff, students, and the community at large. Leadership of the hour-long discussion rotates regularly so that all may enjoy sharing ideas as this noon-time group gathers.

## The Learning Lab

The Learning Lab is located in NTB 116 and offers free tutoring by peers, skills specialists, and college faculty in most classes offered at the College, as well as numerous activities that help students succeed in college. Cybertutor is also available by clicking onto the SPC homepage.

## Special Needs Services

The Special Needs Services Department is located in NTB 116 and offers specialized services to disabled students such as mobility facilitators, readers for visually impaired students, and scribing. Equipment available for student use includes 20 -inch computer monitors, a braille printer, Amigo Scooters, wheelchair, enlargement printer, tape recorders, Visual Teks, Franklin spellers, talking calculators, books on tape, Sorenson VRS, electronic copyboard, JAWS, lighted magnifying glass, Omni 1000 and 3000 software, Visual Tek Voyager and Zoom Test software.

## Interpreter Services

Interpreter Services is located in Campus Center 103 and is available to hearing impaired students. A TDD is available for student use.

Students who will be requesting interpreter services for the semester must register for classes during EARLY registration to insure interpreter services for all of his/her classes. To find out the dates of early registration, please contact the registrar's office at 210-531-3290, or check the website at http://www.accd.edu/spc/spemain/admiss.htm (effective January 2007, the new website address is http://www.accd.edu/spc/admin/admiss.htm). If a student chooses to wait until late registration to register for classes,
the Interpreter Services department cannot guarantee that interpreter services will be provided for all classes.

In accordance to new district policies and Section 54 of the Educational Code, effective Fall 2005, ALL students will be required to submit the following documents to Interpreter Services, to remain on file, in order to receive an appoved tuition waiver for St. Philip's College:

- Completed Educational Plan Application

Student will be required to complete an Education Plan Application as provided by Interpreter Services prior to enrollment with St. Philip's College and to update it when deemed appropriate.

The Education Plan Application is property of St. Philip's College, Interpreter Services to be used as an in-house tool and is not a state or federal issued document.

- Major and Degree plan (received from the student's academic advisor)

The Education Plan Application will accompany the student's degree, certificate or enhanced program plan.

## - Certificate of Deafness

Student is responsible for applying through and obtaining the certificate with the Department of Assistive and Rehabilitation Services, Division of Deaf and Hard of Hearing Services based in Austin, Texas.

## - High School transcript

Student will submit his/her high school and/or college transcripts to both Admissions and Records and Interpreter Services as a requisite to enrollment.

## - Letter of recommendation

Student will be required to obtain a letter of recommendation from his/her high school principal, employer or some other responsible adult who is willing to serve as a reference and letter will remain on file with Interpreter Services.

After meeting with an advisor and submitting all necessary documents, the advisor or counselor in Interpreter Services will approve the certificate of Deafness, which then can be presented to the business office for tuition waiver.

## Learning Disabilities and Psychological Services Program

The Learning Disabilities and Psychological Services Program offers specialized help, in the form of accommodations, to a student who has been diagnosed with learning disabilities or psychological disabilities. In addition, the program offers diagnostic testing for a student who is having difficulty keeping up in class, taking notes, understanding reading assignments, working math problems, passing tests, and/or writing essays.

Remediation techniques, compensatory skills training, individual and group counseling, and techniques for helping students discover new coping strategies that maximize academic potential are offered. Services are available in NTB 106.

## Equity Center

The Equity Center, located in NTB 106 and NTB 108, offers free counseling, referrals to community resources, childcare funding and information, textbook loans, bus tickets, support groups, a food bank, a clothes closet, and a variety of community events. A licensed counselor and a social worker are on staff to provide assistance.

## Child Care Information

The Equity Center provides childcare information to students. Limited childcare funding is available. For information, call (210) 531-3518, or stop by NTB 106.

## Job Assistance Program

The Job Assistance Center is located in Career Services (SLC 102) and is designed to help special needs students with vocational advisement and transition to work. Students are taught how to disclose handicapping conditions to future employers, request workplace accommodations and other skills that are necessary for a successful career.

## INSTRUCTIONAL TECHNOLOGY

## Instructional Technologies Student Computer Labs

General use computer labs are provided by Instructional Technologies (IT) in the Norris Technical Building on the main campus; Southwest Campus in buildings 3020 and 3004; the Northeast Campus; Guadalupe Valley Hospital in Seguin; and the Base Education Office at Randolph Air Force Base and at Lackland Air Force Base. These labs contain networked personal computers, printers, and a large assortment of academic and productivity software. The IT student computer labs are connected to the Internet. The labs are designed to provide academic support to all St. Philip's College students. On the main campus the labs generally are open from 8:00 a.m. to 8:45 p.m. Monday through Thursday and from 8:00 a.m. to 4:45 p.m. Friday. Saturday hours are posted at the beginning of each semester. The computer lab hours at Southwest Campus are from 8:00 a.m. to 5:00 p.m. Monday through Friday. Lab hours for the Northeast Campus, Randolph Air Force Base, and Lackland Air Force Base are posted at the beginning of each semester.

## SPC Center for Distance Learning

The Center for Distance Learning provides support for courses offered in a variety of formats including Internet courses, telecourses, and two-way video conferencing. The center also works closely with the division of Student Affairs to offer online support services to St. Philip's College students.
St. Philip's College is a leading provider of distance education with a range of quality instructional offerings, a commitment to fulfilling the educational goals inherent in distance education, support for distance learning students, use of appropriate distance learning technologies, and the expertise and innovation of the faculty. Visit the center's Web site for more information.

## Open IT Student Computer Labs

Networked computers are loaded with general and special-use software and connected to the Internet so PALS users can access their e-mail. Computers are available in the Norris Technical Building NTB 116 and at Southwest Campus in Building 3004, Room 105 on a first-come, first-served basis during open lab hours. Offered free of charge one-hour seminars on word processing, Power Point Presentations, Internet, spreadsheets, etc. Check the bulletin board calendars for times and dates or call 531-3230.

Students are expected to follow all acceptable use guidelines. These guidelines are posted in the student computer labs and on the college Web site.

For information, contact: Instructional Technologies, (210) 531-3382 at main campus and (210) 921-4669 at Southwest Campus.

## SPC-Main Campus

Open Lab Hours-NTB 116
Fall/Spring Semester
Mon. - Thurs 8:00am $-8: 45 \mathrm{pm}$

Friday | 8:00am $-4: 45 \mathrm{pm}$ |
| :--- |
| Saturday |
| 10:00am $-3: 00 \mathrm{pm}$ |

Summer Semester
Mon. - Thurs. 8:00am-8:45pm
Friday 8:00am-4:45pm
Saturday Posted at the beginning of the semester

SPC-Southwest Campus
Open Lab Hours-Bldg. 3004 Room 105

| Fall/Spring Semester | Summer Semester |
| :--- | :--- |
| Mon. - Friday 8:00am-5:00pm | Mon. - Friday 8:00am-5:00pm |

Hours on both campuses are subject to change. Hours will be posted.

## ST. MARY'S UNIVERSITY

## MILITARY SCIENCE (MS) ARMY ROTC

(Available to the College's students)
The Alamo Community Colleges (St. Philip's College), University of the Incarnate Word and Our Lady of the Lake University have an agreement to participate in the Army R.O.T.C. Program housed at the St. Mary's University Department of Military Science. A student from St. Philip's who wishes to tke Army ROTC may enroll for the course just as they would any other class. Ensure that the prerequisites are met then enroll.

A Leadership Laboratory is held every Wednesday afternoon for two hours, to further the development of leadership skills through a varied program consisting of field trips, practical exercises, and visits to military installations. This laboratory is required each semester for all Military Science students. In most cases, ROTC cadets may receive an academic minor in Military Science.

## Four-Year Program

The Basic Course, usually pursued concurrently with the freshman and sophomore years, is voluntary for students who are physically qualified for military training. There is no obligation incurred by non-scholarship cadets. Veterans who have served on active duty for a period of over one year and who have received an honorable discharged, or High School students that have completed 3 or 4 years of JROTC may be granted credit for the basic course with concurrence of the Professor of Military Science.

Students who are physically qualified and have met the standards prescribed by the Professor of Military Science in academic achievement and demonstrated leadership ability may pursue the Advance Course. Cadets are normally enrolled in the Advanced Course during their Junior and Senior Year or Graduate students pursuing a Master Degree. They are required to attend a five-week ROTC Leadership Development Assessment Course (LDAC) the summer following their junior year. Upon satisfactory completion of LDAC and the academic work required for a degree, students are commissioned as Second Lieutenants in the United States Regular Army, the Army Reserves, or the Army National Guard.

## Two-Year Program

In addition to the standard four-year course outlined above, the Army ROTC offers a two-year program for those who did not have or take the opportunity to complete the normal Basic Course. In order to enroll in the Advanced Course, a student must successfully complete four weeks of leadership training, provided at the Leadership Training Course (LTC) during the summer months prior to beginning their junior year or their first year in graduate school. If students desire to take advantage of this opportunity, they should communicate directly with the Professor of Military Science not later than March 1 of the year preceding the Fall semester. Those students seeking a Master Degree are eligible to participate in our two-year program.

## Scholarship and Remuneration

The Department of the Army offers 4, 3, and 2-year competitive scholarship assistance to qualifying ROTC students. This assistance consists of payment up to $\$ 20,000$ a year to cover tuition and fees, and a $\$ 900.00$ a year book allotment, plus a grant to the ROTC cadet of $\$ 250.00$ to $\$ 400.00$ a month during the period of enrollment (not to exceed 40 months). The student need not be enrolled in the ROTC program prior to competing for a scholarship. Students interested in competing for scholarship assistance under this program should contact the Army ROTC Enrollment Officer.

Formally enrolled Advanced Course Students, not under the scholarship program, will be given a grant at the rate announced annually by the Secretary of the Army (currently this rate is $\$ 350.00$ to $\$ 400.00$ per month) not to exceed twenty months. During LDAC, all students are paid at the rate of one half of the base pay per month of a second lieutenant in lieu of subsistence allowance, plus the allowance of 18 cents per mile for travel performed from their homes to and from the course. Students attending LTC prior to entry into the two-year program are paid at the same rate per month as a private plus travel pay. ROTC graduates who are commissioned in either Regular Army or the Army Reserve are authorized a uniform allowance when they report for active duty.

## Uniform and Equipment

All uniforms, textbooks and other equipment will be issued to students enrolled in Army ROTC courses. Students are responsible for the maintenance and up keep of all items issued to them.

## Information

The Coordinator for Military Science, Dr. Coleman is the point of contact for students from St. Philip's who want more in formation about ROTC. You may contact him at 210-531-4613 or SLC 246a. You may also contact the Professor of Military Science and the Army ROTC offices which are dual located at University of Incarnated Word in the Chapel Bld, Room 7 and on the bottom floor of Treadaway Hall at St. Mary's University. The telephone numbers are 832-3210 or 436-3415. ROTC Enrollment Officer number: 210-379-1997.Email: rotc@universe.uiwtx.edu.



## STUDENT OBLIGATIONS

The philosophy and goals of the institution are to protect the equality of opportunity of a person qualified to attend. The enrollment of a student in the College assumes obligations of performance and behavior that are compatible to its mission. The College expects the student to recognize and accept his or her responsibilities which are respect for the rights of others, academic and personal integrity, and adherence to federal, state, and local laws.

## ACADEMIC STANDARDS

To meet the required academic and progress performance standards of St. Philip's College, a student should consider the following guidelines:

1. A student must maintain a 2.0 cumulative grade point average and be making satisfactory academic progress to be in good academic standing. For graduation from St. Philip's College, a cumulative 2.0 grade point average, as well as good academic standing in the final semester, is required. "Good academic standing" is defined as the absence of Academic Probation, Continued Academic Probation, Academic Dismissal, or Enforced Progress Probation. A
student's status is evaluated after each semester and summer session. A student must meet the minimum academic (2.0 GPA) standards for each semester and summer session.
2. Advanced placement credit is not considered in the determination of academic standing.
3. All grades - excluding I, IP, W, and AU - are counted in academic performance evaluation.
4. In addition to the GPA standards listed above, a student must complete more than $50 \%$ of classes for two consecutive semesters.
5. A STUDENT PLACED ON ACADEMIC PROBATION OR ACADEMIC DISMISSAL WILL RECEIVE
WRITTEN NOTIFICATION FROM THE COLLEGE.
NOTE: Each student is responsible for knowing the college's minimum academic performance standards which determine academic eligibility. If an ineligible student registers in the college, he/ she will be withdrawn. Ignorance of the academic performance standards does not constitute a basis for special consideration.

## ACADEMIC PROBATION

A student who fails to maintain a cumulative grade point average of 2.0 or higher is placed on Academic Probation. A student on Academic Probation may re-enroll at St. Philip's College for one semester, or summer session, after meeting with a counselor. The student's status is evaluated after each semester and summer session. The Academic Probation status is removed when the student has earned a cumulative 2.0 grade point average, otherwise enrollment status will be Continued Academic Probation.

## CONTINUED ACADEMIC PROBATION

After the first semester following Academic Probation Status, a student may re-enroll at St. Philip's College on a Continued Academic Probation status after meeting with a counselor. A student's status is evaluated after each completed semester and summer session. A student must meet minimum academic (2.0 GPA) standards for each subsequent semester and summer session. The continued Academic Probation status is removed when the student has earned a cumulative 2.0 grade point average. If a student does not meet the minimum academic standards (2.0 GPA) each semester and summer session, then the student is placed on Academic Dismissal.

## PROGRESS PROBATION

A student who withdraws from $50 \%$ or more of their classes for two consecutive semesters is placed on progress probation, regardless of GPA. A student placed on progress probation may re-enroll at St. Philip's College for the following semester after meeting with a counselor.

## CONTINUED PROGRESS PROBATION

After the first semester following Progress Probation Status, a student may re-enroll at St. Philip's College on a Continued Academic Probation status as long as the student completes $100 \%$ of courses attempted each semester or summer session. The Progress Probation is removed when the student has completed $100 \%$ of courses attempted for two consecutive semesters ( 2 summer sessions $=1$ semester). Progress Probation status will be reinstated after any semester in which a student withdraws from $50 \%$ of courses attempted during any subsequent semester or summer sessions.

## PERMANENT PROGRESS PROBATION

A student placed on progress probation a third time will remain on permanent progress probation but will be re-evaluated during the semester in which the student becomes eligible to graduate.

## ACADEMIC DISMISSAL OR ENFORCED PROGRESS WITHDRAWAL (See Formal Admissions Categories)

If a student on Academic Probation, Continued Academic Probation, any subsequent Progress Probation, or Continued Progress Probation fails to earn a cumulative GPA of 2.0 in the next semester, or summer session, and/or fails
to earn a cumulative GPA of 2.0 in the next semester, or summer session, and/ or fails to achieve $100 \%$ completion within the subsequent two semesters, the student will be placed on Academic Dismissal or Enforced Progress Withdrawal, whichever is applicable, and will not be allowed to enroll in any classes during the next semester. Students who do not wish to remain out of school for the required semester ( 2 summer sessions $=1$ semester) should petition to the counselor for a special review of his/her academic and/or progress record. These students will be required to enroll in and successfully complete (earn a "C" or better) SDEV 0370, "Personal and Academic Success." Students electing to remain out of school the next semester ( 2 summer sessions $=1$ semester) must meet with a counselor prior to re-enrolling under an automatic status of Continued Academic Probation or Continued Progress Probation unless St. Philip's College's minimum academic and progress standards have been met at another accredited college or university during the period of enforced withdrawal. These students are required to enroll in and successfully complete (earn a "C" or better) SDEV 0370, "Personal and Academic Success."

Students having two or more Academic Dismissal or Enforced Progress Withdrawals will not be permitted to enroll for one calendar year. At the end of that year, the student must petition the appropriate dean for a special review of his/her academic and/or progress record. When the student contacts the appropriate dean, he/she will be advised as to the procedure necessary for readmission.

## RE-ENROLLMENT ELIGIBILITY

## (See Formal Admissions Categories)

After having been placed on Academic Dismissal or Enforced Progress Withdrawal, a student re-enrolls under an automatic status of Academic or Progress Probation unless St. Philip's College's minimum Academic and/or Progress Standards have been met at another accredited college or university during the period of enforced withdrawal. All students re-enrolling either under an exemption, or after remaining out for one semester ( 2 summer sessions $=1$ semester) must enroll in and successfully complete (earn a "C" or better) SDEV 0370, "Personal and Academic Success."

A student having two or more Academic Dismissal or Enforced Progress Withdrawals must petition through the appropriate dean for a special review of his/her academic record. The petition may be submitted only after a lapse of at least one calendar year. When the student contacts the appropriate dean, he/she will be advised as to the procedure necessary for readmission.

## ATTENDANCE

Regular and punctual class and laboratory attendance, day and/or evening, is required. A student who is absent for any reason will be allowed to do makeup work at the discretion of the instructor. However, a student will be held responsible for lecture materials when covered on subsequent examinations. An excused absence will apply only to a student representing the school in an official capacity approved by the President of the College or the Vice President of Student Affairs. Absences of a student are recorded, without exception, from the official date of enrollment
in the class. A student who has accumulated absences equivalent to two (2) weeks of instruction may be dropped by the instructor after the census date. If a student is dropped from a class for excessive absences, the instructor will record a grade of "W" (Withdrew). Since tardiness is a form of absenteeism, the instructor may establish a policy regarding tardiness.

## READMISSION TO CLASS

A student dropped for excessive absences may be readmitted to class only if circumstances justify reinstatement. However, once the decision is made to reinstate, the "reinstatement" form must also be signed by an official from the Office of Records and Registration. Petition for Readmission must be made within two (2) class meetings after the drop date at the discretion of the instructor.

## EXAMINATIONS

A final examination, not to exceed two (2) hours in length, shall be given at the end of each semester for each course. Other examinations are given at the discretion of the instructor.

A student who must be absent from a final examination should petition the appropriate instructor for permission to postpone the examination. Postponed examinations will result in a grade of "I." The final examination must be taken within 120 calendar days from the end of the semester, or the grade will automatically become an "F."

## GRADE POINT AVERAGE

Grade point averages are computed by assigning values to each grade as follows:
A--4 points per semester hour
B--3 points per semester hour
C--2 points per semester hour
D--1 point per semester hour
F--0 points per semester hour
I, W, IP, NC--Not used in grade point average.
The average is found by dividing the total number of points by the total number of semester hours attempted for which grades have been received.

## Calculating the GPA:

1. Multiply the number of semester hours each course is worth by the quality points earned.
2. Add these values.
3. Divide this sum by the number of semester hours attempted.

|  | Semester <br> Hours Attempted | Quality <br> Points | Grade <br> Points |
| :--- | :---: | :---: | :---: |
| BIOL 1408 | 4 | 3(B) | 12 |
| ENGL 1301 | 3 | 2(C) | 6 |
| SPAN 1411 | 4 | 4(A) | 16 |
| PSYC2301 | 3 | 2(C) | 6 |
|  | -14 |  | -40 |

$\mathrm{GPA}=40 / 14=2.86$

## GRADING SYSTEM

Permanent grades are recorded only at the end of the semester. The grades used are as follows: A (excellent), B (good), C (average), D (pass), F (failure), I (incomplete), IP (in-progress), NC (non-credit), and W (withdrew).

For a student who officially withdraws from a course before the census date of any semester, the course is not recorded on the student's record. A student withdrawing after the census date will receive a grade of "W" during the withdrawal period. Official recording dates of "W" are listed in the Academic Calendar. Faculty members are strongly encouraged to use the WEB when posting a "W" on a student record. Only faculty members, not students, may initiate and thus post a "W" after the official recording date in the schedule. However, such action must be communicated to Records and Registration and the Office of Veterans Affairs, since a "W" may require a student to repay veterans benefits.

The conditional grade of "I" may be given to a student only when he or she has a passing average on all completed work, but for justified reasons, such as illness or death in the family, or by providential hindrance has failed to take the final examination or to complete other required work. The " I " becomes an " F " in 120 calendar days unless a student completes the work with a performance grade. The performance grade earned will replace the "I" on the student's permanent transcript.

Students in developmental classes may receive "IP" grades if they have completed all of the course work but still have not earned a " C " or better. The only way to receive a grade in a course for which an "IP" grade has been recorded is to re-register for the course and earn a grade of "C" or better at the end of the semester or term in which the re-registration occurs. Other courses in which this grade is used are determined by the Vice President for Academic Affairs.

Grades will not be changed after one (1) calendar year. The Texas State Library and Archives Commission in the local retention schedule states that Faculty grade book retention is the end of the academic term plus one (1) year.

## DROPS AND WITHDRAWALS

Adding and Dropping Courses
A drop and add period is provided each semester following the close of regular registration.

## Official Withdrawals

A. A student wishing to withdraw completely from the College must follow the procedure listed below:

1. Resolve all financial obligations to the College including library clearance.
2. Obtain a "Notice of Change" form from the Office of Records and Registration.
3. Report to the Counseling Office for an exit interview.
4. Leave the "Notice of Change" form with the Office of Records and Registration. Courses dropped do not become official until the "Notice of Change" form has been signed by the Office of Records and Registration representative.

A grade of "W" will be assigned during the withdrawal period specified in the academic calendar.
B. A student wishing to withdraw from one (1) or more courses (but NOT ALL courses) must follow the procedure listed below:

1. Obtain a "Notice of Change" form from the Office of Records and Registration.
2. Report to the Counseling Office for an exit interview.
3. Submit the "Notice of Change" form to the Office of Records and Registration immediately following the exit interview.
4. Have the "Notice of Change" form signed by an Office of Records and Registration representative.
A grade of "W" will be assigned during the withdrawal period specified in the Academic Calendar.
C. Should circumstances prevent a student from appearing in person to withdraw from the College, he or she may withdraw by writing to the Office of Records and Registration. The postmark date on the envelope is used as the official drop date. No drops or withdrawals will be accepted by phone or by the internet.
D. A student withdrawing from the College on or prior to the Census Date will have the notation "Withdrew-No Record" posted in the specified semester on his or her College record.

## Unofficial Withdrawals

A student who does not follow the procedures for official withdrawal can have an automatic grade of " F " recorded on the permanent record. THIS RECORDED "F" WILL HAVE A NEGATIVE IMPACT ON HIS OR HER GRADE POINT AVERAGE.

## REPETITION OF COURSES

You can repeat a course for credit no more than three times. "Enrollment" is defined as registered, paid, and remaining officially registered through the semester's "W" date. You can repeat the course another time with the approval of the department chairperson and the respective dean. An exception to this policy is "Music Ensembles" which may be repeated for credit up to four times. This course is counted only once in determining the grade point average for graduation and only the highest grade is considered. All grades and academic status are recorded on the official transcript.

If you repeat a St. Philip's College course, you can have your Grade Point Average updated on your college transcript by notifying the Records and Registration Office once the course has been repeated at St. Philip's College. Although the Grade Point Average will be updated, i.e., only the repeated course's grade will be counted in computation of a student's GPA. The original academic status will remain on the transcript. If you are planning to transfer to another institution you should check with that institution concerning its repeat policy.

## STUDENT PERMANENT RECORDS

A student's permanent record, part of the official archives of the College, contains personal data, test scores, summary of transfer and admissions information, the College courses attempted, grades, grade points, and academic status.

A student's name on official records at the College is the name under which the student initially registered, unless a Change of Name form has been processed through the Office of Records and Registration. Name changes are made only when appropriate legal documentation accompanies the request.

## HONOR ROLL

The Honor Roll is composed of the student who is enrolled for twelve (12) or more semester hours of work and earns a GPA of 3.25-3.49 on his or her semester grades. The President's Honor Roll is composed of those students who are enrolled for twelve (12) or more semester hours of work and earn a GPA of 3.50-3.99. The President's Honors List is composed of those students who are enrolled for twelve (12) or more semester hours of work and earn a GPA of 4.00. The Part-time Honor Roll is composed of those students who are enrolled for six (6) to eleven (11) hours of work and earn a GPA of 3.25-4.00. The appropriate notations appear on the grade report and permanent record.

## ELIGIBILITY FOR PUBLIC PARTICIPATION AND SCHOOL REPRESENTATION ON PROGRAMS

A student who, during any semester, is placed on academic probation may not participate in public activities of the College, represent the College in meetings or on competitive teams of the College, or hold club or class office. In addition, a student who has earned credit must have and maintain a minimum cumulative GPA of 2.00 in order to be a member and participate in any student organization authorized on campus.

## PREREQUISITE COURSES

Prerequisite courses may be waived only upon recommendation of the department chairperson.

## DISCIPLINE

All of the general and criminal laws of the state are declared by the Board of Trustees of the District to be in full force on the College campus.

Any recognized misconduct, violation of regulations, or socially unacceptable behavior of a student or non-student on the College campus is subject to administrative disciplinary action by the Vice President for Student Affairs or the President of the College, action by a student-faculty disciplinary review committee, or possible arrest and charge by authorized campus or other peace officers of the city or state.

A student may be requested or required to withdraw with or without public statement of charges by the College administration. Specific disciplinary responsibilities of institutional officials, classification of offenses and sanctions appropriate to each disciplinary offense, and disciplinary procedures are set forth in the official Student Policy Manual and are available through the Office of the Vice President for Student Affairs.

## SUBSTANCE ABUSE PREVENTION

The College is committed to a substance free environment. Distribution, possession, manufacturing, dispensing, or using of alcoholic beverages, drugs or controlled substances on the College campus will not be tolerated. Information, consultation, and referrals are available from the Substance Abuse Prevention Coordinator located in the Counseling Center.



## APPLICATION FOR GRADUATION

A student must apply for graduation in order to be awarded a degree or certificate. An application for graduation must be submitted to the Office of Records and Registration no later than:

Fall 2006 graduates, September 13, 2006; Spring 2007 graduates, January 31, 2007; Summer 2007 graduates, June 7, 2007;
Fall 2007 graduates, September 12, 2007;
Spring 2008 graduates, January 30, 2008;
Summer 2008 graduates, June 5, 2008
A student may submit an application for graduation under provisions of the catalog under which he or she was admitted into the College or as outlined in any College catalog subsequent to the first enrollment date, but within the five (5) year limit. A V.A. student must remain with the catalog of first enrollment unless the change is approved by the Veterans Administration Office. The catalog selected cannot be dated more than five (5) years prior to the expected graduation date. A student may file a petition to the Office of Records and Registration for an extension of the five-year rule. Prior to graduation review, all applicants must provide transcripts reflecting their complete college records. Candidates need not be enrolled during the semester in which the application for graduation is made.

All candidates for degrees and certificates are encouraged to be present at the commencement exercises which is held twice a year May and December,
 although attendance at the exercise is not mandatory.

There is no graduation fee. The diploma, cap, and gown are provided by the College.

## GRADUATION REQUIREMENTS

The College provides four (4) forms of recognition for satisfactory completion of work:

Associate of Arts Degree
Associate of Science Degree
Associate of Applied Science Degree
Certificate of Completion
To qualify for a degree or certificate, a student must have a cumulative grade point average of 2.00 in all courses taken at the College as well as courses successfully completed at other colleges and universities which apply to the student's degree or certificate program at the College. A candidate
for the Associate Degree or Certificate of Completion must also have a minimum grade of " C " in all courses that apply to his or her program major and required electives. A student must be in "Good Academic Standing" at the end of his or her final semester in order to graduate from the College.

A student who is subject to the requirements of the Texas Success Initiative (TSI) must be completed in all three areas - reading, mathematics and english.

Two associate's degrees may be earned concurrently with the stipulation that the requirements for each degree be met.

Persons awarded a baccalaureate-level or higher degree are eligible to receive Applied Science degrees and Certificates of Completion. Such individuals are generally not eligible for degrees and certificates of completion in Arts and Sciences.

It is the student's responsibility to ensure that all substitutions, bypass exams, waivers and/or lists of any electives that are to be approved by the department chairperson be on file in the Office of Records and Registration no later than:

## Spring graduates, April 1;

Fall graduates, November 1; and
Summer graduates, May 1
A student who has not satisfied all requirements by deadline dates will not be eligible for that semester's graduation. The student must reapply for graduation to be eligible for the next graduation date.

Transfer credit may meet graduation requirements if equivalent to the College's courses, and the student must meet the residency requirement for the associate degree or certificate; such equivalencies will be determined by the Office of Records and Registration.

Participation in the graduation ceremony does not mean automatic fulfillment of requirements or that a degree will be awarded. Diplomas will be mailed in approximately seven (7) weeks after the graduation date.

If a student has any questions regarding the evaluation of the application for graduation, he or she should contact the Office of Records and Registration before the deadline date.

Courses taken ten (10) or more years prior to the student's last enrollment at the College that are in the student's specific subject area of concentration (major) within the curricular offerings of Applied Science and Technology will not count as semester hour credits toward the award of the degree or certificate. These courses will only transfer in or be credited as "elective credit" towards the fulfillment of degree/certificate requirements. However, a student may challenge, by examination, courses that were not accepted for credit.

## HONOR GRADUATES

A candidate who maintains an overall of 3.75 or above in all college-level courses attempted at the College, as well as all courses successfully completed at other institutions which apply to his or her degree or certificate, is considered an honor graduate.

## ASSOCIATE DEGREES

To be awarded an associate degree, a student must satisfy the following requirements in addition to other specifications stated below and throughout this chapter:

1. Complete at least sixty (60) semester hours with an average grade of "C" (2.00) in all courses taken at the College as well as courses successfully completed at other colleges or universities which apply to the student's degree at the College.
2. Complete all the prescribed courses in the specific academic and applied science curriculum.
3. Meet residency requirement: complete at least 25 percent of semester credit hours in the degree or certificate through instruction by the College. In addition, for the Associate of Applied Science Degree, at least fifteen (15) semester credit hours must be completed through instruction by the Applied Science department that offers the degree. A student must complete at least 25 percent of work in his or her degree plan in residency at the College to be awarded an Associate of Arts, an Associate of Science Degree, or an Academic Certificate of Completion.
4. Complete at least fifteen (15) semester hours in the General Academic core course requirements for the Associate Applied Science degree and 46 semester hours in the core for the Associate of Science or the Associate of Arts Degree (required by the Southern Association of College and Schools criteria). These courses can be obtained through the following arrangements:

The following is a general grouping of courses in the identified areas for general education core course requirements:

## General Academic Core Requirements for the Associate of Applied Sciences Degree - 15 semester hours:

One (1) course from each of the following areas:

| Humanities or Fine Arts | 3 hours |
| :--- | ---: | :--- |
| Natural Sciences or Mathematics | 3 hours |
| Social or Behavioral Sciences | 3 hours |
| Communication | 3 hours |
| Computation | 3 hours |
|  | $\mathbf{1 5}$ hours |

Humanities/Fine Arts:
English 1302 or higher Drama (Theatre)
Speech Music
Philosophy Arts
History 2311
Humanities 1301
History 2312
Humanities 1302

Natural Sciences/Mathematics:
Biology
Chemistry
Physics

Social Sciences/Behavioral Sciences:
Economics
Geography
Government
History 1301
History 1302
Communication
English 1301
Speech
Language
Reading 1370
Computation:
Mathematics*
Chemistry
Physics
Computer Science
Business Information Solutions (ITSC 1301 only)

* College level

In addition, associate degree curricula may have listed within their individual curriculum-sequence a course selection option by the student identified as "Elective." The "Elective" can be any course chosen by the student and does not have to be a general education course, nor can the "Elective" course be counted as a component of the general education core requirement.

ACTUAL DEGREE PLANS DICTATE GENERAL EDUCATION AND SUBJECT MAJOR COURSES TO BE TAKEN. (DEPARTMENT CHAIRPERSONS MAY BE CONTACTED FOR DETAILS).

## General Academic Core Requirements for the Associate of Arts degree and the Associate of Science degree 46 semester hours:

CORE COMPONENT COURSE SELECTION
HOURS
Communication
Composition English 1301 \& $1302 \quad 6$
Speech/Language Speech 1311 or Modern/Foreign 3-4
Language, $14^{* *}$ or $23^{* *}$

Social \& Behavior Sciences
History History $1301 \& 1302 \quad 6$
Government Gov. 2305 \& $2306 \quad 6$
Other Social Sciences; Psychology or Sociology 13** or $23^{* *} 3$


Humanities/Fine Arts:

Arts 1301
Drama 1300-2499
English 1302
History 2311 or 2312
Natural Sciences/Mathematics:
Biology 1400-2499
Chemistry 1300-2499
Social Sciences/Behavioral Sciences:
Economics 2301-2499
Government2301-2306
History 1301 or 1302

Humanities 1301 or 1302
Music 1300-2499
Philosophy 2303
Speech 1321

Math 1314-2499
Physics 1300-2499

Psychology 2301-2499
Sociology 1300-2336
Urban Studies 1300-2499

Communication
English 1301-1302
Foreign Language 1411-2316
Reading 1370
Speech 1311-2341
Computation
Chemistry 1300-2499
Computer Science 1301-2318
Math 1314-2499
Physics 1300-2499
THE COLLEGE OFFERS THE FOLLOWING MAJORS IN ASSOCIATE OF ARTS DEGREE:

| 1. | Art 2D | 16. | Integrated Arts |
| :---: | :---: | :---: | :---: |
| 2. | Art 3D | 17. | Kinesiology |
| 3. | Business Administration | 18. | Liberal Arts |
| 4. | Comic Book | 19. | Mathematics |
| 5. | Computer Science | 20. | Music |
| 6. | Criminal Justice | 21. | Philosophy |
| 7. | Design | 22. | Pre-Engineering |
| 8. | Digital Photography | 23. | Pre-Law |
| 9. | Economics | 24. | Pre-Social Work |
| 10. | English | 25. | Psychology |
| 11. | Electronic Music | 26. | Sociology |
| 12. | Foreign Languages/Spanish | 27. | Speech |
| 13. | Government | 28. | Stage Production |
| 14. | History | 29. | Teacher Education |
| 15. | Humanities | 30. | Theatre |

THE COLLEGE OFFERS THE FOLLOWING MAJORS IN THE ASSOCIATE OF SCIENCE DEGREE:

| 1. Allied Health Transfer Degrees* | 5. | Pre-Dentistry |  |
| :--- | :--- | :--- | :--- |
| 2. | Biology | 6. | Pre-Medicine |
| 3. | Chemistry | 7. | Pre-Nursing |
| 4. | Environmental Science | 8. | Pre-Pharmacy |

## THE COLLEGE OFFERS THE FOLLOWING MAJORSIN THE ASSOCIATE OF APPLIED SCIENCE DEGREE:

Department of Allied Construction Technology (Southwest Campus)
Air Conditioning \& Heating
Electrical Trades
Home Building Technology
Refrigeration Technology
Department of Allied Health Programs
Diagnostic Medical Sonography
Early Childhood Studies
Health Information Technology
Medical Laboratory Technician
Occupational Therapy Assistant
Physical Therapist Assistant
Radiography Technologist
Respiratory Care Technology
Department of Automotive Technology
Automotive Technology
Automotive Technology - GM ASEP
Department of Business Information Solutions
Accounting Technician
Administrative Assistant
Desktop Support Specialist
E-Business
Construction Business Management
Industrial Maintenance Management
Legal Administrative Assistant
Medical Administrative Assistant
Network Administrator
Network Security Administrator
Web Developer
Department of Drafting (Architectural)
Computer Aided Drafting (Architectural)
Department of Electronic Systems Technology
Bio-Medical Equipment Technology
Computer Maintenance Technology
Network Maintenance Specialization
Department of Nursing Education
LVN to ADN Upward Mobility Program
Department of Multi-Modal Transportation (Southwest Campus)
Aircraft Technician Airframe
Aircraft Technician Powerplant
Diesel Construction Equipment Technician
Diesel/Heavy Equipment Technology
Department of Repair and Manufacturing (Southwest Campus)
CNC Manufacturing Technician
Collision/Refinishing Technician
Precision Metal Workers: Manufacturing Operations Technician

Welder/Welding Technologist
Department of Tourism, Hospitality, and Culinary Arts
Baking and Pastry Arts
Culinary Arts
Hospitality Event Management
Hotel Management
Restaurant Management
CERTIFICATES OF COMPLETION
Department of Allied Construction Trades (Southwest Campus)
Air Conditioning \& Heating
Building Trades
Electrical Trades
Home Building
Plumber's Helper
Plumbing Trades
Refrigeration
Department of Allied Health
Child Development Associate National Credentials Training (CDA)
Clinical Laboratory Assistant
Coding Specialist
Documentation Coding Specialist
Early Childhood Studies
General Medical Transcription
Health Information Specialist
Histologic Technician
Specialty Medical Transcriptionist
Surgical Technology
Department of Automotive Technology
Automotive Technology
Brake \& Front End Specialist
Heating \& Air Conditioning Specialist
Performance Specialist
Transmission Specialist
Department of Business Information Solutions
Computer Support Specialist
Computerized Accounting Administrator
Entrepreneurship
Information Technology Security
Legal Word Processing Specialist
Medical Office Assistant
Microsoft Office Specialist (MOS)
Network Professional
Network Professional: Network +
Network Professional: Server +
Office Assistant
Payroll Clerk
Web Developer

Department of Drafting (Architectural)<br>Computer Aided Drafting Technician (Architectural)<br>Department of Electronic Systems Technology<br>A+ Certification Preparation<br>Advanced CISCO Certificate<br>CISCO System Networking<br>Electronics Assistant<br>Network System Technician<br>Department of Nursing Education<br>Vocational Nursing<br>Department of Multi-Modal Transportation (Southwest Campus)<br>Aircraft Mechanic Airframe<br>Aircraft Mechanic Powerplant<br>Aircraft Structures Mechanic<br>Aircraft Turbine Mechanic<br>Avionics<br>Diesel Brake \& Front-End Specialist<br>Diesel/Heavy Equipment Technology<br>Diesel Transmission Specialist<br>Railroad Operations<br>Railroad Operations-Mechanical<br>Department of Repair and Manufacturing (Southwest Campus)<br>CNC Operator<br>Collision Technology<br>Machinist/Machine Technologist<br>Manual/Semi-Manual Inert Gas Welding-GTAW/GMAW Welder<br>Manufacturing Operations Maintenace Mechanic<br>Precision Metal Worker: CNC Tool Operator<br>Precision Metal Worker: Manufacturing Operations Maintenace Assistant<br>Plastics<br>Refinishing Technology<br>Structural/Pipe Layout<br>Department of Tourism, Hospitality, and Culinary Arts<br>Baking Principles<br>Culinary Studies<br>Hotel Limited Service Property Management<br>ADVANCED TECHNICAL CERTIFICATE<br>Department of Allied Health<br>Long Term Care Nursing Home Administration<br>Department of Radiography<br>Diagnostic Medical Sonography<br>MARKETABLE SKILLS ACHIEVEMENT AWARDS<br>A+Certification Preparation(BIS)<br>Architectural Drafting<br>Beginning Accounting Technician<br>Data Entry Specialist<br>Introduction to Microsoft Office Specialist<br>Pricision Metal Workers: Manufacturing Skills Trade Helper

## Project Team Leader

ENHANCED SKILLS CERTIFICATION
Architectural Drafting 3D
Computer Tomography
Magnetic Resonance Imaging

## ACADEMIC CERTIFICATE OF COMPLETION

1. Complete a minimum of sixty (60) semester hours in an approved academic AA or AS degree program, including six (6) hours of American History and six (6) hours of American Government.
2. Maintain a minimum cumulative average of " C " in all courses taken at the College, as well as courses successfully completed at other colleges or universities which apply to the degree at the College.
3. Complete 25 percent of the degree plan at the College.

## REQUIREMENTS FOR 2+2 /ASSOCIATE DEGREE TRANSFER PROGRAMS

If a student completes the entire course requirements for the first two years of any such $2+2$ program with a minimum of 60 applicable degree hours, he or she will have satisfied requirements for an applicable Associate of Arts degree in Liberal Arts. These hours of credit must include 15 hours in core curriculum areas as required by the Southern Association of Colleges and Schools which must include at least one course each in the following areas: Humanities/Fine Arts; Social/Behavorial Sciences; Natural Science and Mathematics. The hours must also include the courses required by the Texas Higher Education Act as set forth in Subchapter F, sections 51.301 and 51.302 (six semester hours in United States/Texas Government and six semester hours in United States/Texas History).

For further information, please contact the Transfer Center at (210) 5314649.

Transfer Articulation Agreement Colleges \& Universities
Capella University
Our Lady of the Lake University
Park University
Regis University
St. Mary's University
Texas A\&M Corpus Christi
Texas A\&M Kingsville-San Antonio
Texas State Technical College Waco - Fuel Cell Tecchnology
University of Houston
University of Texas @ Brownville and Texas Southmost College
University of Texas @ Dallas
University of Texas @ San Antonio
University of Texas Southwestern Medical Center @ Dallas
University of Texas Health Science Center for Medical Laboratory
University of Texas Medical Branch @ Galveston for Clinical Laboratory
University of the Incarnate Word
Wayland Baptist University
Wiley College

## REVERSE TRANSFER DEGREE

Students who come to St. Philip's College having earned a bachelor's degree from a Texas university may qualify for an associate's degree. The Reverse Transfer Degree Program is designed for students who have accumulated 30 college-level hours at St. Philip's College and who have received a baccalaureate degree from a Texas college or university. Once an official transcript is received documenting a student's bachelor's degree, the student will be notified that he has been awarded an Associate of Arts degree from St. Philip's College under the stipulations for the Reverse Transfer Degree Program. Contact the Dean of Enrollment Management in room 100 of the Sutton Learning Center (SLC) for further information.

## GRADUATE GUARANTEE

If an Associate in Applied Science (AAS) graduate or certificate completer, whose course work began in the fall 1993 semester or thereafter, is judged by an employer to be lacking in technical job skills identified as exit competencies for their specific degree or certificate program, the graduate will be provided up to nine tuition-free credit hours of additional skill training by the college awarding the degree or certificate under the conditions of this policy.

The guarantee does not imply that the graduate will pass any licensing or qualifying examination for a particular career.

Conditions applying to this guarantee policy:

1. The graduate/completer must have earned the AAS degree or certificate in a technical program published in the college's catalog (or its addenda).
2. The graduate/completer must have completed the AAS degree or certificate with a majority ( 75 percent) of the credits being earned at the college awarding the degree within a four-year time span from initial enrollment. The last 15 semester hours of credit must be completed at the college awarding the degree and must include the capstone course for the respective degree. For information on the capstone course, contact the respective chairperson or program coordinator.
3. Graduates must be employed full-time in an area directly related to the area of program concentration as certified by the president of the college or designee.
4. The graduate/completer must commence employment within six (6) months of graduation/completion.
5. The employer must certify in writing that the employee is lacking entrylevel skills which were identified by the college awarding the degree or certificate as the program exit competencies as approved by the program advisory committee. The employer must specify the areas of deficiency within ninety (90) days of the graduate/completer's initial employment.
6. The employer, graduate/completer, and representatives of the college will develop a written educational plan for retraining.
7. The student may receive up to nine (9) semester hours of free tuition for additional skill training.
8. All retraining must be completed within a calendar year from the time agreed upon for the educational plan.
9. This job competency guarantee does not imply that the student will pass any licensing or qualifying examination for a particular career. For further details, please contact the Dean of Applied Science and Technology.
10. The graduate/completer and/or employer is responsible for the costs of books, insurance, uniforms, fees, and/or other course-related expenses.



## ARTS AND SCIENCES

Programs in the Division of Arts and Sciences are designed to assist students in developing their analytical reasoning ability, their communication and human relations skills, and their perception of the world with all its intricate beauty and its complex problems. Faculty and administrators strive to provide an academically stimulating educational setting that offers students opportunities to grow as responsible human beings and to realize their personal goals.

In each academic department, courses are designed as part of a logical, competencybased curriculum. Therefore, in each course, students are expected to develop specific competencies which prepare them to take higher level courses. Standards for grading reflect two of the division's basic goals: preparing its students for transfer to senior colleges and for satisfactory job performance.

The Division of Arts and Sciences is committed to excellence in teaching and to flexibility in instructional approaches. The faculty makes every effort to clearly explain course objectives and grading standards, to keep abreast of current research, and to assist students in achieving their maximum potential.

## CORE CURRICULUM

The Core Curriculum at St. Philip's College was implemented in 1987 in response to House Bill 2183 adopted by the 70th Texas Legislature. The Core Curriculum is that portion of a student's education which is "common" to all learners seeking the Associate of Arts or Science Degree, regardless of major. It provides a basis for transferability not only within the Alamo Community College District but also among other Texas colleges.

A program of General Education Requirements is based on the premise that certain common, essential qualities, independent of the academic discipline, are necessary for an individual's intellectual growth and professional advancement. A general education provides the base of which a student can build a strong specialization while having the flexibility which a changing society demands. Specialized skills are needed in a complex environment, but the rapidity of technological change often requires the acquisition of a new speciality. A sound general education provides the skills and knowledge which individuals will always need to develop their potential and meet the challenges and opportunities of the future.


## CORE COMPONENT COURSE SELECTION HOURS

Communication

Composition
Speech/Language

English 1301 \& $1302 \quad 6$
1311 or Modern Foreign 3
Language, $14^{* *}$ or $23^{* *}$
Social \& Behavior Sciences
History History 1301 \& $1302 \quad 6$
Government Gov. 2305 \& 2306
Other Social Sciences Humanities or Philosophy or 3
Psychology or Sociology 13**or 23**
Natural Sciences Biology 1406 \& 1407 or Biology 1408 \& 1409 or 8
Physics 1401 \& 1402 (or equivalent) or
Chemistry $1411 \& 1412$ (or equivalent)
Math 1314 (or any math for which 3
Math 1314 is a prerequisite)
$\begin{array}{ll}\text { Computer Literacy Computer Science 1301 } & 3 \\ \text { Humanities, Literature \& English } 23^{* *} \text { or Interdisciplinary } & 3\end{array}$
$\begin{array}{lcl}\text { Computer Literacy } & \text { Computer Science } 1301 & 3 \\ \text { Humanities, Literature \& English } 23^{* *} \text { or Interdisciplinary } & 3\end{array}$
Studies $23^{* *}$ or Humanities $13^{* *}$ or $23^{* *}$
Visual/Performing Arts Drama 1310, Art 1301, Music 1306-1310 3
Kinesiology Kine $11^{* *}, 12^{* *}, 21^{* *} 2$
(Military service persons who have completed basic training and this fact is documented on their DD Form 214, Certificate of Release or Discharge from Active Duty, are exempt. In addition, substitutions may be considered with the recommendation from a Physician or Minister.)

Total $\quad 46$

## ACADEMIC AND PREPROFESSIONAL CURRICULA DEGREE PLANS

St. Philip's College awards the Associate of Arts and Associate of Science degrees to students who successfully complete the academic programs. The programs are set up for completion in two years, but students with academic deficiencies may take longer to complete the program. Students attending part-time will require more than two years for completion.

Faculty advisors and counselors are available for assisting students in career counseling, selecting a major, and meeting degree requirements. Students who plan to attend a senior college or university in pursuit of a bachelor's degree should consult the catalog or a representative of the senior institution for their specific course requirements. Counselors and faculty advisors can also help with transfer courses. For specific transfer information contact the Transfer Information Center on campus.

## APPLIED SCIENCE AND TECHNOLOGY

The Division of Applied Science and Technology believes that every student is of inestimable worth deserving the most professional staff attitude and the finest and most intense personal interest that every person can possibly give.

Each degree and certificate plan is goal directed to ensure that each course is relevant to the program title. The objective of each program is to develop job entry skills. However, each program allows sufficient latitude so students can select their own choice of electives based on their own interest area.

St. Philip's College is a community college operating under an open door policy. The desire is to serve each student's educational needs while maintaining a high standard of excellence in all programs.

## ADVISORY COMMITTEES

The occupational programs within the division of Applied Science and Technology of St. Philip's College need the continuing support of the community. A excellent vehicle for this support is advisory committees. Further, individual departments need the support and consultation of advisory committees, one for each program, which also serve to promote employer and other community support. These advisory groups possess no formal authority and serve voluntarily.

Each advisory committee is composed of community leaders representing employers, the profession, labor and education. The committee's function is to provide suggestions, advice, guidance, and support to the program in determining the overall direction, role, and instructional content of the specific education programs. Appropriate advice in general policy matters is also provided.

## ALLIED CONSTRUCTION TRADES TECHNOLOGIES

In this department, the orientation of the offerings is toward immediate entry into the labor force with a marketable skill. Graduates of these programs can receive either the Associate of Applied Science Degree or a Certificate of Completion. The objective of the department is to provide the student with an education which both satisfies entry level skill requirements and furnishes a foundation on which career advancement can be based.

## ALLIED CONSTRUCTION TRADES PROGRAMS

Air Conditioning and Heating
Architectural Computer Aided Drafting
Building Trades
Electrician

Homebuilding
Plumbing
Refrigeration Technology

## MULTI-MODAL TRANSPORTATION TECHNOLOGIES

Population growth and an increase volume of multi-modal equipment have created a demand for skilled maintenance technicians. The Multi-Modal Transportation Technology Department offers programs designed to prepare students to begin a career in aircraft technology, diesel technology, and railroad operations.

The Multi-Modal Transportation Technology Department provides workforce training through grants, customized training, and community-based organizations.

Upon entering the job market, graduates are likely to begin their career as aircraft mechanics, diesel/heavy equipment mechanics and railroad mechanics and operations.

# REPAIR AND MANUFACTURING TECHNOLOGY 

## REPAIR AND MANUFACTURING TECHNOLOGY PROGRAMS

Auto/Automotive Body Repair<br>Collision Technology<br>Machinist/Machine Technology<br>Welder/Welding Technology

The orientation of these programs is toward early entry into the labor force with marketable skills. Graduates of these programs may receive either an Associate of Applied Science Degree or a certificate. The objective is to provide the student with an education which satisfies entry-level skills and provides a sound foundation on which career advancement can be based.

## TEACHER EDUCATION (Associate of Arts Degree)

The objective of the Teacher Education Program is to provide students with a general education leading to initial Texas Teacher Certification in a student's chosen certification area(s). Students will be prepared for a smooth transfer into a Teacher Certification Program at a senior institution, where a Bachelor's Degree will be obtained, typically in Interdisciplinary Studies.

Teacher Education majors at St. Philip's College are advised by the faculty of the Reading, Education, and Foreign Languages Department. Since senior college requirements vary, it is essential for students interested in teaching to consult with transfer counselors at colleges they wish to attend. The THEA (formerly TASP) Test is currently the entry exam into upper division programs for teacher certification. Consult an advisor in Reading, Education, and Foreign Languages if there are questions about this requirement.

## TSI REQUIREMENT

Once enrolled in a certificate program, if the student deviates from the specified curriculum, he or she will need to complete the essay portion of the Accuplacer, if the student did not complete the essay during the point of initial placement testing.

## TOOL REQUIREMENTS FOR STUDENTS

All programs in the technical industrial areas require students to furnish a basic set of tools. Additional tools may be required for advanced courses. Current tool lists with approximate costs are available from the respective program director or chairperson. Students who do not have the required tools by the census date of the semester/session will receive a failing grade for each day they cannot complete their work assignments.

## Global/International Departmental Certificate (2905) (12 Semester Hours)

St. Philip's College offers students the option of completing a 12hour concentration in Global/International Studies. A global awareness is critical for students to have the best opportunity to work in high quality jobs. We live in a diverse, pluralistic world community. Our global village is becoming more networked and interdependent every day. Through study, analyses, and participation, a global education promotes lifelong growth in understanding of the world community and the interdependency of its peoples and systems-ecological, social, economic, and technological. A student completing 12 hours will receive a departmental certificate in Global/International Studies.

## Student Outcomes for Globally Competent Student(s):

- A global competent student
- has knowledge of world history and events
- understands global environmental, political, and economic responsibility and interconnectedness
- is able to effectively communicate cross-culturally
- understands differences and similarities of transcultural human experiences
- is able to use computer and telecommunications technology effectively


#### Abstract

A list of classes, certified instructors, and requirements for the Global/International Certificate can be found at the SPC Global/International Studies Initiative website at: http://www.accd.edu/spe/iic/global/ (effective January 2007, the new website address is http://www.accd.edu/spc/admin/ global).


For more information contact the Dean of Arts and Sciences at (210) 531-3597.

## ACCOUNTING INFORMATION SYSTEMS

The fields of activity in accounting may include keeping the books for one's own small business or working within a corporation or government agency in jobs that entail taxes, budgeting and controls, accounts receivable, accounts payable, inventory, and payroll.

Students beginning the program are introduced to the steps of the accounting cycle, trained to solve manual accounting problems, and then acquainted with computerized accounting. Successful accounting training is done through a hands-on approach which integrates principles with other business software applications such as spreadsheets, databases, and word processing.

A one-year certificate in Payroll Clerk may be obtained after completing the suggested 29 credit hours. The Associate of Applied Science Degree (approximately two years in length) provides a thorough understanding of how accounting procedures are applied in business settings so that the candidate may function successfully in entry-level accounting jobs.

## ASSOCIATE OF APPLIED SCIENCE DEGREE ACCOUNTING TECHNICIAN (2567)

TOTAL CREDIT HOURS REQUIRED: 64

| YEAR 1 Major | Gen. Educ. Elective |
| :---: | :---: |
| First Semester |  |
| ACNT 1425 Principles of Accounting I -----------------------------4 |  |
| ITSC 1301 Introduction to Computers ---------------------------- |  |
| *POFI 1191 Special Topics: Data Entry Technician ------------ 1 |  |
|  |  |
| BUSG 2309 Small Business Management OR |  |
| POFT 1301 Business English ----------------------------------------- 3 |  |
| HUMANITIES OR FINE ARTS (See 1) -----------------------------------------31-3 |  |
| Second Semester |  |
| ITSW 1304 Introduction to Spreadsheets --------------------------3 |  |
| ACNT 1311 Introduction to Computerized Accounting ---------- 3 |  |
| ACNT 1329 Payroll \& Business Tax Accounting ----------------- 3 |  |
| ACNT 1326 Principles of Accounting II ----------------------------3 |  |
|  |  |
| Summer Session |  |
| MATHEMATICS(See 2) |  |
| PSYCHOLOGY (See 3) ---------------------------------------------------------3 |  |
| YEAR2 |  |
| Third Semester |  |
| BUSG 2305 Business Law/Contracts -------------------------------3 |  |
| ACNT 1331 Federal Income Tax -----------------------------------3 |  |
| IMED 2309 Internet Commerce -----------------------------------3 |  |
| POFT 1220 Job Search Skills ----------------------------------------2 |  |
| ENGL 1301 Freshman Composition I -----------------------------------------3 |  |
| Fourth Semester |  |
| ACNT 2386 Internship-Accounting Technician ------------------ 3 |  |
| ACNT 2311 Managerial Accounting ------------------------------3 |  |
| BNKG 1356 Analyzing Financial Statements --------------------- 3 |  |
| ITSW 1307 Introduction to Database OR |  |
| ITSC 1309 Integrated Software Applications I-------------------- 3 |  |
| TOTAL CREDIT HOURS: ---------------------------------------------16 |  |

[^2]
## CERTIFICATE OF COMPLETION <br> PAYROLL CLERK (2629)

TOTAL CREDIT HOURS REQUIRED: 29


CERTIFICATE OF COMPLETION COMPUTERIZED ACCOUNTING ADMINISTRATOR (2741)

TOTAL CREDIT HOURS REQUIRED: 32


# MARKETABLE SKILLS ACHIEVEMENT AWARD 

 BEGINNING ACCOUNTING TECHNICIAN (2909)TOTAL CREDIT HOURS REQUIRED:11

|  | Gen. <br> Educ. |
| :--- | :--- |
| Major | Elective |

## ADMINISTRATIVE COMPUTER TECHNOLOGY

Administrative positions in our society are becoming more technical and require the use of specific skills. To help students meet this demand, St. Philip's College offers a twoyear program designed to provide a high level of proficiency in computer skills, keyboarding, word processing, spreadsheets, records management, accounting, business writing, and other administrative skills. Students' marketability is enhanced by emphasizing decision-making, problem solving, human relations, and business ethics skills.

Students may train for a speciality in a high demand occupation such as administrative assistant, legal administrative assistant, medical administrative assistant, or paralegal assistant. Upon completing the required curriculum, an Associate of Applied Science Degree will be awarded.

One year certificate programs and one semester marketable skills achievement awards are also available for those seeking entry-level workforce positions.

The program curriculum and activities provide, encourage, and support both leadership opportunities and professional development. The program is designed to prepare students to perform their duties with integrity and competence using various current technologies. The program also supports students preparing for careers in other fields. All majors are encouraged to become Certified Microsoft Office Specialists (MOS) in as many Microsoft applications as possible. The Business Information Solutions Department maintains a MOS Testing Center for student convenience.

## ASSOCIATE OF APPLIED SCIENCE ADMINISTRATIVE ASSISTANT (2510)

TOTAL CREDIT HOURS REQUIRED:71-73

|  | Gen. |  |
| :--- | :--- | :--- |
| Major | Educ. |  |
| Elective |  |  |

[^3]

*Prerequisite(s): Students with fewer than 25 wpm must take POFT 1329.
(1) Select one course: MATH 1373, 1314 or higher, BIOL 1370 or higher, CHEM 1370, 1406, 1411, 1470, PHYS 1301, 1305

## CERTIFICATE OF COMPLETION LEGAL WORD PROCESSING SPECIALIST (2561)

TOTAL CREDIT HOURS REQUIRED: 37

| Major | Gen. Educ. Elective |
| :---: | :---: |
| Semester 1 |  |
| *POFT 2301 Intermediate Keyboarding -------------------------------3 |  |
| *ITSW 1301 Introduction to Word Processing -------------------- 3 |  |
| POFL 1305 Legal Terminology ----------------------------------- 3 |  |
| POFT 1313 Professional Development for Office Personnel --- 3 |  |
| POFT 1301 Business English ---------------------------------------------3 |  |
|  |  |
| LGLA 1307 Introduction to Law \& Legal Professions ----------- 3 |  |
| LGLA 2307 Law Office Management ------------------------------- 3 |  |
| POFT 1307 Proofreading \& Editing -------------------------------- 3 |  |
| *POFL 1459 Legal Transcription ----------------------------------- 4 |  |
| POFT 1220 JobSearch Skills ------------------------------------------- 2 |  |
| *POFT 1309 Administrative Office Procedures I ------------------ 3 |  |


|  | Major | Gen. <br> Educ. |
| :--- | :--- | :--- | :--- |
| Elective |  |  |

*Prerequisites: Students with fewer than 25 wpm must take POFT 1329.

## ASSOCIATE OF APPLIED SCIENCE MEDICAL ADMINISTRATIVE ASSISTANT (2059)

TOTAL CREDIT HOURS REQUIRED: 67


## CERTIFICATE OF COMPLETION MEDICAL OFFICE ASSISTANT (2707)

TOTAL CREDIT HOURS REQUIRED: 37

|  | Gen. |  |
| :--- | :--- | :--- |
| Major | Educ. | Elective |


| Semester 1 |  |
| :---: | :---: |
| HITT | 1305 Medical Terminology I --------------------------------3 |
| POFM | 1317 Medical Administrative Support ---------------------3 |
| POFT |  |
| POFT | 1313 Professional Development for Office Personnel -- 3 |
| POFT | 1329 Beginning Keyboarding --------------------------------3 |
| Semester 2 |  |
| *ITSW 1301 Introduction to Word Processing --------------------3 |  |
| *POFM 1302 Medical Software Application ------------------------3 |  |
| POFT |  |
| POFT | 1307 Proofreading \& Editing --------------------------------3 |
| POFT | 1309 Administrative Office Procedures I -----------------3 |
| POFT | 1319 Records \& Information Management I ------------- 3 |
| Summer Session I |  |
| POFM | 1264 Practicum - Medical Administrative Assistant ----- 2 |
| POFM | 2333 Medical Document Production -----------------------3 |

TOTAL CREDIT HOURS ----------------------------------------------37
*Prerequisites: Students with fewer than 25 wpm must take POFT 1329.

## CERTIFICATE OF COMPLETION <br> OFFICE ASSISTANT (2708)

TOTAL CREDIT HOURS REQUIRED: 40

*Prerequisites: Students with fewer than 25 wpm must take POFT 1329.

## CERTIFICATE OF COMPLETION MICROSOFT OFFICE SPECIALIST (MOS) (2742)

Total Credit Hours Required: 42


Total Credit Hours Required: 13

|  | Gen. |  |
| :--- | :--- | :--- |
| Major | Educ. |  |
| Elective |  |  |

POFT 1313 Professional Development for Office Personnel -- 3
POFI 1191 Special Topics: Info Processing/Data Entry
Technician --------------------------------------------------1
POFT 1301 Business English --------------------------------------------3
*ITSW 1301 Introduction to Word Processing ----------------------3
*ITSW 1304 Introduction to Spreadsheets ----------------------------3
TOTAL CREDIT HOURS: ------------------------------------------------13

* Prerequisite: Students with fewer than 25 wpm must take POFT 1329.


## MARKETABLE SKILLS ACHIEVEMENT AWARD INTRODUCTION TO MICROSOFT OFFICE SPECIALIST



## AIR CONDITIONING, HEATING \& REFRIGERATION

Physical/Health Requirements

1. Finger and manual dexterity are necessary when working with electrical and mechanical systems.
2. Color discrimination is necessary to differentiate wire and resistance color coding.
3. Ability to climb, balance, stoop, kneel and/or lift heavy loads, i.e., ladders and tool boxes.
4. Near-visual acuity and depth perception are needed when working with small parts.

## COURSE ENROLLMENT GUIDELINES:

1.Enrollment in any Air Conditioning or Refrigeration course should be based solely upon student knowledge and experience of the subject matter. Any attempt to bypass course prerequisites may cause student failure.
2. To prevent failure, ALL STUDENTS MUST MEET PREREQUISITES of all courses BEFORE registration unless he or she has completed an Advanced Standing Credit Test or has audited a class. NO EXCEPTIONS.

## ASSOCIATE OF APPLIED SCIENCE AIR CONDITIONING AND HEATING (2652)

TOTAL CREDIT HOURS REQUIRED: 64

| YEAR 1 | Major $\begin{gathered}\text { Gen. } \\ \text { Educ. }\end{gathered}$ | Elective |
| :---: | :---: | :---: |
| First Semester |  |  |
| HART 1403 AC Control Principles | 4 |  |
| HART 1407 Refrigeration Principles I | 4 |  |
| HART 1471 Refrigeration Principles II | 4 |  |
| *SPCH 1321 Business/Professional Speech | - 3 |  |
| Second Semester |  |  |
| HART 1441 Residential Air Conditioning --------------------------4 |  |  |
| HART 1445 Gas/Electrical Heat --------------------------------------------4 |  |  |
| HART 1472 Psychrometry \& Duct Fab. ---------------------------4 |  |  |
|  |  |  |
| Summer Semester |  |  |
| ITSC 1301 Introduction to Computers ------------------------------------------3 |  |  |
| HART 2434 Advanced Controls --------------------------------------4. |  |  |
| YEAR 2 |  |  |
| First Semester |  |  |
| HART 2401 AC \& Refrigeration Codes ----------------------------4 |  |  |
| HART 2445 AC Systems Design --------------------------------------4 |  |  |
|  |  |  |
|  |  |  |
| Second Semester |  |  |
| HART 2449 Heat Pumps ----------------------------------------------4 |  |  |
|  |  |  |
|  |  |  |
| *MATH 1373 College Math ------------------------------------------------------3 |  |  |
|  |  |  |
| *General Academic Core Requirement for the Associ the college catalog. Any other substitutions must be ap advisor. Students wishing to transfer academic credits credits to St. Philip's College must also see a departı | ied Science Degree or to enrollment by stitutions or studen or. | ection 7 of department ransferring |

## CERTIFICATE OF COMPLETION AIR CONDITIONING AND HEATING (2689)

TOTAL CREDIT HOURS REQUIRED: 32

| Major | Gen. Elective |
| :---: | :---: |
| First Semester |  |
| HART 1403 AC Control Principles ---------------------------------4 |  |
| HART 1407 Refrigeration Principles I ------------------------------- 4 |  |
| HART 1471 Refrigeration Principles II ---------------------------- 4 |  |
| Second Semester |  |
| HART 1441 Residential Air Conditioning ---------------------------4 |  |
| HART 1445 Gas \& Electric Heating ------------------------------------- 4 |  |
| HART 2449 Heat Pumps ------------------------------------------------4 |  |
| 1st Summer Semester |  |
| HART 1472 Psychrometry \& Duct Fab -----------------------------4 |  |
| 2nd Summer Semester |  |
| HART 2434 Advanced Controls --------------------------------------4 |  |
| TOTAL CREDIT HOURS --------------------------------------------32-- |  |

## ASSOCIATE OF APPLIED SCIENCE REFRIGERATION TECHNOLOGY (2644)

TOTAL CREDIT HOURS REQUIRED: 64

| YEAR 1 | Major | Gen. <br> Educ. | Elective |
| :---: | :---: | :---: | :---: |
| First Semester |  |  |  |
| HART 1403 AC Control Principles | - 4 |  |  |
| HART 1407 Refrigeration Principles I | -- 4 |  |  |
| HART 1471 Refrigeration Principles II ---------- | -- 4 |  |  |
| *SPCH 1321 Business/Professional Speech ------- | ----- |  |  |
| Second Semester |  |  |  |
| MAIR 1449 Refrigerators, Freezers \& W/U ------ | -- 4 |  |  |
| HART 2442 Commercial Refrigeration ----------- | -- 4 |  |  |
| HART 1473 Industrial Refrigeration - | - 4 |  |  |
| *PHYS 1305 Intro to Physics I-------- | ----- |  |  |
| Third Semester |  |  |  |
| ITSC 1301 Introduction to Computers |  | -3 |  |
| HART 2434 Advanced Controls ---------- | -- 4 |  |  |
| YEAR 2 |  |  |  |
| First Semester |  |  |  |
| HART 2401 AC \& Refrigeration Codes ---------- | -- 4 |  |  |
| HART 2436 Troubleshooting ----------------------- | -- 4 |  |  |
| ELECTIVE CNBT, ELPT, PFPB, WDWK ----- |  | ----- | -- 4 |
| *GOVT 2301 American/Texas - |  |  |  |


*General Academic Core Requirement for the Associate of Applied Science Degree; Section 7 of the college catalog. Any other substitutions must be approved prior to enrollment by a department advisor. Students wishing to transfer academic credits to other institutions or students transferring credits to St. Philip's College must also see a department advisor.

## CERTIFICATE OF COMPLETION REFRIGERATION (2690)

TOTAL CREDIT HOURS REQUIRED: 32

| Major | Gen. <br> Educ. Elective |
| :---: | :---: |
| First Semester |  |
| HART 1403 AC Control Principles ----------------------------------4 |  |
| HART 1407 Refrigeration Principles I ----------------------------4 |  |
| HART 1471 Refrigeration Principles II --------------------------- 4 |  |
| Second Semester |  |
| MAIR 1449 Refrigerators, Freezers, W/U -------------------------4 |  |
| HART 2442 Commercial Refrigeration ------------------------------4 |  |
| HART 2457 Advanced Commercial Ref. ----------------------------4 |  |
| 1st Summer Session |  |
| HART 1473 Industrial Refrigeration ------------------------------- 4 |  |
| 2nd Summer Session |  |
| HART 2434 Advanced Controls -----------------------------------4 |  |

## AIRCRAFT TECHNOLOGY

A. This is an FAA approved program. All students must see a Program Advisor for details on FAA requirements.
B. Physical/Health Requirements:

1. Finger and manual dexterity.
2. Color discrimination.
3. Ability to climb, balance, stoop, kneel and/or lift heavy objects.
4. Near-visual acuity and depth perception.

> St. Philip's College/Southwest Campus
> Multi-Modal Transportation Technologies
> Aircraft Technology
> Policy to Award College Credits to
> Students with FAA Certification

The Multi-Modal Transportation Department will review student credentials for the recommendation to award credits for a FAA Airframe and Powerplant license. Students are required to present the original copy of the A\&P license and three years of employer verifiable aerospace work experience. Credits awarded are limited to 13 semester credit hours for an Airframe or Powerplant and 26 hours for an Airframe and Powerplant license. Credits awarded under the proposed guidelines will be included and limited to the 32 semester credit hour limit for non-traditional methods specified in the college catalog. Credits will be posted on the transcript when the student has satisfied the 3 -semester credit hour resident requirement.

## ASSOCIATE OF APPLIED SCIENCE AIRCRAFT TECHNICIAN POWERPLANT (2571)

TOTAL CREDIT HOURS REQUIRED: 62

|  | Gen. |  |
| :--- | :--- | :--- |
| Major | Educ. |  |
| Elective |  |  |

YEAR 1
First Semester
AERM 1205 Weight and Balance ---------------------------------------- 2
AERM 1208 Federal Aviation Regulations ---------------------------- 2
AERM 1310 Ground Operations ------------------------------------------3
AERM 1303 Shop Practice -----------------------------------------------3
AERM 1315 Aviation Science -------------------------------------------3
*MATH 1373 College Mathematics ------------------------------------------------------3
Second Semester
ITSC 1301 Introduction to Computers --------------------------------------------3
*SPCH 1321 Business/Professional Speech ----------------------------------------------3
AERM 1414 Basic Electricity --------------------------------------------- 4
AERM 1444 Aircraft Reciprocating Engines ------------------------- 4
AERM 2246 Aircraft Reciprocating Engine Overhaul I ----------- 2
Summer Semester
AERM 1357 Fuel Metering and Induction System

## YEAR 2

First Semester
*PHYS 1305 Introductory Physics --------------------------------------------------3
AERM 2247 Aircraft Reciprocating Engine Overhaul II --------- 2
AERM 1351 Aircraft Turbine Engine Theory -----------------------3
AERM 2351 Aircraft Turbine Engine Overhaul -----------------------3
AERM 1456 Aircraft Powerplant Electrical -------------------------- 4
Second Semester
*ENGL 1301 Freshman Composition I ------------------------------------------------3
*GOVT 2305 American Government I (Federal) --------------------------------------3
AERM 1340 Aircraft Propellers ----------------------------------------3
AERM 2352 Aircraft Powerplant Inspection -----------------------3
TOTAL CREDIT HOURS: --------------------------------------------------------18
*General Academic Core Requirement for the Associate of Applied Science Degree; Section 7 of the college catalog. Any other substitutions must be approved prior to enrollment by a department advisor. Students wishing to transfer academic credits to other institutions or students transferring credits to St. Philip's College must also see a department advisor.

## ASSOCIATE OF APPLIED SCIENCE AIRCRAFT TECHNICIAN AIRFRAME (2578)

TOTAL CREDIT HOURS REQUIRED: 66

|  | Gen. |  |
| :--- | :--- | :--- |
| Major | Educ. |  |

YEAR 1
First Semester
AERM 1205 Weight and Balance --------------------------------------------2
AERM 1208 Federal Aviation Regulations -----------------------------2
AERM 1310 Ground Operations --------------------------------------------3
AERM 1303 Shop Practice ------------------------------------------------3
AERM 1315 Aviation Science ---------------------------------------------3
MATH 1373 College Mathematics --------------------------------------------------------3
Second Semester

*SPCH 1321 Business/Professional Speech ------------------------------------------3

AERM 1241 Wood Fabric and Finishes --------------------------------- 2
AERM 1445 Airframe Electrical System ---------------------------------4
Summer Semester
AERM 1243 Instrument \& Navigation/Communication ---------- 2
AERM 1452 Aircraft Sheet Metal ------------------------------------------4

| YEAR 2 | Gen. <br> Major Educ. | Elective |
| :---: | :---: | :---: |
| First Semester |  |  |
| AERM 1449 Hydraulic, Pneumatic, \& Fuel Systems | - 4 |  |
| AERM 1350 Landing Gear Systems | - 3 |  |
| AERM 1254 Aircraft Composites - | - 2 |  |
| AERM 1253 Welding | - 2 |  |
| *PHYS 1305 Introductory Physics ---------------- | ------------- 3 |  |
| Second Semester |  |  |
| *ENGL 1301 Freshman Composition I --- | ------------- 3 |  |
| *GOVT 2305 American Government I (Federal) -- | ------------- 3 |  |
| AERM 2231 Airframe Inspection ------------------ | -- 2 |  |
| AERM 1347 Airframe Auxiliary --------- | - 3 |  |
| AERM 2333 Assembly and Rigging ---------------- | -- 3 |  |
| TOTAL CREDIT HOURS: ---- | 48 -------- 18 |  |

*General Academic Core Requirement for the Associate of Applied Science Degree; Section 7 of the college catalog. Any other substitutions must be approved prior to enrollment by a department advisor. Students wishing to transfer academic credits to other institutions or students transferring credits to St. Philip's College must also see a department advisor.

## CERTIFICATE OF COMPLETION AIRCRAFT MECHANIC POWERPLANT (2609)

| Major | Gen. Educ. Elective |
| :---: | :---: |
| First Semester |  |
| AERM 1205 Weight and Balance ------------------------------------2 |  |
| AERM 1208 Federal Aviation Regulations -------------------------2 |  |
|  |  |
| AERM 1303 Shop Practice --------------------------------------------3 |  |
|  |  |
|  |  |
| AERM 1444 Aircraft Reciprocating Engines ----------------------4 |  |
| AERM 2246 Aircraft Recip. Engine Overhaul I -------------------2 |  |
| Second Semester |  |
| AERM 2247 Aircraft Recip. Engine Overhaul II ----------------- 2 |  |
| AERM 1340 Aircraft Propellers -------------------------------------3 |  |
| AERM 1351 Aircraft Turbine Engine Theory --------------------3 |  |
| AERM 2351 Aircraft Turbine Engine Overhaul ------------------ 3 |  |
| AERM 1456 Aircraft Powerplant Electrical -----------------------4 |  |
| AERM 1357 Fuel Metering and Induction System --------------- 3 |  |
| Third Semester |  |
| AERM 2352 Aircraft Powerplant Inspection -----------------------3 |  |
|  |  |
| External Certifying Agency - FAA |  |
| License - Powerplant Mechanic |  |

## CERTIFICATE OF COMPLETION AIRCRAFT MECHANIC AIRFRAME (2608)

TOTAL CREDIT HOURS REQUIRED: 48

|  | Major | Gen. <br> Educ. | Elective |
| :---: | :---: | :---: | :---: |
| First Semester |  |  |  |
| AERM1205 | Weight and Balance ------------------------------------2 |  |  |
| AERM1208 | Federal Aviation Regulations -------------------------2 |  |  |
| AERM1310 | Ground Operations --------------------------------------3 |  |  |
| AERM1303 | Shop Practice ------------------------------------------3 |  |  |
| AERM1315 | Aviation Science ----------------------------------------3 |  |  |
| AERM1414 |  |  |  |
| AERM1241 | Wood Fabric and Finishes -----------------------------2 |  |  |
| AERM1445 | Airframe Electrical System --------------------------4 |  |  |
| Second Semester |  |  |  |
| AERM1449 | Hydraulic, Pneumatic, \& Fuel Systems --------------4 |  |  |
| AERM1350 | Landing Gear Systems --------------------------------3 |  |  |
| AERM1254 | Aircraft Composites -------------------------------------2 |  |  |
| AERM1253 |  |  |  |
| AERM1452 |  |  |  |
| AERM1347 | Airframe Auxiliary ---------------------------------------3 |  |  |
| AERM2333 | Assembly and Rigging ---------------------------------3 |  |  |
| Third Semester |  |  |  |
| AERM1243 Instrument \& Navigation/Communication ----------2 |  |  |  |
| AERM2231 | Airframe Inspection ----------------------------------2 |  |  |
| TOTAL CRE |  |  |  |

## CERTIFICATE OF COMPLETION AIRCRAFT STRUCTURES MECHANIC (2715)

TOTAL CREDIT HOURS REQUIRED: 30

|  | Gen. |  |
| :--- | :--- | :--- |
| Major | Educ. |  |
| Elective |  |  |

First Semester
AERM 1171 Workforce Training Skills for Success ---------------------1
AERM 1201 Introduction to Aviation ---------------------------------------1

AERM 1208 Federal Aviation Regulations --------------------------------- 2
AERM 1310 Ground Operation --------------------------------------------------3
AERM 1315 Aviation Science ----------------------------------------------------3
AERM 1303 Shop Practice -------------------------------------------------------3
Second Semester
AERM 1241 Wood Fabric and Finishes ------------------------------------- 2

AERM 1452 Aircraft Sheet Metal ------------------------------------------------4
AERM 1254 Aircraft Composites ------------------------------------------------ 2
AERM 1264 Aircraft Structures Practicum --------------------------------- 2
TOTAL CREDIT HOURS: -----------------------------------------------------30

## CERTIFICATE OF COMPLETION AIRCRAFT TURBINE MECHANIC (2736)

TOTAL CREDIT HOURS REQUIRED: 30

| Major | Gen. Elective |
| :---: | :---: |
| First Semester |  |
| AERM 1171 Workforce Training Skills for Success -------------- 1 |  |
| AERM 1201 Introduction to Aviation ---------------------------------- 2 |  |
|  |  |
| AERM 1208 Federal Aviation Regulations ---------------------------- 2 |  |
| AERM 1310 Ground Operations ----------------------------------------3 |  |
| AERM 1303 Shop Practice ------------------------------------------------3 |  |
| AERM 1315 Aviation Science -------------------------------------------3 |  |
| Second Semester |  |
|  |  |
| AERM 1351 Aircraft Turbine Engine Theory ---------------------3 |  |
| AERM 2351 Aircraft Turbine Engine Overhaul ------------------3 |  |
| AERM 1264 Aircraft Practicum (1) --------------------------------------- 2 |  |
| AERM 1254 Aircraft Composites -------------------------------------2 |  |
| TOTAL CREDIT HOURS: $\qquad$ 30 <br> (1) Capstone |  |

## CERTIFICATE OF COMPLETION AVIONICS (2592)

TOTAL CREDIT HOURS REQUIRED: 35


## ALLIED <br> HEALTH

The Allied Health programs at St. Philip's College meet the increasing demand for manpower in the expanding healthcare industry. The programs not only prepare students to become skilled technical members of a healthcare team but also educate them to become productive and responsible citizens of the community. The programs include didactic and clinical coursework that provide students with a solid foundation and the technical skills necessary for their chosen fields. In addition, many programs include general education courses to assist in the development of a well-rounded student. The curricula are designed and sequenced to develop students' problem-solving and critical thinking skills with progressive complexity throughout the programs. Legal/ethical issues, professionalism, and communication skills are also integrated into the curriculum. All programs require application for admission separate from applying for admission into the College. It is the responsibility of the student to meet and turn in all program admission and application materials to the department. The student also must meet College admission requirements.

The grading system in the Allied Health Department is different from other departments. The grading system is:

$$
\begin{aligned}
& \mathrm{A}=100-93 \\
& \mathrm{~B}=92-85 \\
& \mathrm{C}=84-77 \\
& \mathrm{D}=76-70 \\
& \mathrm{~F}=69 \text { and under }
\end{aligned}
$$

## ALLIED HEALTH PROGRAMS

Diagnostic Medical Sonography
Early Childhood Studies/CDA
Health Information Systems:
Coding Specialist
Documentation Coding Specialist
Health Information Technology
Specialty Medical Transcriptionist
General Medical Transcriptionist
Histologic Technician
Long Term Care Nursing Home Administrator
Medical Laboratory Technician
Occupational Therapy Assistant
Physical Therapist Assistant
Radiography Technology
Respiratory Care
Surgical Technologist
A felony conviction, while not precluding a student from applying to the academic component of their education in any given Allied Health profession, may prevent a student from sitting for their certification exam or licensure in the State of Texas. Students with concerns should contact their certification/regulatory board of the program for specific information.

Before being fully accepted into any Allied Health program, students must pass a mandatory criminal background check and drug screen (at the student's expense).

Before beginning the clinical rotations, students must complete mandatory immunizations and may be required to carry health insurance during those semesters. A list of required immunizations can

## be found on the Allied Health Department application. <br> All students requesting admission into any of the Allied Health programs must submit the following:

1. Apply to the Allied Health program of interest (students may apply to more than one program) with the general Allied Health Department Application found online in the Allied Health webpage and in the department office located in Science Building 118. A separate application packet is required for each program the student applies to.
2. Submit unofficial transcripts of relevant prerequisites/coursework completed or in progress (The same rule applies to students attending any of the Alamo Community College District colleges-including St. Philip's College-who can obtain their unofficial transcripts through the Records \& Registration office or online through the student services link.)

NOTE: Some programs require that official transcripts be submitted with the application. Please check on the program website or department office to verify.
3. Submit a one-page typed, double-spaced autobiographical essay stating the reasons for applying to the program and interest in the field. Some programs will score this essay as part of their points system for acceptance.
4. Submit the application packet with all materials enclosed to the program by the application deadline date (Deadline dates vary by program. It is the student's responsibility to verify the deadlines and all requirements prior to submission.)

Each program has a different set of prerequisites and application procedures. It is the student's responsibility to verify these requirements prior to submitting an application. Meeting the minimum application requirements of any program does not guarantee acceptance due to limited class sizes.

Please note that students may apply to any Allied Health program without being enrolled at St. Philip's College. However, it is the student's responsibility to apply for admission and submit all required admissions paperwork for St. Philip's College prior to registering for program coursework. Official transcripts submitted to any of the Allied Health programs with applications become the property of the programs and will not be forwarded to the Admissions Office. Therefore, students should request two sets of official transcripts: one for the program application and one for the Admissions Office.

CLINICAL FACILITIES FOR RELATED CLINICAL EXPERIENCE
Selected learning expriences in one or more health care agencies are planned for students in these programs as an important phase of the overall curriculum. Transportation must be arranged by the student.

## MAJOR CLINICAL FACILITIES

Audie Murphy Veteran's Hospital
Baptist Healthcare Systems Brooke Army Medical Center Christus Healthcare System Methodist Healthcare Systems

Nix Hospital
Southwest General Hospital
University Health Systems
Wilford Hall Medical Center

## ASSOCIATE OF SCIENCE ALLIED HEALTH TRANSFER DEGREE (LEADING TO B.S. DEGREE) (2063)

This program is designed for students who would like to receive a Baccalaureate Degree in one of several Allied Health areas. These areas include: Occupational Therapy, Physical Therapy, Respiratory Therapy, Nuclear Medicine, Profusion Technology, Medical Technology, and Health Information Technology.

TOTAL CREDIT HOURS REQUIRED: 70-73

YEAR 1 Major | Gen. |  |
| :--- | :--- | :--- |
| Educ. Elective |  |

First Semester
ENGL 1301 Freshman Composition I ---------------------------------------------------3
KINE Any activity course (1100-1238) --------------------------------------------------1
HIST 1301 History of the U.S. I -----------------------------------------------------3
BIOL 1413 General Zoology OR
BIOL 1406 General Biology I (Sci Majors) OR
BIOL 1408 General Biology I (Non-Sci Majors) ------------------------------------- 4
CHEM 1411 General Chemistry --------------------------------------------------------4
Second Semester
ENGL 1302 Freshman Composition II ------------------------------------------------3

MATH 1314 College Algebra OR

KINE Any activity course (KINE 1100-2199) ------------------------------------11
BIOL 1411 General Botany OR
BIOL 1407 General Biology II (Sci-Majors) OR
BIOL 1409 General Biology II (Non-Sci Majors) -------------------- 4
CHEM 1412 General Chemistry II ------------------------------------------4
YEAR 2
First Semester
Select one course from:
ENGL 2322 through 2333 OR SPCH 1311 OR 1318 ----------------------------------------------------------- 3
Select one course from Natural Science
CHEM 2323, 2223 Organic Chemistry OR

GOVT 2305 American Government (Federal) --------------------------------------3
COSC 1315 Intro to Computer Science OR
COSC 1301 Computer Literacy - 3

Psychology or Sociology (1300 through 2300) ----------------------------------------3
Second Semester
(Select one course)
HUMA 1301,1302- 3
(Select one course)
ARTS 1301; MUSI 1306-1310; DRAM 1310 ----------------------------------------3
GOVT 2306 American Government (State) --------------------------------------------3
CHEM 2325, 2225 Organic Chemistry OR
PHYS 1402 OR BIOL 2402 ------------------------------------------
BIOL 2421 Microbiology OR BIOL/CHEM Elective ----------- 4
TOTAL CREDIT HOURS

## ART

For information, consult the Chairperson of Fine Arts. Students seeking to major in art should seek information early concerning the specific transfer requirements of the senior institution of their choice. Students majoring in art should follow the Associate of Arts degree plan. This curriculum meets the standards recommended by the Texas Association of Schools of Art.

## ASSOCIATE OF ARTS <br> ART 2D (2072)

TOTAL CREDIT HOURS REQUIRED: 67-69

| YEAR 1 |  | Major | Gen. Educ. | Elective |
| :---: | :---: | :---: | :---: | :---: |
| First | Semester |  |  |  |
| ARTS |  | - 3 |  |  |
| ARTS | 1311 Design I | -3 |  |  |
| ARTS | 1303 Art History | -3 |  |  |
| ENGL | 1301 Freshman Composition |  | -3 |  |
| HUMA | 13** OR 23** |  | -3 |  |
| Second Semester |  |  |  |  |
| ARTS 1317 Drawing II -----------------------------------------------------------3 |  |  |  |  |
|  |  |  |  |  |
| SPCH 1311 OR Modern Language 14** OR 23** ------------- 3 |  |  |  |  |
| ENGL 1302 Freshman Composition II ----------------------------------------------3 |  |  |  |  |
|  |  |  |  |  |
| Summer Semester |  |  |  |  |
| GOVT 2305 American Government I ----------------------------------------------------3 |  |  |  |  |
|  |  |  |  |  |
| COSC 1301 Computer Liter |  |  |  |  |
| YEAR 2 |  |  |  |  |
| First Semester |  |  |  |  |
|  |  |  |  |  |
| HIST 1301 US History |  |  |  |  |
| BIOL 1406 General Biology I (Sci Majors) OR |  |  |  |  |
| BIOL 1408 General Biology I (Non-Sci Majors) OR |  |  |  |  |
| PHYS 1401 Gen. Physics I OR CHEM 1411 General Chemistry I ---------- 4 |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Second Semester |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| BIOL 1407 General Biology II (Sci-Majors) OR |  |  |  |  |
| BIOL 1409 General Biology II (Non-Sci Majors) OR |  |  |  |  |
| PHYS 1402 Gen. Physics II OR CHEM 1412 General Chemistry II -------4 |  |  |  |  |
| PSYC 2301 General Psychology OR |  |  |  |  |
| SOCI 1301 Introduction to Sociology ----------------------------------------------3 |  |  |  |  |

## ASSOCIATE OF ARTS <br> ART 3D (2073)

TOTAL CREDIT HOURS REQUIRED: 67-69


## ASSOCIATE OF ARTS INTEGRATED ARTS (2077)

TOTAL CREDIT HOURS REQUIRED: 69-71

| YEAR 1 |  | Major | Gen. <br> Educ. | Elective |
| :---: | :---: | :---: | :---: | :---: |
| First | Semester |  |  |  |
| ARTS | 1316 Drawing | - 3 |  |  |
| ARTS | 1311 Design I | - 3 |  |  |
| ARTS | 1301 Art Appreciation | - 3 |  |  |
| ENGL | 1301 Freshman Composition I | ------- |  |  |
| Second Semester |  |  |  |  |
|  |  |  |  |  |
| DRAM 2120 Production and Rehearsal ----------------------------------3 |  |  |  |  |
| DRAM 1310 Introduction to Theatre -----------------------------------3 |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Summer Semester |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| YEAR 2 |  |  |  |  |
| First Semester |  |  |  |  |
|  |  |  |  |  |
| HIST 1301 US History I |  |  |  |  |
| BIOL 1406 General Biology I (Sci Majors) OR |  |  |  |  |
| BIOL 1408 General Biology I (Non-Sci Majors) OR |  |  |  |  |
| PHYS 1401 Gen. Physics I OR CHEM 1411 General Chemistry I ----------4 |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Second Semester |  |  |  |  |
| MUSI 1134 Instrument Ensemble ----------------------------------------11 |  |  |  |  |
|  |  |  |  |  |
| HIST 1302 US History II --------------------------------------------------------------3 |  |  |  |  |
| BIOL 1407 General Biology II (Sci-Majors) OR |  |  |  |  |
| BIOL 1409 General Biology II (Non-Sci Majors) OR |  |  |  |  |
| PHYS 1402 Gen. Physics II OR CHEM 1412 General Chemistry II -------4 |  |  |  |  |
| Summer Semester |  |  |  |  |
| HUMA 1301 Introduction to Humanities ---------------------------------------------3 |  |  |  |  |
| PSYC 2301 General Psychology OR |  |  |  |  |
| SOCI 1301 Introduction to Sociology --------------------------------------------------3 |  |  |  |  |
| COSC 1301 Computer Literacy -------------------------------------------------------3 |  |  |  |  |

## ASSOCIATE OF ARTS COMIC BOOK (2075)

TOTAL CREDIT HOURS REQUIRED: 67-69

| YEAR 1 |  | Major | Gen. <br> Educ. | Elective |
| :---: | :---: | :---: | :---: | :---: |
| First | Semester |  |  |  |
| ARTS | 1316 Drawing I | - 3 |  |  |
| ARTS | 1311 Design I | -- 3 |  |  |
| ARTS | 1303 Art History | - 3 |  |  |
| ENGL | 1301 Freshman Composition I | ------ | -3 |  |
| HUMA | 13** OR 23** |  | -3 |  |
| Second Semester |  |  |  |  |
|  |  |  |  |  |
| ARTS 2313 Design Communication I -------------------------------3 |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Summer Semester |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| COSC 1301 Computer Literacy |  |  |  |  |
|  | YEAR 2 |  |  |  |
| First Semester |  |  |  |  |
| ARTS 2314 Design Communication II ---------------------------------3 |  |  |  |  |
| HIST 1301 US History I |  |  |  |  |
| BIOL 1406 General Biology I (Sci Majors) OR |  |  |  |  |
| BIOL 1408 General Biology I (Non-Sci Majors) OR |  |  |  |  |
| PHYS 1401 Gen. Physics I OR CHEM 1411 General Chemistry I ---------- 4 |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Second Semester |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| BIOL 1407 General Biology II (Sci-Majors) OR |  |  |  |  |
| BIOL 1409 General Biology II (Non-Sci Majors) OR |  |  |  |  |
| PHYS 1402 Gen. Physics II OR CHEM 1412 General Chemistry II -------4 |  |  |  |  |
| PSYC 2301 General Psychology OR |  |  |  |  |
|  |  |  |  |  |

## ASSOCIATE OF ARTS DESIGN (2074)

TOTAL CREDIT HOURS REQUIRED: 67-69


## ASSOCIATE OF ARTS

 DIGITAL PHOTOGRAPHY (2076)TOTAL CREDIT HOURS REQUIRED: 67-69


## AUTOMOTIVE BODY REPAIRER (Collision Technology)

The Auto Collision Program is introducing a new line of degrees and certificates of completion to better serve the St. Philip's College auto collision students as well as the auto collision industry. The new degree programs were the results of feed back provided by the community leaders in the auto collision repair industry and approved by the Auto collision advisory committee for implementation as of Fall 2002. The goal is to provide the industry with a higher skill-trained technician that is specialized or can operate in all areas of the collision/refinishing industry.

The program is currently instructed to the standards of the newest I-CAR Enhanced Delivery training software This will allow students to receive the latest and most up-to-date training with the latest in technology with equipment and standards. This training program was developed and accepted by both insurance companies and the collision repair industry nationally. Our training programs give students the opportunity to earn I-CAR credits and certifications upon successful completion.

Physical/ Health:

1. Finger and manual dexterity
2. Ability to Climb, balance, stoop, kneel, and lift heavy loads
3. Color distinction required
4. Near-visual acuity and depth perception

## ASSOCIATE OF APPLIED SCIENCE COLLISION/REFINISHING TECHNICIAN (2728)

TOTAL CREDIT HOURS REQUIRED: 68 Gen. Educ. Electives YEAR 1
FirstSemester

| ABDR | 1307 |
| :--- | :--- |
| ABDR | Auto Body Welding --------------------------------------------------------------------------------- 4 |

ABDR 1431 Basic Refinishing --------------------------------------------------------- 4
*SPCH 1321 Business/Professional Speech -------------------------------------------------------3
Second Semester
ABDR 1442 Structural Analysis \& Damage Repair II ----------------------
ABDR 1449 Automotive Plastic \& Sheet
Molded Compound Repair ---------------------------------------- 4

Third Semester
ABDR 1301 Auto Body Repair \& Repainting --------------------------------3
ABDR 2355 Collision Repair Estimating -------------------------------------3
ABDR 2257 Collision Repair Shop Management --------------------------- 2
YEAR 2
First Semester
ABDR 2437 Structural Analysis \& Damage Repair V ----------------------- 4
ABDR 2441 Major Collision Repair \& Panel Replacement -------------- 4
ABDR 2449 Advanced RefinishingI -----------------------------------------------4
ITSC 1301 Introduction to Computers ------------------------------------------------------------3
*GOVT 2301 American/Texas ------------------------------------------------------------------------3
Second Semester
ABDR 2451 Specialized Refinishing Techniques ------------------------------ 4
**ABDR 1380 Cooperative Training
----------------------------------------------------------- 3

ABDR 2453 Color Analysis \& Paint Matching -----------------------------


TOTAL CREDIT HOURS: ---------------------------------------------------------------------18 18
*General Academic Core Requirement for the Associate of Applied Science Degree; Section 7 of the college catalog. Any other substitutions must be approved prior to enrollment by a department advisor. Students wishing to transfer academic credits to other institutions or students transferring credits to St. Philip's College must also see a department advisor.
**See Advisor for Cooperative training
ABDR 1380 required for youth opportunity students and dual-credit students
ABDR 1480 Required for college level majors

## CERTIFICATE OF COMPLETION REFINISHING TECHNOLOGY (2670)

TOTAL CREDIT HOURS REQUIRED: 31-32

| Major | Gen. Educ. Elective |
| :---: | :---: |
| First Semester |  |
| ABDR 1301 Auto Body Repair \& Repainting ---------------------3 |  |
| ABDR 1431 Basic Refinishing ------------------------------------------ 4 |  |
| ABDR 1449 Automotive Plastic \& Sheet |  |
| Molded Compound Repair ----------------------------4 |  |
| Second Semester |  |
| ABDR 2449 Advanced Refinishing I ----------------------------------4 |  |
| ABDR 2451 Specialized Refinishing Techniques ------------------4 |  |
| ABDR 2453 Color Analysis \& Paint Matching ------------------4 |  |
| ABDR 1380 Cooperative Training OR |  |
| ABDR 1480 Cooperative Training ----------------------------------3-4 |  |
| Third Semester |  |
| ABDR 2355 Collision Repair Estimating --------------------------3 |  |
| ABDR 2257 Collision Repair Shop Management ----------------- 2 |  |
| TOTAL CREDIT HOURS: ---------------------------------------31-32-3 |  |

## CERTIFICATE OF COMPLETION COLLISION TECHNOLOGY (2680)

TOTAL CREDIT HOURS REQUIRED: 38-39

| Major | Gen. Elective |
| :---: | :---: |
| First Semester |  |
| ABDR 1307 Auto Body Welding ---------------------------------------3 |  |
|  |  |
|  |  |
| ABDR 2402 Auto Body Mechanical \& Electrical Service ------- 4 |  |
| Second Semester |  |
| ABDR 2437 Structural Analysis \& Damage Repair V ------------ 4 |  |
| ABDR 1449 Automotive Plastic \& Sheet |  |
| Molded Compound Repair ----------------------------4 |  |
| ABDR 2441 Major Collision Repair \& Panel Replacement ----- 4 |  |
| ABDR 1380 Cooperative Training OR |  |
| ABDR 1480 Cooperative Training -----------------------------------3-4 |  |
| Third Semester |  |
| ABDR 1301 Auto Body Repair \& Repainting ---------------------3 |  |
| ABDR 2355 Collision Repair Estimating ---------------------------3 |  |
| ABDR 2257 Collision Repair Shop Management ---------------- 2 |  |
|  |  |

## AUTOMOTIVE TECHNOLOGY

Students entering the Automotive Technology programs must have:

1. Finger and manual dexterity necessary to work mechanical and electrical systems.
2. Color discrimination necessary to differentiate wire and resistance color codes.
3. Near visual acuity and depth perception needed when working with small parts.
4. Hearing capability necessary to discover, analyze, and correct irregular vehicle noises.
5. Ability to climb, balance, stoop, kneel, and to lift heavy loads such as a tool box.

The above limitations may be waived if the student is equipped with mechanical and/or electrical devices and has obtained approval from the Chairperson of Automotive Technology and the Dean of Applied Science and Technology.

The Automotive Technology Department may waive college credit requirements for students attaining industry skill standards. The criteria for waiving a course will be based on current Automotive Service Excellence (ASE) certification in a specific area as well as having three recent years of employer verifiable work experience in that specific area. The waiver must be approved by the Automotive Department. Credit will be limited to a total of 16 semester hours and will be included in a limited by the 32 semester hour limit for non-traditional methods. The waiver will not be posted on the transcript until the student has satisfied college resident requirement. Credit waived is non-transferable. The ACE Guide will be utilized in establishing equivalencies. All documentation must be submitted by the requesting student.

The Automotive Technology Department has four programs: 1. Automotive Technology - Option I.
a. Associate of Applied Science Degree
b. One-Year Certificate of Completion
c. Specialized Certificates of Completion
<Transmission Specialist
$<$ Performance Specialist
$<$ Heating and Air Conditioning Specialist
<Brake and Front End Specialist
2. Automotive Technology - Option II, Ford MLR
3. GM Automotive Service Educational Program

ASSOCIATE OF APPLIED SCIENCE AUTOMOTIVE TECHNOLOGY (2643)

TOTAL CREDIT HOURS REQUIRED: 62-64

|  | Gen. |
| :--- | :--- | :--- |
| Major | Educ. Elective |

YEAR 1
First Semester
AUMT 1305 Intro. to Automotive Tech.

- 3

AUMT 1307 Automotive Electrical Systems --------------------------3
AUMT 1310 Automotive Brake Systems --------------------------------3
AUMT 1316 Suspension and Steering ------------------------------------3
Humanities/Fine Arts Requirement $-3$

|  | Major | Gen. <br> Educ. | Elective |
| :---: | :---: | :---: | :---: |
| Second Semester |  |  |  |
| AUMT 1319 Automotive Engine Repair --- |  |  |  |
| AUMT 1345 Automotive Heating \& Air Conditio |  |  |  |
| AUMT 2317 Engine Performance Analysis I ---- |  |  |  |
| College MATH 1373 or Higher ------------- | ----- |  |  |
| Summer Semester |  |  |  |
| AUMT 1366 Practicum I OR AUMT 2328 OR |  |  |  |
| AUMT 2288 ------------------------------------ | 2-3 |  |  |
| AUMT 2313 Manual Drive Train ------------- | - 3 |  |  |
| YEAR |  |  |  |


| First Semester |  |
| :---: | :---: |
|  | AUMT 2321 Automotive Electrical Lighting \& Accessories ---- 3 |
|  | AUMT 2325 Automatic Transmission/Transaxles ---------------3 |
|  | AUMT 2334 Engine Performance Analysis II ---------------------3 |
|  |  |
|  |  |
| Second Semester |  |
| AUMT 2343 Automotive Emissions Licensing -------------------3 |  |
| AUMT 2366 Practicum II OR AUMT 1372 OR |  |
|  |  |
|  |  |
|  |  |
|  | Elective (AUMT 2301 or ITSC 1301 or Higher) |
|  |  |

Exit Point: Automotive Technician/Automotive Technician Enter-Level

$$
\begin{array}{ll}
\text { CERTIFICATE } & \text { OF COMPLETION } \\
\text { AUTOMOTIVE } & \text { TECHNOLOGY } \\
\mathbf{( 2 6 4 3 )}
\end{array}
$$

TOTAL CREDIT HOURS REQUIRED: 26-31

| Major | Gen. Educ. Elective |
| :---: | :---: |
| First Semester |  |
| AUMT 1305 Introduction to Auto Tech -----------------------------3 |  |
| AUMT 1307 Automotive Electrical Systems ---------------------3 |  |
| AUMT 1310 Automotive Brake Systems ---------------------------3 |  |
| AUMT 1316 Steering \& Suspension Systems ---------------------3 |  |
| Second Semester |  |
| AUMT 1319 Automotive Engine Repair --------------------------3 |  |
| AUMT 2313 Manual Drive Train ----------------------------------------3 |  |
| AUMT 2317 Engine Performance Analysis I ---------------------3 |  |
| AUMT 2321 Automotive Electrical Lighting \& Accessories ---- 3 |  |
| Summer I Semester |  |
| AUMT 1366 Practicum I OR AUMT 2328 OR |  |
| AUMT 2288 ------------------------------------------------------------------2-3 |  |
|  |  |
|  |  |
| *Elective may be waived by the department chairperson |  |
| Exit Point: Entry Level Automotive Technician. Practicum students may elect to complete a |  |
| Automotive Service/Special Projects course in Lieu of the required p individuals who wish to continue and pursue the AAS degree must Technology - Option I degree plan and meet all other college requirem | cum course. Those ww the Automotive |

## CERTIFICATE OF COMPLETION TRANSMISSION SPECIALIST (2719)

TOTAL CREDIT HOURS REQUIRED: 17-22

|  | Gen. |  |
| :--- | :--- | :--- |
| Major | Educ. |  |
| Elective |  |  |

```
First Semester
AUMT 1305 Introduction to Auto Tech -------------------------------
AUMT 1307 Automotive Electrical Systems ------------------------
AUMT 2313 Manual Drive Train -----------------------------------------
Second Semester
AUMT 2317 Engine Performance Analysis I -----------------------
AUMT 2325 Automatic Transmission/Transaxle -------------------- }
AUMT 2366 Practicum II OR AUMT 1372 OR
AUMT 2289
2-3
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TOTAL CREDIT HOURS: -------------------------------------------------------------------------------
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*Elective may be waived by the department chairperson
Exit Point: Entry-Level Transmission Repair Technician. Practicum students may elect to complete a Special Projects course in Lieu of the required practicum course. Those individuals who wish to continue and pursue the AAS degree must follow the Automotive Technology - Option I degree plan and meet all other College requirements.

$$
\begin{array}{cc}
\text { CERTIFICATE } & \text { OF COMPLETION } \\
\text { PERFORMANCE } & \text { SPECIALIST }
\end{array}
$$

TOTAL CREDIT HOURS REQUIRED: 21-26

|  | Gen. |
| :--- | :--- |
| Major | Educ. |

First Semester
AUMT 1305 Introduction to Auto Tech ----------------------------------3
AUMT 1307 Automotive Electrical Systems ---------------------------3
AUMT 2317 Engine Performance Analysis I --------------------------3
AUMT 2334 Engine Performance Analysis II ------------------------ 3
Second Semester
AUMT 2343 Automotive Emissions Licensing Prep ---------------- 3
AUMT 2366 Practicum II OR AUMT 1372 OR

AUMT 2437 Automotive Electronics ----------------------------------------4


*Elective may be waived by the department chairperson
Exit Point: Entry-Level Performance Specialist Technician. Practicum students may elect to complete a Special Projects course in Lieu of the required practicum course. Those individuals who wish to continue and pursue the AAS degree must follow the Automotive Technology - Option I degree plan and meet all other College requirements.

## CERTIFICATE OF COMPLETION HEATING \& AIR CONDITIONING SPECIALIST (2721)

TOTAL CREDIT HOURS REQUIRED: 17-22

| Major | Gen. Eluc. |
| :---: | :---: |
| First Semester |  |
| AUMT 1305 Introduction to Auto Tech -----------------------------3 |  |
| AUMT 1307 Automotive Electrical Systems ---------------------3 |  |
| AUMT 1345 Heating and Air Conditioning ------------------------3 |  |
| Second Semester |  |
| AUMT 1366 Practicum I OR AUMT 2328 OR |  |
| AUMT 2288 -----------------------------------------------------------2-3 |  |
| AUMT 2317 Engine Performance Analysis I ---------------------3 |  |
| AUMT 2321 Automotive Electrical Lighting \& Accessories ---- 3 |  |
| Automotive Elective* | ------ 3-4 |
|  | ---------- 3-4 |

Exit Point: Entry-Level Automotive Heating and Air Conditioning Technician. Practicum students may elect to complete a Special Topics course in lieu of the practicum. Those individuals who wish to continue and pursue the AAS degree must follow the Automotive Technology - Option I degree plan and meet all other College requirements.


First Semester
AUMT 1305 Introduction to Auto Tech ------------------------------3
AUMT 1307 Automotive Electrical Systems ------------------------3
AUMT 1310 Auto Brake Systems --------------------------------------3
AUMT 1316 Suspension and Steering ------------------------------------3
Second Semester
AUMT 1366 Practicum I OR AUMT 2328 OR
AUMT 2288 2-3

Automotive Elective*

*Elective may be waived by the department chairperson
Exit Point: Entry-Level Brake \& Front End Specialist. Practicum students may elect to complete an Automotive Service course in lieu of the required practicum course. Those individuals who wish to continue and pursue the AAS degree must follow the Automotive Technology - Option I degree plan and meet all other College requirements.

# CERTIFICATE OF COMPLETION FORD MAINTENANCE AND LIGHT-DUTY REPAIR (2761) 

TOTAL CREDIT HOURS REQUIRED: 28

|  | Gen. |  |
| :--- | :--- | :--- |
| Major | Educ. |  |
| Elective |  |  |

First Semester
AUMT 1305 Introduction to Auto Tech -------------------------------3
AUMT 2321 Automotive Electrical Lighting \& Accessories ---- 3
AUMT 2437 Automotive Electronics ------------------------------------4
AUMT 2317 Engine Performance Analysis I -----------------------3
Second Semester
AUMT 1316 Steering and Suspension Systems ------------------------3
AUMT 1310 Automotive Brake Systems -----------------------------3
AUMT 1345 Heating and Air Conditioning ----------------------------3
AUMT 1319 Automotive Engine Repair ------------------------------3
AUMT 1366 Practicum I-------------------------------------------------------3


Courses are presented in 4-week per course block format, M-F 8:00am-1:00pm. Internships are arranged at participating Dealerships.

Exit Point: Entry-Level Ford Technician. Local Ford and Lincoln Mercury Dealerships, in cooperation with Ford Motor Company Training Division and the St. Philip's Automotive Technology Department have designed a two-semester Certificate Program to meet the needs of the dealerships. Students may be required to complete developmental courses prior to enrolling. Each semester is embedded with Ford factory-training credits/certifications. In addition to the College admission requirements, Ford MLR candidates must apply for admission in this program within the automotive department. Students selected for this program must be willing to be sponsored by a Ford/Lincoln Mercury dealership, which may require drug testing and various background checks (this process is dealership policy and is not associated with St. Philip's College).

## ASSOCIATE OF APPLIED SCIENCE GENERAL MOTORS AUTOMOTIVE SERVICE EDUCATIONAL PROGRAM (ASEP) (2638)

## TOTAL CREDIT HOURS REQUIRED: 60



## BAKING

## ASSOCIATE OF APPLIED SCIENCE BAKING AND PASTRY ARTS (2770)

Students will be accepted into this program by application only. Please visit the department office for details.

TOTAL CREDIT HOURS REQUIRED: 70

| YEAR 1 |  | Major | Gen. <br> Educ. | Elective |
| :---: | :---: | :---: | :---: | :---: |
| First S | Semester |  |  |  |
| FDNS |  | -- 3 |  |  |
| CHEF | 1401 Basic Food Preparation ------------------- | - 4 |  |  |
| HAMG | 1321 Intro. To Hospitality Industry ----------- | -- 3 |  |  |
| CHEF | 1305 Sanitation and Safety ----------------------1-1-- | - 3 |  |  |
| ENGL | 1301 Freshman Composition I --------------------- |  |  |  |
| Second | Semester |  |  |  |
| PSTR | 1401 Fundamentals of Baking | -- 4 |  |  |
| ENGL | 1302 Freshman Composition II |  | 3 |  |
| ONE COURSE FROM THE FOLLOWING: |  |  |  |  |
| PSYC | 2301, 2308, 2315, OR |  |  |  |
| SOCI | 1301, 1372, 2301, 2306 |  | 3 |  |
| ONE COURSE FROM THE FOLLOWING: |  |  |  |  |
| MATH | 1373, 1314, 1332, 1374 - |  | 3 |  |
| COSC | 1301 Computer Literacy |  | 3 |  |
| Third Semester |  |  |  |  |
| PSTR | 1310 Pies, Tarts, Teacakes, Cookies ------------- | -- 3 |  |  |
| PSTR | 1305 Breads and Rolls ----------------------------------- | -- 3 |  |  |
|  | YEAR 2 |  |  |  |
| Fourth | Semester |  |  |  |
| FDNS |  | -- 3 |  |  |
| RSTO | 1325 Purchasing for Hospitality Operations ---- |  |  |  |
| PSTR | 2301 Chocolates and Confections ----------------- | -- 3 |  |  |
| PSTR | 1312 Laminated Doughs, Pate A Choux, Donuts |  |  |  |
| PSTR | 1340 Plated Desserts -------------------------------------- | -- 3 |  |  |
| Fifth S | Semester |  |  |  |
| PSTR |  | -- 3 |  |  |
| PSTR | 2307 Cake Decorating II | -- 3 |  |  |
| PSTR | 2350 Wedding Cakes ---- | -- 3 |  |  |
| RSTO | 2301 Prin. of Food and Beverage Control ----- | -- 3 |  |  |
| PSTR |  | -- 2 |  |  |
|  |  |  |  |  |

## CERTIFICATE OF COMPLETION BAKING PRINCIPLES (2590)

TOTAL CREDIT HOURS REQUIRED: 24


## BIOLOGY

## (Natural Sciences)

Students interested in the fields of biology or Natural Sciences, pre-dentistry, pre-medicine, pre-nursing, and pre-pharmacy must follow the Associate of Science Degree plan. It is essential that students majoring in these areas work closely with the advisors in the Natural Science Department to assure meeting transfer requirements of the various senior colleges and nursing schools. It is advisable for the pre-nursing students to select the nursing school they plan to attend before conferring with the St. Philip's advisors so that the St. Philip's program may be adjusted to meet individual needs best.
Note: A $2+2$ Plan (articulation) now exists in Biology between a number of area colleges and universities and St. Philip's College. A 2+3 Plan also exists in Pharmacy between Texas Southern University and St. Philip's College. In addition, articulation plans exist between St. Philip's College and all area nursing schools. For more information, contact the department faculty.

ASSOCIATE OF SCIENCE

## BIOLOGY (2003), PRE-DENTISTRY (2006), PRE-MEDICINE (2042)

TOTAL CREDIT HOURS REQUIRED: 71-74

|  | YEAR 1 | Major | Gen. <br> Educ. | Elective |
| :---: | :---: | :---: | :---: | :---: |
| First Semester |  |  |  |  |
| *BIOL 1406 General Biology I ------------------------------------ 4 |  |  |  |  |
| *CHEM 1411 General Chemistry ----------------------------------------------- 4 |  |  |  |  |
| *ENGL 1301 Freshman Composition -------------------------------------------3 |  |  |  |  |
| HIST 1301 History of the US I -------------------------------------------------3 |  |  |  |  |
| KINE Any activity course (1100-1238) -------------------------------------1-2 |  |  |  |  |
| Second Semester |  |  |  |  |
| *BIOL 1407 General Biology II --------------------------------------- 4 |  |  |  |  |
| *CHEM 1412 General Chemistry II ----------------------------------------------4 |  |  |  |  |
| *ENGL 1302 English Composition II ---------------------------------------------3 |  |  |  |  |
| HIST 1302 History of US II ----------------------------------------------------3 |  |  |  |  |
| MATH 1314 College Algebra or |  |  |  |  |
|  |  |  |  |  |
| KINE Any activity course 1100-2199 ---------------------------------------1-2 |  |  |  |  |
| YEAR 2 |  |  |  |  |
| First Semester |  |  |  |  |
| *CHEM2323 Organic Chemistry I ----------------------------------3 |  |  |  |  |
| *CHEM2223 Organic Chemistry Lab I ---------------------------- 2 |  |  |  |  |
| COSC 1301 Computer Literacy |  |  |  |  |
| $\begin{array}{ll}\text { ENGL } & \text { Any Literature (2322-2377) or } \\ \text { Interdisciplinary Studies (2370--------------------------- }\end{array}$ |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| GOVT 2305 American Government (Federal) |  |  |  |  |
| BIOL 2401 Human Anatomy \& Physiology I |  |  |  |  |
| SOCI 1301 Introduction to Sociology -- |  |  |  |  |
| Second Semester |  |  |  |  |
| BIOL 2421 Microbiology --------------------------------------------- 4 |  |  |  |  |
| BIOL 2402 Human Anatomy \& Physiology II -----------------4 |  |  |  |  |
| GOVT 2306 American Government (State) ---------------------------------3 |  |  |  |  |
| ARTS 1301 or DRAM 1310 or MUSI 1306-1310 --------------- 3 |  |  |  |  |
| SPCH 1311 Fundamental of Speech --------------------------------------------3 |  |  |  |  |
| TOTAL | CREDIT HOURS: |  | 46-49 |  |

*The courses marked with an asterick are required for Medical and Dental School. The following courses are also necessary for Medical and Dental School, but are not required for the Associate of Science Degree; (No VA Benefits in these majors):
PHYS 1401 \& PHYS 1402 General Physics I \& II
MATH 2413 College Calculus
CHEM 2325 Organic Chemistry II
CHEM 2225 Organic Chemistry Lab II

## BIOMEDICAL EQUIPMENT TECHNOLOGY PROGRAM

The Biomedical Equipment Technician is filling an important role in today's specialized medical industry. Biomedical equipment, which is vital to human life is found in clinics, hospitals, and many doctors' offices. The complex, and highly specialized equipment in these facilities is valued in millions of dollars. The Biomedical Equipment Technology program at St. Philip's College is designed to prepare the student to meet the demands of this exacting profession by teaching them to inspect, calibrate, maintain, troubleshoot and repair medical equipment. The student must meet the college admission requirements. The program is started every Fall semester with a limit of twenty-four (24) students per calendar year. This program is available only during the daytime.

Students in the second year use community facilities for practicum experiences.
BMET - Background and Drug Checks will be required prior to Practicum courses. At the student's expense.

COMMUNITY FACILITIES FOR RELATED CLINICAL EXPERIENCE
Selected learning experiences in one or more health care agencies are planned for students in these programs as an important phase of the overall curriculum. Transportation must be arranged by the student.

## COMMUNITY FACILITIES

Audie L. Murphy Veteran's Hospital
University Center Hospital
University of Texas Health Science Center Hospital
Christus Santa Rosa Medical Hospital
Wilford Hall Medical Center

Methodist Hospital Metropolitan
Methodist Hospital - San Antonio
Methodist Specialty and Transplant
Southwest Texas Methodist Hospital

## ASSOCIATE OF APPLIED SCIENCE BIOMEDICAL EQUIPMENT TECHNOLOGY (2548)

TOTAL CREDIT HOURS REQUIRED: 69

|  | Gen. <br> Major$\quad$ Educ. |  |
| :--- | :--- | :--- |
| Elective |  |  |

150 St. Philip's College 2006-2008 Catalog

|  | Gen. <br> Major | Educ. | Elective |
| :---: | :---: | :---: | :---: |
| Third Semester |  |  |  |
| CETT 1425 Digital Fundamentals ------------------- | -- 4 |  |  |
| MATHEMATICS ------ | ----- | 3 |  |
| YEAR 2 |  |  |  |
| Fourth Semester |  |  |  |
| BIOM 1201 Biomedical Equipment Technology - | -- 2 |  |  |
| BIOM 2266 Practicum Biomedical Tech I------- | -- 2 |  |  |
| CPMT 1445 Computer Systems Maintenance | -- 4 |  |  |
| *COMMUNICATIONS |  | 3 |  |
| *SOCIAL SCIENCE |  | 3 |  |
| Fifth Semester |  |  |  |
| BIOM 2239 Physiological Instruments II ----- | -- 2 |  |  |
| CPMT 1191 Job Search Skills --- | -- 1 |  |  |
| CPMT 1449 Comp. Networking Technology | - 4 |  |  |
| RBTC 1447 Electro-Mechanical Devices ------- | -- 4 |  |  |
| BIOM 2367 Practicum Biomedical Tech II ------- | -- 3 |  |  |
| HUMA SEE (1) ---------------------------- |  | 3 |  |
| TOTAL CREDIT HOURS: - | 53 | 16 |  |

Select one course from the list below:

* General Academic Core Requirements for the Associate of Applied Sciences Degree, Section 7 of the college catalog.


## BUSINESS ADMINISTRATION

Students interested in transferring to a senior institution and earning a Bachelor's Degree in Business Administration with a major in such areas as accounting, economics, financial management, marketing, personnel management, or operations management should follow the following degree plan. Transfer of courses is determined by the receiving senior institution. Students should consult a department advisor early in their programs of study to develop degree plans which meet degree requirements of the senior institution.

## ASSOCIATE OF ARTS BUSINESS ADMINISTRATION (2004)

TOTAL CREDIT HOURS REQUIRED: 64-65


## BUSINESS INFORMATION SOLUTIONS

The Department of Business Information Solutions offers four major programs geared toward preparing students for the workplace. The programs are Accounting Information Systems, Administrative Computer Technology, Business Management, and Information Technology. All programs offer a one-year Certificate and an Associate of Applied Science; and some of the programs offer Institutional Certificates and Marketable Skills Achievement Awards for students requiring marketable skills for immediate entry into the workplace.

All one-year Certificates and Associate of Applied Science Degrees include a capstone course or an internship/practicum that offers students the opportunity to practice the skills they have acquired. Advisory Committees composed of area businesses meet regularly to discuss, review, and evaluate training equipment, curriculum, and job market trends that might require program revision or the development of new programs.

Students interested in any of the Business Information Solutions Programs should contact a faculty member in their area of interest.

## COMPUTER AND BUSINESS TECHNOLOGY PROGRAMS

ACCOUNTING INFORMATION SYSTEMS<br>Accounting Technician, A.A.S.<br>Beginning Accounting Technician, Marketable Skills Achievement Award<br>Computerized Accounting Administration<br>Payroll Clerk, Certificate<br>ADMINISTRATIVE COMPUTER TECHNOLOGY*<br>Administrative Assistant, A.A.S.<br>Data Entry Specialist, Institutional Certificate: Marketable Skills Achievement Award<br>Legal Administrative Assistant, A.A.S.<br>Legal Word Processing, Certificate<br>Medical Administrative Assistant, A.A.S.<br>Medical Office Assistant, Certificate<br>Office Assistant, Certificate<br>Paralegal Studies<br>BUSINESS MANAGEMENT<br>Business Management E-Business, A.A.S.<br>Business Management "Construction Business Management Option", A.A.S.<br>Industrail Maintenance Management, A.A.S.<br>Entrepreneurship, Certificate<br>Project Team Leader, Marketable Skill Achievement Award<br>INFORMATION TECHNOLOGY<br>A+ Certification Preparation, Marketable Skills Achievement Award<br>Computer Support Specialist, Certificate<br>Desktop Support Specialist, A.A.S.<br>Information Technology Security, (ITSA Program)<br>Network Administrator, A.A.S.<br>Network Professional, Certificate<br>Network Professional: Network+<br>Network Professional: Server+<br>Network Security Administrator<br>Web Developer, A.A.S.<br>Web Developer, Certificate

[^4]
## BUSINESS MANAGEMENT

The Associate of Applied Science Degree in E-Business prepares individuals to plan, manage, supervise, and market electronic business operations, products and services provided online via the Internet. Includes instruction in business management, information technology, information resources management, web design, computer and Internet law and policy, computer privacy and security, e-trading, insurance, electronic marketing, investment capital planning, enterprise operations, personnel supervision, and human relations.

A construction business management option has been added to the associates degree to serve clients enrolled in journeyman programs who are interested in entering management. An advisory team from the construction industry identified the curriculum for this program. A certificate is also available in entrepreneurship for students interested in starting or improving a for-profit business. The Project Management Team Leader Marketable Skills Achievement Award has also been added for those interested in moving into supervisory/managment positioning.

## ASSOCIATE OF APPLIED SCIENCE <br> E-BUSINESS (2739)

TOTAL CREDIT HOURS REQUIRED: 69-70

|  |  | Major | Gen. Educ. | Elective |
| :---: | :---: | :---: | :---: | :---: |
| First | Semester |  |  |  |
| ITSC | 1301 Introduction to Computers - |  | 3 |  |
| ENGL | 1301 Freshman Composition I --------------------- |  | 3 |  |
| HRPO |  | - 3 |  |  |
| MATH | (See 1) |  | 3 |  |
| ACNT | 1425 Principles of Accounting I --------------------- | - 4 |  |  |
| Second | d Semester |  |  |  |
| BMGT |  | -3 |  |  |
| ITSW | 1307 Introduction to Database OR |  |  |  |
| ITMC | 2403 SQL Server --- | 3-4 |  |  |
| ACNT | 1326 Principles of Accounting II OR |  |  |  |
| BGMT | 1313 Principles of Purchasing ---------------------- | - 3 |  |  |
| ITSC | 1325 PC Hardware OR |  |  |  |
| ITSC |  | - 3 |  |  |
| HRPO | 2307 Organizational Behavior ---------------------- | -3 |  |  |
| Summe | er Session |  |  |  |
| PSYC | 2301 General Psychology OR |  |  |  |
| PSYC | 2315 Psyc of Personal Adjustment ----------------- | ---- |  |  |
| ECON | 2301 Macroeconomics OR |  |  |  |
| ECON | 2302 Microeconomics -- |  |  |  |
| POFT |  | - 2 |  |  |
| Third | Semester |  |  |  |
| BMGT | 1309 Information and Project Management ----- | --- 3 |  |  |
| IMED | 1316 Web Page Design I OR |  |  |  |
| ITSE | 1311 Beginning Web Page Programming --------- | --- 3 |  |  |
| ITNW | 1325 Fundamentals of Networking Technologies | --- 3 |  |  |
| ITSE | 1331 Introduction to Visual Basic |  |  |  |
|  | Programming II ----------------------- |  |  |  |
| BMGT | 1302 Principles of Retailing OR |  |  |  |
| BNKG | 1356 Analyzing Financial Statements OR |  |  |  |
| IBUS | 1305 Introduction to Int'l Business ---------------- | --- 3 |  |  |
| Fourth | Semester |  |  |  |
| BUSG | 2305 Business Law/Contracts OR |  |  |  |
| BUSG | 2309 Small Business Mgmt. ------- | --- 3 |  |  |
| BMGT | 2303 Problem Solving and Decision Making OR |  |  |  |
| MRKG | 2349 Advertising and Sales Promotion ------------- | --- 3 |  |  |
| IMED |  | --- 3 |  |  |
| BMGT | 2331 Principles of Quality Management --- | - 3 |  |  |
| BMGT | 2389 Internship - Business Admin \& Management | --- 3 |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## ASSOCIATE OF APPLIED SCIENCE

 CONSTRUCTION BUSINESS MANAGEMENT (2755)|  | Major | Gen. <br> Educ. | Elective |
| :---: | :---: | :---: | :---: |
| First | Semester |  |  |
| ITSC |  |  |  |
| ENGL | 1301 Freshmen Composition I -----------------------------------3 |  |  |
| MATH |  |  |  |
| PSYC |  |  |  |
| SPCH | 1311 Fundamentals of Speech --------------------------------3 |  |  |
| Second | d Semester |  |  |
| HRPO | 1311 Human Relations -------------------------------------------3 |  |  |
| BMGT |  |  |  |
| BMGT | 2303 Problem Solving \& Decision Making ----------------3 |  |  |
| (See 3) | Must consult with Advisor for Journeyman Experience - 32 |  |  |
| Third | Semester |  |  |
| ACNT |  |  |  |
| BMGT | 1309 Information and Project Management -------------- 3 |  |  |
| BUSG | 2305 Business Law/Contracts ---------------------------------3 |  |  |
| BUSG | 2309 Small Business Management ---------------------------3 |  |  |
| BMGT | 2331 Quality Management --------------------------------------3 |  |  |
| TOTAL | C CREDIT HOURS: ------------------------------------------------19 |  |  |

Prerequisites: Students with fewer than 25 WPM must take POFT 1329 to upgrade their keyboarding skills.
(1) Select one course: MATH 1373, 1314, 1332, 1442, 1374, 2412, 2413, 2414, or 2415
(2) Select one course: PSYC 2301, 2315
(3) Licensed Journeyman who have completed an approved U.S. Department of Labor (DOL)Bureau of Apprenticeship and Training Construction Trades Curriculum, or the Associated Builder and Contractors (ABC) Curricula; may select up to eight courses from the tables below, which represent basic and intermediate competencies contained in the St. Philip's College 1400+ level courses.

## JOURNEYMAN EXPERIENCE

## Electrical Trades

ELPT 1411 Basic Electrical Theory 4
ELPT 1419 Fundamentals of Electricity I 4
ELPT 1429 Residential Wiring 4
ELPT 1445 Commercial Wiring 4
ELPT 1457 Industrial Wiring 4

## Home Building

CNBT 1405 Residential \& Light Commercial Blueprint Reading 4
CNBT 1416 Construction Technology I 4
CNBT 1450 Construction Technology II 4
CNBT 1471 Construction Tools and Techniques 4
CNBT 2342 Construction Management 3
CNBT 2266 Construction Practicum 2
WDWK 1413 Cabinetmaking 4
WDWK 2451 Cabinetmaking II 4
Plumbing
PFPB 1405 Basic Blueprint for Pipefitter/Plumber 4
PFPB 1413 Introduction to Plumbing Trades 4
PFPB 1417 Lawn Irrigation Systems 4
PFPB 1421 Plumbing Maintenance \& Repair 4
PFPB 1445 Commercial Construction \& Fixtures 4

## ASSOCIATE OF APPLIED SCIENCE INDUSTRAIL MAINTENANCE MANAGEMENT (27)

TOTAL CREDIT HOURS REQUIRED: 63-71

(*Select one course from list)

## CERTIFICATE OF COMPLETION ENTREPRENEURSHIP (2506)

TOTAL CREDIT HOURS REQUIRED: 35-36

Major | Gen. |
| :---: |
| Educ. | Elective



## MARKETABLE SKILLS ACHIEVEMENT AWARD PROJECT TEAM LEADER (2912)

TOTAL CREDIT HOURS REQUIRED: 12

|  | Major | Gen. <br> Educ. | Elective |
| :---: | :---: | :---: | :---: |
| BMGT | 1301 Supervision ---------------------------------------------------3 |  |  |
| HRPO | 1311 Human Relations -------------------------------------3 |  |  |
| BMGT | 1309 Information and Project Management -------------3 |  |  |
| BMGT | 2331 Quality Management------------------------------------3 |  |  |
| TOTAL |  |  |  |

## CHEMISTRY (Natural Sciences)

Students planning further work in chemistry, physics, engineering, mathematics, or other sciences or who are entering pre-professional programs in medicine, dentistry, and similar fields must complete Chemistry 1411 and Chemistry 1412. Completion of Chemistry 1406 and 1407 satisfies the science requirements for non-science majors who need a six to eight credit laboratory course.

Note: A $2+2$ Plan (articulation) now exists in Chemistry with a number of area colleges and universities and St. Philip's College. For more information, contact the department chairperson.

## ASSOCIATE OF SCIENCE CHEMISTRY (2005)

TOTAL CREDIT HOURS REQUIRED: 72-73

|  | Gen. |
| :--- | :--- | :--- |
| Major | Educ. |

YEAR 1
First Semester
ENGL 1301 Freshman Composition I -------------------------------------------------3

HIST 1301 History of the US I- 3

COSC 1301 Computer Literacy -----------------------------------------------------------3
MATH 1314 College Algebra
$-3$


Our technological society needs well-trained people in the electronics field, especially computer maintenance. To help meet this demand, St. Philip's College offers a degree in Computer Maintenance Technology.
As a computer maintenance technician, students will be trained to perform entry-level technical work in servicing and maintaining computer systems. They will also learn simple programming and diagnostic techniques. After completing the required curriculum, students will receive an Associate of Applied Science Degree and will also be prepared to take the A+ Certification Exam.

## ASSOCIATE OF APPLIED SCIENCE COMPUTER MAINTENANCE TECHNOLOGY (2633)

TOTAL CREDIT HOURS REQUIRED: 63

|  |  |  |  |
| :--- | :--- | :--- | :--- |
| First | Semester | Major | Gen. <br> Educ. |
| Elective |  |  |  |



Select one course from the list below:
*General Academic Core Requirement for the Associate of Applied Science Degree, Section 7 of the college catalog.
CERTIFICATE OF COMPLETION

TOTAL CREDIT HOURS REQUIRED: 17

|  | Gen. |  |
| :--- | :--- | :--- |
| Major | Educ. | Elective |

First Semester
CETT 1509 DC-AC Circuits --------------------------------------------- 5
CPMT 1404 Microcomputer System Software ------------------------4
Second Semester
CETT 1429 Solid State Devices --------------------------------------------4
CETT 1425 Digital Electronics --------------------------------------------4
TOTALCREDITHOURS: 17

## CERTIFICATE OF COMPLETION A+ CERTIFICATION PREPARATION (2732)

TOTAL CREDIT HOURS REQUIRED: 16

Gen. Educ. Elective
Major Educ. Elective

First Semester
CETT 1425 Digital Fundamentals 4

Second Semester
CPMT 1445 Computer Systems Maintenance ----------------------- 4
CPMT 1449 Computer Networking Technology ------------------- 4
TOTAL CREDIT HOURS:

## COMPUTER MAINTENANCE TECHNOLOGY

The demand for technically trained personnel has risen at a rapid rate. In many cases the demand has exceeded the available pool of trained technicians. It is estimated there are over 850,000 jobs nationwide that are going unfilled for lack of trained technicians.
St. Philip's has stepped forward to meet the demand in the San Antonio and surrounding areas.
The students in this program will received training in networking skills to include the installation and maintenance of routers, switches, cabling, etc. After completing the Associate Degree plan, the student will be prepared to take the A+ Certification and the CISCO Certified Network Associate (CCNA) exam. With the Certificate Program, they will be prepared for the CCNA exam.

To get started on your new career, please call (210) 531-3467 for more information on enrolling in this program.

## ASSOCIATE OF APPLIED SCIENCE NETWORK MAINTENANCE SPECIALIZATION (2583)



Select one course from the list below:

* General Academic Core Requirements for the Associate of Applied Sciences Degree, Section 7 of the college catalog.


# CERTIFICATE OF COMPLETION NETWORK SYSTEMS TECHNICIAN (2744) 

TOTAL CREDIT HOURS REQUIRED: 36

|  | Major | Gen. Educ. | Elective |
| :---: | :---: | :---: | :---: |
| First Semester |  |  |  |
| CPMT 1404 Microcomputer System Software -------------------- 4 |  |  |  |
| ITCC 1302 LAN Design and Protocols (CISCO 1) ------------- 3 |  |  |  |
| ITCC 1306 Basic Router Configuration (CISCO 2) -------------- 3 |  |  |  |
| ITMC 1401 Microsoft Windows 2000 Network ------------------ 4 |  |  |  |
| Second Semester |  |  |  |
| ITCC 1342 Local Area Management (CISCO 3) ----------------- 3 |  |  |  |
| ITCC 1346 Wide Area Management (CISCO 4) ----------------- 3 |  |  |  |
| CPMT 1445 Computer Systems Maintenance ---------------------4 |  |  |  |
| ITMC 1441 Implementing Microsoft Window 2000 ------------ 4 |  |  |  |
| Third Semester |  |  |  |
| ITMC 1442 Implementing Microsoft Window 2000 ------------ 4 |  |  |  |
| ITMC 1443 Implementing \& Administering |  |  |  |
|  | Microsoft Directory Services ---------------------- 4 |  |  |

CERTIFICATE OF COMPLETION CISCO SYSTEMS NETWORKING (2656)

TOTAL CREDIT HOURS REQUIRED: 16


TOTAL CREDIT HOURS REQUIRED: 16
First Semester

Major | Gen. |
| :---: |
| Educ. | Elective

## COMPUTER SCIENCE (COSC)

This degree program offers students the opportunity to prepare for careers in high-technology companies, business, government, and teaching. Students are provided the foundation for further studies in Computer Science to include: data communications, procedural and objectoriented programming, operating systems, algorithm development and applications.

## ASSOCIATE OF ARTS COMPUTER SCIENCE (2067)

TOTAL CREDIT HOURS REQUIRED: 61-63

|  | Major | Gen. Educ. | Elective |
| :---: | :---: | :---: | :---: |
| Core Courses |  |  |  |
| ENGL 1301 Freshman Comp I --------------------------------------------------3 |  |  |  |
| ENGL 1302 Freshman Comp II ------------------------------------------------3 |  |  |  |
| SPAN 1411, 1412, 2311, 2312, 2313, 2315, 2316, <br> 2321, 2322, or SPCH 1311 |  |  |  |
| Social and Behavioral Science |  |  |  |
| HIST | 1301 History of the U.S. I | 3 |  |
| HIST | 1302 History of the U.S. II | 3 |  |
| GOVT | 2305 American Government | 3 |  |
| GOVT | 2306 American Government | 3 |  |
| PSYC 1370, 2301, 2306, 2308, 2315, 2316, 2317, 2319, 2371; <br> OR SOCI 1301, 1306, 1370, 1372, 2301, 2336, 2370 -------------- 3 |  |  |  |
|  |  |  |  |
| BIOL 1406 and BIOL 1407 (Science Majors) OR |  |  |  |
| BIOL 1408 and BIOL 1409 (Non-Science Majors) OR |  |  |  |
| BIOL 1411 General Botany and |  |  |  |
| BIOL 1413 General Zoology OR |  |  |  |
| CHEM 1411 General Chemistry I and |  |  |  |
| CHEM 1412 General Chemistry II OR |  |  |  |
| PHYS 1401 General Physics I and |  |  |  |
| PHYS 1402 General Physics II |  |  |  |
| Mathematics (SELECT THREE-FOUR COURSES) |  |  |  |
| MATH 1314, 1442, 2320, 2412, 2413, 2414 --------------------12 |  |  |  |
| Humanities, Literature, and Visual/Performing Arts (Select one course) |  |  |  |
| HUMA 1301, 1302, 1371, 2319; PHIL 1301, 1304, 2303, 2306, 2371; |  |  |  |
| ENGL 2322, 2323, 2327, 2328, 2332, 2333,2374, 2375, 2376, 2377; |  |  |  |
| IDST 2370, 2371, 2372, 2373, 2377 --------------------------------------------3 |  |  |  |
| (Select one course) |  |  |  |
| ARTS 1301; DRAM 1310; MUSI 1306-1310 ---------------------------------------3 |  |  |  |
| Kinesiology (SELECT TWO COURSES) |  |  |  |
|  |  |  |  |
| Major Course Requirements - Computer Science |  |  |  |
| *COSC 1315 Intro to Computer Science ---------------------------3 |  |  |  |
| COSC 2315 Data Structures I -------------------------------------3 |  |  |  |
| COSC 2318 Advanced Structured Programming Tech -----------3 |  |  |  |
| TOTAL |  | 40-42 |  |

*COSC 1301 is a pre-requisite for COSC 1315

NOTE: COSC 1301, which is a core curriculum course, but cannot be counted towards an Associate Degree in Computer Science.

## CRIMINAL JUSTICE

Criminal Justice majors should follow the Associate of Arts degree plan and check with department advisors for selection of electives and transfer of courses to senior institutions.

## ASSOCIATE OF ARTS

 CRIMINAL JUSTICE (2066)TOTAL CREDIT HOURS REQUIRED: 71

| Major | Gen. Eluc. ${ }^{\text {Edive }}$ |
| :---: | :---: |
| Core Courses |  |
| ENGL 1301 Freshman Comp I |  |
| ENGL 1302 Freshman Comp II ---------------------------------------------------- |  |
| GOVT 2305 American Government I ---------------------------------------3 |  |
| GOVT 2306 American Government II -----------------------------------------3 |  |
| HIST 1301 History of the U.S. I |  |
| HIST 1302 History of the U.S. II |  |
| SOCI 2336 Criminology |  |
| SPAN 1411 Elementary Spanish ----------------------------------------------4 |  |
| MATH 1314 College Algebra or Higher ----------------------------------------3 |  |
| KINE (Select two courses) |  |
| KINE 1100 through KINE 1238 -------------------------------------------------- 2 |  |
| COMPUTER SCIENCE (One course) |  |
| COSC 1301 ------------------------------------------------------------------------- |  |
| SOCIAL SCIENCES (Select one course) |  |
| ECON 2301, ECON 2302; HIST 2380, HIST 2381; SOCI 2319 ------------- 3 |  |
| HUMANITIES /FINE ARTS |  |
| (Select one course) |  |
|  |  |
| ENGL 2333, ENGL 2375, ENGL 2376; HUMA 1301, HUMA 1302, |  |
| HUMA 2319; PHIL 1301, PHIL 2303 -----------------------------------------3 |  |
| (Select one course) |  |
| ARTS 1301; DRAM 1310; MUSI 1306-1310 ---------------------------------3 |  |
| NATURAL SCIENCE (Select two courses) |  |
| BIOL 1400 through BIOL 2499; CHEM 1400 through CHEM 2499; |  |
|  |  |
| MAJOR COURSE REQUIREMENTS-Criminal Justice (Four courses) CRIJ 1301, CRIJ 1306, |  |
|  |  |
| CRIJ 2313, CRIJ 2328 -------------------------------------------------12 |  |
| Criminal Justice Elective Courses (Select three courses) |  |
|  |  |
| CRIJ 1307, CRIJ 1310, CRIJ 2314, CRIJ 2323 --------------------------------- 9 |  |
| TOTAL CREDIT HOURS: ------------------------------------------12--12-- |  |

## CULINARY ARTS

## ASSOCIATE OF APPLIED SCIENCE <br> CULINARY ARTS (2573)

Program Accredited by the
American Culinary Federation Educational Institute Accrediting Commission

TOTAL CREDIT HOURS REQUIRED: 72

|  | YEAR 1 Major | Gen. Educ. | Elective |
| :---: | :---: | :---: | :---: |
| First Semester |  |  |  |
| FDNS | 1301 Introduction to Foods ----------------------------3 |  |  |
| CHEF | 1401 Basic Food Preparation --------------------------4 |  |  |
| HAMG | 1321 Intro. To Hospitality Industry ------------------3 |  |  |
| CHEF | 1305 Sanitation and Safety -----------------------------3 |  |  |
| RSTO | 1325 Purchasing for Hospitality Operations -----------3 |  |  |
| Second | S Semester |  |  |
| CHEF | 1400 Professional Cooking \& Dining Room Serv. ---- 4 |  |  |
| HAMG | 1340 Hospitality Legal Issues --------------------------3 |  |  |
| RSTO | 2301 Prin. of Food and Beverage Controls ------------3 |  |  |
| ENGL | 1301 Freshman Composition I----------------------- |  |  |
| ONE COURSE FROM THE FOLLOWING: MATH 1373, 1314, |  |  |  |
| 1332, 1374 ----------------------------------------------------------------------3 |  |  |  |
| Third Semester |  |  |  |
| ENGL |  |  |  |
| COSC | 1301 Computer Literacy --------- |  |  |
|  | YEAR2 |  |  |
| Fourth Semester |  |  |  |
|  |  |  |  |
| HAMG 2305 Hospitality Management \& Leadership ---------- 3 |  |  |  |
| CHEF 1445 International Cuisine -------------------------------4 |  |  |  |
| CHEF 1410 Garde Manger ------------------------------------------ 4 |  |  |  |
| PSTR 1401 Fundamentals of Baking ---------------------------- 4 |  |  |  |
| Fifth Semester |  |  |  |
| RSTO 2405 Management of Food Production \& Service ---- 4 |  |  |  |
| PSTR 2431 Advanced Pastry Shop ------------------------------ 4 <br>  |  |  |  |
|  |  |  |  |
| ONE COURSE FROM THE FOLLOWING: |  |  |  |
| PSYC 2301, PSYC 2308, PSYC 2315, SOCI 1301, SOCI 1372, |  |  |  |
|  |  |  |  |
| CHEF | 2264 Practicum ------------------------------------------------ 2 |  |  |
| TOTAL |  | 15 |  |

164 St. Philip's College 2006-2008 Catalog

## CERTIFICATE OF COMPLETION <br> CULINARY STUDIES (2591)

TOTAL CREDIT HOURS REQUIRED: 24
Gen.
Major Educ. Elective


## DANCE

For information, consult the Director of Fine Arts. Students seeking to major in dance should seek information early concerning the specific transfer requirements of the senior institution of their choice. Students majoring in dance should follow the Associate of Arts Degree Plan.

## DANCE CLASSES

## (THERE IS NO DEGREE PROGRAM IN DANCE)



## DIESEL TECHNOLOGY

A degree plan will be established for each student in the program during the first semester of the first year of enrollment. Selection will include the necessary Arts and Science general education, Diesel Technology and other related technical courses as outlined in the College Catalog. The first six diesel courses are core courses and are required to be taken by all students in the program.

Students entering the Diesel Technology programs must have:

1. Finger and manual dexterity necessary to work mechanical and electrical systems.
2. Color discrimination necessary to differentiate wire and resistance color codes.
3. Near visual acuity and depth perception needed when working with small parts.
4. Hearing capability necessary to discover, analyze, and correct irregular vehicle noises.
5. Ability to climb, balance, stoop, kneel, and to lift heavy loads such as a tool box.

The above limitations may be waived if the student is equipped with mechanical and/ or electrical devices and has obtained approval from the chairperson of Multi-Modal Technology Department and the Dean of Applied Science and Technology.

The Diesel Technology Program may award college credit requirements for students attaining industry skill standards. The criteria for awarding will be based on passing the Automotive Service Excellence (ASE) test in the specific area of the course to be awarded as well as having five years of employer verifiable work experience in that specific area. The Diesel Program Credit Committee must approve the credit. Credit will be limited to a total of 16 semester hours and will be included in and limited by the 32 -semester hour limit for non-traditional methods. The credit will not be posted on the transcript until the student has satisfied the 3 -semester hour resident requirement and the credit award is nontransferable. The ACE Guide will be utilized in establishing equivalencies. The requesting student must develop all documentation.

The Diesel Technology Program

## 1. Associate of Applied Science Degree

2. Associate of Applied Science Construction
3. One-Year Certificate of Completion
4. Specialized Certificates of Completion Transmission Specialist
Brake and Front End Specialist

## ASSOCIATE OF APPLIED SCIENCE DIESEL/HEAVY EQUIPMENT TECHNOLOGY (2524)

TOTAL CREDIT HOURS REQUIRED:
69

| Major | Gen. <br> Educ. | Elective |
| :---: | :---: | :---: |
| YEAR 1 |  |  |
| First Semester |  |  |
| DEMR 1401 Shop Safety and Procedures ------------------------------4 |  |  |
|  |  |  |
| DEMR 1405 Basic Electrical Systems -------------------------------------4 |  |  |
| DEMR 1416 Basic Hydraulics ------------------------------------------------4 |  |  |
| Second Semester |  |  |
| DEMR 1417 Basic Brake Systems ------------------------------------------4 |  |  |
| DEMR 1423 Heating, Ventilation and Air Conditioning Troubleshooting \& Repair ------------ 4 |  |  |
| DEMR 1421 Power Train I ------------------------------------------------------ |  |  |
|  |  |  |
| Third Semester |  |  |
|  |  |  |
|  |  |  |
| YEAR 2 |  |  |
| First Semester |  |  |
| DEMR 1329 Preventive Maintenance --------------------------------------3 |  |  |
| DEMR 1330 Steering \& Suspension I -------------------------------------3 |  |  |
| DEMR 2434 Advanced Diesel Tune-Up \& Troubleshooting ----- 4 |  |  |
|  |  |  |
|  |  |  |
| Second Semester |  |  |
|  |  |  |
| DEMR 2266 Practicum - Diesel Engine Mechanic \& Repairer --- 2 |  |  |
| DEMR 2477 Advanced Diesel Electrical/Electronics ---------------4 |  |  |
|  |  |  |
| Welding Elective |  |  |

*General Academic Core Requirement for the Associate of Applied Science Degree; Section 7 of the college catalog. Any other substitutions must be approved prior to enrollment by a department advisor. Students wishing to transfer academic credits to other institutions or students transferring credits to St. Philip's College must also see a department advisor.

## ASSOCIATE OF APPLIED SCIENCE

 DIESEL CONSTRUCTION EQUIPMENT TECHNICIAN (2746)TOTAL CREDIT HOURS REQUIRED: 70

|  | Gen. |  |
| :--- | :--- | :--- |
| Major | Educ. |  |


| YEAR 1 |  |
| :---: | :---: |
| First Semester |  |
| DEMR 1401 Shop Safety and Procedures ------------------------------4 |  |
|  |  |
|  |  |
| DEMR 1329 Preventative Maintenance ---------------------------------3 |  |
| *SPCH 1321 Business/Professional | 3 |
| Second Semester |  |
|  |  |
|  |  |
| *PHYS 1305 Introduction Physics I | 3 |
| ITSC 1301 Introduction to Computers | 3 |
|  |  |
| YEAR 2 |  |
| First Semester |  |
| DEMR 2432 Electronic Controls --------------------------------------------4 |  |
| DEMR 1423 Heating, Ventilation and Air Conditioning <br> Troubleshooting \& Repair ---------------------------------------------------4 |  |
|  |  |
| DEMR 1435 Automatic Power Shift \& Hydrostatic Drives ------- 4 |  |
|  |  |
|  |  |
| Second Semester |  |
| DEMR 2434 Advanced Diesel Tune-Up \& Troubleshooting ----- 4 |  |
| DEMR 2348 Failure Analysis ----------------------------------------------3 |  |
| HEMR 1401Tracks and Undercarriages ---------------------------------4 |  |
| DEMR 2266 Practicum - Diesel Engine -------------------------------- 2 |  |
|  | 3 |
| TOTAL CREDIT HOURS: | 18 -------- 4 |

[^5]
## CERTIFICATE OF COMPLETION DIESEL/HEAVY EQUIPMENT TECHNOLOGY (2524)

TOTAL CREDIT HOURS REQUIRED: 41

| Major | Gen. Educ. Elective |
| :---: | :---: |
| First Semester |  |
| DEMR 1401 Shop Safety and Procedures ------------------------------- 4 |  |
|  |  |
|  |  |
|  |  |
| DEMR 1416 Basic Hydraulics -------------------------------------------------4 |  |
| Second Semester |  |
| DEMR 2434 Advanced Diesel Tune-Up \& Troubleshooting ----- 4 |  |
| DEMR 1423 Heating, Ventilation \& Air Cond. <br> Troubleshooting \& Repair $\qquad$ |  |
| DEMR 1330 Steering \& Suspension I-----------------------------------------3 |  |
| DEMR 1421 Power Train I ------------------------------------------------------ |  |
| Third Semester |  |
| DEMR 2477 Advanced Diesel Electrical/Electronics --------------- 4 |  |
| DEMR 2266 Practicum - Diesel Engine Mechanic and Repairer ------------------------------------------------------ 2 |  |
| TOTAL CREDIT HOURS: -----------------------------------------------------11 |  |

## CERTIFICATE OF COMPLETION DIESEL TRANSMISSION SPECIALIST (2660)

TOTAL CREDIT HOURS REQUIRED: 28


## CERTIFICATE OF COMPLETION

DIESEL BRAKE AND FRONT END SPECIALIST (2692)

TOTAL CREDIT HOURS REQUIRED: 24


## DRAFTING

The Computer Drafting (Architectural) program at St. Philip's College is tailored to provide the skills necessary to create construction drawings for use by the architectural, engineering, interior design and building management fields. Graduates of the program will be able to read and prepare the drawings used in the design and construction of residential and commercial buildings. Graduates will be ready to enter the field as an entry level Computer Computer Aided Drafting technician and will possess the critical skills necessary to advancement in these careers.

Graduates of the program can receive either the Associate of Applied Science Degree or a Certificate of Completion.

COMPUTER AIDED DRAFTING (ARCHITECTURAL) AND INTERIOR DESIGN
Computer Aided Drafting (Architectural) Interior Design
Computer Aided Drafting Technician (Architectural) Interior Design Assistant

## COMPUTER AIDED DRAFTING (ARCHITECTURAL)

Students entering a Drafting program should have the following traits in order to complete successfully the degree or certificate requirements:

1. Be able to read at tenth grade vocabulary and comprehension level.
2. Be able to distinguish colors.
3. Be able to work (standing or seated) at or over a drafting station for extended periods of time.
4. Be able to discern visibly fine details on drawings and related items.

A Certificate of Completion may be awarded to an individual upon successful completion of all required certificate Drafting courses.

ASSOCIATE OF APPLIED SCIENCE COMPUTER AIDED DRAFTING (ARCHITECTURAL) (2717)

TOTAL CREDIT HOURS REQUIRED: 64

| YEAR 1 |  | Major | Gen. <br> Educ. | Elective |
| :---: | :---: | :---: | :---: | :---: |
| First | Semester |  |  |  |
| DFTG | 1409 Basic Computer Aided Drafting ---- | - 4 |  |  |
| DFTG | 1417 Architectural Drafting Residential -- | - 4 |  |  |
| ARCE | 1421 Architectural Illustration -- | -- 4 |  |  |
| Humanities or Fine Arts: (SPCH 1321 or See Note 1) --------------------------3 |  |  |  |  |
| Second Semester |  |  |  |  |
| ARCE 1303 Architectural Methods \& Materials ----------------- 3 |  |  |  |  |
| ARCE 1452 Structural Drafting |  |  |  |  |
| DFTG 2419 Intermediate Computer Aided Drafting ------------ 4 |  |  |  |  |
| Natural Science or Mathematics: (PHYS 1305 or See Note 2) ----------------3 |  |  |  |  |
| Summer Session |  |  |  |  |
|  |  |  |  |  |



Note: General Academic Core Requirements for Associates of Applied Science Degree-Courses may be substituted to meet transfer requirements or for prior academic work: 15 semester hours

1. Humanities/Fine Arts: Speech 1321, English 1302, Philosophy 2303, History 2311 or 2312, Humanities 1301 or 1302, Drama 1300-2499, Arts 1301, Music 1300-2499
2. Natural Science: Biology 1400 -2499, Chemistry 1300-2499, Physics 1300-2499, College Math 1314-2499
3.Social/Behavioral Science: Sociology 1301-2336, Government 2301-2306, Urban Studies 1300- 2499, Geography 1300-2499, Economics 2301-2499, History 1301 or 1302, Psychology 2301-2499
3. Communications: English 1301-1302, Speech 1311-2341,

Foreign Language 1411-2316, Reading 1370
5. Mathematics: Math 1314-2499, Chemistry 1300-2499, Physics 1300-2499,

Computer Science 1315-2318

## CERTIFICATE OF COMPLETION <br> COMPUTER AIDED DRAFTING TECHNICIAN (ARCHITECTURAL) (2662)

TOTAL CREDIT HOURS REQUIRED: 28

|  | Gen. |
| :--- | :--- | :--- |
| Major | Educ. |

First Semester
DFTG 1409 Basic Computer Aided Drafting ------------------------- 4
DFTG 1417 Architectural Drafting Residential --------------------- 4
ARCE 1421 Architectural Illustration ------------------------------------ 4
Second Semester
ARCE 1303 Architectural Methods \& Materials ------------------- 4
ARCE 1452 Structural Drafting --------------------------------------------4
DFTG 2419 Intermediate Computer Aided Drafting --------------- 4
Summer Session
DFTG 2438 Final Project - Architectural Drafting ----------------- 4
TOTAL CREDIT HOURS: --------------------------------------------------28

## ENHANCED SKILLS CERTIFICATE ARCHITECTURAL DRAFTING 3D (2902)

TOTAL CREDIT HOURS REQUIRED: 8
$\begin{array}{lll} & \text { Gen. } \\ \text { Major } & \text { Educ. } & \\ \text { Elective }\end{array}$

```
First Semester
DFTG 2437 Advanced Technical Animation &
            Rendering --------------------------------------------------
DFTG 2440 SolidModeling/Design ------------------------------------
TOTAL CREDIT HOURS: ------------------------------------------------
```

MARKETABLE SKILLS CERTIFICATE ARCHITECTURAL DRAFTING (2908)

TOTAL CREDIT HOURS REQUIRED: 16

|  | Gen. |  |
| :--- | :--- | :--- |
| Major | Educ. | Elective |

First
Demester
DFTG
DFTG
D
D

## EARLY CHILDHOOD STUDIES

The mission of the Early Childhood Studies Program will be to provide the community a comprehensive early childhood program responsive to cultural, ethnic, socio-economic diversity, rich in current and innovative ideas and nurturing authentic learning and handson experiences. The result is individuals well prepared for a variety of job opportunities in the rapidly changing early care and education profession. Our motto is "Preparing future early care and education professionals to make a world of a difference in the life of all children and their families".
The Early Childhood Studies Program offerings include three plans leading to one (1) Associate of Applied Science (AAS) degree and two (2) Certificates of Completion. One of the certificate programs incorporates a CDA training program to meet the requirements for the Child Development Associate National Credential (CDA). All programs' Practicum and Cooperative Education courses require a current criminal history background check and a current PPD (Tuberculosis) screening.

## ASSOCIATE OF APPLIED SCIENCE EARLY CHILDHOOD STUDIES (2657)

This program is designed to prepare students for a career working with children and families in a variety of work settings. The degree offers students Early Childhood opportunities in administration, staff training, social service, child advocacy, classroom instruction, as well as other child-related jobs. This AAS may transfer credits towards a Bachelor's degree in Child Development or Human Sciences.
An AAS degree would qualify an individual for, but not limit him or her to, positions as a Lead Teacher or Director in an Early Head Start or Head Start program, Program Coordinator, Public School Early Childhood Teacher Assistant, or Staff Development Specialist. Students must submit a formal application, criminal history check and drug screening to the program. This application is separate from the application for admission to the College.

Students must contact Program Director or Student Advisor for a current degree plan to verify fulfillment of core and general education course requirements.

TOTAL CREDIT HOURS REQUIRED: 69

| YEAR 1 | Major | Gen. <br> Educ. | Elective |
| :---: | :---: | :---: | :---: |
| First Semester |  |  |  |
| *TECA 1303 Families, Communities \& Schools --------- | -- 3 |  |  |
| *TECA 1311 Educating Young Children ------------------ | - 3 |  |  |
| CDEC 1319 Child Guidance - | - 3 |  |  |
| ENGL 1301 Freshman Composition I ------------------- |  | 3 |  |
| SOCI 1301 Introduction to Sociology OR |  |  |  |
| PSYC 2301 Genral Psychology --- |  |  |  |
| Second Semester |  |  |  |
| CDEC 1313 Curriculum Resources for Early Childhood |  |  |  |
| Program ------------------------------------------- | -- 3 |  |  |
| *TECA 1318 Wellness of the Young Child | -- 3 |  |  |
| CDEC 1321 Infant \& Toddler ---- | - 3 |  |  |
| CDEC 1266 Practicum I - Child Development \& |  |  |  |
| Early Childhood ------------------------------- |  |  |  |
| ENGL 1302 Freshman Composition II |  | 3 |  |
| SPCH 1311 Fundamentals of Speech |  | -3 |  |


*Requires fifteen (15) hours of field experience
See Course Description Section for course prerequisites

## TECHNICAL CERTIFICATE OF COMPLETION EARLY CHILDHOOD STUDIES (2730)

This Early Childhood Studies Technical Certificate provides the student with knowledge and hands-on experience to meet the daily challenges of the Early Care and Education field. A sampling of issues addressed include parent involvement dynamics, areas of growth \& development, the inclusive classroom, developmentally appropriate curriculum \& equipment, dealing with child abuse, and positive guidance techniques. Upon completion the student is prepared to work in settings, such as, but not limited to, childcare facilities, educational programs, federally-funded youth programs, and private/church schools' early childhood programs.

Students must contact Program Director or Student Advisor for a current degree plan to verify fulfillment of core and general education course requirements.

TOTAL CREDIT HOURS REQUIRED: 34

|  | Major | Gen. <br> Educ. | Elective |
| :---: | :---: | :---: | :---: |
| First Semester |  |  |  |
| *TECA 1303 Families, Communities \& Schools | 3 |  |  |
| *TECA 1311 Educating Young Children | - 3 |  |  |
|  | -- 3 |  |  |
| ENGL 1301 Freshman Composition |  | 3 |  |
| CDEC 1266 Practicum I-Child Development \& Early Childhood |  |  |  |
| Second Semester |  |  |  |
| TECA 1354 Child Growth and Development ----------- | - 3 |  |  |
| *TECA 1318 Wellness of the Young Child -------------- | -- 3 |  |  |
| CDEC 1359 Children with Special Needs ---------------- | - 3 |  |  |
| CDEC 1358 Creative Arts in Early Childhood --------- | -- 3 |  |  |
| CDEC 1267 Practicum II-Child Development \& Early Childhood |  |  |  |
| Third Semester |  |  |  |
| *CDEC 1313 Curriculum Resources for Early Childhood |  |  |  |
| CDEC 1356 Emerams --------------------------------------- |  |  |  |
|  | 31 |  |  |
| *Requires fifteen (15) hours of field experience See Course Description Section for course prerequisites |  |  |  |

# CERTIFICATE OF COMPLETION CHILD DEVELOPMENT ASSOCIATE NATIONAL CREDENTIAL (CDA) (2731) 

The Child Development Associate (CDA) Training Program provides an individual with the necessary training through concurrent lecture and practical application in an early childhood setting to successfully complete the CDA assessment and credentialing process administered independently through the Council for Professional Recognition. Upon graduation, a student is responsible for retaining an advisor for assessment, apply for the credentialing process and submit all required documents to the Council for Professional Recognition in Washington, DC. This information can be on the website at http://www.cdacouncil.org/

Students must select one or have an option of applying for dual certification under five settings offered for training and subsequent assessment:
(1) infants/toddlers in center-based programs, (2) preschoolers in center-based programs, (3) family child care programs, (4) home visitor programs, and (5) bilingual specialization for those working in bilingual programs.
Requirements: By the first day of lecture course (CDEC 2322 and/or 2324); student must submit a letter from an approved early childhood setting on letter head with a state license number. Students enrolled in this program must work a minimum of 20 hours per week throughout both semesters at their chosen and early childhood setting (it can be paid or volunteer). These facilities require a current criminal history background check and a PPD (Tuberculosis) screening within the last 12 months.

The CDA Program can serve as building blocks or exit points for the Technical Certificate of Completion or AAS degree program.

Students must contact Program Director or Student Advisor for a current degree plan to verify fulfillment of core and general education course requirements.

TOTAL CREDIT HOURS REQUIRED: 15
Major Een. Elective

First Semester
CDEC 2322 Child Development Associate
Training II ---------------------------------------------- 3
*CDEC 1380 Cooperative Education in
Child Development I --------------------------------3

Second Semester
CDEC 2324 Child Development Associate Training III --- 3
**CDEC 1381 Cooperative Education in Child Dev II ----------- 3

TOTAL CREDIT HOURS: ------------------------------------------------------3
*Corequisite: CDEC 2322
**Corequisite: CDEC 2324
***CDEC 1319 Child Guidance is required and transfers into the AAS or Technical Certificate of Completion.

## ECONOMICS

Students interested in transferring to a senior institution and earning a Bachelor's Degree in Business Administration with a major in such areas as Accounting, Economics, Financial Management, Marketing, Personnel Management, or Operations Management should follow the following degree plan. Transfer of courses is determined by the receiving senior institution. Students should consult a department advisor early in their programs of study to develop degree plans which meet requirements of the senior institution.

## ASSOCIATE OF ARTS ECONOMICS (2007)

TOTAL CREDIT HOURS REQUIRED: 64


## EDUCATION

The objective of the Teacher Education Program is to provide students with a general education leading to initial Texas Teacher Certification in a student's chosen certification area(s). Students will be prepared for a smooth transfer into a Teacher Certification Program at a senior institution, where a Bachelor's Degree will be obtained, typically in Interdisciplinary Studies.

## ASSOCIATE OF ARTS <br> TEACHER EDUCATION (2025)

(DESIGNATED AS INTERDISCIPLINARY STUDIES, CERTIFICATION TRACK AT SOME AREA UNIVERSITIES)

TOTAL CREDIT HOURS REQUIRED: 66-71


## ELECTRICIAN

Students entering an Electrical Program should meet the following physical requirements:

1. Finger and manual dexterity when working with electrical and mechanical systems.
2. Ability to distinguish different colors of wire and resistor colors.
3. Ability to climb, balance, stoop, kneel, and/or lift heavy loads.
4. Near-visual acuity and depth perception needed when working with small parts.

Regarding Electrical Practicum course: Any four hour course from the Allied Construction Trades may be substituted for ELPT 2265 Practicum by approval of the student's advisor or chairperson. For substitution approval, the student must be working in the electrical field or have had prior working experience in the electrical field.

## ASSOCIATE OF APPLIED SCIENCE ELECTRICAL TRADES (2528)

TOTAL CREDIT HOURS REQUIRED: 70

| $\begin{array}{llll} & & \text { Gen. } \\ \text { YEAR } 1 & \text { Major } \\ \text { Educ. } & \text { Elective }\end{array}$ |  |  |  |
| :---: | :---: | :---: | :---: |
| First Semester |  |  |  |
| ELPT 1411 Basic Electrical Theory ----------------------------- 4 |  |  |  |
| ELPT 1419 Fundamentals of Electricity I------------------------- 4 |  |  |  |
| ELPT 1429 Residential Wiring -------------------------------------- 4 |  |  |  |
| *SPCH 1321 Business/Professional Speech --------------------------------------- 3 |  |  |  |
| Second Semester |  |  |  |
| ELPT 1420 Fundamentals of Electricity II ---------------------- 4 |  |  |  |
| ELPT 2423 Transformers --------------------------------------------- 4 |  |  |  |
| ELPT 1445 Commercial Wiring ----------------------------------- 4 |  |  |  |
| *PHYS 1305 Introduction to Physics I-------------------------------------------3 |  |  |  |
| Summer Session |  |  |  |
| ITSC 1301 Introduction to Computers |  |  |  |
| *GOV | T 2301 American/Texas |  |  |
| YEAR2 |  |  |  |
| First Semester |  |  |  |
| ELPT 1457 Industrial Wiring ------------------------------------- 4 |  |  |  |
| ELPT 2437 Electrical Planning \& Estimating -------------------- 4 |  |  |  |
| ELPT 1451 Electrical Machines ---------------------------------- 4 |  |  |  |
| *ENGL 1301 Freshman Composition I -------------------------------------------------- |  |  |  |
| Second Semester |  |  |  |
| ELPT 1441 Basic Motor Controls ----------------------------------- 4 |  |  |  |
| ELPT 2419 Programmable Logic Controller I------------------- 4 |  |  |  |
| ELPT 1325 National Electrical Codes I -------------------------- 3 |  |  |  |
| ELPT 2325 National Electric Codes II ---------------------------- 3 |  |  |  |
| ELPT 2265 Practicum ------------------------------------------------- 2 |  |  |  |
| *MATH 1373 College Mathematics ----------------------------------------------3 |  |  |  |
|  |  |  |  |
| *This prior other departı | is part of the General Academic Core Requirement, all substituti enrollment by a department advisor. Students wishing to tran institutions or students transferring credits to St. Philip's College nent advisor. See pages 99-100 for transferable courses. | must be academ st also | pproved credits to a |

## CERTIFICATE OF COMPLETION ELECTRICAL TRADES (2528)

TOTAL CREDIT HOURS REQUIRED: 30


## ENGLISH

One of the primary goals of education at the community college level is to provide students with the skills necessary for their personal achievement in a changing world. Communication skills are essential for such achievement. The Department of English and Speech therefore accepts its obligation to help students develop the ability to read and to listen critically, to think clearly, to speak eloquently, and to write effectively.

Essential to the St. Philip's curriculum is a developmental writing program designed to prepare the student for College English and passage of the Texas Success Initiative. The Department also offers courses in literature in order to help students develop a broader understanding of themselves, their environment, and their cultural background.

A student is placed in ENGL 0300/0310, 0301/0311, or 1301 according to scores made on a college placement exam, such as the Accuplacer, ASSET or THEA Test which is administered by the College. Students whose test scores indicate inadequate preparation to do satisfactory work in English 1301 must complete English 0300/0310 and 0301/0311 before enrolling in English 1301.

The Texas Success Initiative is designed to ensure that all students attending a public college in Texas have the reading, mathematics, and writing skills necessary to perform effectively in college-level courses. Remedial courses, such as the 0300 sequence in the English Department, will be required for those students who do not pass a state-mandated assessment test or the college placement test (Senate Bill 286, Texas Legislature, 2003).

Students enrolling in sophomore literature courses should consider their majors and the curricula outlined by colleges or universities to which they plan to transfer. English majors should follow the Associate of Arts Degree plan.

## ASSOCIATE OF ARTS <br> ENGLISH (2009)

TOTAL CREDIT HOURS REQUIRED: 61-65
Gen.
Major Educ. Elective
YEAR 1
Fall Semester
ENGL 1301 Freshman Composition I ----------------------------------3
Mathematics Requirement (See 1) ----------------------------------------------------3
GOVT 2305 American Government (Federal) ----------------------------------- 3
HIST 1301 American History I ----------------------------------------------------3
Speech/Language Requirement (See 2) ----------------------------------------------3-1
KINE Any Activity Course 1100-2199 -----------------------------------------1-1
Spring Semester
ENGL 1302 Freshman Composition II ------------------------------- 3
GOVT 2306 American Government (State) ----------------------------------------3
HIST 1302 American History II ----------------------------------------------------3
Speech/Language Requirement (See 2) --------------------------------------------3-4
KINE Any Activity Course 1100-2199 ------------------------------------------1-1

|  | Major | Gen. Educ. | Elective |
| :---: | :---: | :---: | :---: |
| Summer Semester |  |  |  |
| Natural Science Requirement (See 3) |  | 4 |  |
| Literature Requirement (See 4) ------------- | - 3 |  |  |
| YEAR 2 |  |  |  |
| Fall Semester |  |  |  |
| Literature Requirement (See 4) ------------ | - 3 |  |  |
| COSC 1301 Computer Literacy |  | 3 |  |
| Social Science Requirement (See 5) -------- |  | 3 |  |
| Humanities Requirement (See 6) ----------- |  | 3 |  |
| Spring Semester |  |  |  |
| Literature Requirement (See 4) ---------- | - 3 |  |  |
| Social Science Requirement (See 5) --- | ----- | 3 |  |
| DRAM 1310; ARTS 1301; OR MUSI 1306-1310 |  | 3 |  |
| Natural Science Requirement (See 3) |  | 4 |  |

1. (*) MATH 1314, MATH 1332, or any math for which MATH 1314 is a prerequisite
2. (*) SPCH 1311-1321; SPAN 1411-2312; FREN 1411-2312; GERM 1411-2312
3. (*) BIOL 1406-1409; CHEM 1406-1412; PHYS 1401, 1402
4. (*) ENGL 2322-2377
5. (*) SOCI 1301-2336; PSYC 2301-2317
6. (*) HUMA 1301-2319; IDST 2370-2377; PHIL 1301-2371

## ENVIRONMENTAL SCIENCE (ES)

Environmental Science with a focus on Applied Ecology Water Resource Science and Biomedical Science.

The numerous ecological opportunities which exist in the San Antonio are well-recognized. These include: limited water and/or water resources for the long-term; pesticide pollution/contamination of workers and residents, soil, and water in the areas of military bases, ornamental-plan nurseries, farms, industrial units, or even in individual home landscapes; continued deterioration of air quality; and continued acute and chronic health problems in people and other biota of the area--and rising health care costs.

Moreover, as a result of increasing regulatory and incentive-initiatives and educational outreach efforts, industries (including industrial "agriculture"), communities, neighborhoods, and individuals are recognizing the need to develop short and long-term solutions to various ecological problems. It is being increasingly recognized that applied ecologists are an important component of these solutions.

## ASSOCIATE OF SCIENCE <br> ENVIRONMENTAL SCIENCE (ES) (2070)

TOTAL CREDIT HOURS REQUIRED: 70

| YEAR 1 |  | Major | Gen. <br> Educ. | Elective |
| :---: | :---: | :---: | :---: | :---: |
| First | Semester |  |  |  |
| ENGL | 1301 Freshman Composition | --- | 3 |  |
| KINE | 1104 Conditioning for Fitness |  | 1 |  |
| HIST | 1301 History of the United States I ------- | -- | -3 |  |
| BIOL | 1406 General Biology I-- | -- 4 |  |  |
| CHEM | 1411 General Chemistry I --- | ------- |  |  |
| Second Semester |  |  |  |  |
| ENGL | 1302 Freshman Composition II -- | ----- | -3 |  |
| HIST | 1302 History of the United States II |  | 3 |  |
| MATH | H 2412 Pre-Calculus |  | -4 |  |
| KINE | 1131 Intermediate Swimming |  | -1 |  |
| BIOL | 1407 General Biology II --- | -- 4 |  |  |
| CHEM | 1412 General Chemistry II |  |  |  |
|  | YEAR |  |  |  |
| First Semester |  |  |  |  |
| ENGL | 2332 Reading in World Literature or |  |  |  |
| ENGL | 2376 Literature of American Minorities or |  |  |  |
| ENGL | 2372 U.S. Latin American Literature ---- | --- |  |  |
| BIOL | 2306 Man and His Environment - | -- 3 |  |  |
| GOVT | 2305 American Government (Federal) |  | 3 |  |
| COSC | 1301 Computer Literacy |  | 3 |  |
| PHIL | 2306 Ethics |  | -3 |  |
| PHYS | 1401 General Physics ---------- | -4 |  |  |
| Second Semester |  |  |  |  |
| SPCH 1311 Fundamentals of Speech |  |  |  |  |
| HUMA 1371 The Southwest: A Sense of Place -----------------------------------3 |  |  |  |  |
|  |  |  |  |  |
| PHYS 1402 General Physics II ------ |  |  |  |  |
| BIOL 2421 Microbiology ---- |  |  |  |  |
| TOTAL | L CREDIT HOURS: ------------ | - 23 --- | 47 |  |

## GOVERNMENT

Government majors should follow the Associate of Arts Degree plan and check with department advisors for selection of electives and transfer of courses to senior institutions.

If government is required in student's degree plan for graduation, then he or she should note that St. Philip's College offers alternate ways to satisfy the legislative requirement. A student may take American Government 2301 and 2302 (Combined Federal and State), or a student may take American Government 2305 and 2306 in which Federal and State are separated. However, a student may not mix alternate plans.

## ASSOCIATE OF ARTS GOVERNMENT (2012)

TOTAL CREDIT HOURS REQUIRED: 67-69

|  | Major | Gen. Educ. | Elective |
| :---: | :---: | :---: | :---: |
| Core Courses |  |  |  |
|  |  |  |  |
| ENGL 1302 Freshman Composition |  |  |  |
| GOVT 2305 American Government I |  |  |  |
|  |  |  |  |
| HIST 1301 History of the |  |  |  |
| HIST 1302 History of |  |  |  |
| ECON 2301 Principles of Macroecon |  |  |  |
|  |  |  |  |
| KINESIOLOGY (SELECT TWO COURSES) |  |  |  |
| KINE 1100 through KINE 1238 --------------------------------------------------- 2 |  |  |  |
| FOREIGN LANGUAGE/SPEECH (SELECT TWO COURSES) |  |  |  |
| SPAN 1411, SPAN 1412, SPCH 1318, SPCH 1311 --------------------------6-8 |  |  |  |
| COMPUTERSCIENCE |  |  |  |
|  |  |  |  |
| HUMANITIES/FINEARTS |  |  |  |
| (Select one course) |  |  |  |
| ENGL 2322, ENGL 2332, ENGL 2376; HIST 2311, HIST 2312; |  |  |  |
| HUMA 1301, HUMA 1302; PHIL 1301 ------------------------------------------3 |  |  |  |
| (Select one course) |  |  |  |
| ARTS 1301, ARTS 1303; DRAM 1310; MUSI 1306-1310 -------------------3 |  |  |  |
| MATHEMATICS (SELECT ONE COURSE) |  |  |  |
|  |  |  |  |
| NATURAL SCIENCE (SELECT TWO COURSES) |  |  |  |
| BIOL 1400 through BIOL 2499; CHEM 1400 |  |  |  |
| through CHEM 2499; PHYS 1400 through |  |  |  |
|  |  |  |  |
| SOCIAL SCIENCE (SELECT TWO COURSES) |  |  |  |
| HIST 2380, HIST 2381, HUMA 2319, PSYC 2301, |  |  |  |
|  |  |  |  |
| MAJOR COURSE REQUIREMENTS-GOVERNMENT (two courses) |  |  |  |
| GEOG 1303, GOVT 2304 --------------------------------------------------- 6 |  |  |  |
|  |  |  |  |
| TOTA |  | 58-60 |  |

## HEALTH INFORMATION SYSTEMS

Programs offered from Health Information Systems are oriented toward students completing training with marketable skills for immediate entry into the workplace. Graduates of these programs can receive an Associate of Applied Science or a Certificate of Completion. The HIS Programs provide students with an education which both satisfies entry-level skill requirements and provide a foundation for career advancement. Curricula has been developed in cooperation with the Health Information Systems Advisory Committee, whose membership includes Health Information professionals from the San Antonio metropolitan area.

## Health Information Systems Programs

Health Information Technology/Technician (HITT)
Health Information Technology (AAS)
Health Information Specialist (Certificate of Completion)
Documentation Coding Specialist (Certificate of Completion)
Coding Specialist (Certificate of Completion)
Medical Transcription (MRMT)
General Medical Transcriptionist (Certificate of Completion)
Specialty Medical Transcriptionist (Certificate of Completion)
See Health Information Technology and Medical Transcription for specific program curriculum.
Students pursuing careers in Health Information Systems programs must submit a formal application to the program prior to enrollment in any major course. All applicants must have a 12th grade reading and writing level for admission into the certificate of completion programs. All applicants must have a 12th grade reading, writing, and math level for admission into the Associate's degree program.

All students will be required to have a criminal background check and drug screening before final acceptance into any HIS program. Both MUST be completed prior to enrollment into the first semester of the program or prior to beginning first clinical rotation. Random drug screening can be requested at anytime deemed necessary by a clinical site, clinical instructor, or faculty member of a program. All students must understand that a clinical site may require drug screening prior to the start of each new semester. The individual cost for drug screens and criminal background check are the responsibility of the student. The appropriate forms needed to obtain the required drug screen and criminal background check will be provided by the program director.

All students are required to have up to date immunization on file with the program. Proof of immunizations must be submitted by the end of the first semester in the program or prior to beginning the first clinical. Immunizations must include:

| DP | TB |
| :--- | :--- |
| MMR | Chicken Pox |
| Hepatitis A |  |
| Hepatitis B |  |

A student transferring from another college must submit an official transcript. Courses taken ten(10) or more years prior to a student's last enrollment at the College will not count as semester credit hours towards the degree or certificate of completion.

Graduation, registration and certification are separate mechanisms and are the responsibility of the student. Students graduating with an AAS in HITT must complete at least fifteen (15) semester credit hours of HITT designated courses. Students graduating with an AAS in HITT must complete $25 \%$ of the coursework in residence.

All courses within each HIS program must be taken in sequence. Non-major courses can be taken any semester. All courses within the program curricula must be completed with a grade of "C" or better.

Health Information Systems also provides Allied Health Foundation courses that are open to any Allied Health or Nursing student with a reading and writing level of 12th grade.
Courses are designed to introduce health related subject matter such as:
Basic Medical Terminology
Legal and Ethical Aspects of Health Information
Computers in Healthcare
Further information regarding these Foundation courses can be obtained through the Allied Health Department.

## HEALTH INFORMATION TECHNOLOGY/TECHNICIAN(HITT)

The Health Information Technology program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) (www.cahiim.org).

As a Health Information Technician, you will work in a healthcare facility reviewing records for completeness, abstracting data, and classifying diagnoses and treatments. You will work with hospital statistics, quality control and resource management, and health information databases.

The program offerings include plans leading to an Associate of Applied Science and three Certificate of Completion options.

Graduates who obtain an Associate Degree will be able to write the national accreditation examination administered by the American Health Information Management Association (AHIMA - www.ahima.org). Upon successful completion of this exam, you will be a Registered Health Information Technician (RHIT). If you choose to continue your education, you may become a Registered Health Information Administrator (RHIA). Your Associate's degree may count as part of a four year degree program at a senior institution.

Graduates who obtain a Certificate of Completion as a Documentation Coding Specialist will be eligible to write the national certifying examination administered by the American Health Information Management Association (AHIMA - www.ahima.org).

Students pursuing a major in Health Information Technology must submit a formal application prior to enrollment in any major course. This application is separate from the application prior to enrollment in any major course. This application is separate from the application for admission to the College. All applicants must have a 12th grade reading and writing level for admission into the certificate of completion programs. All applicants must have a 12th grade reading, writing and math level for admission into the Associate's degree program.

All students will be required to have a criminal background check and drug screening before final acceptance into any HIS program. Both MUST be completed prior to enrollment into the first semester of the program or prior to beginning first clinical rotation. Random drug screening can be requested at anytime deemed necessary by a clinical site, clinical instructor, or faculty member of a program. All students must understand that a clinical site may require drug screening prior to the start of each new semester. The individual cost for drug screens and criminal background check are the responsibility of the student. The appropriate forms needed to obtain the required drug screen and criminal background check will be provided by the program director.

All students are required to have up to date immunization on file with the program. Proof of immunizations must be submitted by the end of the first semester in the program or prior to beginning the first clinical. Immunizations must include:

| DP | TB |
| :--- | :--- |
| MMR | Chicken Pox |
| Hepatitis A |  |
| Hepatitis B |  |

A student transferring from another college must submit an official transcript. Courses taken ten(10) or more years prior to a student's last enrollment at the College will not count as semester credit hours towards the degree or certificate of completion.

Graduation, registration and certification are separate mechanisms and are the responsibility of the student. Students graduating with an AAS in HITT must complete at least fifteen (15) semester credit hours of HITT designated courses. Students graduating with an AAS in HITT must complete $25 \%$ of the coursework in residence.

All courses within each HIS program must be taken in sequence. Non-major courses can be taken any semester. All courses within the program curricula must be completed with a grade of "C" or better.

All major courses (HITT and HPRS) are offered only as an online option.

## ASSOCIATE OF APPLIED SCIENCE HEALTH INFORMATION TECHNOLOGY (2693)

TOTAL CREDIT HOURS REQUIRED: 69


# CERTIFICATE OF COMPLETION HEALTH INFORMATION SPECIALIST (2694) 

TOTAL CREDIT HOURS REQUIRED: 23-27

|  | Gen. |  |
| :--- | :--- | :--- |
| Major | Educ. | Elective |

## Prerequisite: <br> HITT 1305 Basic Medical Terminology ------------------------------ 3 <br> BIOL 2404 Human Anatomy and Physiology OR <br> *BIOL 2401 and BIOL 2402 --------------------------------------------------------------- 4 or 8 <br> First Semester <br> HITT 1311 Computers in Healthcare ---------------------------------3 <br> HITT 1301 Healthcare Data Content \& Structure ----------------- 3 <br> Second Semester <br> ENGL 1301 Freshman Composition I ----------------------------------------------------3 <br> HITT 1353 Legal \& Ethical Aspects of Health Info. ------------ 3 <br> Third Semester <br> HT T 1461 Clinical I -----------------------------------------------------------4 <br> TOTAL CREDIT HOURS: ------------------------------------------------------11 <br> * Both must be completed in lieu of BIOL 2404 to satisfy program. <br> $\underset{\text { CODING }}{\text { CERTIFICATE }} \underset{\text { SPECIALIST }}{\text { OF }} \underset{(\mathbf{2 6 3 7})}{\text { COMPLETION }}$

TOTAL CREDIT HOURS REQUIRED: 22-26


## CERTIFICATE OF COMPLETION DOCUMENTATION CODING SPECIALIST (2703)

## TOTAL CREDIT HOURS REQUIRED: 30-38



## HISTORY

History majors should follow the Associate of Arts Degree plan and check with department advisors for selection of electives and transfer of courses to senior institutions.

$$
\begin{array}{cc}
\text { ASSOCIATE } & \text { OF ARTS } \\
\text { HISTORY }
\end{array}
$$ TOTAL CREDIT HOURS REQUIRED: 70-73



## HISTOLOGIC TECHNICIAN

The study and practice of histology involves the use of instrumentation such as microtomes, water baths, embedders, tissue processors, cryostats, and automated stainers. Basic techniques in staining and specialized techniques are also involved as a histology technician.

The program at St. Philip's College includes lecture and laboratory courses in histology science and clinical education experience conducted in settings where histology services are provided. Through the labs, students will be exposed to handling specimens such as tissue, hardware, and foreign body items. The histology student will accession specimens, experience automated/computerized equipment and lab specific protocols.

After completing the required academic and histologic technician courses, students will earn a Certificate of Completion and will be eligible for the certification examination administered by the American Society of Clinical Pathologists.

Students pursuing this career must possess visual acuity, digital dexterity, motor coordination, and enjoy working with others. They must be able to work quickly under pressure with human tissue, fragile \& delicate instruments, very sharp knives, glass slides, and chemicals.

The Histologic Technician Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) 8410 West Bryn, MAWR Ave., Suite 670, Chicago, IL 60631-341, (773) 714-8880.

## CERTIFICATE OF COMPLETION HISTOLOGIC TECHNICIAN (2716)



## HOME BUILDING

The Home Building Program offers a two-year program leading to an Associate's Degree in Applied Science. The courses present the details of residential construction cast in a context which emphasizes the supervisory use of such knowledge by the foreman, superintendent and general contractor. The Program includes both on-the-job work and classroom study. The Program was designed in cooperation with the Greater San Antonio Builders Association and a consortium of contractors who act as an Advisory Committee for the Program.

For Associate in Applied Science Degree requirements in Home Building, please contact the department chairperson.

## ASSOCIATE OF APPLIED SCIENCE HOME BUILDING TECHNOLOGY (2682)

TOTAL CREDIT HOURS REQUIRED: 61


## CERTIFICATE OF COMPLETION HOME BUILDING (2588)

TOTAL CREDIT HOURS REQUIRED: 37

| Major | Gen. <br> Educ. Elective |
| :---: | :---: |
| First Semester |  |
| CNBT 1311 Construction Methods and Materials ----------------3 |  |
| DFTG 1425 Blueprint Reading and Sketching ----------------------4 |  |
| CNBT 1416 Construction Technology I ---------------------------4 |  |
| WDWK1413 Cabinet Making I ---------------------------------------4 |  |
| Second Semester |  |
| CNBT 1450 Construction Technology II ---------------------------4 |  |
|  |  |
| CNBT 1471 Construction Tools \& Techniques ------------------4 |  |
| CNBT 1446 Construction Estimating I -----------------------------4 |  |
| Summer Session |  |
| CNBT 1342 Building Codes and Specifications -------------------3 |  |
| CNBT 2342 Construction Management I --------------------------3 |  |
|  |  |

## CERTIFICATE OF COMPLETION BUILDING TRADES (2626)

TOTAL CREDIT HOURS REQUIRED: 31
Major Educ. Elective

| First Semester |  |
| :---: | :---: |
| CNBT | 1416 Construction Technology I ----------------------------4 |
| PFPB | 2409 Residential Construction Plumbing I ----------------4 |
| ELPT | 1411 Basic Electrical Theory ------------------------------4 |
| Second Semester |  |
| DFTG | 1425 Blueprint Reading and Sketching |
| ELPT | 1429 Residential Wiring ------------------------------------------ 4 |
| HART | 1441 Residential A/C ------------------------------------------4 |
| PFPB | 2445 Residential Construction Plumbing II ---------------4 |
| Summer Session |  |
| CNBT | 1342 Building Codes and Inspections -----------------------3 |
| TOTAL |  |

## HOSPITALITY EVENT MANAGEMENT

## ASSOCIATE OF APPLIED SCIENCE HOSPITALITY EVENT MANAGEMENT (2745)

TOTAL CREDIT HOURS REQUIRED: 67

|  | Gen. |
| :---: | :---: |
| Major | Educ. Elective |

## YEAR 1

| First Se | Semester |
| :---: | :---: |
| HAMG | 1313 Front Office Procedures -----------------------------3 |
| HAMG | 1342 Guest Room Maintenance --------------------------3 |
| HAMG | 1321 Introduction to the Hospitality Industry --------- 3 |
| TRVM | 1323 Group Tour Operations ----------------------------3 |
| RSTO | 1325 Purchasing for Hospitality Operations ----------- 3 |
| Second S | d Semester |
| COSC | 1301 Computer Literac |
| HAMG | 1340 Hospitality Legal Issues |
| TRVM | 1327 Special Events Design |
| ENGL | 1301 Freshman Composition |
| One course from the following: MATH 1373, 1314, 1332, |  |
|  |  |
| HAMG | 2267 Hotel Practicum ----------------------------------------- 2 |
| Third Semester |  |
| ENGL | 1302 Freshman Composition II OR |
| SPCH | 1321 Business \& Professional Speech |
| Fourth Semester |  |
| TRVM | 2355 Exposition and Trade Show Operations ---------- 3 |
| HAMG | 2305 Hospitality Management \& Ldrship ------------- 3 |
| RSTO | 2307 Catering ------------------------------------------------3 |
| One course from the following: PSYC 2301, 2308, 2315, |  |
| ITSW | 1310 Intro to Presentation Grap |
| Fifth Semester |  |
| HAMG | 2332 Hospitality Financial Management ---------------- 3 |
| HAMG | 2330 Convention and Group Management ------------- 3 |
| RSTO | 2301 Principles of Food \& Beverage Controls --------- 3 |
| HAMG | 2307 Hospitality Marketing \& Sales -------------------- 3 |
| TRVM | 2345 Adv. Topics in Tourism ----------------------------3 |
| TRVM | 2267 Practicum --------------------------------------------------- 2 |

[^6]
## HOTEL MANAGEMENT

## ASSOCIATE OF APPLIED SCIENCE HOTEL MANAGEMENT (2556)

TOTAL CREDIT HOURS REQUIRED: 66


# CERTIFICATE OF COMPLETION 

 HOTEL LIMITED SERVICE PROPERTY MANAGEMENT|  | Gen. |
| :---: | :---: |
| Major | Educ. Elective |


| First | Semester |
| :---: | :---: |
| HAMG | 1313 Front Office Procedures ----------------------------3 |
| HAMG | 1342 Guest Room Maintenance ------------------------3 |
| CHEF | 1305 Sanitation and Safety ------------------------------3 |
| RSTO | 1325 Purchasing for Hospitality Operations ---------- 3 |
| Second | Semester |
| HAMG | 1340 Hospitality Legal Issues -------------------------- 3 |
| RSTO | 2301 Principles of Food \& Beverage Controls ------- 3 |
| HAMG | 2332 Hospitality Financial Management ------------- 3 |
| HAMG | 2307 Hospitality Marketing \& Sales -------------------3 |
| HAMG | 2267 Practicum ------------------------------------------------ 2 |
| Third Semester |  |
| HAMG | 2305 Hospitality Management \& Leadership --------- 3 |
| TOTA | REDIT HOURS: -------------------------------------------29 |

## HUMANITIES

The Associate of Arts degree in Humanities is an interdisciplinary degree program consisting of courses drawn from a number of academic disciplines. Art history, literature, history, philosophy, religious perspectives, economic realities, and architectural concerns, and the analysis and interpretation of the cultural past will be the emphasis of the program. Humanities as an academic degree could be use to pursue a career in the social sciences, classics, art history, education, or museum studies all of which would require at least a Bachelor of Arts degree and possible state certifications. While at St. Philip's College, you will receive a well-rounded liberal arts program with emphasis on humanities to prepare for transfer to four-year college.

## ASSOCIATE OF ARTS HUMANITIES (2078)

TOTAL CREDIT HOURS REQUIRED: 64-67


## INFORMATION TECHNOLOGY

Information Technology possesses a strong commitment to providing computer skills that enable students to enter the fast growing field of Information Technology. Aside from providing the entry-level skill requirements, it also provides a foundation on which future education pursuits may be applied in areas such as computer networking, electronic commerce, Web Development, the Internet, the World Wide Web, and certifications in these technologies.

All program curriculum and course offerings have been developed in cooperation with an Advisory Committee composed of local IT professionals. These professionals meet on a regular basis to discuss, review, and evaluate training equipment, curriculum, and market trends that impact program offerings.

This instructional unit offers Associate Degrees, Certificates, and Marketable Skills Achievement Awards. The unit is also designated as a Microsoft Information Technology Academy designed to provide training in IT careers such as network administrator, developers, systems engineers and network security specialists. The curriculum covers concepts helpful in preparing for certification exams. In addition to being an Academy, the unit also offers preparation classes for A+ certification and a variety of programs for WebDeveloper and Help Desk Occupations.

The Business Information Solutions (BIS) Department may substitute industry/vendor-specific certification for college credit courses. BIS maintains a matrix of current certifications, the BIS course(s) which may be eligible for substitution, and details of any additional criteria. The minimum criteria will be current certification, and one year employer verified satisfactory work experience in that specific area. The student must provide all documentation to include originals of certification certificates to be validated and copied by the advisor. Substitution of certification for credit will be limited to a total of 16 semester hours, and counted as part of the 32 semester hour limit for all credit by non-traditional methods. Also, at least 25 percent of any degree or certificate must be earned in residence at the college. The credit will not be posted on the transcript until the student has satisfied the 3-semester hour resident requirement. This credit may, or may not, be transferable.

## ASSOCIATE OF APPLIED SCIENCE NETWORK ADMINISTRATOR (2738)

TOTAL CREDIT HOURS REQUIRED: 70



## ASSOCIATE OF APPLIED SCIENCE DESKTOP SUPPORT SPECIALIST (2756)

Proposed Title: HELPDESK SUPPORT SPECIALIST (Pending Approval)
Formerly Computer Application Specialist
TOTAL CREDIT HOURS REQUIRED: 66-67

|  | Gen. |  |
| :--- | :--- | :--- |
| Major | Educ. | Elective |



202 St. Philip's College 2006-2008 Catalog

| Fourth | Semester | Major |
| :--- | :--- | :--- | | Gen. |
| :---: |
| Educ. | Elective


| Class Grouping | Certification |
| :---: | :---: |
| ITSC 2335 and ITSC 1309 | MOS Master |
| ITSC 1305 and ITSC 1325 | Comptia A+ |
| ITSC 2339 and ITSC 1321 | Microsoft MCDST |

*Pre-requisites: Students with fewer than 25 wpm must take POFT 1127, 1329 OR 2401 to upgrade their skills.
(1) Select one course: MATH 1373, 1314, 1332, 1342, 1374, 2412, 2413, 2414, 2415
(2) Select one course: SPCH 1311/1321
(3) Select one course: PSYC 2301/2315
(4) Select one course: ITMC 2434, 2304, 2409, ITSY 2401, 2443, ITNW 2321, 2313

## ASSOCIATE OF APPLIED SCIENCE NETWORK SECURITY ADMINISTRATOR (2740)

TOTAL CREDIT HOURS REQUIRED: 72

|  | Major | Gen. <br> Educ. |
| :--- | :---: | :--- |
| First | Semester |  |
| ITSC |  |  |
| 1307 |  |  |


|  | Major | Gen. <br> Educ. |
| :--- | :--- | :--- |
| Elective |  |  |

Pre-requisites: Course Placement Guide (see advisor). Students with fewer than 25 wpm must take POFT 1329 to upgrade their skills.
(1) Select one course: MATH 1373, 1314, 1332, 1342, 1374, 2412, 2413, 2414, 2415
(2) Select one course: PHIL
(3) Select one course: SPCH 1311/1321
(4) Select one course: PSYC 2301/2315

## CERTIFICATE OF COMPLETION COMPUTER SUPPORT SPECIALIST (2759) <br> Proposed Title: INFORMATION SUPPORT SPECIALIST (Pending Approval) Formerly Computer Help Desk Specialist

TOTAL CREDIT HOURS REQUIRED: 28


TOTAL CREDIT HOURS: --------------------------------------------------------3
Students with fewer than 25 wpm keyboarding skills should take POFT 1329 OR POFT 2301 to upgrade their skills.

Industry certifications that can be accomplished:

| Class Grouping | Certification |
| :---: | :---: |
| ITSC 2335 and ITSC 1309 | MOS Master |
| ITSC 1305 and ITSC 1325 | Comptia A+ |
| ITSC 2339 and ITSC 1321 | Microsoft MCDST |

## CERTIFICATE OF COMPLETION NETWORK PROFESSIONAL* (2658)

TOTAL CREDIT HOURS REQUIRED: 26

|  |  | Major | Gen. <br> Educ. | Elective |
| :---: | :---: | :---: | :---: | :---: |
| First Semester |  |  |  |  |
| ITMC | 1401 MS Windows Network \& Operating System |  |  |  |
|  | Essentials ------------- | - 4 |  |  |
| ITMC | 1441 Implementing MS Windows Profess. \& |  |  |  |
|  | Server ------------------------------------ | - 4 |  |  |
| ITMC | 1442 Implementing MS Windows Network |  |  |  |
|  | Infrastructure -------------------------- | - 4 |  |  |
| ITMC | 1443 Implementing \& Admin. MS Windows Dir. -- | -- 4 |  |  |
| POFT | 1220 Job Search Skills ------------------------------------- | --- 2 |  |  |
| Second | Semester |  |  |  |
| ITSC | 1264 Practicum: Computer \& Info. Sciences* ----- | --- 2 |  |  |
|  |  |  |  |  |
| ITMC 2330 Updating Support Skills for MS Windows |  |  |  |  |
| ITNW | 2313 Networking Hardware |  |  |  |
| ITSE 13 | 1329 Programming Logic and Design |  |  |  |
| BMGT | 1309 Information and Project Management |  |  |  |
| ITMC | 2308 Administering Microsoft Systems Mgmt Server |  |  |  |
| ITMC | 2336 Designing Microsoft Exchange for the Enterprise |  |  |  |
| ITMC | 2306 Populating a Data Warehouse with Microsoft SQL |  |  |  |
| ITMC | 2304 Implementing and Managing Microsoft Exchange |  |  |  |
| ITMC | 2303 Administering a Microsoft SQL Server Database |  |  |  |
| TOTAL |  | -- 26 |  |  |

Pre-requisites: Course Placement Guide (see advisor). Students with fewer than 25 wpm should take POFT 1329 to upgrade their skills.
Prerequisites: Must have ITSC 1301, or COSC 1301, TEA-approved high school
Computer Literacy course within the past two years; ITNW 2313, or instructor approval.
*DEPARTMENT PERMISSIONREQUIRED

## ASSOCIATE OF APPLIED SCIENCE WEB DEVELOPER (2757)

TOTAL CREDIT HOURS REQUIRED: 71

|  |  | Major | Gen. <br> Educ. | Elective |
| :---: | :---: | :---: | :---: | :---: |
| First S | Semester |  |  |  |
| ITSC | 1301 Introduction to Computers |  |  |  |
| ITSC | 1305 Introduction to PC Operating Systems | -- 3 |  |  |
| IMED | 1316 Web Page Design I | -- 3 |  |  |
| ITNW | 1325 Fundamentals of Networking ---------- | -- 3 |  |  |
| MATH | (See 1 below) --------------- | ------ | 3 |  |
| Second | Semester |  |  |  |
| ENGL | 1301 Freshman Composition I -- | --- |  |  |
| ITSE | 1302 Computer Programming ---------------- | - 3 |  |  |
| ITSE | 1311 Beginning Web Page Programming --- | 3 |  |  |
| ITSW | 1307 Introduction to Database ------------- | - 3 |  |  |
| ITSE | 1305 Web Authoring and Publishing -------- | - 3 |  |  |
| Semest | ter Session |  |  |  |
| MATH | (See 1 below) |  | 3 |  |
| PSYC | OR SOCI (See 2 below) |  | 3 |  |
| SPCH | (See 3 below) -------- |  |  |  |
| Third | Semester |  |  |  |
| ITSE | 2321 Object-Oriented Programming -------- | -- 3 |  |  |
| POFT | 1220 Job Search Skills ------------------------- | - 2 |  |  |
| ITSE |  | - 3 |  |  |
| IMED | 2315 Web Page Design II --------------- | 3 |  |  |
| ITSE | 1356 Extensible Markup Language (XML) -- | 3 |  |  |
| ITSE | 1331 Introduction to Visual BASIC Prog. ---- | - 3 |  |  |
| Fourth | Semester |  |  |  |
| ITSE | 2309 Database Programming |  |  |  |
| ITSC | 2386 Internship: Computer \& Info. Sciences |  |  |  |
| Major Pr | Program Elective (See 4 below) |  |  | -- 3 |
| ITSE | 2302 Intermediate Web Programming | - 3 |  |  |
| ITMC | 2337 Programming a Microsoft SQL Server |  |  |  |
|  | Database ---------------------------------- |  |  |  |
| TOTAL | L CREDIT HOURS: ---- | 50 | 18 |  |

Students with fewer than 25 wpm keyboarding skills should take POFT 1329 to upgrade their skills.
(1) Select two courses: MATH 1373, 1314, 1332, 1342, 1374, 2412, 2413, 2414, 2415
(2) Select one course: PSYC 2301, 2315, SOCI 1301
(3) Select one course: SPCH 1311/1321
(4) Select one course: IMED 1301, 1351 or 2309 , ARTC 1302 or other course approved by major advisor.

# MARKETABLE SKILLS ACHIEVEMENT AWARD A + CERTIFICATION PREPARATION (2907) 



Prerequisites: Course Placement Guide (see advisor). Students with fewer than 25 wpm must take POFT 1329 to upgrade their skills.
Prerequisites: Must have ITSC 1301, or COSC 1301 or TEA-approved high school
Computer Literacy course within the past two years; ITNW 1333, ITNW 2313

## CERTIFICATE OF COMPLETION WEB DEVELOPER (2757)

TOTAL CREDIT HOURS REQUIRED: 40

|  | Major | Gen. Educ. | Elective |
| :---: | :---: | :---: | :---: |
| First | Semester |  |  |
| ITSC | 1301 Introduction to Computers --------------------------- |  |  |
| IMED | 1316 Web Page Design I ----------------------------------------3 |  |  |
| ITNW | 1325 Fundamentals of Networking ------------------------3 |  |  |
| ITSC | 1305 Introduction to PC Operating Systems ------------ 3 |  |  |
| ITSE | 1302 Computer Programming -------------------------------3 |  |  |
| Second | Semester |  |  |
| ITSE | 1311 Beginning Web Page Programming ----------------- 3 |  |  |
| ITSE |  |  |  |
| Major P | Program Elective - SEE (1) ----------------------------------3 |  |  |
| ITSE | 1332 Introduction to Visual Basic Programming.NET -- 3 |  |  |
| POFT | 1220 Job Search Skills ------------------------------------------- 2 |  |  |
| Third | Semester |  |  |
| ITSE | 1306 Computer Programming using (PHP) --------------- 3 |  |  |
| ITSE | 2302 Intermediate Web Programming --------------------3 |  |  |
| ITSE | 2309 Database Programming ------------------------------3 |  |  |
| ITSC | 1264 Practicum: Computer \& Information Sciences --- 2 |  |  |
| TOTAL |  |  |  |
| Prerequi to upgra (1) SEL approve | isites: Students with fewer than 25 wpm must take POST 1127, P ade their keyboarding skills. <br> ECT ONE COURSE: ITSE 1356, IMED 2315, ITMC 2337, AR ed by the major advisor. | $\begin{aligned} & \text { Г } 1329 \text { o } \\ & 1302, \text { o } \end{aligned}$ | OFT 2401 <br> her course |

## CERTIFICATE OF COMPLETION NETWORK PROFESSIONAL: SERVER+ (2585)

TOTAL CREDIT HOURS REQUIRED: 27


## CERTIFICATE OF COMPLETION NETWORK PROFESSIONAL: NETWORK+ (2743)

TOTAL CREDIT HOURS REQUIRED: 30

| First | Semester | Major |
| :--- | :---: | :--- | | Gen. |
| :---: |
| Educ. |$\quad$ Elective

TOTAL CREDIT HOURS REQUIRED: 26-27

|  |  | Major | Gen. <br> Educ. | Elective |
| :---: | :---: | :---: | :---: | :---: |
| First | Semester |  |  |  |
| ITSC | 1301 Introduction to Computers ----------- |  |  |  |
| ITSC | 1325 Personal Computer Hardware ---------- | -- 3 |  |  |
| Second | Semester |  |  |  |
| ITSC | 1305 Introduction to PC Operating Systems | -- 3 |  |  |
| ITNW | 1421 Introduction to Networking ------------- | -- 4 |  |  |
| Third | Semester |  |  |  |
| ITSY | 1300 Fund. of Information Security --------- | -- 3 |  |  |
| ITSE | 1402 Computer Programming ---------------- | - 4 |  |  |
| Fourth | Semester |  |  |  |
| ITNW | 2321 Networking with TCP/IP --------------- | -- 3 |  |  |
| ITSY | 1442 Information Technology Security OR |  |  |  |
| ITSE | 1350 System Analysis and Design OR |  |  |  |
| ITSE | 1311 Web Page Programming ---- | -3-4 |  |  |

TOTAL CREDIT HOURS: 26-27

## KINESIOLOGY

Kinesiology is based on a scientific knowledge of human growth and development and an understanding of human behavior.

The College graduation requirements for most students include a minimum of two semester hours of activity classes in Kinesiology. (Special individualized activities are available for all ages).
The curriculum in Kinesiology is designed to

1. Serve all the students in the institution.
2. Develop motor skills, health and fitness through varied activities.
3. Offer a beginning major in Kinesiology for the first two years of college.
4. Train individuals to use their leisure time wisely.

Students should follow the Associate of Arts degree plan. Procedures for being admitted as a Kinesiology major and $2+2$ agreements with most senior institutions are available from the counseling office or the Kinesiology Department. Majors are encouraged to check with Department advisors for scheduling of classes, selection of electives, and or transfer information.

## ASSOCIATE OF ARTS KINESIOLOGY (2020)



| Major | Gen. <br> Educ. | Electiv |
| :---: | :---: | :---: |
| Natural Science Requirement (Complete two courses from list) |  |  |
| BIOL 1406 and BIOL 1407 (Science Majors) OR |  |  |
| BIOL 1408 and BIOL 1409 (Non-Science Majors) OR |  |  |
| BIOL 2401 and BIOL 2402 OR CHEM 1411 and CHEM 1412 OR |  |  |
| PHYS 1401 and PHYS 1402 ------ | 8 |  |
| Social Science Requirement (Complete one course) |  |  |
| PHIL 1301, PHIL 1304, PHIL 2303, PHIL 2306, |  |  |
| PHIL 2371, PSYC 2301, PSYC 2306, PSYC 2308, |  |  |
| PSYC 2315, PSYC 2316, PSYC 2317, PSYC 2319, |  |  |
| PSYC 2371, SOCI 1301, SOCI 1306, SOCI 1370, |  |  |
| SOCI 1372, SOCI 2301, SOCI 2336, SOCI 2370 ---------------------------- |  |  |
| Elective Requirement |  |  |
| (Complete 2 three semester hour courses) |  |  |
| Consult with Advisor |  |  |

## LIBERAL ARTS

The Liberal Arts Degree is available as a distance learning option; this degree may be earned by taking a combination of Internet and Telecourses. Consult with the Counseling or the Records and Registration Office for the list of the specific options for each class.

## ASSOCIATE OF ARTS LIBERAL ARTS (2031)

TOTAL CREDIT HOURS REQUIRED: 60-62


|  | Gen. |
| :--- | :--- | :--- |
| Major | Educ. Elective |

(Select one course)
ENGL 2300-2399, IDST 2300-2399;
HUMA 1300-2399; PHIL 1300-2399 -------------------------------------------------------3
(Select one course)
ARTS 1301, DRAM 1310, MUSI 1306-1310 -------------------------------------------3
Kinesiology ( 2 semester hours)
KINE 1100-1238 OR KINE 2100 series
(Military basic training may be substituted for up to 4 hours of
KINE activity class credits. Substitutions are available within
discipline with recommendations from physicians or ministers). ---------------- 2
MAJOR COURSE REQUIREMENTS (6-7 semester hours)
SPAN 1412 OR SPCH 1318, \& ECON 2301 OR 2302 ----------- 6-7

ELECTIVES (8 semester hours)
Eight semester hours of elective credit as approved by advisor ---------------------------------18


# LONG TERM CARE NURSING HOME ADMINISTRATOR 

## ADVANCED TECHNICAL CERTIFICATE LONG TERM CARE NURSING HOME ADMINISTRATOR (2913)

TOTAL CREDIT HOURS REQUIRED: 26

|  |  | Major | Gen. <br> Educ. | Elective |
| :---: | :---: | :---: | :---: | :---: |
| First S | Semester |  |  |  |
| LTCA | 1311 Intro. to Long Term Care Administration -- | -- 3 |  |  |
| LTCA | 1312 Resident Care in the Long Term Care Facility |  |  |  |
| LTCA | 1313 Organization and Management of Long Term Care Facilities |  |  |  |
| LTCA | 2315 Financial Management of Long Term Care Facilities |  |  |  |
| LTCA |  | -- 3 |  |  |
| Second | Semester |  |  |  |
| LTCA | 2560 Clinical - Hospital and Health Care Facilities <br> Administration/Management |  |  |  |
| Third | Semester |  |  |  |
| LTCA | 2660 Clinical - Hospital and Health Care Facilities Administration/Management |  |  |  |
| TOTAL |  | 26 |  |  |

## MANUFACTURING ENGINEERING TECHNOLOGY

The Manufacturing Engineering Technology (MET) program is designed to prepare students for high performance manufacturing employment opportunities. The MET program is an associate degree program directed toward training you to operate and program the equipment used within manufacturing environments. To keep pace with industry, SPC will have access to advanced manufacturing systems at the ACCD-Advanced Technology Center. By participating in the MET program you will be provided training in this facility, which includes a Computer Integrated Manufacturing Cell (CIM), Computer Numerical Control (CNC) machine centers (horizontal and vertical), robots, and coordinated measuring machines. Students can earn an Associate of Applied Science in Manufacturing Engineering Technology or a one year Certificate of Completion for CNC operator or for Machinist/Machine Shop. Continuing Education or Marketable Skills Certificate can be earned in Basic Robotic Operations.

Physical/Health Requirements:

1. Finger and manual dexterity.
2. Ability to climb, balance, stoop, kneel, and lift heavy loads.
3. Near-visual acuity and depth perception.

CNC | ASSOCIATE OF APPLIED SCIENCE |
| :---: |
| MANUFACTURING TECHNICIAN |
| (2051) |

TOTAL CREDIT HOURS REQUIRED: 60


## ASSOCIATE OF APPLIED SCIENCE PRECISIONMETAL WORKERS:MANUFACTURING OPERATIONS TECHNICIAN (2766)

TOTAL CREDIT HOURS REQUIRED: 70

| YEAR 1 Major $\begin{aligned} & \text { Gen. } \\ & \text { Educ. }\end{aligned}$ |  |  | Elective |
| :---: | :---: | :---: | :---: |
| First Semester |  |  |  |
| MCHN | 1438 Basic Machine Shop I --------------------------------4 |  |  |
| MCHN | 1320 Precision Tools \& Measurement ------------------ 3 |  |  |
| MATH | 1373 College Math |  |  |
| INMT | 2303 Pumps, Compressors and Mechanical Drives ---- 3 |  |  |
| ITSC | 1301 Introduction to Computers ------------------------- |  |  |
| Second Semester |  |  |  |
| ENGL | 1301 Freshman Composition I | 3 |  |
| ELPT | 1419 Fundamentals of Electricity -----------------------4 |  |  |
| ELMT | 1305 Basic Fluid Power ------------------------------------3 |  |  |
| PHYS |  | -3 |  |
| ENTC | 1301 Robotics I ----------------------------------------------3 |  |  |
|  | YEAR 2 |  |  |
| Third S | Semester |  |  |
| RBTC | 2447 Computer Integrated Manufacturing -------------- 4 |  |  |
| QCTC | 1243 Quality Assurance --------------------------------------20-- |  |  |
| GOVT |  | 3 |  |
| WLDG | 2439 Advanced Oxy-Fuel Welding and Cutting -------- 4 |  |  |
| ELPT | 1420 Fundamentals of Electricity II ---------------------4 |  |  |
| Fourth | Semester |  |  |
| WLDG | 1413 Intro to Blueprint Reading for Welders ----------- 4 |  |  |
| ELPT | 2419 Programmable Logic Controllers I ----------------4 |  |  |
| ELPT | 1441 Motor Control --------------------------------------4 |  |  |
| WLDG | 1428 Intro to Shielded Metal Arc Welding (SMAW) -- 4 |  |  |
| SPCH | 1321 Business and Professional Speech ------------------ |  |  |
| MCHN |  |  |  |

## CERTIFICATE OF COMPLETION CNC OPERATOR (2610)

TOTAL CREDIT HOURS REQUIRED: 38

|  | Major | Gen. Educ. | Elective |
| :---: | :---: | :---: | :---: |
| First Semester |  |  |  |
| MCHN | 1438 Basic Machine Shop I ---------------------------------4 |  |  |
| MCHN | 1302 Machinist II -------------------------------------------3 |  |  |
| MCHN | 1320 Precision Tools and Measurement ---------------- 3 |  |  |
| MCHN | 2403 Fundamentals of CNC Machine Control ----------- 4 |  |  |
| ITSC | 1301 Introduction to Computers ------------------------------- |  |  |
| Second | Semester |  |  |
| MCHN | 1426 Introduction to CAM -----------------------------------4 |  |  |
| MCHN | 2431 Operation of CNC Turning Centers ----------------4 |  |  |
| MCHN | 2434 Operation of CNC Machining Centers -------------4 |  |  |
| ENTC | 1301 Robotics I ---------------------------------------------3 |  |  |
| RBTC | 2447 Computer Integrated Manufacturing --------------- 4 |  |  |
| Third Semester |  |  |  |
| MCHN | 2266 Practicum ---------------------------------------------------- |  |  |
| TOTAL |  |  |  |

## CERTIFICATE OF COMPLETION MACHINIST/MACHINE TECHNOLOGIST (2575)

TOTAL CREDIT HOURS REQUIRED: 32


CERTIFICATE OF COMPLETION
PRECISION METAL WORKERS: CNC TOOL OPERATOR (2768)


TOTAL CREDIT HOURS: 29

## CERTIFICATE OF COMPLETION PLASTICS

TOTAL CREDIT HOURS REQUIRED: 28

|  |  | Major | Gen. <br> Educ. | Elective |
| :---: | :---: | :---: | :---: | :---: |
| First Semester |  |  |  |  |
| PLTC | 1341 P | Plastic Materials and Testing ------------------------3 |  |  |
| PLTC | 1301 I | Introduction to Plastics -----------------------------3 |  |  |
| PLTC | 1445 P |  |  |  |
| PLTC | 2346 P | Plastic Processes II ------------------------------------3 |  |  |
| Second Semester |  |  |  |  |
| MCHN | 2403 F | Fundamentals of CNC Machine Control ---------- 4 |  |  |
| PLTC | 1343 M | Mold Design and Maintenance -------------------- 3 |  |  |
| ENTC | 1301 R | Robotics I ---------------------------------------------3 |  |  |
| PLTC | 2331 | Troubleshooting Plastic Processes ---------------- 3 |  |  |
| *PLTC | 1206 P | Plastics Quality Control ---------------------------- 2 |  |  |
| TOTAL | L CREDI' | IT HOURS: ---------------------------------------------28 |  |  |

*Capstone

## CERTIFICATE OF COMPLETION PRECISION METAL WORKERS: MANUFACTURING OPERATIONS MAINTENANCE ASSISTANT (2767)

| TOTAL CREDIT HOURS REQUIRED: 31 |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Major | Gen. <br> Educ. | Elective |
| First Semester |  |  |  |
| TECM 1303 Technical Mathematics ---------------------------------3 |  |  |  |
| MCHN 1438 Basic Machine Shop I ------------------------------------4 |  |  |  |
| Second Semester |  |  |  |
| MCHN 1320 Precision Tools and Measurement ----------------- 3 |  |  |  |
| INMT 1248 Manufacturing Process ---------------------------------- 2 |  |  |  |
| MCHN 1171 Workforce Training Skills for Success ------------- 1 |  |  |  |
| Third Semester |  |  |  |
| MCHN 2266 Practicum --------------------------------------------------- 2 |  |  |  |
| Fourth Semester |  |  |  |
| MCHN 1302 Machinist II --------------------------------------------------3 |  |  |  |
| INMT 2303 Pumps, Compressors, and Mechanical Drives ---- 3 |  |  |  |
| WLDG 1200 Introduction to Welding ------------------------------- 2 |  |  |  |
| Fifth Semester |  |  |  |
| ELPT 1311 Basic Electrical Theory ---------------------------------3 |  |  |  |
|  |  |  |  |
| QCTC 1243 Quality Assurance ---------------------------------------2 |  |  |  |
| TOTAL |  |  |  |

MARKETABLE SKILLS ACHIEVEMENT AWARD PRECISIONMETALWORKERS:MANUFACTURINGSKILLSTRADE HELPER (2914)

TOTAL CREDIT HOURS REQUIRED: 13


## CERTIFICATE OF COMPLETION PRECISION METALWORKERS: MANUFACTURING OPERATIONS

TOTAL CREDIT HOURS REQUIRED: 38


## MATHEMATICS

The Department of Mathematics, Computer Science, and Business Administration, in cooperation with other departments on campus, is offering five major programs - Mathematics, Computer Science, Pre-Engineering, Business Administration, and Business Administration and Economics.

Students who plan to teach mathematics in high school should declare a mathematics major. Mathematics majors should follow the Associate of Arts degree plan. Majors should check with the Department advisors to select electives and to assure transfer of courses to senior institutions.

Articulation plans exist with several universities. Interested students should contact their advisor for further information.

## ASSOCIATE OF ARTS

 MATHEMATICS (2017)TOTAL CREDIT HOURS REQUIRED:59-69


## MEDICAL LABORATORY TECHNICIAN

The Medical Laboratory Technician program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences 8410 West Bryn MAWR Ave., Suite 670, Chicago, IL., 60631-341, (773) 714-8880.

ASSOCIATE OF APPLIED SCIENCE MEDICAL LABORATORY TECHNICIAN (2540)

TOTAL CREDIT HOURS REQUIRED: 69-73


## MEDICAL TRANSCRIPTION (MRMT)

The Medical Transcription programs a Certificate program that requires completion of specialty as well as academic course. Entry admission requirements include a minimum keyboard speed of 50 wpm ; good grammar, punctuation and vocabulary skills; and 12 th grade reading and writing skill levels.

The program offerings include plans leading to two (2) Certificate of Completion.
Prerequisite courses are offered on a regular semester basis and are required to provide the well-rounded foundation and knowledge necessary to perform as a medical transcriptionist. The prerequisite courses and skills focus on medical terminology, anatomy and physiology, English usage and keyboarding skills essential to perform medical transcription.

The Medical Transcription (MRMT) specialty courses offer instruction in theory as well as practice in transcription of reports. The student will utilize technology, software, and equipment, including word processing and transcription software, to learn essential transcription techniques. Each MRMT specialty course progresses the student to a more advanced level of transcription performance, including transcription of actual reports provided by local facilities in an online as well as clinical setting.

The Medical Transcription specialty courses are offered as competency-based instruction. Specialty courses are offered in an online environment and provide students flexibility in completion of required online assignments. Software, technology, and equipment required for MRMT specialty courses provide for completion of all course work at remote site locations, such as home or office.

Employment opportunities are excellent and exist in a variety of healthcare settings.
Students pursuing a major in Medical Transcription must submit a formal application prior to enrollment in any major course. This application is separate from the application for admission to the College. All applicants must have a 12 th grade reading and writing level for admission into the certificate of completion programs.

All students will be required to have a criminal background check and drug screening before final acceptance into the Medical Transcription program. Both MUST be completed prior to enrollment into the first semester of the program or prior to beginning first clinical rotation. Random drug screening can be requested at anytime deemed necessary by a clinical site, clinical instructor, or faculty member of a program. All students must understand that a clinical site may require drug screening prior to the start of each new semester. The individual cost for drug screens and criminal background check will be provided by the program director. All students are required to have up to date immunizations on file with the program. Proof of immunizations must be submitted by the end of the first semester in the program or prior to beginning the first clinical. Immunization include:

DP
MMR
Hepatitis A
Hepatitis B
TB
Chicken Pox

A student transferring from another college must submit an official transcript. Courses taken ten (10) or more years prior to a student's last enrollment at the College will not count as semester credit hours towards the degree or certificate of completion.

Graduation, registration and certification are separate mechanisms and are the responsibility of the student.

All courses within each HIS program must be taken in sequence. Non-major courses can be taken any semester. All courses within the curricula must be completed with a grade of "C" or better.

All major courses (HITT and MRMT) are only offered as an online option.

## CERTIFICATE OF COMPLETION SPECIALTY MEDICAL TRANSCRIPTIONIST - OPTION I (2696)

TOTAL CREDIT HOURS REQUIRED: 14-18


Graduates of the above certificate are prepared for an entry level position. This requires basic knowledge and understanding of medical terminology; anatomy and physiology; transcription of dictation of a repetitive or patterned nature; and English and grammar usage.

## CERTIFICATE OF COMPLETION GENERAL MEDICAL TRANSCRIPTIONIST - OPTION II (2695)

TOTAL CREDIT HOURS REQUIRED: 28-32

*Both must be completed in lieu of BIOL 2404 to satisfy program.
Graduates of the above certificate are prepared for an intermediate position. This requires in-depth knowledge of medical terminology; anatomy and physiology; transcription guidelines; interpretation of dictation; english and grammar usage. Upon completion of the above certificate students may consider pursuit of national certifying examinations administered by the American Association of Medical Transcription (AAMT - www.aamt.org) (RMT and/or CMT).

## MUSIC

The goals of the Music Department are: to give music majors the training in the practical, theoretical, and historical elements of music that will allow them to transfer to a Bachelor's degree program; to raise their skill level in music, so that they may perform in professional and/or community venues; to make available to majors in other curricula opportunities to elect courses in theory, appreciation, individual and ensemble; performance; and to enrich the cultural life of the student and College community through recitals and performances. The Associates of Arts Degree Program in Music is a field of study degree program as described by the Texas Higher Education Coordination Board. This degree is designed to apply to a Baccalaureate Degree Program in Music. Students will only complete 29 hours of general education courses. The remaining hours will be completed at the receiving institution.

## ASSOCIATE OF ARTS MUSIC <br> (2019)

TOTAL CREDIT HOURS REQUIRED: 68

| YEAR1 Major $\begin{array}{ll}\text { Gen. } \\ \text { Educ. }\end{array}$ |  |  |  | Elective |
| :---: | :---: | :---: | :---: | :---: |
| First | Semester |  |  |  |
| MUSI | 1311 The | -- 3 |  |  |
| MUSI | 1216 Aur | -- 2 |  |  |
| ENGL | 1301 Fre | ------- |  |  |
| GOVT | 2305 Am | -- |  |  |
| MUAP $1^{* * *}$ (Freshman Level I Major |  |  |  |  |
| Instrument-Private Instruction) ------------------- 2 |  |  |  |  |
| MUEN 11** (Same ensemble may be repeated for credit) ------- 1 |  |  |  |  |
|  |  |  |  |  |
| (Piano Proficiency: The piano proficiency requirement may be fulfilled by audition or by taking recommended piano classes MUSI 1114, 1115) |  |  |  |  |
| Second Semester |  |  |  |  |
| MUSI 1312 Music Theory II --------------------------------------------3 |  |  |  |  |
|  |  |  |  |  |
| MUAP $1^{* * *}$ (Freshman Level II Major Instrument) ------------- 2 |  |  |  |  |
| MUEN 11** (Same ensemble may be repeated for credit) ------- 1 |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| MATH 1314 College Algebra OR MATH 1332 -------------------------------3 |  |  |  |  |
| Summer Session |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| First Semester |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| HIST 1301 U.S |  |  |  |  |
| MUSI 1308 Intro to Music Lit I ---------------------------------------3 |  |  |  |  |
| MUAP $2^{* * *}$ (Sophomore Level I Major Instrument) ------------ 2 |  |  |  |  |
| MUEN $11^{* *}$ (Same ensemble may be repeated for credit) ------- 1 |  |  |  |  |
| One Course from the following; |  |  |  |  |
| BIOL 1408-1499; BIOL 2400-2499; CHEM 1400-1499 |  |  |  |  |
| CHEM 2400-2499; PHYS 1400-1499; PHYS 2400-2499 -------------------4 |  |  |  |  |
| (May n | need Piano |  |  |  |



TOTAL CREDIT HOURS: --------------------------------------------------------33

# DEPARTMENT OF NURSING EDUCATION Certificate of Completion in Vocational Nursing 

The Department of Nursing is approved by the Texas Board of Nurse Examiners and the Texas Higher Education Coordinating Board to award the Certificate of Completion in Vocational Nursing.

The Vocational Nursing Program conducts classes on the main campus in two tracks for students. They may choose either the day or evening track for the length of their matriculation. St. Philip's College students in the Seguin area may also attend daytime classes held in the Teaching Center as a professional courtesy of the Guadalupe Regional Medical Center.

The curriculum covers fundamentals of vocational nursing, ethical and legal aspects of nursing practice, nutrition, gerontology, communication skills, body structure and function, administration of medications and solutions, medical and surgical nursing, obstetrical nursing, pediatric nursing, mental health nursing, and professional development. In addition to classroom study, the student will receive supervised laboratory and clinical experiences in local hospitals, long term care facilities and other health care facilities.

Students who successfully complete the entire three semester program are awarded a Certificate of Completion and may apply to the Texas Board of Nurse Examiners for the National Certification Licensing Examination for Practical Nurses (NCLEX-PN).

All applicants admitted to Vocational Nursing Program must meet the current admission requirements.

As an open admission institution, applicants with completed application packets are admitted by a system of first-come, first enrolled.

Program requirements: A student enrolled in Vocational Nursing must be able to:

1. Use the sense of vision, hearing, speech, and touch. Use of the senses enhances the nurses' abilities to observe the patient accurately.
2. Preform psychomotor movements that require coordination of gross and fine muscular movements, and equilibrium. Good coordination is necessary for patient safety.
3. Communicate orally and in writing as well as demonstrate behavior that indicates sensitivity to others. Nurses are required to function in highly compassionate areas where integrity, interpersonal skills and concern for others are desirable personal qualities
4. Demonstrate emotional health and intellectual abilities required to exercise sound judgement. The applicant must be flexible and able to adapt to change and stress.
5. Demonstrate physical health necessary to preform strenuous activities related to patient care, which include moving and lifting. (Must be able to lift or move more than 50 pounds)
6. Provide nursing care to patient with all types of health problems, including communicable diseases such as tuberculosis and HIV -(AIDS).

The requirements for admission into the Vocational Nursing Program, St. Philip's College, are in accordance with the Texas Board of Nurse Examiners, Austin, Texas. All admission requirements must be met and application process completed before submitting application to the Vocational Nursing Program for proper consideration.

## CERTIFICATE OF COMPLETION VOCATIONAL NURSING (2547)

TOTAL CREDIT HOURS REQUIRED: 46-50

|  | Major | Gen. Educ. Elective |
| :---: | :---: | :---: |
| First Semester |  |  |
| VNSG |  |  |
| VNSG |  |  |
| VNSG | 1420 Anatomy \& Physiology for Allied Health OR |  |
| BIOL | 2401 Human Anatomy \& Physiology I AND |  |
| BIOL | 2402 Human Anatomy \& Physiology II ----------------4-8 |  |
| VNSG | 1323 Basic Nursing Skills Co-req to VNSG 1502 --------- 3 |  |
| VNSG | 1502 Applied Nursing Skills |  |
|  | Co-req to VNSG 1323 and 1260 --------------------------- 5 |  |
| VNSG | 1260 Clinical-Practical Nurse-Co-req. to VNSG 1502 --- 2 |  |
| Second Semester |  |  |
| VNSG | 1329 Medical Surgical Nursing I ----------------------------3 |  |
| VNSG | 2160 Clinical-Practical Nurse-Co-req. to VNSG 1329 --- 1 |  |
| VNSG | 1332 Medical Surgical Nursing II --------------------------3 |  |
| VNSG | 2161 Clinical-Practical Nurse-Co-req. to VNSG 1332 --- 1 |  |
| VNSG | 2331 Advanced Nursing Skills -----------------------------3 |  |
| VNSG | 2162 Clinical-Practical Nurse-Co-req. to VNSG 2331 --- 1 |  |
| VNSG | 1136 Mental Health ------------------------------------------11--1 |  |
| VNSG |  |  |
| VNSG | 1163 Clinical-Practical Nurse- |  |
|  | Co-req. to VNSG 1238 \& 1138 -------------------- 1 |  |
| Third Semester |  |  |
| VNSG | 1330 Maternal/Newborn Nursing ---------------------------3 |  |
| VNSG | 1161 Clinical-Practical Nurse-Co-req. to VNSG 1330 --- 1 |  |
| VNSG | 1334 Pediatric Nursing ------------------------------------3 |  |
| VNSG | 1162 Clinical-Practical Nurse-Co-req. to VNSG 1334 --- 1 |  |
| VNSG | 1219 Professional Development --------------------------2 |  |
| VNSG | 2163 Clinical-Practical Nurse-Co-req. to VNSG 1219 --- 1 |  |
|  |  |  |

## Admission Requirement

Must be 18 years of age.

High school diploma or GED.
Individuals who have completed High School requirements in a foreign country must submit an official high school transcript translated in English. Contact the office of Advising \& Assessment for information regarding foreign transcripts. (210) 531-3263.

Entrance Exam / Pretest: Program requirement and
BNE requirement (Rule 233.65)

Pass the required entrance exam with the scores established by the program as acceptable for admission.

Any one of the following exams may be taken:

Accuplacer, ACT, ASSET and SAT scores (valid for (3) years). TASP/THEA (scores do not have expiration date).

In an effort to admit students that are adequately prepared in the skills assessed by the entrance exam/s, the entrance exam required by the program will not be waived.

Individuals with college degrees, ( regardless of the degree or type of degree), must still qualify for admission by taking an entrance exam and must pass with the qualifying scores established by the program for admission

Applicants must meet the entrance exam requirement before the application for admission is requested.

## Eligibility for Licensure Issues

Persons planning to enroll in the Vocational Nursing Program who may have eligibility issues that could result in denial of licensure would not be eligible for admission. The following are considered potential ineligibilities; criminal conduct and or conviction; mental illness; chemical dependency including alcohol.

Persons with eligibility issues would not be eligible for admission until the declaratory order process is completed with the Board of Nurse Examiners and proof of eligibility for licensure is provided.
Eligibility for licensure information go to www.bne.state.tx. us see BNE rules and regulations Texas Administrative code rule 213.30

## Criminal background check:

Applicant must consent for back ground check
Applicant is responsible for the cost
Persons with adverse report will be counseled by the program director to contact the BNE to confirm licensure eligibility.

An applicant with declaratory orders pending will be eligible for admission if the BNE determines that the applicant would be eligible for licensure.

When the applicant shows proof that eligibility for licensure has been granted by the BNE, the applicant will be placed in the order of current applicant roster for admission.

## Drug Screen:

Applicant must consent to drug screen
Applicant is responsible for the cost
Applicants with a positive drug screen are not eligible for admission.
Immunizations
Must have documentation of two MMRs, current TD, TB screening or chest X-Ray. Hepatitis-B series
Applicants must complete Hepatitis B series before application is submitted.
CPR
Must have current CPR (BCLS) card Infant, child and adult
All required immunizations as well as CPR must remain current while enrolled in the program.

Health insurance
Applicant must provide evidence of health insurance
Application
All required documents must be completed.
Incomplete applications will not be accepted.

# DEPARTMENT OF NURSING EDUCATION 

## Associate of Applied Science in Nursing Degree <br> LVN to ADN Mobility Program

The Department of Nursing Education offers the Associate of Applied Science Degree to students interested in upward mobility. The twelve-month course of study is designed to prepare the graduate to function safely and effectively as a provider of care, a coordinator of care and as a member of the profession of nursing. The curriculum includes a transition course as a bridge to the second year of an Associate in Applied Science in nursing, didactic and clinical nursing courses, and general education courses in selected humanities, biological, social and physical sciences. The curriculum reflects the significant and on-going changes in the health care delivery system. It provides a progressively more complex series of learning experiences to assist the student in developing problem-solving and critical thinking skills. Professionalism, ethical and legal issues, communication and nursing psychomotor skills are integrated throughout the curriculum. The curriculum consists of 28 credit hours of general education courses and 38 hours of nursing education courses. Classroom and laboratory experiences are held on the St. Philip's College Campus. The clinical component is provided in a variety of public and private health care settings.

This program is liable for all state mandates under the Texas Success Initiative, and is fully accredited by the Texas Higher Education Coordinating Board and by the Texas Board of Nurse Examiners. St. Philip's ADN Mobility Program is a member of the National League for Nursing (NLN). The student who successfully completes the program is eligible to apply for the National Council Licensure Examination for registered nurses (NCLEX-RN). The Texas Board of Nurse Examiners can be reached at Post Office Box 430, Austin, Texas 78767-0430 or by phone (512) 305-7400

Classes for the ADN Mobility begin each spring semester in January and end in December. Evening classes for the LVN to ADN Mobility Program begins each Fall Semester in August and end in August. Application Deadlines: Spring Program: First Friday in October, @ 5 p.m. Fall Program: First Friday in June, @ 5 p.m.

The LVN to ADN Mobility Program student with two failures in nursing courses will be dismissed from the program without the option of readmission.

The LVN to ADN Mobility Program applicant who has failed two courses in another nursing program will have met the threshold for being dropped from St. Philip's nursing program and is therefore ineligible for transfer or admission to St. Philip's LVN to ADN Mobility Program. All students requesting admission to the Department of Nursing Education must follow this sequence:

1. Apply to St. Philip's College for admission. Application to the College is made in the Sutton Learning Center, Records and Registration Office in Room 100. Phone number is 210-531-3290.
2. Send official copies of ALL college work to the Records and Registration Office.
3. Applicant must carry copies of all official transcripts including the official transcript from the LVN Program to the Nursing Education Department, prior to applying for admission to the ADN Mobility Nursing Program. Applicants must be present when the transcripts are evaluated. 4. Request an application packet and submit completed packet by the posted deadline with all official transcripts.

After items 1-4 have been completed, the application packet and transcripts will be evaluated by the following criteria:

1. Applicant holds a current license to practice Vocational Nursing in the State of Texas, or be eligible for reciprocity.
2. All the required general education courses with a grade of " C " or above.
3. Minimum overall grade point average of 2.0 or above for acceptance into program and 2.5 grade point average for all prerequisites.
4. (3) letters of reference, (1) letter of reference must be from a registered nurse (RN), Direct Supervisor is preferred.
5. Work experience validated, if the applicant has been licensed for more than two (2) years, by fulfilling one of the following criteria:
$\checkmark 6$ months recent full time clinical practice in a hospital or longterm care facility at the level of Licensed Vocational Nurse.
$\checkmark 1$ year of recent part time clinical practice in a hospital or nursing home at the level of Licensed Vocational Nurse.
$\checkmark$ Completion of a nursing refresher course with a clinical component in a hospital or longterm care facility at the level of Licensed Vocational Nursing.
6. Work experience validation is not required of applicants who have been licensed for less than two years.
7. Any potential student who has been convicted of a felony must submit a letter of review to the Board of Nurse Examiners and receive permission prior to being approved to take the NCLEXRN. This process may take up to eighteen months. Potential students are encouraged to discuss their situation with the Board of Nurse Examiners in Austin (512-305-7400), prior to entering the program.
8. Current immunizations.
9. CPR Health Provider Card required prior to clinical rotations.

## ASSOCIATE OF APPLIED SCIENCE LVN TO ADN MOBILITY PROGRAM (2697)

TOTAL CREDIT HOURS REQUIRED: 60


|  | Major | Gen. <br> Educ. | Elective |
| :---: | :---: | :---: | :---: |
| RNSG | 2263 Clinical - Advanced Concepts* ---------------------- 2 |  |  |
| RNSG | 2130 Professional Nursing Review and Licensure Prep* |  |  |
|  |  |  |  |
| * 8 Week Courses |  |  |  |
| Completion of all prerequisites must reflect grade of "C" or better and a cumulative grade point average of 2.5 or above. |  |  |  |
| RN EXIT. The student is required to pass a nationally accredited exit examination with a predetermined level in order to graduate from the program. After successful completion of the exit examination the student will be recommended to apply for the national licensing examination. |  |  |  |
| Successful completion of the program and passing the exit exam establishes graduation eligibility. |  |  |  |
| The student is allowed a total of five (5) attempts to pass the RN exit exam. The student is responsible for the cost of each RN exam taken. Initially the student will be allowed up to three |  |  |  |
| (3) attempts to pass the RN exit exam. Remediation is required after each attempt until success is achieved. |  |  |  |
| tud | ust abide by the catalog year he/she is admitted into the LVN | Mo | Progr |

Health Assessment, RNSG 1215 and Pharmacology, RNSG 1301: These two ADN program courses may be taken by LVNs before enrolling in the program. Verification of LVN licensure will be required.

## OCCUPATIONAL THERAPY ASSISTANT

The Occupational Therapy Assistant Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220. AOTA's phone number is (301) 652-AOTA. Graduates of the Program will be able to sit the national certification examination for the occupational therapy assistant administered by the National Board for Certification in Occupational Therapy (NBCOT). NBCOT can be contacted by writing to NBCOT, 800 South Frederick Ave, Suite 200, Gaithersburg, MD 20877-4150. After passing this exam, the individual will be a Certified Occupational Therapy Assistant (COTA). Once certified, the COTA must apply to the Texas Board of O.T. Examiners (TBOTE) for licensure to practice in the State of Texas. Address for TBOTE is 333 Guadalupe, Suite 2-510, Austin, TX 78701-3942. Graduation, certification, and licensure are separate mechanisms and are the responsibility of the individual student.
All occupational therapy courses must be taken in sequence. Non-OT courses can be taken any semester. All courses must be completed with a grade of "C" or better. A separate application is required and can be picked up in the Allied Health Office, Room 118, Science Building. Meeting minimal requirements does not guarantee acceptance into the Program due to limited class size.

## ASSOCIATE OF APPLIED SCIENCE

 OCCUPATIONAL THERAPY ASSISTANT (2543)TOTAL CREDIT HOURS REQUIRED: 68-72
Gen.
Educ. Elective


## PHILOSOPHY

Philosophy majors should follow the Associate of Arts Degree plan and check with department advisors for selection of electives and transfer of courses to senior institutions.

## ASSOCIATE OF ARTS PHILOSOPHY (2064)

TOTAL OF CREDIT HOURS REQUIRED: 70-72


## PHYSICAL THERAPIST ASSISTANT

The Physical Therapist Assistant Program is approved by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association. Graduates of the program will be able to sit for the licensure test given by the Texas State Board of Physical Therapy Examiners. The licensure test is the responsibility of the graduate. Some travel might be required for clinical education outside of San Antonio.

All physical therapy courses must be taken in sequence and can be taken only in the semester listed. All prerequisite courses and all courses required within the listed curriculum must be passed with a "C" or higher.

ENGL 1301, BIOL 2401, PHYS 1305, and MATH 1314 must be completed prior to application to the Program. BIOL 2402 must be completed before enrolling in the professional phase of the Program. Meeting minimal requirements does not guarantee acceptance into the Program because of limited class size.

## ASSOCIATE OF APPLIED SCIENCE <br> PHYSICAL THERAPIST ASSISTANT (2545)

TOTAL CREDIT HOURS REQUIRED: 71

| Major | Gen. Educ. | Elective |
| :---: | :---: | :---: |
| Prerequisites: |  |  |
| ENGL 1301 Freshman Composition I | 3 |  |
| BIOL 2401 Human Anatomy \& Physiology | 4 |  |
| BIOL 2402 Human Anatomy \& Physiology II <br> (Prerequisite- BIOL 2401) |  |  |
| PHYS 1305 Introduction to Physics I OR HIGHER ----------- |  |  |
| MATH 1314 College Algebra or Higher -----------------------------------------3 |  |  |
| YEAR 1 |  |  |
| First Semester |  |  |
|  |  |  |
| PTHA 1301 The Profession of Physical Therapy ---------------3 |  |  |
| PTHA 1321 Clinical Pathophysiology ----------------------------3 |  |  |
| PTHA 1413 Functional Anatomy ------------------------------------4. |  |  |
| Second Semester |  |  |
| PTHA 2305 Neurology --------------------------------------------------3 |  |  |
| PTHA 1305 Basic Patient Care Skills --------------------------------3 |  |  |
|  |  |  |
| PSYC 2301 General Psychology or |  |  |
| Introduction to Psychology --------------------------------------------------------3 |  |  |
| Third Semester |  |  |
| PTHA 1360 Clinical I - Physical Therapist Assistant ------------ 3 <br> YEAR2 |  |  |
| Fourth Semester |  |  |
| PTHA 2409 Therapeutic Exercise -----------------------------------4 |  |  |
| PTHA 2435 Rehabilitation Techniques --------------------------4 |  |  |
| PTHA 2460 Clinical II - Physical Therapist Assistant ---------- 4 |  |  |
| Fifth Semester |  |  |
| PTHA 2431 Management of Neurologic al Disorders ----------- 4 |  |  |
| PTHA 2317 Issues in Health Care ------------------------------------3 |  |  |
| PTHA 2660 Clinical III - Physical Therapist Assistant---------- 6 |  |  |
|  | 23 |  |

## PLUMBING AND PIPEFITTING TECHNOLOGY

Physical/Health Requirements:

1. Finger and manual dexterity is necessary when working with electrical and mechanical systems.
2. Ability to climb, balance, stoop, kneel, and/or lift heavy loads, i.e, pipe and tool boxes.
3. Near-visual acuity and depth perception needed when working with small parts.

## CERTIFICATE OF COMPLETION

PLUMBING TRADES (2535)
TOTAL CREDIT HOURS REQUIRED: 32

| Gen. |  |
| :--- | :--- |
| Major | Educ. |

```
First Semester
PFPB 1413 Introduction to the Plumbing Trade -------------------
PFPB 1450 Plumbing & Pipefitting Equipment & Safety ------ 4
PFPB 1440 Lawn Irrigation -----------------------------------------------
Second Semester
PFPB 1421 Plumbing Maintenance & Repair ---------------------
PFPB 2409 Residential Construction Plumbing I -----------------
PFPB 2445 Residential Construction Plumbing II -----------------
Summer Semester
PFPB 1405 Basic BluePrint Reading for Plumber -----------------
PFPB 2436 Commercial Construction and fixture setting ------ 4
```

TOTAL CREDIT HOURS:32

|  | Gen. |  |
| :--- | :--- | :--- |
| Major | Educ. |  |
| Elective |  |  |


| First | Semester |
| :---: | :---: |
| PFPB | 1413 Introduction to the Plumbing Trade -----------------4 |
| PFPB | 1450 Plumbing \& Pipefitting Equipment \& Safety ------ 4 |
| PFPB | 1421 Plumbing Maintenance \& Repair --------------------4 |
| Second Semester |  |
| PFPB | 1405 Basic BluePrint Reading for Plumber ---------------- 4 |
| PFPB | 2409 Residential Construction Plumbing I --------------- 4 |
| PFPB | 2436 Commercial Construction \& Fixture Setting |

TOTAL CREDIT HOURS: 24

## PRACTICUMS

Practicums are designed to provide on-the-job learning experience for the students in their chosen occupational field.

Students enrolled in practicums serve 14 hours per week on jobs in the community and in most cases, two hours of seminar on campus, and receive four semester hours of credit. The coordinator acts as counselor and instructor of the seminar and advises students on job-related problems. Seminar attendance is mandatory.

It is the responsibility of the student to secure an acceptable job-training site; the coordinator will assist the student in the site selection and give final approval. The student's on-the-job supervisor may be considered an adjunct faculty member of St. Philip's College.

Students planning to register for the practicum course (except for air conditioning and auto mechanics) should arrange an interview with the coordinator of occupational internships before or during the preregistration period to make plans for securing a job-training site. Air conditioning and auto mechanics majors should contact the person in the respective departments in charge of the practicum. The chairperson of a student's program should be contacted for further information.

Under certain conditions, the Department Chairperson may approve another course to substitute for the practicum if deemed advisable. For all practicums, a laboratory fee will be added.

## PRACTICUMS ARE OFFERED IN THE FOLLOWING PROGRAMS:

Air Conditioning, Heating and Refrigeration
Aircraft Technology
Auto/Automotive Body Repair
Automotive Technology
Collision Technology
Diesel Technology
Computer Aided Drafting (Architectural)
Electrician
Electronics
Machinist/Machine Technology
Welder/Welding Technology
Homebuilding
For practicums in Business Information Systems Technology, Allied Health or Tourism, Hospitality, and Culinary Arts, contact the Department Chairperson. Semester credit hours may vary for practicums in Business Information Systems Technology or Allied Health.

## PRE-ENGINEERING

This degree program is managed by the Mathematics, Computer Science, and Business Administration Department.

Pre-engineering majors should follow the Associate of Arts Degree plan below. It is essential to check with Departmental advisors before selection is made of Mathematics, Computer Science, science, and elective courses. Advisement is essential also for transfer information. Articulation plans exist with several universities. Interested students should contact their advisor for further information.

## ASSOCIATE OF ARTS PRE-ENGINEERING (2008)

TOTAL CREDIT HOURS REQUIRED: 71-76

|  | Major | Gen. Educ. | Elective |
| :---: | :---: | :---: | :---: |
| Core | Courses |  |  |
| ENGL | 1301 Freshman Composition I | - 3 |  |
| ENGL | 1302 Freshman Composition II | -- 3 |  |
| GOVT | 2305 American Government I | -- 3 |  |
| GOVT | 2306 American Government II | -3 |  |
| HIST | 1301 History of the US I | -- 3 |  |
| HIST | 1302 History of the US II | -3 |  |
| Computer Literacy |  |  |  |
| COSC | 1301 ------ |  |  |
| Computer Science (Select one course) |  |  |  |
|  |  |  |  |
| Foreign Language/Speech (Select two courses) |  |  |  |
|  |  |  |  |
| Natural Science (Select two courses) |  |  |  |
| CHEM 1411 and CHEM 1412; or PHYS 1401 and |  |  |  |
|  |  |  |  |
| Kinesiology (Select two courses) |  |  |  |
| KINE 1100 through KINE 1238 -----------------------------------------------------2-3 |  |  |  |
| Humanities/Fine Arts (Select one course) |  |  |  |
|  |  |  |  |
| ENGL 2322, ENGL 2332; HIST 2311, HIST 2312; HUMA 1301, |  |  |  |
|  |  |  |  |
| (Select one course) |  |  |  |
| ARTS 1301, ARTS 1303; DRAM 1310; MUSI 1306-1310 -------------------3 |  |  |  |
| Social Science (Select two courses) |  |  |  |
| ECON 2301, ECON 2302, GEOG 1303, PSYC 2301, |  |  |  |
| SOCI 1301, URBS 1371 ----------------------------------------------------------------- |  |  |  |
| Mathematics-PRE-ENGINEERING (five courses) |  |  |  |
| MATH 1316 OR MATH 2412, AND ---------------------------3-4 |  |  |  |
| MATH 1348, MATH 2413, MATH 2414, MATH 2415 ------- 15 |  |  |  |
|  |  |  |  |
| TOTAL | L CREDIT HOURS: --------------------------------------18-19-19 | 52-55 |  |

## PRE-LAW

Pre-law majors should follow the Associate of Arts Degree plan and check with Department advisors for selection of electives and transfer of courses to senior institutions.

## ASSOCIATE OF ARTS <br> PRE-LAW (2015)

TOTAL CREDIT HOURS REQUIRED: 72-75


PRE-NURSING
(PRE-R.N. - Natural Science)

## ASSOCIATE OF SCIENCE PRE-NURSING (2035)

TOTAL CREDIT HOURS REQUIRED: 82-84


Summer school may be necessary to augment a student's semester load. He or she should contact the Nursing School that he or she plans to attend for exact courses required.

## PRE-PHARMACY <br> (Natural Science)

The following curriculum is specified for Pre-Pharmacy. If a student intends to attend a pharmacy school, he or she should contact the Department advisors.

## ASSOCIATE OF SCIENCE <br> PRE-PHARMACY (2061)

TOTAL CREDIT HOURS REQUIRED: 85-87


Summer school may be necessary to augment a student's semester load.

## PRE-SOCIAL WORK

Pre-Social Work majors should follow the Associate of Arts Degree plan and check with Department advisors for selection of electives and transfer of courses to senior institutions.

## ASSOCIATE OF ARTS PRE-SOCIAL WORK (2065)

TOTAL CREDIT HOURS REQUIRED: 69-72


## PSYCHOLOGY

The Psychology and Philosophy Department provides courses for the students who are interested in a general background within the behavioral sciences area. Students planning to major in psychology should check with the psychology/philosophy advisors concerning course sequences, transferability, and degree plans.

ASSOCIATE OF ARTS

## PSYCHOLOGY (2022)

TOTAL CREDIT HOURS REQUIRED: 69-72


## RADIOGRAPHY-DIAGNOSTIC MEDICAL IMAGING

The Radiography Program is accredited by the Joint Review Committee on Education in Radiologic Technology. Graduates of the Program will be able to sit for the National Certification Examination, the American Registry of Radiologic Technologists (A.R.R.T.). After successful completion of this exam, the individual will become a Certified Radiographer R.T.(R). Developmental courses must be completed prior to enrolling in RT courses. Students must be able to meet and maintain all technical standards (Job Functions) of the R.T. Program (see program director for details). A combined cumulative 2.8 GPA is required from all colleges and universities attended; together with three (3) academic curriculum college-level courses completed at the time of application submission. Failure to successfully complete any RT course with a "C" or above will prohibit progression in the Radiography Program. All students must be able to meet the clinical and classroom schedules; failure to do so will result in being dropped. Within 28 calendar days of graduation the student may apply to the Texas Department of Health for an Medical Radiologic Technologist (M.R.T.) certification to practice in the state of Texas. Graduation and certifications are separate mechanisms and are the responsibility of the individual student. Advanced courses are offered in the form of Enhanced Skills; namely SONO, CT/MRI, etc. Mammography is offered through the Continuing Education (C.E.) Department.

## ASSOCIATE OF APPLIED SCIENCE <br> RADIOGRAPHY TECHNOLOGIST (2546)

TOTAL CREDIT HOURS REQUIRED: 72-76



## ASSOCIATE OF APPLIED SCIENCE DIAGNOSTIC MEDICAL SONOGRAPHY (2901)

TOTAL CREDIT HOURS REQUIRED: 69

|  | Gen. |  |
| :---: | :---: | :---: |
| Major | Educ. | Elective |

Prerequisites:
HITT 1305 Basic Medical Terminology -----------------------------------3
PHYS 1305 Introduction to Physics I -------------------------------------------------3

BIOL 2402 Human Anatomy and Physiology ---------------------------------------4
First Semester

DMSO 1210 Introduction to Sonography ------------------------------2
DMSO 1541 Abdominopelvic Sonography ------------------------------ 5

Second Semester
DMSO 1302 Basic Ultrasound Physics -------------------------------------3
DMSO 1201 Techniques of Medical Sonography ------------------- 2
DMSO 2341 Sonography of Abdominopelvic Pathology -------- 3
ENGL 1302 Freshman Composition II ----------------------------------------------------3
Third Semester
DMSO 1561 Clinical Diagnostic Medical Sonography I ----------- 5
DMSO 1342 Intermediate Ultrasound Physics -----------------------3
Fourth Semester
DMSO 2353 Sonography of Superficial Structures ------------------ 3
DMSO 2462 Clinical Diagnostic Medical Sonography ------------- 4
DMSO 2351 Doppler Physics -----------------------------------------------3
PSYC 2301 General Psychology -------------------------------------------------------------3


## ADVANCED TECHNICAL CERTIFICATE DIAGNOSTIC MEDICAL SONOGRAPHY (2901)

TOTAL CREDIT HOURS REQUIRED: 22

|  | Gen. |  |
| :--- | :--- | :--- |
| Major | Educ. |  |
| Elective |  |  |

First Semester
DMSO 1351 Sonography Cross Sectional Anatomy ---------------- 3
DMSO 2441 Sonography of Abdominopelvic Pathology --------- 4
Second Semester
DMSO 2405 Sonography of Obstretis/Gynecology ---------------- 4
DMSO 1302 Basic Ultrasound Physics -----------------------------------3
DMSO 1360 Sonography Clinical I ----------------------------------------3

Third Semester
DMSO 1361 Sonography Clinical II ---------------------------------------3
DMSO 2253 Sonography of Superficial Structures ------------------ 2
TOTAL CREDIT HOURS: -------------------------------------------------22

## ENHANCE SKILLS CERTIFICATE

## COMPUTED TOMOGRAPHY (2903)

TOTAL CREDIT HOURS REQUIRED: 12

|  | Gen. |  |
| :--- | :--- | :--- |
| Major | Educ. | Elective |

[^7]
## ENHANCE SKILLS CERTIFICATE MAGNETIC RESONANCE IMAGING (2904)

TOTAL CREDIT HOURS REQUIRED: 12

| Major | Gen. <br> Educ. Elective |
| :---: | :---: |
| First Semester |  |
| RADR 2340 Sectional Anatomy for Medical Imaging ---------- 3 |  |
| MRIT 2330 Principles of Magnetic Resonance Imaging -------- 3 |  |
| Second Semester |  |
| MRIT 2360 Clinical I - MRI ---------------------------------------------3 |  |
| Third Semester |  |
| MRIT 2361 Clinical II - MRI --------------------------------------------3 |  |

## RAILROAD OPERATIONS

The Railroad Operations program is designed to prepare students for entry-level positions in railroad transportation or mechanical departments. Railroads offer challenging careers in these areas with excellent pay and benefits. Students interested in transportation department careers should consider the Certificate of Completion in Railroad Operations. This program provides the railroad courses and academic supporting courses. Students interested in mechanical department careers should consider the Mechanical Option Certificate. This program provides the railroad courses with technical supporting courses that provide basic skills applicable to locomotive and railcar maintenance. Regardless of specialization, all students will learn the unique terminology and characteristics of the industry and study the General Code of Operating Rules, which is adopted by most North American railroads. Upon successful completion of the first 2 semesters of study, students may have the opportunity to gain actual railroad experience during the final semester. When considering a railroad career, students should keep in mind that relocation, night and weekend work, and drug testing is typically required of railroad employees. Many transportation and mechanical department jobs also require physical, outdoor work in all weather conditions.

CERTIFICATE OF COMPLETION
RAILROAD OPERATIONS (2713)

|  |  | TOTAL CREDIT HOURS REQUIRED: 32 |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Major | Gen. <br> Educ. | Elective |
| First | Semester |  |  |  |
| RAIL | 1372 Railroad Technical Careers | ----------------- 3 |  |  |
| ENGL | 1301 Freshman Composition I -- | ----------------------- |  |  |
| RAIL | 1371 The History of Railroading | ---------------- 3 |  |  |
| ITSC | 1301 Intro to Computer Info Sys | --------- |  |  |



Note 1: OR ECON 2301 OR ECON 2302

## CERTIFICATE OF COMPLETION RAILROAD OPERATIONS-MECHANICAL (2734)

TOTAL CREDIT HOURS REQUIRED: 40

|  | Gen. |  |
| :--- | :--- | :--- |
| Major | Educ. |  |


| First | Semester |
| :---: | :---: |
| RAIL | 1371 The History of Railroading ----------------------------3 |
| DEMR |  |
| ELPT | 1411 Basic Electrical Theory ------------------------------4 |
| RAIL | 1372 Railroad Technical Careers ---------------------------3 |
| Second Semester |  |
| RAIL | 2470 Locomotive and Freight Car Fundamentals -------- 4 |
| RAIL | 2374 Railroad Safety, Quality, and the Environment --- 3 |
| SPCH | 1321 Business and Professional Speech ----------------- |
| RAIL | 2373 Railroad Operations -----------------------------------3 |
| Third Semester |  |
| WLDG | 1421 Intro to Welding Fundamentals ----------------------4 |
| DEMR |  |
| ITSC | 1301 Intro to Computer Info. Systems |
| DEMR |  |

## RESPIRATORY CARE


#### Abstract

The Respiratory Care Technology Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) and in compliance with the essentials and standards of the Committee on Accreditation for Respiratory Care (CoARC)

Graduates of this two-year A.A.S. Degree program are eligible to sit for the National Board for Respiratory Care Entry Level Examination (CRT) and the Advanced Level Examination (RRT) for Repiratory Care Practitioners. Upon successful completion of these examinations, the graduate will be awarded the CRT and the RRT credential respectively.

Students planning to transfer to a university-based Respiratory Care Program for a B.S. in Respiratory Care should complete Math 1314, Biology 2401, and Biology 2402 in lieu of the published A.A.S. prerequisite courses.


## ASSOCIATE OF APPLIED SCIENCE RESPIRATORY CARE TECHNOLOGY (2539)

TOTAL CREDIT HOURS REQUIRED: 72-76

YEAR 1 Major |  | Gen. |
| :--- | :--- | :--- |
| Educ. | Elective |

--------------------------------------------- 3
Prerequisites:

BIOL 2404 Human Anatomy \& Physiology OR

* BIOL 2401 and BIOL 2402 --------------------------------------------------------------4

First Semester
RSPT 1271 Basic Respiratory Care Pharmacology --------------- 2
RSPT 1207 Cardiopulmonary Anatomy \& Physiology --------- 2
RSPT 1360 Clinical ----------------------------------------------------------3
RSPT 1329 Respiratory Fundamentals I --------------------------------3
ENGL 1302 Freshman Composition II -------------------------------------------------3
Second Semester
RSPT 1361 Clinical ------------------------------------------------------------3
RSPT 1411 Respiratory Care Procedures II -------------------------- 4
RSPT 1431 Repiratory Care Fundamentals II -----------------------4
RSPT 2210 Cardiopulmonary Disease ----------------------------------- 2
Third Semester

Fourth Semester
RSPT 1141 Respiratory Home Care \& Rehabilitation ---------- 1
RSPT 2360 Clinical ------------------------------------------------------------3
RSPT 2353 Neonatal/Pediatric Cardiopulmonary Care --------- 3
RSPT 2325 Cardiopulmonary Diagnostics ---------------------------3
BIOL 2420 Microbiology \& Clinical Path. 3 - 4

## Fifth Semester

RSPT 2231 Clinical Simulations in Respiratory Care ------------ 2
RSPT 2361 Clinical ------------------------------------------------------------3
RSPT 2405 Pulmonary Diagnostics ------------------------------------- 4
PSYC 2301 General Psychology ----------------------------------------------------------3
Sixth Semester
RSPT 2562 Clinical ----------------------------------------------------------- 5

**Both BIOL 2401 and BIOL 2402 must be completed in lieu of BIOL 2404 to satisfy program requirements.

## RESTAURANT MANAGEMENT

## ASSOCIATE OF APPLIED SCIENCE RESTAURANT MANAGEMENT (2503)

## PROGRAM ACCREDITED BY THE AMERICAN CULINARY FEDERATION EDUCATIONAL INSTITUTE ACCREDITING COMMISSION

TOTAL CREDIT HOURS REQUIRED: 67-68


## SOCIOLOGY

Sociology majors should follow the Associate of Arts Degree plan and check with Department advisors for selection of electives and transfer of courses to senior institutions.

ASSOCIATE OF ARTS SOCIOLOGY (2023)

TOTAL CREDIT HOURS REQUIRED: 69-72

|  | Major | Gen. Educ. | Elective |
| :---: | :---: | :---: | :---: |
| Core Courses |  |  |  |
|  |  |  |  |
| ENGL 1302 Freshman Composition |  |  |  |
| GOVT 2305 American Government |  |  |  |
| GOVT 2306 American Government II ---------------------------------------------3 |  |  |  |
| HIST 1301 History of the US |  |  |  |
|  |  |  |  |
| Kinesiology (Select two courses) |  |  |  |
| KINE 1100 through KINE 1238 ----------------------------------------------------1-2 |  |  |  |
| Foreign Language/Speech (Select two courses) |  |  |  |
|  |  |  |  |
| Computer Science (One course) |  |  |  |
|  |  |  |  |
| Humanities/Fine Arts |  |  |  |
| (Select one course) |  |  |  |
| ENGL 2322, ENGL 2332, ENGL 2376; HIST 2311, HIST 2312; |  |  |  |
| HUMA 1301, HUMA 1302; PHIL 1301 ----------------------------------------------- |  |  |  |
| (Select one course) |  |  |  |
| ARTS 1301, ARTS 1303; DRAM 1310; MUSI 1306-1310 --------------------3 |  |  |  |
| Mathematics (Select one course) |  |  |  |
|  |  |  |  |
| Natural Science (Select two courses) |  |  |  |
| BIOL 1400 through BIOL 2499; CHEM 1400 |  |  |  |
| through CHEM 2499; PHYS 1400 through |  |  |  |
| PHYS 2499 |  |  |  |
| Social Science (Select two courses) |  |  |  |
| ECON 2301, ECON 2302, GEOG 1303, GEOG 2312, |  |  |  |
|  |  |  |  |
| Major Course Requirements - Sociology (Select five courses) |  |  |  |
| SOCI 1301, SOCI 1306, SOCI 1370, SOCI 1372, |  |  |  |
| SOCI 2301, SOCI 2319, SOCI 2336, SOCI 2370 ------------------15 |  |  |  |
|  |  |  |  |
| TOTA |  | 51-5 |  |

## SPANISH

The Foreign Language Program endeavors to give students a basic knowledge of a second language, specifically Spanish and to acquaint them with the Spanish culture in order to prepare them for integration into a multi-cultural society.

## ASSOCIATE OF ARTS <br> FOREIGN LANGUAGE (SPANISH) (2010)

TOTAL CREDIT HOURS REQUIRED: 63-64

|  | $\begin{array}{ll}  & \text { Gen. } \\ \text { Major } & \text { Educ. } \end{array}$ | Elective |
| :---: | :---: | :---: |
| Core Courses |  |  |
| ENGL 1301 Freshman Composition I ---- | ------ 3 |  |
| ENGL 1302 Freshman Composition II --- | --- 3 |  |
| GOVT 2305 American Government I --- | -- 3 |  |
| GOVT 2306 American Government II -- | -- 3 |  |
| HIST 1301 History of the US I - | --------- 3 |  |
| HIST 1302 History of the US II- | -- 3 |  |
| Kinesiology (Select two courses) |  |  |
| KINE 1100 through KINE 1238 ----------------------------- | ------------- 2 |  |
| Computer Science (Select one course) |  |  |
| COSC 1301, COSC 1316, COSC 1318, COSC 1315 ------ | ------------ 3 |  |
| Humanities/Fine Arts |  |  |
| (Select one course) |  |  |
| ENGL 2322, ENGL 2332; HIST 2311, HIST 2312; |  |  |
| HUMA 1301, HUMA 1302; PHIL 1301; EDUC 1301 -- | ------------ 3 |  |
| (Select one course) |  |  |
| ARTS 1301, ARTS 1303; MUSI 1306-1310 -------------- | --------- 3 |  |
| Mathematics (Select one course) |  |  |
| MATH 1314, MATH 1316, MATH 1348, MATH 1442, |  |  |
| MATH 1332, MATH 2412, MATH 2413, MATH 2414, |  |  |
| MATH 2415 --------------------------------- | ----- 3-4 |  |
| Natural Science (Select two courses) |  |  |
| BIOL 1400 through BIOL 2499; CHEM 1400 |  |  |
| through CHEM 2499; PHYS 1400 through |  |  |
| PHYS 2499 ---------- | ------------ 8 |  |
| Social Science (Select two courses) |  |  |
| ECON 2301, ECON 2302, GEOG 1303, PSYC 2301, |  |  |
| SOCI 1301 ---------------------- | ------- 6 |  |
| Major Course Requirements - |  |  |
| Foreign Language (Four courses) |  |  |
| SPAN 1411, SPAN 1412, SPAN 2311, SPAN 2312 ------- | - 14 |  |
| Elective (one college level course) ----- |  |  |
| TOTAL CREDIT HOURS: | - 14 ------ 46-47 |  |

## SPEECH

Recognizing that speech is closely related to, draws upon, and contributes to the other academic disciplines, the Speech Program plays an important role in the mission of the College. The objective of the speech curricula is to provide students with the knowledge and skills which will enable them to function as effective communicators.

## ASSOCIATE OF ARTS <br> SPEECH (2024)

TOTAL CREDIT HOURS REQUIRED: 61-63


1. (*) MATH 1314, MATH 1332, or any math for which MATH 1314 is a prerequisite
2. (*) BIOL 1406-1409; CHEM 1406-1412; PHYS 1401, PHYS 1402
3. (*) ENGL 2322-2377
4. (*) SOCI 1301-2336; PSYC 2301-2317

## SURGICAL TECHNOLOGY

The Surgical Technology Program is accredited by the Commission on Accreditation of Allied Health Education Programs in cooperation with the Accreditation Review Committee - Surgical Technologist.

All Surgical Technology courses must be taken only in the semester listed. All prerequisite courses and all courses listed within the listed curriculum must be passed with a "C" or higher. Meeting minimal requirements does not guarantee acceptance into the program because of limited class size.

## CERTIFICATE OF COMPLETION SURGICAL TECHNOLOGY (2544)

TOTAL CREDIT HOURS REQUIRED: 55


## THEATRE (DRAMA)

For information, consult the departmental faculty. Students seeking a degree in Theatre (Drama) should seek information early concerning the specific transfer requirements of the senior institution of their choice. Students majoring in Theatre (Drama) should follow the Associate of Arts Degree plan. Students are required to register for one of the following each semester: DRAM 1120, 1121, 2120, or 2121.

## ASSOCIATE OF ARTS THEATRE (2041)



## ASSOCIATE OF ARTS

 STAGE PRODUCTION AND TECHNOLOGY (2069)TOTAL CREDIT HOURS REQUIRED: 66-67
Major Educ. Elective

*or any MATH course for which MATH 1314 is a prerequisite.

## TOURISM, HOSPITALITY, AND CULINARY ARTS

This Department offers programs to prepare students for immediate entry into the hospitality labor force with marketable skills or to articulate with four-year college and university programs in the hospitality field. The Program's offerings include degree plans leading to the Associate of Applied Science Degree and Certificates of Completion. The Department presents the student with an education which provides entry level skills and provides a foundation upon which career advancement can be based. Selected programs of study also have been reviewed and accredited by the American Culinary Federation Accrediting Commission.

## ASSOCIATE OF APPLIED SCIENCE PROGRAMS

Baking and Pastry Arts
Culinary Arts
Hospitality Event Management
Hotel Management
Restaurant Management

## CERTIFICATE PROGRAMS

Baking Principles
Culinary Studies
Hotel Limited Service Property Management

## WELDER/WELDING TECHNOLOGIST

The orientation of the Program is toward early entry into the labor force with marketable skills. Graduates of this program can receive either an Associate in Applied Science Degree or a certificate. The objective of the program is to provide the student with an education which satisfies entrylevel skills and provide a sound foundation on which career advancement can be based.

The Welding Program has high school articulation programs, which offer high school students up to eight semester hours of credit in welding.

Physical/Health Requirements:

1. Finger and manual dexterity.
2. Ability to climb, balance, stoop, kneel, and/or lift heavy objects.
3. Near-visual acuity and depth perception.

American Welding Society (A.W.S.) certification is available to students requesting it. Fee is required. See Program Director or Department Chairperson for details. NOTE: Once enrolled in a certificate program, a student should not deviate from the courses specified in the approved curriculum.

## ASSOCIATE OF APPLIED SCIENCE WELDER/WELDING TECHNOLOGIST (2712)

TOTAL CREDIT HOURS REQUIRED: 70

|  | Gen. |  |
| :--- | :--- | :--- |
| Major | Educ. | Elective |

## YEAR 1

First Semester
WLDG 2439 Advanced Oxy-Fuel Welding ------------------------------4
WLDG 1428 Intro to Shielded Arc Welding ---------------------------- 4
ITSC 1301 Introduction to Computers ------------------------------------------------3
*SPCH 1321 Business/Professional Speech ------------------------------------------3
Second Semester
WLDG 2543 Advanced Shielded Arc Welding ------------------------- 5
WLDG 1534 Intro to Gas Tungsten Arc Welding ---------------------- 5
WLDG 1417 Intro to Layout and Fabrication ------------------------ 4
*PHYS 1305 Intro to Physics I -------------------------------------------------------------3
Summer Session
WLDG 1413 Intro to Blueprint Reading for Welders --------------- 4
*GOVT 2301 American/Texas -------------------------
First Semester
WLDG 2551 Advanced Gas Tungsten Arc Welding ------------------ 5
WLDG 1430 Intro to Gas Metal Arc Welding ------------------------ 4
WLDG 2435 Advanced Layout and Fabrication ------------------------4
*ENGL 1301 Freshman Composition I4

## Second Semester

WLDG 2553 Advanced Pipe Welding ------------------------------------- 5
WLDG 2447 Advanced Gas Metal Arc Welding -----------------------4
WLDG 2488 Internship-Welder/Welding Technologist ** ------ 4
*MATH 1373 College Mathematics --------------------------------------------------------3

TOTAL CREDIT HOURS: -------------------------------------------------------18
*This is part of the General Academic Core Requirement, all substitutions must be approved prior to enrollment by a department advisor. Students wishing to transfer academic credits to other institutions or students transferring credits to St. Philip's College must also see a department advisor. See pages 99-100 for transferable courses.

## CERTIFICATE OF COMPLETION STRUCTURAL/PIPE LAYOUT (2550)

## TOTAL CREDIT HOURS REQUIRED: 34



# CERTIFICATE OF COMPLETION <br> MANUAL/SEMI-MANUAL INERT GAS WELDING GTAW/GMAW WELDER (2724) 

TOTAL CREDIT HOURS REQUIRED: 34

| Major | Gen. Elective |
| :---: | :---: |
| First Semester |  |
| WLDG 1413 Intro to Blueprint Reading for Welders -------------4 |  |
| WLDG 2439 Advanced Oxy-Fuel Welding -------------------------4 |  |
| WLDG 1534 Intro to Gas Tungsten Arc Welding ------------------ 5 |  |
| WLDG 2551 Advanced Gas Tungsten Arc Welding --------------- 5 |  |
| Second Semester |  |
| WLDG 1428 Intro to Shielded Metal Arc Welding ---------------- 4 |  |
| WLDG 1430 Intro to Gas Metal Arc Welding ---------------------4 |  |
| WLDG 2447 Advanced Gas Metal Arc Welding ------------------ 4 |  |
| WLDG 2488 Internship - Welder/Welding Technologist -------- 4 |  |
|  |  |




The numbers listed on the right hand margin of the course descriptions (ex: 3-3-0) are explained below:

- The first digit is the number of semester credit hours for course.
- The second digit is the number of lecture hours per week in a regular 16-week semester.
- The third digit is the number of laboratory/clinical/internship/practicum hours per week in a regular 16 -week semester.
- Hours met per week are based on semester-length classes; courses of shorter during such as flex classes, will meet for more hours per week for equivalency.


## AUTOMOTIVE BODY REPAIRER (COLLISION TECHNOLOGY \& VEHICLE INTERIORS)

## ABDR 1301 AUTO REPAIR \& REPAINTING

Prerequisites: None
Fees: Laboratory
Shop safety practices and the use of hand and power tool; techniques of bending, shrinking, cutting, and welding metals and plastics and frame straightening. Fiberglass repair, body preparation, application of body plastic, sanding, priming, painting, and detailing.

## ABDR 1307 AUTO BODY WELDING

Prerequisites: None
Fees: Laboratory
Fundamentals of automotive welding processes. Skill development in oxy/ acetylene, stick are, MIG, and cutting processes in a variety of applications.

## ABDR 1380 COOPERATIVE TRAINING

Prerequisite: See program advisor
Fees: Laboratory
An intermediate or advanced course with lecture and work-based instruction that helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. Indirect supervision is provided by the work supervisor while the lecture is provided by the college faculty or by other individuals under the supervision of the educational institution. Cooperative education may be a paid or unpaid learning experience.

Fees: Laboratory
Notes: Formerly BODY 1401
Emphasis on basic current metal working techniques, shop safety, proper tool usage, product application, and skill development utilizing various body features including metal principles.

## ABDR 1431 BASIC REFINISHING

Prerequisite: None
Fees: Laboratory
Notes: Formerly BODY 1402
An introduction to terms, trade practices, hand tools, power tools, current refinishing products, shop safety, and equipment used in the automotive refinishing industry. Painting of trim and replacement parts included. Emphasis on surface preparation. Introduction to masking techniques.

## ABDR 1442 STRUCTURALANALYSIS \& DAMAGE REPAIR II <br> (4-2-6)

Prerequisites: See program advisor
Fees: Laboratory
Continuation of general repair and replacement procedures for damaged structural parts and collision damaged.

## ABDR 1449 AUTO PLASTIC AND SHEET MOULDINGS

Prerequisite: None
Fees: Laboratory
A comprehensive course in repair of interior and exterior plastics including the use of various types of adhesives and state-of-the-art welding. Repairing and replacing of padded dash covers will be emphasized.

## ABDR 1458 INTERMEDIATE REFINISHING

Prerequisite: See Program Advisor.
Fees: Laboratory
Mixing and spraying of automotive topcoats. Emphasis on formula ingredient, reducing, thinning, and special spraying techniques. Introduction to partial panel refinishing techniques and current industry paint removal techniques.

## ABDR 2257 COLLISION REPAIR SHOP MANAGEMENT

Prerequisite: See program advisor
Fees: Laboratory
A study of methods and equipment used in state of the art repair shops to improve management functions and profitability.

## ABDR 2355 COLLISION REPAIR ESTIMATING

Prerequisite: See Program Advisor.
Fees: None
Notes: Formerly BODY 2412
An advanced course in collision estimating and development of an accurate damage report. Study of methods in improving management functions and profitability.

## ABDR 2402 AUTO BODY MECHANICAL \& ELECTRICAL SERVICE <br> (4-2-6)

Prerequisites: See program advisor
Fees: Laboratory
Instruction in the repair, replacement, and/or service of those mechanical or electrical systems that are subject to damage from a collision. Topics include drive train removal, reinstallation and service; cooling system service and repair; exhaust system service; and emission control systems. Additional topics include wire and connector repair, reading wiring diagrams, and troubleshooting.

## ABDR 2437 STRUCTURAL ANALYSIS AND DAMAGE REPAIR V

Prerequisite: ABDR 1419, ABDR 1307
Fees: Laboratory
Notes: Formerly BODY 2407
Skill development in the operation of frame equipment and the procedures involved in making satisfactory repairs of supporting structures on both conventional and unitized constructed vehicles. Special emphasis on conducting a thorough damage analysis as well as demonstrating proper holding, blocking, tie-down, and pulling. Vehicle measurements to manufacturer's specification demonstrated.

## ABDR 2441 MAJOR COLLISION REPAIR AND PANEL REPLACEMENT

Prerequisite: ABDR 2437 and ABDR 1307
Fees: Laboratory
Notes: Formerly BODY 2410
Instruction in preparation of vehicles for repair including removal and reinstallation of fenders, bumpers, trims, head and door liners, locks, handles, fascia, headers, doors, tailgates, deck lids, hatches and hoods. Interpreting information from damage reports, planning repair sequences, selecting appropriate tools and organizing removal parts for reinstallation are also included. Special emphasis on developing safe work habits.

## ABDR 2449 ADVANCED REFINISHING

Prerequisites: ABDR 1331
Fees: Laboratory
Skill development in multi-stage refinishing including base coat/clear coat techniques. Further development in identification of problems and solutions in color matching and partial panel refinishing.

## ABDR 2451 SPECIALIZED REFINISHING TECHNIQUES

Prerequisites: ABDR 2449
Fees: Laboratory
Advanced topics in specialty automotive refinishing. Emphasis on refinishing of vinyl tops, interior plastics, fiberglass, and aluminum and galvanized panels as well as custom graphics and current industry innovations.

## ABDR 2453 COLOR ANALYSIS \& PAINT MATCHING

Prerequisites: ABDR 2449
Fees: Laboratory
Color theory, color analysis, tinting, and advanced blending techniques for commercially acceptable paint matching.

## ACCOUNTING

## ACCT 2301 PRINCIPLES OF ACCOUNTING I

Prerequisite: None
A study of fundamental financial accounting concepts and principles. Focus on the accounting cycle for service and merchandising business, accounting systems design, inventory methods, internal control concepts, financial reporting, plant assets and depreciation methods.

## ACCT 2302 PRINCIPLES OF ACCOUNTING II

Prerequisite: ACCT 2301
Corporations, debt and equity, financing, financial statement analysis, cash flow statement, manufacturing operations, cost systems to include job order, process, and standard cost systems, responsibility accounting, budgeting, cost-volume-profit analysis, managerial accounting concepts and principles, non-routine decision making.

## ACCOUNTING INFORMATION SYSTEMS

## ACNT 1311 INTRO TO COMPUTERIZED ACCOUNTING

Fees: Laboratory
Introduction to utilizing the computer in maintaining accounting records, making management decisions, and processing common business applications with primary emphasis on a general ledger package.

## ACNT 1326 PRINCIPLES OF ACCOUNTING II

Prerequisite: ACNT 1425
A study of the fundamentals of managerial accounting. Emphasis on budgeting, planning, management decision-making, and analysis of financial reports.

## ACNT 1329 PAYROLLAND BUSINESS TAX ACCOUNTING

(3-3-0)
Prerequisite: ACNT 1425
A study of payroll procedures, taxing entities, and reporting requirements of local, state, and federal taxing authorities in a manual and computerized environment.

ACNT 1331 FEDERAL INCOME TAX: INDIVIDUAL
Notes: Offered in Fall only
A study of the laws currently implemented by the IRS, providing a working knowledge of preparing taxes for the individual.

## ACNT 1425 PRINCIPLES OF ACCOUNTING I

Prerequisite: Course Placement Guide (see advisor) Fees: Laboratory

A study of accounting concepts, their application in transaction analysis and financial statement preparation, and asset and equity accounting in proprietorships and corporations. Emphasis on accounting cycle for service and merchandising enterprises.

ACNT 2311 MANAGERIALACCOUNTING
Prerequisite: ACNT 1425 and ACNT 1326
Fees: None
Practical applications of accounting with emphasis on cost behavior, capital management decisions, budgeting, financial statement analysis, and income tax effects.

ACNT 2386 INTERNSHIP-ACCOUNTING TECHNOLOGY
Department permission required.
Prerequisite: POFT 1220
A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.

## AIRCRAFT TECHNOLOGY

## AERM 1171 WORKFORCE TRAINING SKILLS FOR SUCCESS (1-1-0)

Prerequisite: None
Fees: None
A study of the relationship between student, school, and work, including a study of how business organizations work, the competencies necessary to be productive employees, and college survival skills. Contents include an analysis of programs offered at the College and possible career paths. State of the industry presentations will be made by selected guest speakers.

## AERM 1201 INTRODUCTION TO AVIATION

(2-2-0)
Prerequisite: None
Fees: None
An overview of aviation maintenance including the history of aviation, the mechanic's roles and duties, and nomenclature of aircrafts and safety.

## AERM 1205 WEIGHT AND BALANCE

Prerequisite: MATH 0301, ENGL 0300, READ 0302
Fees: Laboratory
An introduction to Federal Aviation Administration (FAA) required subjects relating to the weighing of aircraft, the performance of weight and balance calculations, and appropriate maintenance of record entries.

## AERM 1208 FEDERALAVIATION REGULATIONS

Prerequisite: MATH 0301, ENGL 0300, READ 0302
Fees: Laboratory
A course in the use and understanding of the Federal Aviation Administration and aircraft manufacturer's publications, forms, and records; and the exercise of mechanic privileges within prescribed limitations.

## AERM 1241 WOOD, FABRIC, AND FINISHES

Prerequisite: AERM 1205, 1208, 1303, 1310, 1315,1414
Fees: Laboratory
A course in the use and care of various covering materials, finishes, and wood structures including approved methods and procedures.

## AERM 1243 INSTRUMENTS \& NAVIGATION/COMMUNICATION

Prerequisite: AERM 1205, 1208, 1303, 1310, 1315, 1414
Fees: Laboratory
A study of aircraft instruments and electronic flight instrument systems including testing and installing instruments; inspecting, checking, and troubleshooting navigation and communication systems; and inspecting and repairing antennas and electronic equipment installations.

## AERM 1253 AIRCRAFT WELDING

Prerequisite: AERM 1205, 1208, 1303, 1310, 1315, 1414
Fees: Laboratory
Topics address repair procedures for steel, magnesium, brass, and aluminum materials used in aircraft assembly and selection and application of appropriate methods of welding, brazing, and soldering steel, magnesium, brass, and aluminum.

## AERM 1254 AIRCRAFT COMPOSITES

(2-1-3)
Prerequisite: AERM 1205, 1208, 1303, 1310, 1315, 1414
Fees: Laboratory
A study of the inspection and repair of composite, fiberglass, honeycomb, and laminated structural materials including doors, windows, bonded structures, and interior furnishings.

## AERM 1264 AIRCRAFT STRUCTURES PRACTICUM

(2-0-20)
Prerequisite: AERM 1171, 1201, 1241, 1303, 1315, 1452
Fees: None
Application of classroom principles under the supervision of the employer and a member of the Aircraft Technology faculty.

## AERM 1303 SHOP PRACTICES

Prerequisite: MATH 0301, ENGL 0300, READ 0302
Fees: Laboratory
An introduction to the correct use of hand tools and equipment and precision measurement; identification of aircraft hardware; and the fabrication of fluid lines and tubing. Emphasis on procedures for testing, heat-treating, and inspection of aircraft structures.

## AERM 1310 GROUND OPERATIONS

Prerequisite: MATH 0301, ENGL 0300, READ 0302
Fees: Laboratory
An introductory course in fuels, servicing methods and procedures, aircraft movement, securing and operations of aircraft, external power equipment, aircraft cleaning, and corrosion control.

## AERM 1315 AVIATION SCIENCE

Prerequisite: MATH 0301, ENGL 0300, READ 0302
Fees: Laboratory
Fundamentals of mathematics, physics, and drawing as they apply to aircraft principles and operations as required by the Federal Aviation Administration for airframe and power plant mechanics.

Prerequisite: AERM 1205, 1208, 1303, 1310, 1315, 1414
Fees: Laboratory
Fundamentals of construction of propellers. Skill development in inspection, servicing, and repair of fixed-pitch, constant-speed, and feathering propellers and governing systems. Instruction in removal, balancing, and installation of propellers.

## AERM 1343 AIRCRAFT ELECTRICALAND ELECTRONIC SYSTEMS INSTALLATION

An introduction to basic avionics systems installation to include wire termination, basic soldering practices, wire bundle build-up, installation planning and documentation. This course also emphasizes the FCC component of soldering that applies to the General Radiotelephone Operators License (GROL).

## AERM 1347 AIRFRAME AUXILIARY SYSTEMS

Prerequisite: AERM 1205, 1208, 1303, 1310, 1315, 1414
Fees: Laboratory
Topics address airframe auxiliary systems including the operation and repair of position and warning systems, cabin atmospheric controls systems, ice and rain control systems for aircraft and engines, and fire detection and protection systems.

## AERM 1350 LANDING GEAR SYSTEMS

Prerequisite: AERM 1205, 1208, 1303, 1310, 1315, 1414
Fees: Laboratory
Inspection, servicing, overhaul, and repair of fixed and retractable landing gear systems. In-depth coverage of systems, components, and operation.

## AERM 1351 AIRCRAFT TURBINE ENGINE THEORY

Prerequisite: AERM 1205, 1208, 1303, 1310, 1315, 1414
Fees: Laboratory
Theory, history, and servicing of turbine engines including lubrication, instrumentation, auxiliary power units, and exhaust systems.

## AERM 1357 FUEL METERINGAND INDUCTION SYSTEMS

Prerequisite: AERM 1205, 1208, 1303, 1310, 1315, 1414
Fees: Laboratory
A study of fuel metering and induction systems used on reciprocating and turbine engines including fuel metering systems, carburetors, induction systems, heat exchangers, and cooling systems.

## AERM 1414 BASIC ELECTRICITY

Prerequisite: MATH 0301, ENGL 0300, READ 0302
Fees: Laboratory
A study of aircraft electrical systems and their requirements including the use of ammeter, volmeter, ohmmeter; series and parallel circuits; inductance and capacitance; magnetism; converting alternating current (AC) to direct (DC); controlling devices; maintenance and servicing of aircraft batteries; and reading and interpreting aircraft electrical diagrams including solid state devices and logic functions.

## AERM 1444 AIRCRAFT RECIPROCATING ENGINES

Prerequisite: AERM 1205, 1208, 1303, 1310, 1315, 1414
Fees: Laboratory
A study of reciprocating engines and their development, operating principles, and theory. Instruction in engine instruments, lubricating, and exhaust systems.

## AERM 1445 AIRFRAME ELECTRICALSYSTEMS

Prerequisite: AERM 1205, 1208, 1303, 1310, 1315, 1414
Fees: Laboratory
A study of airframe electrical systems including installation, removal, disassembly, and repair of electrical components and related wiring.

## AERM 1449 HYDRAULIC, PNEUMATIC, \& FUELSYSTEMS

Prerequisite: AERM 1205, 1208, 1303, 1310, 1315, 1414
Fees: Laboratory
Skills development in inspecting, servicing, and maintaining aircraft fluid systems including hydraulics, pneumatics, and fuel. Application of basic concepts through detailed maintenance procedures.

## AERM 1452 AIRCRAFT SHEET METAL

Prerequisite: AERM 1205, 1208, 1303, 1310, 1315, 1414
Fees: Laboratory
A course in inspection and repair of sheet metal structures including forming, layout, and bending of sheet metal and identification, selection, and installation of rivets and fasteners.

## AERM 1456 AIRCRAFT POWER PLANT ELECTRICAL

Prerequisite: AERM 1205, 1208, 1303, 1310, 1315, 1414
Fees: Laboratory
Theory, operation, and maintenance of power plants including electrical, ignition, starting, and fire protection systems.

Prerequisite: AERM 1205, 1208, 1303, 1310, 1315, 1414
Fees: Laboratory
A study of the materials and procedures for completing the One Hundred Hour Inspection as per Federal Aviation Regulations and manufacturers' service information.

## AERM 2246 RECIPROCATINGAIRCRAFT RECIPROCATING ENGINE OVERHAUL I

Prerequisite: AERM 1205, 1208, 1303, 1310, 1315, 1414
Fees: Laboratory
A study of reciprocating engine overhaul including measurement and inspection procedures. Instruction in removal and installation, inspections, checks, servicing, and repair of engines.

## AERM 2247 AIRCRAFT RECIPROCATING ENGINE OVERHAUL II

(2-1-3)
Prerequisite: AERM 1205, 1208, 1303, 1310, 1315, 1414
Fees: Laboratory
A study of reciprocating engine overhaul including measurement and inspection procedures. Instruction in removal and installation, inspection, checks, servicing, and repair of engines.

## AERM 2333 ASSEMBLY AND RIGGING

Prerequisite: AERM 1205, 1208, 1303, 1310, 1315, 1414
Fees: Laboratory
An advanced course in assembly and rigging of fixed and rotary-wing aircraft.

## AERM 2343 COCKPIT ORIENTATIONAND ELECTRICAL SYSTEMS

An introduction to instrument principles as they apply to aircraft Attitude Heading Reference System (AHRS) compass system, Angle of Attack (AOA), fuel quantity, pitot/static Electronic Flight Instrument System (EFIS), and standby instrument systems, as well as flight data and cockpit recording systems.

## AERM 2351 AIRCRAFT TURBINE ENGINE OVERHAUL

Prerequisite: AERM 1205, 1208, 1303, 1310, 1315, 1414
Fees: Laboratory
Topics address inspection, disassembly, re-assembly, and replacement of gas turbine engines, sections, and components as well as operational troubleshooting and analysis.

## AERM 2352 AIRCRAFT POWER PLANT INSPECTION

Prerequisite: AERM 1205, 1208, 1303, 1310, 1315, 1414
Fees: Laboratory
In-depth coverage of methods and procedures for completing airworthiness and conformity inspections on aircraft power plants.

## DRAFTING

## ARCE 1303 ARCHITECTURAL METHODS AND MATERIALS OF CONSTRUCTION

Prerequisite: Concurrent enrollment in DFTG 1409 and DFTG 1417
Fees: Laboratory
Properties, specifications, vendor references, and uses of materials as related to architectural systems of structures.

## ARCE 1421 ARCHITECTURALILLUSTRATION

Prerequisite: Concurrent enrollment in DFTG 1409 and DFTG 1417

## Fees: Laboratory

Architectural drawings and sketching, including freehand drawing, perspectives, delineation in various media and development of students' graphical expression, including an introduction to various reproduction methods.

## ARCE 1452 STRUCTURAL DRAFTING

Prerequisite: Block I and concurrent enrollment in INDS 1415 and DFTG 2419 Fees: Laboratory

A study of structural systems including concrete foundations and frames, wood framing and trusses, and structural steel framing systems. Includes detailing of concrete, wood, and steel to meet industry standards including the American Institute of Steel Construction and The American Concrete Institute.

## ART

## ARTS 1301 ART APPRECIATION

Prerequisite: None
The visual elements, their nature, functions, and relationships in painting, sculpture, architecture and industrial design.

## ARTS 1303 ART HISTORY I

Prerequisite: None
Notes: Formerly ARTS 1307
A survey of painting, sculpture, architecture, and the minor arts from prehistoric times to the 14th century, stressing critical thinking.

## ARTS 1304 ART HISTORY II

Prerequisite: None
Notes: Formerly ARTS 1308
A survey of painting, sculpture, architecture, and minor arts from the 14th century to the present.

## ARTS 1311 DESIGN I

Prerequisite: None
Fees: Laboratory
Notes: Formerly ARTS 1303
A basic course in the fundamentals of design with emphasis upon two-dimensional media. Includes the fundamentals of line, color, form, texture, shape, and composition. Outside work required.

ARTS 1312 DESIGN II
(3-3-3)
Prerequisite: ARTS 1311
Fees: Laboratory
A continuation of Design I with emphasis upon three-dimensional media. Outside work required.

## ARTS 1316 DRAWING I

Prerequisite: None
Fees: Laboratory
Notes: Formerly ARTS 1305
An introduction to basic principles and techniques of drawing. Designed to acquaint the student with a variety of media and subjects, exploring perceptual and descriptive possibilities with consideration of drawing as a developmental process as well as an end in itself. Outside work required.

## ARTS 1317 DRAWING II

Prerequisite: ARTS 1316 or consent of the instructor.
Fees: Laboratory
Notes: Formerly ARTS 1306
Expansion of Drawing I stressing figure proportion and the expressive, conceptual aspects of the interpretation of the figure. Special consideration will be given to the figure within a special environment. Skills development demand that outside assignments be required.

## ARTS 1372 FUNDAMENTALS OF ART

Prerequisite: None
Fees: Laboratory
Notes: Formerly ARTS 1302
Techniques of art fundamentals through theory and practice. Basic principles of design, color, proportion, perspective, and composition through lectures and demonstrations. Laboratory experiences in a variety of methods and media. Outside work required.

## ARTS 2311 DESIGN III

Prerequisites:
Fees: Laboratory
Design III is a studio course which further investigates the problems of twodimensional concepts with an emphasis on color theory and personal expression.

## ARTS 2313 LAYOUT AND GRAPHIC DESIGN

Prerequisite: None
Fees: Laboratory
Notes: Formerly ART 2315
Fundamentals of various graphic techniques: use of basic tools and materials; typographic design; production methods for print medium including type specification and usage; type and letter styles; proper layout procedures from thumbnail through roughs and comprehensives. Outside work required.

## ARTS 2316 PAINTING I

Prerequisite: ARTS 1312.
Fees: Laboratory
Notes: Formerly ARTS 2309
Exploring the potentials of painting media with emphasis on color, composition, and dynamics of vision.

## ARTS 2317 PAINTING II

Prerequisite: ARTS 2316 or consent of the instructor.
Fees: Laboratory
Notes: Formerly ARTS 2310
Continuation of ARTS 2316 with emphasis on individual expression.

## ARTS 2326 SCULPTURE I

Prerequisite: None
Fees: Laboratory
Notes: Formerly ARTS 2311
A studio course that explores three-dimensional concepts in a variety of media.

## ARTS 2327 SCULPTURE II

Prerequisite: ARTS 2326
Fees: Laboratory
Notes: Formerly ARTS 2312
A continuation of ARTS 2326 with emphasis on individual expression. With the instructor's approval, this course may be repeated once for additional 3 hours credit as a study in advanced problems and techniques.

## ARTS 2346 CERAMICS I

Prerequisite: None
Fees: Laboratory
Notes: Formerly ARTS 2313
Introductions to basic ceramic processes, including hand building and wheel throwing techniques. All aspects in the making and production of ceramic objects will be taught. Outside work is required.

## ARTS 2347 CERAMICS II

Prerequisite: ARTS 2346
Fees: Laboratory
Notes: Formerly ARTS 2314
Opportunities for specialization and experimentation in ceramic processes.
Outside work is required.

## ARTS 2348 DIGITALART I

Prerequisite: none
Fees: Laboratory
Digital Art I is a studio course which explores the potential of the computer hardware and software medium for their visual, conceptual, and practical uses in the visual arts.

## ARTS 2349 DIGITALART II

Prerequisite: ARTS 2348 or the consent of the instructor
Fees: Laboratory
A continuation of Digital Art I using computer hardware and software as a medium for visual and conceptual expression in the visual arts.

## ARTS 2356 PHOTOGRAPHY I

Prerequisite: none
Fees: Laboratory
Introduction to the basics of photography. Includes camera operation, techniques, knowledge of chemistry, and presentation skills. Emphasis on design, history, and contemporary trends as a means of developing an understanding of photographic aesthetics. Emphasis will be placed on the use of digital cameras.

## ARTS 2357 PHOTOGRAPHY II

Prerequisite: ARTS 2356 or the consent of the instructor
Fees: Laboratory
Extends the students' knowledge of technique and guides them in developing personal outlooks toward specific applications of the photographic process. Emphasis will be placed on the use of digital cameras.

## ARTS 2366 WATERCOLOR I

Prerequisite: none
Fees: Laboratory
Exploration of ideas using water-based painting media and techniques.

## ARTS 2367 WATERCOLOR II

Prerequisite: ARTS 2366 or the consent of the instructor.
Fees: Laboratory
Continuation of ARTS 2366 with emphasis on individual expression.

## ARTS 2389 ACADEMIC COOPERATIVE IN THE FINE ARTS:

 ARTPrerequisite: ARTS 1311 OR ARTS 1316
Fees: Laboratory
An instructional program designed to integrate on-campus study with practical hands-on work experience in the arts. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of art.

## AUTOMOTIVE TECHNOLOGY

## AUMT 1305 INTRODUCTION TO AUTOMOTIVE TECHNOLOGY

Prerequisite: MATH 0300, READ 0300, ENGL 0300
Fees: Laboratory
An introduction to the automotive industry including automotive history, safety practices, shop equipment and tools, vehicle subsystems, service publications, fasteners, professional responsibilities, and automotive maintenance. Courses will be taught manufacturer specific in the ASEP and ASSET programs.

## AUMT 1307 AUTOMOTIVE ELECTRICALSYSTEMS

Prerequisite: MATH 0300, READ 0300, ENGL 0300
Fees: Laboratory
An overview of automotive electrical systems including topics in operational theory, testing, diagnosis, and repair of batteries, charging and starting systems, and electrical accessories. Emphasis on electrical schematic diagrams and service manuals. Course will be taught manufacturer specific in the ASEP and ASSET programs.

## AUMT 1310 AUTOMOTIVE BRAKE SYSTEMS

(3-2-4)
Prerequisite: AUMT 1307
Fees: Laboratory
Operation and repair of drum/disc type brake systems. Emphasis on safe use of modern equipment. Topics include brake theory, diagnosis, and repair of power, manual, anti-lock brake systems, and parking brakes. Course will be taught manufacturer specific in the ASEP and ASSET program.

## AUMT 1316 SUSPENSION AND STEERING

Prerequisite: AUMT 1307
Fees: Laboratory
Theory and operation of automotive suspension and steering systems including tire and wheel problem diagnosis, component repair, and alignment procedures. Course will be taught manufacturer specific in the ASEP and ASSET programs.

AUMT 1319 AUTOMOTIVE ENGINE REPAIR
Prerequisite: AUMT 1307
Fees: Laboratory
Fundamentals of engine operation, diagnosis and repair including lubrication systems and cooling systems. Emphasis on overhaul of selected engines, identification and inspection, measurements, and disassembly, repair, and reassembly of the engine. Course will be taught manufacturer specific in the ASEP and ASSET programs.

AUMT 1345 AUTOMOTIVE HEATING AND A.C.
Prerequisite: AUMT 2321
Fees: Laboratory
Theory of automotive air conditioning and heating systems. Emphasis on the basic refrigeration cycle and diagnosis and repair of system malfunctions. Covers EPS guidelines for refrigerant handling and new refrigerant replacements. Course will be taught manufacturer specific in the ASEP and ASSET programs.

## AUMT 1366 PRACTICUM I-AUTO/AUTOMOTIVE MECHANIC/ TECHNICIAN

Prerequisite/Co-requisite: AUMT 1305, 1307, 1310, 1316, 1319, 1345, 2317, 2321 Fees: None

Practical general training and experience in the workforce. The College, with the employer, develops and documents an individualized plan for the student. The Plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary.

## AUMT 1372 SPECIAL PROJECTS I IN AUTO/AUTOMOTIVE MECHANIC/TECHNICIAN

Prerequisite/Co-requisite: AUMT 1305, 1307, 1345, 2313, \& 2325
Fees: Laboratory
The course is designed for students to have additional hands-on training. Program students normally receive their training in Practicum II. However, due to individual circumstances, some students are unable to participate in the regular Practicum course and may enroll in Special Projects I as an alternative. Special tasks will be performed which relate to the automotive courses associated with Practicum. In this case, the student must complete a minimum of 4 Hrs . of training in Manual Drive Train and Axles (AUMT 2313), a minimum of 24 Hrs. of training in Automatic Transmission \& Transaxles (AUMT 2325). After completing a minimum training hours mentioned above, the student may perform lab training in any automotive subject area that the student has completed or is currently enrolled in. The Special Projects instructor must approve all projects. Students are encouraged to track their accomplishments in this course via the "NATEF PRACTICUMTASK BOOK" (available at the campus bookstore) which will portfolio the students skills thus documenting task accomplishments and enhancing their employability.

AUMT 1380 COOPERATIVE I
Prerequisite: 1305, 1307, 1319
Fees: None
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary.

## AUMT 1381 COOPERATIVE II

(3-1-15)
Prerequisite: 1380
Fees: None
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary.

## AUMT 2288 INTERNSHIP-AUTO TECHNICIAN

Prerequisite: AUMT 1305, 1307
Fees: None

* Instructor Permission Required For Enrollment

An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience.

## AUMT 2289 INTERNSHIP-AUTO TECHNICIAN

Prerequisite: AUMT 1305, 1307
Fees: None

* Instructor Permission Required For Enrollment

An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience.

AUMT 2301 AUTO MANAGEMENT
Prerequisite: AUMT 1305
Fees: None
Instruction in human relations, customer relations, and customer satisfaction. Emphasis on management techniques and building relationships between the service department and the customer.

AUMT 2313 MANUAL DRIVE TRAIN AND AXLES
Prerequisite: AUMT 1307
Fees: Laboratory
A study of automotive clutches, clutch operation devices, standard transmissions, transaxles, and differentials with emphasis on the diagnosis and repair of transmissions and drive lines. Course will be taught manufacturer specific in the ASEP and ASSET programs.

## AUMT 2317 ENGINE PERFORMANCE ANALYSIS 1

Prerequisite: AUMT 1307
Fees: Laboratory
Theory, operation, diagnosis, and repair of basic engine dynamics, ignition systems, and fuel delivery systems. Use of basic engine performance diagnostic equipment. Course will be taught manufacturer specific in the ASEP and ASSET programs.

## AUMT 2321 AUTOMOTIVE ELECTRICAL <br> LIGHTING AND ASSESSORIES

Prerequisite: AUMT 1305
Fees: Laboratory
Repair of automotive electrical subsystems, lighting, instrumentation, and accessories. Emphasis on accurate diagnosis and proper repair methods using various troubleshooting skills and techniques. Course will be taught manufacturer specific in the ASEP and ASSET programs.

AUMT 2325 AUTOMATIC TRANSMISSION \& TRANSAXLES (3-2-4)
Prerequisite: AUMT 2313
Fees: Laboratory
A study of the operation, hydraulic principles, and related circuits of modern automatic transmissions and automatic transaxles. Diagnosis, disassembly, and assembly procedures with emphasis on the use of special tools and proper repair techniques. Course will be taught manufacturer specific in the ASEP and ASSET programs.

Prerequisite/Co-requisite: AUMT 1305, 1307, 1310, 1316, 1319, \& 2317
Fees: Laboratory
The course is designed for students to have additional hands-on training. Program students normally receive their training in Practicum I. However, due to individual circumstances, some students are unable to participate in the regular Practicum course and may enroll in Automotive Service as an alternative. Special tasks will be performed which relate to the automotive courses associated with Practicum. In this case, the student must complete a minimum of 9 Hrs . of training in Automotive Brake Systems (AUMT 1310), and a minimum of 24 Hrs. of training in Automotive Engine Repair (AUMT 1319). After completing the minimum training hours mentioned above, the student may perform lab training in any automotive subject area that the student has completed or is currently enrolled in. The Automotive Service instructor must approve all projects. Students are encouraged to track their accomplishments in this course via the "NATEF PRACTICUM TASK BOOK" (available at the campus bookstore), which will portfolio the students' skills thus documenting task accomplishements and enhancing their employability.

## AUMT 2334 ENGINE PERFORMANCE ANALYSIS II

Diagnosis and repair of emission systems, computerized engine performance systems, and advanced ignition and fuel systems; and proper use of advanced engine performance diagnostic equipment. Course will be taught manufacturer specific in the ASEP and ASSET programs.

## AUMT 2343 AUTOMOTIVE EMISSIONS LICENSING PREPARATION

Prerequisite: AUMT 2334
Fees: Laboratory
A study of state and federal legislation regarding automotive emissions, automotive emissions systems operation, testing, and repair. Preparation for licensing.

## AUMT 2366 PRACTICUM II - AUTO/AUTOMOTIVE MECHANIC/

 TECHNICIAN
## AUMT 2380 COOPERATIVE III

Prerequisite: 1381
Fees: None
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary.

## AUMT 2381 COOPERATIVE IV

(3-1-15)
Prerequisite: 2380
Fees: None
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary.

## AUMT 2437 AUTOMOTIVE ELECTRONICS

Prerequisite: AUMT 2317 and AUMT 2334
Fees: Laboratory
Topics address electrical principles, semiconductor and integrated circuits, digital fundamentals, microcomputer systems, and electrical test equipment as applied to automotive technology. Course will be taught manufacturer specific in the ASEP and ASSET programs.

## AIRCRAFT TECHNOLOGY

AVNC 1303 INTRODUCTION TOAIRCRAFT ELECTRONICS
A review of basic electronics theory and the study of radio principles and how they apply to aircraft radios and navigation systems to include the VHF and HF communication radios, intercom/audio integrating systems, Emergency Location Transmitter (ELT), Automatic Direction Finding (ADF) navigation systems. This course also emphasizes the FCC components of electronics theory and radio principles that apply to the General Radiotelephone Operators License (GROL).

## AVNC 1343AIRCRAFT ELECTRICALAND ELECTRONIC SYSTEMS

 INSTALLATIONA comprehensive study of and practical experience in the installation of avionic systems in aircraft, mounting electronic equipment, construction and installation of electrical wiring and cables, proper use of tools, selection of materials, and safety.

## AVNC 1353 THEORYAND OPERATIONALTESTING OFAIRCRAFT

 ELECTRICALSYSTEMSAn introduction to RADAR theory and principles as they apply to aircraft RADAR and RADAR/Radio altimeter systems. Also introduces students to aircraft antiskid systems, generator control systems, aircraft systems lighting, and intercom and audio integrating systems. This course also emphasizes the FCC components of RADAR theory and radio principles that apply to the General Radiotelephone Operators License (GROL).

## AVNC 2471 MODERN AVIONICS SYSTEMS INTEGRATION

(3-2-3)
An introduction to VOR/LOC/GS/MB navigation system, aircraft transponder theory as they apply to aircraft transponder and Traffic Collision Avoidance System (TCAS) systems, auto-pilot, Flight Management Systems (FMS), Ground Proximity Warning System (GPWS), Global Positioning System (GPS) systems and integrated aircraft avionics data bus architecture. This course also emphasizes the FCC components of transponder theory and aircraft navigation components that apply to the General Radiotelephone Operators License (GROL).

## MUSIC - PRIVIATE BASS

## BASS 1271. PRIVATE BASS ELEMENTARY LEVEL

## Prerequisite: None

Fees: Laboratory
Beginning one-on-one instruction in the technique of playing the bass. This will include, but not be limited to, proper positioning of instrument and bow, fingering, intonation, and music reading skills. This course can involve study of the electric bass with permission from the instructor.

## BASS 1272. PRIVATE BASS INTERMEDIATE LEVEL

Prerequisite: BASS 1271, or permission of instructor.
Fees: Laboratory
A continuation of BASS 1271 at a more advanced level. The course will develop physical playing skills and reading on the bass or electric bass.

MUSIC - PRIVATE BASSOON<br>Elementary \& Intermediate Level Courses

## BASN 1271. PRIVATE BASSOON ELEMENTARY LEVEL

## Prerequisite: None

Fees: Laboratory
Beginning one-on-one instruction in the technique of playing the bassoon. This will include, but not be limited to, proper positioning of instrument and embouchure, fingering, intonation, and music reading skills.

## BASN 1272. PRIVATE BASSOON INTERMEDIATE LEVEL

Prerequisite: BASN 1271, or permission of instructor.
Fees: Laboratory
A continuation of BASN 1271 at a more advanced level. The course will develop physical playing skills and reading on the bassoon.

## BIOLOGY

## BIOL 1322 NUTRITION

Prerequisite: Completion of BIOL 2401 and recommend completion of one semester of Chemistry.

A survey of the biological and chemical composition and major functions of the nutrients important in human nutrition. The topics include carbohydrate, lipids, proteins, metabolism and energy, vitamins, minerals, and some research findings associated with nutrition.

## BIOL 1370 HUMAN SEXUALITYAND REPRODUCTION

Prerequisite: None
Human reproductive anatomy and physiology, fertility control, reproductive disease and discussion of fertility patterns.

BIOL 1406 GENERAL BIOLOGY I
(LECTURE + LAB, FOR SCIENCE MAJORS)
Prerequisite: None
Fees: Laboratory
This course is suitable for science majors and students intending to pursue careers in Allied Health. It is an introduction to the science of biology and includes the nature, history and philosophy of science, particularly as it relates to the study of life. Course content includes: the scientific method, basic chemistry, energetics, genetics, evolution, taxonomy and a survey of the kingdoms of living organisms.

## BIOL 1407 GENERAL BIOLOGY II

(LECTURE + LAB, FOR SCIENCE MAJORS)
Prerequisite: None
Fees: Laboratory
This course is a continuation of Biology 1406 and emphasizes the structure and function of living organisms and ecology. Course concepts include plant anatomy and physiology, animal physiology, development reproduction, population dynamics, community interactions and the structure of biomes.

## BIOL 1408 GENERAL BIOLOGY I

## (LECTURE + LAB, FOR NON-SCIENCE MAJORS)

Prerequisite: None
Fees: Laboratory
This course is suitable for non-science majors. It investigates the nature of science, the chemistry of life, the structure and function of cells, energy transformations, genetics, evolution and fundamental aspects of classification.

BIOL 1409 GENERAL BIOLOGY II
(LECTURE + LAB, FOR NON-SCIENCE MAJORS)
Prerequisite: None
Fees: Laboratory
This course is a continuation of Biology 1408 and investigates the structure and function of plants and animals, development, reproduction and ecology.

## BIOL 1411 GENERAL BOTANY

(4-3-4)
Prerequisite: None
Fees: Laboratory
A survey of the plant kingdom. Lecture and laboratory work dealing with the structure, function, economic importance, and relationship to man of various forms of plant life.

BIOL 1413 GENERAL ZOOLOGY
Prerequisite: None
Fees: Laboratory
A study of the animal kingdom providing a basic background for further studies in the biological sciences.

## BIOL 2301 PRINCIPLES OF ANATOMY AND PHYSIOLOGY

Prerequisite: None
A preparatory course in Human Anatomy and Physiology, incorporating various study skills. This course is designed to introduce principles of the structure and function of the human body, emphasizing correct definitions, pronunciation, and terms.

BIOL 2304 PRACTICAL HUMAN ANATOMY \& PHYSIOLOGY
(3-3-3)
Prerequisite: None
Fees: Laboratory
A general survey course of the human body. The course is specially designed for those individuals majoring in massage therapy.

BIOL 2306 ENVIRONMENTAL BIOLOGY
Prerequisite: None
The interrelationships of man and his environment and their interdependence. The nature of man, his technology, environmental perception, pollution, water supply, urbanization, wildlife, soils, mineral resources, and other natural phenomena as well as group, social, political, and economic implications for man and his environment.

## BIOL 2401 HUMAN ANATOMY AND PHYSIOLOGY I

Prerequisite: None
Fees: Laboratory
Basic chemistry, the cell, tissues, the skeletal, muscular, nervous, and systems, and the senses.

BIOL 2402 HUMAN ANATOMY AND PHYSIOLOGY II
Prerequisite: BIOL 2401
Fees: Laboratory
Fundamental principles of body systems and their functions. Satisfies the requirements of human anatomy and physiology for some Paramedical and Allied Health curricula.

BIOL 2404 HUMAN ANATOMY AND PHYSIOLOGY
Prerequisite: None
Fees: Laboratory
Fundamental principles of body systems and their functions. Satisfies the requirements of human anatomy and physiology for some Paramedical and Allied Health curricula.

## BIOL 2416 GENETICS

(4-3-4)
Pre-requisite: Completion of three biology courses, including BIOL 2420 or 2421, and completion of CHEM 1406 or 1411 , or consent of instructor.
Fees: Laboratory
The hereditary system of plants and animals. Mendelian and population genetics; human heredity; and cloning.

BIOL 2420 MICROBIOLOGY AND CLINICAL PATHOLOGY
(4-3-4)
Prerequisite: Recommend completion of one semester of biology and chemistry. Fees: Laboratory

Microbiology and clinical pathology vital to the paramedical health professions. Study of infectious diseases, their prevention, and patient care. Study of diagnostic laboratory procedeures and interpretation of results.

## BIOL 2421 MICROBIOLOGY

(4-3-4)
Prerequisite: BIOL 1406 and 1407, or BIOL 2402 or BIOL 1411 or BIOL 1413 and CHEM 1406 and CHEM 1407 or CHEM 1406 or CHEM 1407 or CHEM 1411 or CHEM 1412, or consent of instructor.
Fees: Laboratory
Bacteria, their morphology and structure, classification, cultivation, staining, procedures, sterilization, effects on environment, preparation of media, and accepted methods of laboratory technique. Microbiology and clinical pathology is important in the health professions. Study of infectious diseases, their prevention, and patient care.

## BIOL 2428 VERTEBRATE ZOOLOGY

(4-3-4)
Prerequisite: None
Fees: Laboratory
A study of animal vertebrates with emphasis on structure, physiology, and development of vertebrate systems. This course is recommended for biology majors or students pursuing parabiological areas.

## ELECTRONIC SYSTEMS TECHNOLOGY

## BIOM 1201 BIOMEDICAL EQUIPMENT TECHNOLOGY

Prerequisite: BIOM 2301 \& BIOM 2335
Co-requisite: BIOM 1205, CETT 1509
Introduction to current job responsibilities, salaries and compensation in the medical industry and health care organizations.

## BIOM 1209 APPLIED BIOMEDICAL EQUIPMENT TECH.

Prerequisite: See Department entrance requirements
Introduction to biomedical instrumentation as related to anatomy and physiology. Detailed coverage of anatomical systems that use medical equipment for monitoring, diagnosis, and treatment.

## BIOM 2201 SAFETY IN HEALTH CARE FACILITIES

Prerequisite: Permission of the Program Director
Study of codes, standards, and management principles related to biomedical instrumentation. Emphasize on the proper use and application of safety test equipment, preventive maintenance, procedures, and documentation of work performed.

BIOM 2235 PHYSIOLOGICAL INSTRUMENTS I
(2-1-3)
Prerequisite: CETT 1509 and BIOM 1209 with grades of "C" or higher. Fees: Laboratory

Introduction to electrocardiographic equipment. Emphasize is on the theory of operation, circuit analysis, and troubleshooting techniques including physiology of the cardiovascular system.

BIOM 2266 PRACTICUM BIOMEDICAL TECHNOLOGY I
Prerequisite: CETT 1425 and with a grade of "C" or higher. Co-requisite: BIOM 2235.
Fees: Laboratory
Practical general training and experiences in the workplace. The College, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary.

## BIOM 2339 PHYSIOLOGICAL INSTRUMENTS II

Prerequisite: BIOM 2235 and BIOM 2266
Fees: Laboratory
Continuation of Physiological, Instruments I, emphasizing graphic display recording devices. A study of defibrillator and multi-purpose diagnostic equipment.

## BIOM 2367 PRACTICUM BIOMEDICAL TECHNOLOGY II

Prerequisite: RBTC 1447 and BIOM 2266 with grades of "C" or higher. Co-requisite: BIOM 2239
Fees: Laboratory
Practical general training and experiences in the workplace. The College, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary.

## BUSINESS MANAGEMENT

## BMGT 1268 PRACTICUM - BUSINESS ADMINISTRATION AND

 MANAGEMENT(2-0-16)
Practical, general workplace training supported by an individualized learning plan developed by the employer, college and student.

## BMGT 1301 SUPERVISION

A study of the role of the supervisor. Managerial functions as applied to leadership, counseling, motivation, and human skills are examined.

## BMGT 1305 COMMUNICATIONS IN MANAGEMENT

Basic theory and process of communication skills necessary for the management of an organization's workforce.

## BMGT 1309 INFORMATION AND PROJECT MANAGEMENT

(3-3-0)
Information and project management including task determination, time management, scheduling management, status reports, budget management, customer service, professional attitude, and project supervision. This course is oriented to the information technology field and provides management skills to complement technical expertise. This is the capstone course for the Information Technology Certificate.

## BMGT 2303 PROBLEM SOLVING AND DECISION MAKING <br> (3-3-0)

Prerequisite: BMGT 1301 OR HRPO 1311
Decision making and problem solving processes in organizations, utilizing logical and creative problem solving techniques. Application of theory is provided by experiential activities such as small group discussions, case studies, and the use of other managerial decision aids.

## BMGT 2331 PRINCIPLES OF QUALITY MANAGEMENT

Prerequisite: None
Quality of productivity in organizations. Includes planning for quality throughout the organization, analysis of costs of quality, and employee empowerment.

## BMGT 2389 INTERNSHIP-BUSINESS ADMINISTRATION AND MANAGEMENT, GENERAL

Prerequisite: POFT 1220 and Department Permission
Notes: Formerly BMGT 2313
A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.

## ACCOUNTING INFORMATION SYSTEMS

BNKG 1356 ANALYZING FINANCIALSTATEMENTS
(3-3-0)
Prerequisite: ACNT 1425, ACNT 1326, ACNT 1311 or Department Permission
A study of the process of evaluating financial statements, cash flow, and ratio analysis of individuals and businesses. Emphasis on the relationship of comparative analysis and industry standards.

## BUSINESS MANAGEMENT

BUSG 2305 BUSINESS LAW/CONTRACTS
(3-3-0)
Principles of law which form the legal framework of business activity including applicable statues, contracts, and agency.

## BUSG 2309 SMALL BUSINESS MANAGEMENT

A course on how to start and operate a small business. Topics include facts about a small business, essential management skills, how to prepare a business plan, financial needs, marketing strategies, and legal issues.

## BUSINESS ADMINISTRATION

## BUSI 1301 INTRODUCTION TO BUSINESS

Prerequisite: None
General business course. Basic industries, forms of organization, capitalism, marketing, finance, management, personnel, pricing, business risks, and the relation of government to business.

## BUSI 1307 PERSONAL FINANCE

Prerequisite: None
A study of all the major personal financial planning problems that individuals and families encounter. These include measuring personal financial standing, managing taxes, making major financial acquisition decisions, making insurance decisions, making investment decisions, and preserving one's estate.

## BUSI 2301 BUSINESS LAW I

Prerequisite: None
Origin and development of law, principles of torts, criminal law and government regulations as applied to business. The application of law contracts, personal property, bailments, and sales.

## EARLY CHILDHOOD STUDIES

## CDEC 1266 PRACTICUM I - CHILD DEVELOPMENT \& EARLY CHILDHOOD

Prerequisite: TECA 1311, CDEC 1313, 1319 and Permission needed from department
Fees: Laboratory
Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. It relates the workplace training and experiences to the student's general and technical course of study. This course may be repeated if topics and learning outcomes vary.

## CDEC 1267 PRACTICUM II - CHILD DEVELOPMENT AND EARLY CHILDHOOD

Prerequisite: CDEC 1311, 1313, 1318, and 1319
Fees: Laboratory
Continuation of practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. It relates the workplace training and experiences to the student's general and technical course of study. This course may be repeated if topics and learning outcomes vary.

## CDEC 1313 CURRICULUM RESOURCES FOR EARLY CHILDHOOD PROGRAMS

Prerequisite: TECA 1311 or concurrent enrollment
A study of the fundamentals of curriculum design and implementation in developmentally appropriate programs for children.

## CDEC 1319 CHILD GUIDANCE

## Prerequisite: None

An exploration of guidance strategies for promoting prosocial behaviors in children. Emphasis on positive guidance principles and techniques, family involvement and cultural influences. Practical application through direct participation with children.

## CDEC 1321 THE INFANTAND TODDLER

Prerequisite: TECA 1311 or concurrent enrollment
A study of appropriate infant and toddler programs (birth to age 3), including an overview of development, quality caregiving routines, appropriate environments, materials and activities, and teaching/guidance techniques.

## CDEC 1356EMERGENTLITERACYFOREARLY CHILDHOOD

Prerequisite: TECA 1311 and CDEC 1313, concurrent enrollment
An exploration of principles, methods, and materials for teaching young children language and literacy through a play-based integrated curriculum.

## CDEC 1357 MATH AND SCIENCE FOR EARLY CHILDHOOD

Prerequisite: CDEC 1311 and CDEC 1313
An exploration of principles, methods, and materials for teaching children math and science concepts through discovery and play.

## CDEC 1358 CREATIVE ARTS FOR EARLY CHILDHOOD

Prerequisite: TECA 1311 and CDEC 1313, concurrent enrollment or Permission from department
An exploration of principles, methods, and materials for teaching children music, movement, visual arts, and dramatic play through process-oriented experiences to support divergent thinking.

## CDEC 1359 CHILDREN WITH SPECIAL NEEDS

Prerequisite: TECA 1311, concurrent enrollment
A survey of information regarding children with special needs including possible causes and characteristics of exceptionalities, intervention strategies, available resources, referral processes, the advocacy role, and legislative issues.

## CDEC 1380 COOPERATIVE EDUCATION IN CHILD DEVELOPMENTI

Corequisite: CDEC 2322
Fees: Laboratory
This course provides on-the-job training in the CDA functional areas with emphasis on safety, health, learning environment, physical, cognitive, and communication with a minimum of 20 hours per week in an approved child care program.

## CDEC 1381 COOPERATIVE EDUCATION IN CHILD DEVELOPMENTII

Prerequisite: CDEC 1380
Corequisite: CDEC 2324
Fees: Laboratory
This course provides a continuation of on-the-job training with a minimum of 20 hours per week in an approved child care program. Areas covered include creative, self, social, guidance, families, program management, and professionalism.

## CDEC 2267 PRACTICUM II-CHILD DEVELOPMENTAND EARLYCHILDHOOD

(2-0-16)
Prerequisite: TECA 1311, 1318, CDEC 1313, 1319 and Permission needed from department
Fees: Laboratory
Continuation of practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. It relates the workplace training and experiences to the student's general and technical course of study. This course may be repeated if topics and learning outcomes vary.

## CDEC 2268 PRACTICUMIII-CHILD DEVELOPMENTAND EARLY CHILDHOOD

(2-0-16)
Prerequisite: All major core courses and Permission needed from department Fees: Laboratory

Continuation of practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. It relates the workplace training and experiences to the student's general and technical course of study. This course may be repeated if topics and learning outcomes vary.

Prerequisite: TECA 1311, concurrent enrollment or Permission needed from department
Methods used by child care workers in the identification of physical, emotional, and sexual abuse and neglect with an emphasis on developing skills for working with children and families. Includes methods of referral to public and private agencies that deal with investigation and treatment.

## CDEC 2307 MATHAND SCIENCE FOR EARLY CHILDHOOD

(3-3-0)
Prerequisite: TECA 1311 and CDEC 1313, concurrent enrollment or Permission needed from department
An exploration of principles, methods, and materials for teaching children math and science concepts through discovery and play.

## CDEC 2315DIVERSE CULTURAL/MULTILINGUALEDUCATION

Prerequisite: TECA 1311 and CDEC 1313, concurrent enrollment or Permission needed from department
An overview of multicultural education to include relationship with the family and community to develop awareness and sensitivity to diversity related to individual needs of children.

## CDEC 2322 CHILD DEVELOPMENT ASSOCIATE TRAININGI

Corequisite: CDEC 1380
Fees: Laboratory
This course studies the first half of the requirements for the Child Development Associate National Credential (CDA). The six functional areas of study include safety, health, learning environment, physical, cognitive, and communication.

## CDEC 2324 CHILD DEVELOPMENT ASSOCIATE TRAININGII

Prerequisite: CDEC 2322 and 1380
Corequisite: CDEC 1381
Fees: Laboratory
This course provides continuation of the study of the requirements for the Child Development Associate National Credential (CDA). The four functional areas of study are creative, self, social, guidance, families, program management, and professionalism.

## CDEC 2341 THE SCHOOLAGE CHILD

(3-3-0)
Prerequisite: TECA 1311 and CDEC 1313, concurrent enrollment or Permission needed from department
A study of appropriate programs for the school age child (5 to 13 years), including an overview of development, appropriate environments, materials, and activities and teaching/guidance techniques.

## MUSIC - PRIVATE CELLO

## CELL1271 PRIVATE CELLOELEMENTARYLEVEL

Prerequisite: None
Fees: Laboratory
Beginning one-on-one instruction in the technique of playing the cello. This will include, but not be limited to, proper positioning of instrument and bow, fingering, intonation, and music reading skills.

## CELL1272 PRIVATE CELLO INTERMEDIATE LEVEL

Prerequisite: CELL 1271, or permission of instructor.
Fees: Laboratory
A continuation of CELL 1271 at a more advanced level. The course will develop physical playing skills and reading on the cello.

## ELECTRONIC SYSTEMS TECHNOLOGY

## CETT 1303 DC CIRCUITS

Prerequisite: Department approval
Fees: Laboratory
A study of the fundamentals of direct current including Ohm's law, Kirchhoff's laws and circuit analysis techniques. Emphasis on circuit analysis of resistive networks and DC measurements.

## CETT 1305AC CIRCUITS

Prerequisite: Department approval
Fees: Laboratory
A study of the fundamentals of alternating current including series and parallel AC circuits, phasors, capacitive and inductive networks, transformers, and resonance.

## CETT 1307 FUNDAMENTALS OF ELECTRONICS

Prerequisite: Department approval
Fees: Laboratory
Applies concepts of electricity, electronics, and digital fundamentals; supports programs requiring a general knowledge of electronics.

## CETT 1425 DIGITALFUNDAMENTALS

Fees: Laboratory
An entry-level course in digital electronics covering number systems, binary mathematics, digital codes, logic gates, Boolean Algebra, and combinational logic. Emphasis on circuit logic analysis and troubleshooting digital circuits.

Prerequisite: Department approval
Fees: Laboratory
A study of diodes, transistor characteristics and other semiconductor devices, including analysis of static and dynamic characteristics, biasing techniques, and thermal considerations.

CETT 1445 MICROPROCESSORS
Prerequisite: Department approval
Fees: Laboratory
An introductory course in microprocessor software and hardware; architecture, timing sequence, operation, and programming. Discussion of appropriate software diagnostic language and tools.

CETT 1509 DC-AC CIRCUITS
(5-4-4)
Prerequisite: Department approval
Fees: Laboratory
Fundamentals of DC circuits and AC circuits operation including Ohm's Law, Kirchoff's Laws, networks, transformers, resonance, phasors, capacitive and inductive and circuit analysis techniques.

## CULINARY ARTS

## CHEF 1301 BASIC FOOD PREPARATION

Prerequisite or Co-Requisite: CHEF 1305
Recommended co-requisite FDNS 1301
Prerequisite: READ 0300, MATH 0300
Fees: Laboratory
A study of the fundamental principles of food preparation and cookery to include Brigade System, cooking techniques, material handling, heat transfer, sanitation, safety, nutrition, and professionalism. The student will demonstrate skills in knife, tool and equipment handling, and operate equipment safely and correctly; demonstrate proficiency in dry and moist heat cooking methods; produce a variety of food products applying principles of food handling and preparation; and implement professional standards in food preparation. B or better required for Culinary majors.

## CHEF 1305 SANITATION AND SAFETY

(3-3-0)
A study of personal cleanliness; sanitary practices in food preparation; causes, investigation, control of illness caused by food contamination (Hazard Analysis Critical Control Points); and work place safety standards. The student will identify causes and prevention procedures for food-borne illness, intoxication, and infection; demonstrate good personal hygiene and safe food handling procedures; describe food storage and refrigeration techniques; explain sanitation of fishes, equipment,
and kitchens including cleaning material, garbage, and refuse disposal; and discuss Occupational Safety and Health Administration (OSHA) requirements and effective workplace safety programs.

## CHEF 1400 PROFESSIONAL COOKING \& DINING ROOM SERV (4-2-4)

Prerequisites: CHEF 1301, 1305, READ 0300, MATH 0300, ENGL 0300
Fees: Laboratory
The purpose of this course is to put into practice the knowledge and skills gained in CULA 1301. In addition to the technical aspects of food preparation, the student will learn teamwork, communication skills, and kitchen professionalism. This will be accomplished by preparing and serving meals as a team within a time deadline in the Department's dining room. By serving the public, the student will be able to practice table service and guest relations as well as plate presentation. UNIFORM REQUIRED. B or better required for Culinary majors.

## CHEF 1401 BASIC FOOD PREPARATION

Prerequisite or Co-Requisite: CHEF 1305
Recommended co-requisite FDNS 1301
Prerequisite: READ 0300, MATH 0300
Fees: Laboratory
A study of the fundamental principles of food preparation and cookery to include Brigade System, cooking techniques, material handling, heat transfer, sanitation, safety, nutrition, and professionalism. The student will demonstrate skills in knife, tool and equipment handling, and operate equipment safely and correctly; demonstrate proficiency in dry and moist heat cooking methods; produce a variety of food products applying principles of food handling and preparation; and implement professional standards in food preparation. B or better required for Culinary majors.

## CHEF 1410 GARDE MANGER

(4-2-4)
Prerequisite: CHEF 1400, FDNS 1301
Fees: Laboratory
A study of speciality foods and garnishes. Emphasis on design techniques and display of fine foods. The student will identify tools and equipment common to the Garde Manger Station; develop fundamental skills in preparation of forcemeats; demonstrate basic skills in charcuterie and aspic development; and demonstrate specialty food techniques for presentation. B or better required for Culinary majors. Offered during Fall or Summer semesters.

## CHEF 1445 INTERNATIONALCUISINE

Prerequisite: FDNS 1301, CHEF 1400

## Fees: Laboratory

The study of classical cooking skills associated with the preparation and service of international and ethnic cuisines. Topics include similarities between food production systems used in the United States and other regions of the world.

The student will explain the impact of Germany, Mexico, France, Italy, and China in the development of classical principles and food preparation; interpret basic and advanced cooking principles in the preparation of classical food dishes; and identify the origin of menu items. B or better required for Culinary majors. Offered during Fall or Summer semesters.

## CHEF 2264 PRACTICUM

Prerequisite: Instructor Approval, MATH 0301
Fees: Laboratory
Practical general training and experiences in the workplace. The College, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay. This course may be repeated if topics and learning outcomes vary. As outlined in the learning plan, the student will master the theory, concepts, and skills involving the tools, materials, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, and legal systems associated with the workplace; demonstrate ethical behavior, safety practices, interpersonal and teamwork skills, appropriate verbal and written communications in the workplace.

## CHEMISTRY

## CHEM 1370 BASIC CHEMISTRY

Prerequisite: None
A basic course for students with little or no chemistry or science background. This course covers the fundamentals of chemistry and related mathematics. May not be counted in lieu of other chemistry courses.

## CHEM 1406 INTRODUCTION TO CHEMISTRY I

Prerequisite: None
Co-requisite: Concurrent enrollment in CHEM 1406 Laboratory
Fees: Laboratory
A course for non-science majors and students pursuing a degree in nursing. An introduction to the principles and laws of elementary in organic chemistry, which includes measurement, atomic theory, stoichiometry, gas laws, and solution chemistry. Must be followed by completion of CHEM 1407 to satisfy a physical science requirement. Requires concurrent enrollment in CHEM 1406 Laboratory.

## CHEM 1407 INTRODUCTION TO CHEMISTRY II

Prerequisite: Completion CHEM 1406
Co-requisite: Concurrent enrollment in CHEM 1407 Laboratory
Fees: Laboratory
A course for non-science majors and students pursuing a BSN degree in nursing. An introduction to the principles and laws of nuclear chemistry, general organic chemistry, organic functional groups, and basic biochemical structural groups and processes. Must be preceded by completion of CHEM 1406 to satisfy a physical science requirement. Requires concurrent enrollment in CHEM 1407 Laboratory.

## CHEM 1411 GENERAL CHEMISTRY I

Prerequisite or Co-requisite: MATH 1314
Co-requisite: Concurrent enrollment in CHEM 1411 Laboratory.
Fees: Laboratory
A course for science majors. Study of the fundamental principles and laws of inorganic chemistry, which includes measurement, modern atomic theory, stoichiometry, chemical bonding, gas laws, states of matter, and solution chemistry.

## CHEM 1412 GENERAL CHEMISTRY II

Prerequisite: Completion of CHEM 1411 or its equivalent. Co-requisite: Concurrent enrollment in CHEM 1412 Laboratory Fees: Laboratory

A course for science majors. Continuation of the study of the fundamental principles and laws of inorganic chemistry. Topics include molecular and ionic equilibria, elementary thermodynamics, electrochemistry, nuclear chemistry, and an introduction to organic chemistry. Requires concurrent enrollment in CHEM 1412 Laboratory.

## CHEM 2223 ORGANIC CHEMISTRY LABORATORY I

Prerequisite: Completion of CHEM 1412 or the equivalent. Corequisite: Concurrent enrollment in CHEM 2323 Lecture
Fees: Laboratory
A course for science majors. The study of the fundamental principles and laboratory techniques of organic chemistry. Topics include preparation, isolation, and purification of organic molecules.

## CHEM 2225 ORGANIC CHEMISTRY LABORATORY II

Prerequisite: Completion of CHEM 2223 or the equivalent. Corequisite: Concurrent enrollment in CHEM 2325 Lecture Fees: Laboratory

A course for science majors. Continuation of the study of the fundamental principles and laboratory techniques of organic chemistry. Topics include synthesis and analysis of organic molecules and characterization of organic functional groups.

## CHEM 2323 ORGANIC CHEMISTRY I

Prerequisite: Completion of CHEM 1412 or the equivalent.
Corequisite: Concurrent enrollment in CHEM 2223 Laboratory
Fees: Laboratory
An introductory course in organic chemistry. Presentations of the principles and basic concepts and theories of organic chemistry as they relate to the structures, nomenclature, and properties of hydrocarbons and derivative of the aliphatic and aromatic series of compounds. Concurrent enrollment in CHEM 2223 Laboratory is required.

## CHEM 2325 ORGANIC CHEMISTRY II

(3-3-0)
Prerequisite: Completion of CHEM 2323 and CHEM 2223 or the equivalent. Co-requisite: Concurrent enrollment in CHEM 2225 Laboratory
Fees: Laboratory
Continuation of an introductory course in organic chemistry. Presentation of the principles, basic concepts and theories of organic chemistry as they relate to the effects of functional groups in organic reactions. Functional groups covered in this course include alcohol, ethers, thiols, carboxylic acids, esters, amines, polymers, carbohydrates, lipids, amino acids, and nucleic acids. Concurrent enrollment in CHEM 2225 Laboratory is required.

## CHEM 2401 QUANTITATIVE ANALYSIS

Prerequisite: Completion of CHEM 1412, General Chemistry Part 2 with a grade of "C" or better; completion of MATH 1314, College Algebra or MATH 1442 Statistics, with a grade of "C" or better. Corequisite: Concurrent enrollment in CHEM 2401 Laboratory
Fees: Laboratory
Theory and practice of some general methods of quantitative chemical analysis, including gravimetric, volumetric, potentiometric, spectroscopic and chromatographic techniques. Designed for students planning a career in chemistry, chemical technology, and related fields. Concurrent enrollment in CHEM 2401 Laboratory is required.

## MUSIC - PRIVATE CLARINET

## CLAR 1271 PRIVATE CLARINET ELEMENTARYLEVEL

Beginning one-on-one instruction in the technique of playing the clarinet. This will include, but not be limited to, proper positioning of instrument and embouchure, fingering, intonation, and music reading skills.

CLAR 1272 PRIVATE CLARINETINTERMEDIATE LEVEL
Prerequisite: CLAR 1271, or permission of instructor.
Fees: Laboratory
A continuation of CLAR 1271 at a more advanced level. The course will develop physical playing skills and reading on the clarinet.

## HOME BUILDING

CNBT 1311 CONSTRUCTION METHODS AND MATERIALS
Prerequisite: None
An introduction to construction materials and methods and their applications.

## CNBT 1342 BUILDING CODES AND INSPECTIONS

Prerequisite: CNBT 1311, 1405, 1416 or meet departmental criteria.
An examination of the building codes and standards applicable to building construction and inspection processes.

## CNBT 1391 LEGAL RESPONSIBILITIES FOR CONTRACTORS

Prerequisite: None
Management problems faced by the beginning contractor including state and federal tax requirements, unemployment compensation, workman's compensation, insurance, contracts, liens, record keeping, and construction finance.

## CNBT 1416 CONSTRUCTION TECHNOLOGY I

Prerequisite: None
Fees: Laboratory
A comprehensive course in site preparation, foundation, form work, and framing. Topics include safety; tools and equipment; basic site preparation; foundations and form work; and basic floor, wall, and roof framing methods and systems.

## CNBT 1446 CONSTRUCTION ESTIMATING I

Prerequisite: CNBT 1311, 1405, 1416 or meet departmental criteria.
Fees: Laboratory
Fundamentals of estimating materials and labor costs in construction.

## CNBT 1450 CONSTRUCTION TECHNOLOGY II

Prerequisite: CNBT 1416 and MATH 1373
Fees: Laboratory
An intermediate course in site preparation, foundation, form work, and framing in residential and light construction. Topics include safety; tools, and equipment; site preparation and layout; concrete; foundations and related form work; and floor, wall, ceiling, stair, and roof framing methods and systems.

## CNBT 1471 CONSTRUCTION TOOLS AND TECHNIQUES

Prerequisite: None
Fees: Laboratory
The use of pneumatic, optical, electrical and power actuated tools used in home construction. Pneumatic nailer, airless spray gun, and portable power units. Roofing and interior finish, insulation techniques, door and window hanging, interior trim, are the vehicles of instruction.

## CNBT 2266 PRACTICUM - CONSTRUCTION/BUILDING TECHNOLOGY/TECHNICIAN

Prerequisite: Meet departmental criteria.
Practical general training and experiences in the workplace. The College, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary.

## CNBT 2437 CONSTRUCTION ESTIMATING II

(4-3-3)
Prerequisite: CNBT 1446
Fees: Laboratory
Advanced estimating concepts using computer software programs from the construction industry.

## CNBT 2342 CONSTRUCTION MANAGEMENT

Prerequisite: CNBT 1311, 1416, 1450, 1405, 1342 or meet departmental criteria.
Human relations management skills in motivation on the job site. Topics include written and oral communications, leadership and motivation, problem solving, and decision making.

## COMMUNICATIONS EQUIPMENT TECHNOLOGY <br> (See: Electronic Systems Technology)

COMPUTER MAINTENANCE TECHNOLOGY (See: Electronic Systems Technology)

## COMPUTER SCIENCE

COSC 1301 COMPUTER LITERACY
Prerequisite: None
Fees: Laboratory
A hands-on introduction to personal computers and information processing for those with no previous background. A study of the computer and its social impact. Specific topics include systems capabilities, DOS, word processing, presentations, spreadsheets, databases, and an introduction to programming. Numerous computer assignments are required. This course is not for mathematics or computer science majors.

## COSC 1315 INTRODUCTION TO COMPUTER SCIENCE

Prerequisite: MATH 1314 (may be taken concurrently) or higher.
Fees: Laboratory
Fundamental concepts in computer science with emphasis on problem solving and algorithm design. Topics include simple data types, programming constructs, procedures, arrays, strings, record, and files as implemented in a structured highlevel language. Student computer programming projects illustrate the design, coding, debugging, documentation, and techniques of good programming style.

COSC 2315 DATA STRUCTURES
Prerequisite: COSC 1315 with a grade of "C" or better, or equivalent.
Fees: Laboratory
Topics include abstract data structures (stacks, queues, lists, trees), primitive operations, and methods of data representation, dynamic memory allocation, pointers, and recursion.

## COSC 2318 ADVANCED STRUCTURED PROGRAMMING TECHNIQUES

Prerequisite: COSC 2315 with a grade of "C" or better, or equivalent, and concurrent enrollment in MATH 1314 or higher, or consent of the instructor.
Fees: Laboratory
This course is intended for students with prior experience in programming in an high-level language. This course emphasizes fundamental concepts of Computer Science as related to problem solving and algorithm design. Student computer programming projects and case studies are used to illustrate these concepts. Topics also include procedures, arrays, strings, records, and files as implemented in a structured high-level language.

## ELECTRONIC SYSTEMS TECHNOLOGY

## CPMT 1171 INTRODUCTION TO ELECTRONICS

Prerequisite: Department approval
Fees: Laboratory
This course is designed to present an overview of an Electronic Technical Career and the Electronics Department in general. Contents include an analysis of programs offered, departmental policies, and an overview of basic electronics and basic tool and test equipment usage. State of the industry presentations will be made by selected guest speakers.

## CPMT 1191 JOB SEARCH SKILLS

Prerequisite: Department approval
Fees: Laboratory
This course is designed to help the student develop their communication skills dealing with resume writing and interviewing techniques. Guest speakers from industry will also present information on what the electronics industry is looking for.

## CPMT 1404 MICROCOMPUTER SYSTEM SOFTWARE

Prerequisite: Department approval
Fees: Laboratory
Skill development in the installation, configuration, maintenance and troubleshooting of system software in microcomputers. Topics may include operating systems, utility software and other software affecting the basic operation of a microcomputer system.

## CPMT 1445 COMPUTER SYSTEMS MAINTENANCE

Prerequisite: Department approval
Fees: Laboratory
Functions of the components within a computer system. Development of skills in the use of test equipment and maintenance aids.

## CPMT 1449 COMPUTER NETWORKING TECHNOLOGY

Prerequisite: Department approval

## Fees: Laboratory

Networking fundamentals, terminology, hardware, software, and network architecture. Includes local and wide area networking concepts and networking installations and operations.

## CRIMINAL JUSTICE

## CRIJ 1301 INTRODUCTION TO CRIMINAL JUSTICE

Prerequisite: None
This course explores the history and philosophy of criminal justice. The study includes ethical considerations, crime definitions by nature and impact, and an overview of the Criminal Justices system components: law enforcement; court system; prosecution and defense; trial process; and corrections.

## CRIJ 1306 THE COURTS AND CRIMINAL PROCEDURE

Prerequisite: None
The judiciary in the Criminal Justice System is studied. Included is the structure of the American court system, the prosecution, right to counsel, pre-trial release, grand juries, the adjudication process, types and rules of evidence, and sentencing.

## CRIJ 1307 CRIME IN AMERICA

Prerequisite: None
This course is the study of American crime problems in a historical perspective. Included are social and public policy factors affecting crime, impact and crime trends, social characteristics of specific crimes, and the prevention of crime.

## CRIJ 1310 FUNDAMENTALS OF CRIMINAL LAW

Prerequisite: None
A study of the nature of criminal law; philosophical and historical development; major definitions and concepts; classification of crime; elements of crimes and penalties using Texas statutes as illustrations are explored.

## CRIJ 2313 CORRECTIONAL SYSTEMS AND PRACTICES

Prerequisite: None
This course is a study of corrections in the Criminal Justice System; organization of correctional systems; correctional role; institutional operations; alternatives to institutionalization; treatment and rehabilitation; current and future issues.

## CRIJ 2314 CRIMINAL INVESTIGATION

Prerequisite: None
This course explores investigative theory; collection and preservation of evidence; sources of information; interview and interrogation; uses of forensic sciences, case and trial preparation.

CRIJ 2323 LEGAL ASPECTS OF LAW ENFORCEMENT
Prerequisite: None
The course studies police authority, responsibilities; constitutional constraints; laws of arrest, search, and seizure; and police liability.

## CRIJ 2328 POLICE SYSTEMS AND PROCEDURES

Prerequisite: None
The course explores the police as a profession; organization of law enforcement systems; the police role; police discretion; ethics; police-community interaction; and current and future issues.

## COMPUTED TOMOGRAPHY (ENHANCED SKILLS CERTIFICATE)

## CTMT 2332 PRINCIPLES OF COMPUTED TOMOGRAPHY

(3-3-0)
Coverage of computed tomography imaging techniques. Image quality assurance and radiation protection are emphasized.

## CTMT 2360 CT CLINICAL I

(3-0-9)
Clinical rotation that covers basic skills in the application of computed tomography.

## CTMT 2361 CT CLINICAL II

(3-0-9)
Continuation of clinical rotation in computed tomography to include quality control and upper-level scanning parameters.

## DANCE

## DANC 1151 BEGINNING DANCE

Prerequisite: None
Notes: Formerly DAN 1101
Basic techniques and theory of fundamental body movements, development of self-expression, body control, and flexibility. Seeks to develop self-confidence, poise, grace, ease of movement, and to present a broad cultural background as an art form. Emphasis on social dance some semesters. May be repeated for credit. Same as KINE 1151.

DANC 1152 INTERMEDIATE DANCE
Prerequisite: DANC 1151 or permission of instructor.
Notes: Formerly DAN 1102
Continuation of 1151 with focus on ballet, modern, or modern jazz. May be repeated for credit. Same as KINE 1152.

## DANC 1241 BEGINNING BALLET

Prerequisite: None
Notes: Formerly DAN 1201
Beginning theory, technique, and vocabulary of ballet. May be repeated for credit.

## DANC 1245 BEGINNING MODERN DANCE

Prerequisite: None
Notes: Formerly DAN 1202
Beginning theory, technique, and vocabulary of modern dance. May be repeated for credit.

## DANC 1247 BEGINNING MODERN JAZZ DANCE

Prerequisite: None
Notes: Formerly DAN 1203
Elementary theory, technique, and vocabulary of jazz dance. May be repeated for credit.

## DANC 1251 DANCE, PERFORMINGARTS

Prerequisite: None
Instruction and participation in ballet, jazz, or modern dance technique. May be repeated for credit.

## DANC 1252 DANCE, PERFORMINGARTS

Prerequisite: DANC 1251 or permission of instructor.
A continuation of DANC 1251. May be repeated for credit.

## MANUFACTURING TECHNOLOGY ACADEMY

## DEMR 1316 BASIC HYDRAULICS

Prerequisite: None
Fees: Laboratory
Fundamentals of hydraulics including components and related systems.

## DEMR 1329 PREVENTATIVE MAINTENANCE

Prerequisite: None
Fees: Laboratory
An introductory course designed to provide the student with basic knowledge of proper servicing practices. Content includes record keeping and condition of major systems.

## DEMR 1330 STEERING AND SUSPENSION I

Prerequisite: None
Fees: Laboratory
A study of design, function, maintenance, and repair of steering and suspension systems. Emphasis on troubleshooting and repair of failed components.

## DEMR 1401 SHOP SAFETY AND PROCEDURES

Prerequisite: None
Fees: Laboratory
A study of shop safety, rules, basic shop tools, and test equipment.

## DEMR 1405 BASIC ELECTRICAL SYSTEMS

Prerequisite: None
Fees: Laboratory
An introduction to the basic principles of electrical systems for diesel powered equipment with emphasis on starters, alternators, batteries, and regulators.

## DEMR 1406 DIESEL ENGINE I

Prerequisite: None
Fees: Laboratory
An introduction to the basic principles of diesel engines and systems.

## DEMR 1416 BASIC HYDRAULICS

Prerequisite: None
Fees: Laboratory
Fundamentals of hydraulics including components and related systems.

DEMR 1417 BASIC BRAKE SYSTEMS
Prerequisite: None
Fees: Laboratory
An introduction to the basic principles of brake systems of diesel powered equipment. Emphasis on maintenance, repairs, and troubleshooting.

## DEMR 1421 POWER TRAIN I

Prerequisite: None
Fees: Laboratory
Introduction to fundamentals, repair, and theory of power trains including clutches, transmissions, drive shafts, and differentials. Emphasis on inspection and repair.

## DEMR 1423 HEATING, VENTILATION, AND AIR CONDITIONING <br> (HVAC) TROUBLESHOOTING AND REPAIR (4-3-2)

Prerequisite: None
Fees: Laboratory
Introduction to heating, ventilation, and air conditioning theory, testing, and repair. Emphasis on refrigerant reclamation, safety procedures, specialized tools, and repairs.

## DEMR 1435AUTOMATIC POWER SHIFT AND HYDROSTATIC TRANSMISSION I

Prerequisite: Basic Hydraulics
Fees: Laboratory
A study of the operation, maintenance, and repair of automatic power shift hydrostatic transmission ( Allison 500, 600, \& 700). The student will interpret applications and oil flow circuits used in hydrostatic transmissions; evaluate parts using visual and standard testing procedures; and diagnose problems, repair and adjust the transmission.

## DEMR 2266 PRACTICUM (OR FIELD EXPERIENCE) DIESEL ENGINE MECHANIC AND REPAIRER

Prerequisite: None
Fees: Laboratory
Practical general training and experiences in the workplace. The College, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary.

## DEMR 2335ADVANCED HYDRAULICS

Advanced study of hydraulic systems and components including diagnostics and testing of hydraulic systems.

## DEMR 2348 FAILURE ANALYSIS

Fees: Laboratory
An advanced course designed for the analysis of typical part failures on equipment.

## DEMR 2432 ELECTRONIC CONTROLS

Prerequisite: DEMR 1405
Fees: Laboratory
Advanced skills in diagnostic and programming techniques of electronic control systems.

## DEMR 2434 ADVANCED DIESELTUNE-UPAND TROUBLESHOOTING

Prerequisite: Engine I
Fees: Laboratory
Advanced concepts and skills required for tune-up and troubleshooting procedures of diesel engines. Emphasis on the science of diagnostics with a common sense approach. The student will analyze engine malfunctions; determine corrective repair; perform engine repairs; and adjust engine tune-up according to engine manual. The course will emphasize Caterpillar, Cummins, Detroit, and Mack electronically controlled engine systems.

## DEMR 2477 ADVANCED DIESEL ELECTRICAL/ELECTRONICS

Prerequisite: DEMR 1401, 1405
Fees: Laboratory
This course is a continuation of the Basic Electrical course; in it the students will become more involved in the major electrical devices of a truck. Those would include; truck and trailer lighting, instruments and warning systems, truck accessories, ignition systems, and computer control systems. They will also learn about the various diagnostic tools and procedures for modern electronic systems. Primary emphasis will be on diagnosis, testing, and repair.

## DRAFTING

## DFTG 1208 BASIC COMPUTER-AIDED DRAFTING

Prerequisite: Approval of the Program Director
Fees: Laboratory
A continuation to computer-aided drafting. Emphasis is placed on setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinate systems, and plot/print to scale.

## DFTG1315 ARCHITECTURALBLUE PRINTREADING AND CONSTRUCTION ESTIMATING

Prerequisite: Block III and concurrent enrollment in DFTG 2466 and DFTG 2453
Fees: Laboratory
The fundamentals of blueprint reading for the construction industry will be examined. Identify the importance and use of construction prints; identify the symbols, terminology, and standard abbreviations; explain the sequence of drawing organization; make the calculations and measurements relative to construction; and interpret construction drawings and scales. Principles and practices commonly employed by the local construction industries.

## DFTG 1409 BASIC COMPUTER - AIDED DRAFTING

Prerequisite: Approval of the Program Director
Fees: Laboratory
An introduction to basic computer-aided drafting. Emphasis is placed on drawing setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinating systems; as well as input and output devices. The student will demonstrate the use of CAD hardware and software to create, display, and plot/ print working drawings.

DFTG 1417 ARCHITECTURALDRAFTING-RESIDENTIAL
Prerequisite: Concurrent enrollment in DFTG 1409 and DFTG 1421
Fees: Laboratory
A continuation of practices and techniques used in basic computer-aided Architectural drafting procedures, practices, and symbols, including preparation of detailed working drawings for residential structure with emphasis on light frame construction methods.

## DFTG 1425 BLUEPRINT ERADINGAND SKETCHING

Prerequisite: None
Fees: Laboratory
An introduction to reading and interpreting working drawings for fabrication processes and associated trades. Use of sketching techniques to create pictorial and multiple-view drawings.

## DFTG 2400 INTERMEDIATEARCHITECTURALDRAFTING-RESIDENTIAL

(4-3-4)
Prerequisite: Block II and concurrent enrollment in DFTG 2428 and DFTG 2432
Fees: Laboratory
Continued application of principles and practices used in residential construction.

## DFTG 2419 INTERMEDIATE COMPUTER-AIDED DRAFTING <br> (4-3-4)

Prerequisite: Block I and concurrent enrollment in DFTG 2410 and INDS 1415 Fees: Laboratory

A continuation of practices and techniques used in basic computer-aided drafting emphasizing advanced dimensioning techniques, the development and use of prototype drawings, construction of pictorial drawings, construction of 2 dimensional drawings, interfacing 2 d and 3 d environments and extracting data. Demonstrate developing working drawings, pictorial drawings and externally referencing multiple drawings to construct a composite drawing; import and extract data.

DFTG 2428ARCHITECTURALDRAFTING-COMMERCIAL (4-3-4)
Prerequisite: Block II and concurrent enrollment in DFTG 2432 and INDS 2435 Fees: Laboratory

Architectural drafting procedures, practices, and symbols, including the preparation of detailed working drawings for a commercial building, with emphasis on commercial construction methods. The students will demonstrate a general understanding of architectural terms, symbols, use of commercial construction materials and processes, and a general knowledge of drawing production processes; recognize the relationship between specifications and drawings and exhibit a general knowledge of architectural requirements and governing codes; demonstrate the ability to produce a set of commercial construction drawings to include a site plan, floor plans, reflected ceiling plan, sections, elevations, schedules, and details. A continuation of DFTG 1417 and DFTG 2419.

## DFTG 2432 ADVANCED COMPUTERAIDED DRAFTING

(4-3-4)
Prerequisite: Block II and concurrent enrollment in DFTG 2428 and INDS 2435
Fees: Laboratory
Use of advanced techniques, including the use of a customized system and the principles of data manipulation for drawing production enhancement. Presentation of advanced drawing applications, such as three-dimensional modeling and linking graphic entities to external non-graphic data. The student will demonstrate a working knowledge of drawing production enhanced by system customization and data manipulation; create three-dimensional models: export, import and link file data.

## DFTG 2438 FINALPROJECT-ARCHITECTURAL DRAFTING

Prerequisite: Approval of the Program Director or Chairman
Fees: Laboratory
A drafting course in which students participate in a comprehensive project from conception to conclusion. Additional research in the Architectural Field with the emphasis on producing a professional portfolio and completing several hours of community service.

## DFTG 2440 SOLID MODELING

Prerequisite: Approval of the Program director or Chairman

## Fees: Laboratory

A computer-aide modeling course. Development of three-dimensional drawings and models form engineering sketches and orthographic drawings and utilization of three-dimensional models in design work. Application of the concepts necessary to create three-dimensional solid model objects; create isometric, oblique, and perspective drawings.

## DFTG 2466 PRACTICUM

Prerequisite: Approval of the Program Director or Chairman
Fees: Laboratory
Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. As outlined in the learning plan, apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry and will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry. The guided external experiences may be for pay or no pay. This course may be repeated if topics and learning outcomes vary.

## DIETARY MANAGER

## DITA 1300 DIETARY MANAGER I

Prerequisite: None
Preparation for supervisory roles in food service departments. Emphasis on normal and therapeutic nutrition and food service systems management. Major topics include dietary and meal planning guidelines, sources and functions of nutrients, diet therapy, nutritional assessment and care, food production management and purchasing, and regulatory agencies.

The student will apply diet and nutrition principles to menu selection and food preparation for maximal health benefit and enjoyment of persons on regular or altered diets; discuss nutrition assessment and care planning process and participate in the processes as required; and organize the procurement and preparation of foods and meals to meet the dietary needs of clientele within resources available.

## DITA 1167 PRACTICUM

(1-0-8)
Prerequisite: Instructor Approval
Fees: Laboratory
Practical general training and experiences in the workplace. The College, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay. This course may be repeated if topics and learning outcomes vary. As outlined in the learning plan, the student will master the theory, concepts, and skills involving the tools, materials, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, and legal systems associated with the workplace; demonstrate ethical behavior, safety practices, interpersonal and teamwork skills, appropriate verbal and written communications in the workplace.

## DIAGNOSTIC MEDICAL SONOGRAPHY (ADVANCED TECHNICAL CERTIFICATE)

## DMSO 1201 TECHNIQUES OF MEDICAL SONOGRAPHY

Prerequisite: None
Fees: Laboratory
Scanning techniques. Includes scan protocols and procedures within the laboratory setting utilizing live and/or simulated experience.

DMSO 1210 INTRODUCTION TO SONOGRAPHY
Prerequisite: None
Fees: Laboratory
An introduction to the profession of sonography and the role of the sonographer. Emphasis on medical terminology, ethical/legal aspects, written and verbal
communications, and professional issues relating to registry, accreditation, professional organizations and history of the profession.

## DMSO 1302 BASIC ULTRASOUND PHYSICS

Prerequisite: None
Fees: None
Basic acoustical physics and acoustical waves in human tissue. Emphasis on ultrasound transmission in soft tissues, attenuation of sound energy, parameters affecting sound transmission and resolution of sound beam.

## DMSO 1342 INTERMEDIATE ULTRASOUND PHYSICS

Prerequisite: DMSO 1302
Fees: None
Continuation of Basic Ultrasound Phisics. Includes interaction of ultrasound with tissue, mechanics of ultrasound production and display, various transducer design and construction, quality assurance, bioeffects, and image artifact. May introduce methods of Doppler flow analysis.

## DMSO 1351 SONOGRAPHY CROSS SECTIONAL ANATOMY

Detailed study of the anatomy of the abdomen including anatomical relationships of organs, such as liver, gallbladder, spleen, pancreas, and vascular structures and body planes and quadrants.

## DMSO 1360 SONOGRAPHY CLINICAL I

(3-0-18)
Clinical rotation to include orientation and introduction to common applications of diagnostic medical sonography. Basic scanning methods and instrumentation will be demonstrated, focusing on abdominal and fetal anatomy.

## DMSO 1361 SONOGRAPHY CLINICAL II

(3-0-18)
Continuation of clinical rotation to include performing specified ultrasound procedures.

## DMSO 1541 ABDOMINOPELVIC SONOGRAPHY

Prerequisite: None
Fees: Laboratory
Normal anatomy and physiology of the abdominal and pelvic cavities as related to scanning techniques, transducer selection, and scanning protocols.

## DMSO 1561 CLINICAL DIAGNOSTIC MEDICAL SONOGRAPHY I

Prerequisite: None
Fees: None
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

DMSO 2253 SONOGRAPHY OF SUPERFICIAL STRUCTURES
(2-2-0)
Detailed study of normal and pathological superficial structures as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols.

## DMSO 2341 SONOGRAPHY OFABDOMINOPELVIC PATHOLOGY

Prerequisite: DMSO 1541
Fees: Laboratory
Pathologies and disease state of the abdomen and pelvis as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. Emphasizes endocavitary sonographic anatomy and procedures including pregnancy.

DMSO 2342 SONOGRAPHY OF HIGH RISK OBSTETRICS
Prerequisite: None
Fees: Laboratory
Maternal disease and fetal abnormalities. Includes scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols.

## DMSO 2243 ADVANCED ULTRASOUND PRINCIPLES AND INSTRUMENTATION

Prerequisite: DMSO 1342
Fees: None
Theory and application of ultrasound principles. Includes advances in technology.

## DMSO 2353 SONOGRAPHY OF SUPERFICIAL STRUCTURES

Prerequisite: None
Fees: Laboratory
Detailed study of normal and pathological superficial structures as related to scanning techniques, patient history and laboratory data, transducer selection and scanning protocol.

DMSO 2351 DOPPLER PHYSICS
Prerequisite: None
Fees: None
Doppler and hemodynamic principles relating to arterial and venous imaging and testing.

## DMSO 2353 SONOGRAPHY OF SUPERFICIAL STRUCTURES

Prerequisite: None
Fees: Laboratory
Detailed study of normal and pathological superficial structures as related to scanning techniques, patient history and laboratory data, transducer selection and scanning protocol.

## DMSO 2405 SONOGRAPHY OF OBSTETRICS/GYNECOLOGY

(4-3-2)
Fees: Laboratory
Detailed study of the male and female pelvis and obstetrics/gynecology related to scanning techniques, patient history, a laboratory data, transducer selection, and scanning protocols.

## DMSO 2441 SONOGRAPHY OF ABDOMINOPELVIC PATHOLOGY

Fees: Laboratory
Pathologies and disease state of the abdomen and pelvis as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. Emphasizes endocavitary sonographic anatomy and procedures including pregnancy.

## DMSO 2462 CLINICAL DIAGNOSTIC MEDICAL SONOGRAPHY II

Prerequisite: DMSO 1561
Fees: None
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

## DMSO 2463 CLINICAL DIAGNOSTIC MEDICAL SONOGRAPHY III

Prerequisite: DMSO 2462
Fees: None
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

# DIAGNOSTIC VASCULAR TECHNOLOGY 

## DVST 1103 INTRO TO VASCULAR TECHNOLOGY

Prerequisite: None
Fees: Laboratory
Introduction to basic non-invasive vascular theories. Emphasizes image orientation, transducer handling, and identification of anatomic structures.

## DRAMA

DRAM 1120 PRODUCTION AND REHEARSAL
(1-0-3)
Prerequisite: None
Participation by contract in major production (actor and/or technician).

## DRAM 1121 PRODUCTION AND REHEARSAL

Prerequisite: DRAM 1120
Participation by contract in major production (actor and/or technician).

## DRAM 1310 INTRODUCTION TO THEATRE-THEATRE APPRECIATION

Prerequisite: None
A course designed to provide a survey of the main fields of theatre activity thus providing a background for the appreciation and enjoyment of live theatre through an understanding of the elements of theatre management, play analysis, acting, directing, and technical theatre.

## DRAM 1330 INTRODUCTION TO THEATRE PRACTICE I

Prerequisite: None
Introduction to the three major areas of theatre design and technology. A hands-on approach to stagecraft with a focus on the five elements of design. Basic design projects completed. Participation on technical crews for departmental productions is required.

## DRAM 1341 STAGE MAKE-UP

Prerequisite: None
Fees: Laboratory
Principles of the art, technique, and design of stage make-up.
DRAM 1351 ACTING I
Prerequisite: None
Basic skills and techniques of acting, stage movement, and characterization. Emphasis on problems of ensemble playing.

DRAM 1352 ACTING II
Prerequisite: DRAM 1351 or consent of instructor.
A continuation of Dram 1351 with special emphasis on the exploration and development of techniques for the creation of a characterization through the preparation and presentation of scenes and monologues.

## DRAM 1376 CREATIVE DRAMATICS

Prerequisite: None
An introductory course which emphasizes the use of creative dramatics as a teaching tool-improvisation, pantomime, puppetry, and storytelling. An excellent course for preschool and elementary teachers.

## DRAM 2120 PRODUCTION AND REHEARSAL

Prerequisite: None
Participation by contract in major production (actor and/or technician).

## DRAM 2121 PRODUCTION AND REHEARSAL

Prerequisite: None
Participation by contact in major production (actor and/or technician).

## DRAM 2331 INTRODUCTION TO THEATRE PRACTICE II

Prerequisite: DRAM 1330
A study of intermediate stagecraft skills with emphasis on design for performance. Major design project completed. Participation on technical crews for departmental productions is required.

## DRAM 2336 VOICE FOR STAGE

Prerequisite: None
A practical course designed to develop an understanding of the use and function of the performer's voice as a creative instrument for communication.

## DRAM 2371 CHILDREN'S THEATRE

Prerequisite: None
Adults learning the basic techniques of acting for children. The class may culminate with a formal production for children.

## DRAM 2389 ACA COOPERATIVE IN THE FINE ARTS: THEATRE

Prerequisite: DRAM 1330 and DRAM 2120 or Instructor Approval Fees: Laboratory

An instructional program designed to integrate on-campus study with practical hands-on work experience in theatre. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of theatre.

## ECONOMICS

## ECON 2301 PRINCIPLES OF MACROECONOMICS

Prerequisite: None
Economic analysis of the whole economy. The determination of aggregate income and employment; fiscal policy; operation of the monetary system; shortterm income fluctuations; long-term income growth; problems of international trade and finance.

## ECON 2302 PRINCIPLES OF MICROECONOMICS

Prerequisite: None
Consumer behavior, cost of production, price and output decisions in various market situations. Microeconomic problems and policies related to business; labor; cost-benefit analysis for the public sector; the cities; insecurity, poverty, and discrimination; the environment; the world's economics.

## EDUCATION

## EDUC 1300 LEARNING FRAMEWORK

Prerequisite: None
The psychology of learning, motivation and the factors that impact learning are studied. Identify your strengths in learning and improve your learning potential in your classes. Future teachers can identify how each of their students learns best. SATISFIES THE SOCIAL SCIENCE COURSE REQUIREMENT.

## EDUC 1301 INTRODUCTION TO THE TEACHING PROFESSION (3-3-0)

Prerequisite: None
An in-depth study of the teaching profession, focusing on foundations of American education, social and ethical issues, and classroom management techniques. Information regarding admission criteria for entry into teachercertification programs at area universities will be addressed. The course includes a minimum of 16 contact hours of field experience (observations and interaction with students) in P-12 classrooms. REQUIRED FOR TEACHER EDUCATION MAJORS ENTERINGST.PHILIP'S COLLEGE UNDER THECURRENTCATALOG.

## EDUC 1325 MULTICULTURALEDUCATION

An examination of the practices of cultural diversity found in society and the classroom. Topics include the study of cultures and their influence on lifestyle, behavior, learning, intercultural communication and teaching. REQUIRED FOR TEACHER EDUCATION MAJORS ENTERING ST. PHILIP'S COLLEGE UNDER THE CURRENT CATALOG.

## ELECTRONIC SYSTEMS TECHNOLOGY

## EECT 1407 CONVERGENT TECHNOLGIES

Prerequisite: Department approval
Fees: Laboratory
A study of telecommunications convergent technologies including telephone, LAN, WAN, wireless, voice, video, and internet protocol.

## EECT 2266 PRACTICUM - ELECTRICAL, ELECTRONIC AND COMMUNICATIONS ENGINEERING TECHNOLOGY/ TECHNICIAN <br> Prerequisite: Department approval <br> Fees: Laboratory <br> Practical general workplace training supported by an individualized learning plan developed by the employer, college, and student.

## ELMT 1305 BASIC FLUID POWER

Prerequisite: None
Fees: Laboratory
Basic fluid power course covering vacuum systems, pneumatic and hydraulic systems, fluid power symbols, operating theory, components, and basic electrical and manual controls.

## ELPT 1311 BASIC ELECTRICAL THEORY

An overview of the theory and practice of electrical circuits including calculations as applied to alternating and direct current.

## ELPT 1325 NATIONAL ELECTRICAL CODE I

Prerequisite: None
An introductory study of the National Electric Code (NEC) for those employed in fields requiring knowledge of the Code. Emphasis on wiring design, protection, methods, and materials; equipment for general use; and basic calculations. The student will locate and read the sections in the NEC that pertain to electrical installations; calculate the size of conductors, boxes, raceways, and over current protection devices for branch circuits supplying electrical equipment; calculate conductors and over current protection, and service equipment as applied to building services; and compute the size of branch circuits, feeders, and equipment for motors.

## ELPT 1355 ELECTRONICS FOR ELECTRICIANS

A study of electronic principles and the use of electronic devices by electricians.

## ELPT 1411 BASIC ELECTRICAL THEORY

Prerequisite: None
Fees: Laboratory
An overview of theory and practice of electrical circuits including calculations as applied to alternating and direct current. The student will explain atomic structure and basic values such as voltage, current, resistance, and power; determine electrical values for combination circuits in direct current (DC) and alternating current (AC) containing resistance, inductance, and capacitances; summarize the principles of magnetism, calculate voltage drops based on conductor length, type of material, and size, and utilize electrical measuring instruments.

## ELPT 1419 FUNDAMENTALS OF ELECTRICITYI

Prerequisite: ELPT 1411 or approval of Chairperson.
Fees: Laboratory
An Introduction to basic direct current (DC) theory including electron theory and direct current application. The student will explain atomic structure and basic electrical values such as voltage, current, resistance, and power; calculate electrical values for series, parallel, and combination circuits; calculate voltage drop based on conductor length, type of materials, and size; summarize the principles of magnetism; and utilize electrical measuring instruments; including AC voltage, frequency, mechanical and electrical degrees, waveforms, resistors, capacitors, and inductors.

## ELPT 1420 FUNDAMENTALS OF ELECTRICITY II

Prerequisite: ELPT 1411 and ELPT 1419 or approval of Chairperson.
Fees: Laboratory
An introduction to alternating current (AC) including Ohm's Law. Topics capacitance and inductance; determine the values of AC voltage, current, and impedance for circuits containing resistors, capacitors, and inductors; explain and calculate power factor in circuits; utilize electrical measuring instruments.

## ELPT 1429 RESIDENTIAL WIRING

Prerequisite: None
Fees: Laboratory
Instruction in wiring methods used for single family, two family, and multifamily dwelling. The student will compute the circuit sizes needed for the installation of branch circuits, feeders, and service entrance conductors; explain the proper installation of wiring devices according to electrical codes; demonstrate grounding method, install ground fault circuits; and identify residential wiring methods.

## ELPT 1441 MOTOR CONTROLS

Operating principles of solid-state and conventional controls along with their practical applications. Includes braking, jogging, plugging, safety interlocks, wiring, and schematic diagram interpretations.

## ELPT 1445 COMMERCIAL WIRING

Prerequisite: None
Fees: Laboratory
Instruction in commercial wiring methods. The student will interpret electrical blueprints/drawings; compute circuit sizes and over-current protection needed for the installation of branch circuits, feeders, and service entrance conductors; explain the proper installation of wiring devices according to electrical codes; demonstrate grounding methods; identify commercial wiring methods including conduit bending.

## ELPT 1451 ELECTRICAL MACHINES

(4-3-3)
Prerequisite: None
Fees: Laboratory
General principles and fundamentals of direct current (DC) motors, singlephase alternating current (AC) motors, generators, and alternators. Emphasis on their construction, characteristics, efficiencies, starting, speed control. The student will define motor terms associated with both AC and DC systems; describe all basic motor and generator parts as to their specific use and application; summarize installation procedures in regard to electrical and mechanical requirements; and discuss troubleshooting techniques and generators.

## ELPT 1457 INDUSTRIAL WIRING

Prerequisite: None
Fees: Laboratory
Instruction in wiring methods used for industrial installations. The student will interpret electrical blueprints/drawings; compute circuit sizes and over current protection for the installation of branch circuits, feeders, and service entrance conductors; explain the proper installation of wiring devices according to electrical codes; demonstrate grounding methods; and identify industrial wiring methods including conduit bending.

## ELPT 2265 ELECTRICAL PRACTICUM (OR FIELD EXPERIENCE)

(2-0-20)
Practical general training and experience in the workplace. The College, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experience to the student's general and technical course of study. The guided external experience may be for pay or no pay. This course may be repeated if topics and learning outcomes vary.

As outlined in the learning plan, the student will master the theory, concepts, and skills involving the tools, materials, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, and legal systems associated with the workplace; demonstrate ethical behavior, safety practices. Interpersoanl and teamwork skills, appropriate verbal, and written communications in the workplace.

## ELPT 2325 NATIONAL ELECTRICAL CODE II

Prerequisite: None
In-depth coverage of the National Electric Code (NEC) for those employed in field requiring knowledge of the Code. Emphasis onwiring protection and methods, special conditions, and advanced calculations. The student will explain hazardous location classifications and divisions and wiring methods allowed in these locations; state the rules for electrical installation in special locations; calculate conductor sizes and overload protection required for residential, commercial, and industrial locations; and select appropriate sections in the NEC for specific applications.

## ELPT 2419 PROGRAMMABLE LOGIC CONTROLLER I

Prerequisite: ELPT 1420 and 1411 or approval of Chairperson.
Fees: Laboratory
The student will identify and describe digital logic circuits and explain, numbering systems, logic gates, and Boolean expressions as applied to electrical controls. The student will identify and describe digital logic circuits and explain numbering systems; explain the operation of programmable logic controllers; convert ladder diagrams into programs; incorporate timers and counters utilizing programmable logic controllers; and execute and evaluate programs.

## ELPT 2423 TRANSFORMERS

Prerequisite: ELPT 1411 or approval of Chairperson.
Fees: Laboratory
A study of transformer types, construction, connections, protection, and grounding. The student will describe how transformers operate and the operating characteristics of various types; compute transformer sizes for various applications; summarize National Electric Code (NEC) regulations governing the installation of transformers; explain the types and purposes of grounding transformers.

## ELPT 2331 AC/DC DRIVES

A course in the installation and maintenance of alternating current (AC) and direct current (DC) variable speed drives with emphasis on application, operating characteristics, and troubleshooting techniques.

## ELPT 2437 ELECTRICALPLANNINGAND ESTIMATING

Prerequisite: ELPT 1428, 1445, and 1457 or approval of Chairperson. Fees: Laboratory

Instruction in preparation of estimates for residential, commercial, and industrial wiring systems. Skills development in a variety of electrical techniques. The student will list estimating procedures; organize job costs; identify types of bids; calculate cost adjustments and job costs; and demonstrate the use of estimating forms.

## ENGLISH

STUDENTS WHO RECEIVED A "D" OR "F" IN FRESHMAN COMPOSITION THREE OR MORE SEMESTERS PRIOR TO THE CURRENT SEMESTER MUST TAKE THE REQUIRED ENGLISH PLACEMENT TEST FOR CURRENT PLACEMENT. STUDENTS MAY NOT ENROLL IN ENGLISH 1301 UNTIL THIS REQUIREMENT HAS BEEN MET. STUDENTS WHO DESIRE TO ENROLL IN TWOLITERATURE COURSES CONCURRENTLYMUSTHAVEA"B"AVERAGE AND THE APPROVAL OF THE CHAIRPERSON OF THE DEPARTMENT OF ENGLISH.ALLSTUDENTS REGISTERING IN ENGLISH COURSES MUSTHAVE PROOF OF HAVING MET COURSE PREREQUISITES.
A student is placed in ENGL 0300/0310, 0301/0311, or 1301 according to scores made on a college placement exam, such as the Accuplacer, ASSET or THEA Test which is administered by the College. Students whose test scores indicate inadequate preparation to do satisfactory work in English 1301 must complete English 0300/0310, and/or 0301/0311 before enrolling in English 1301.

ENGL 0300 BASIC ENGLISH I
(3-3-0)
Prerequisite: None
Fees: None
Note: Formerly ENGL 0310
Emphasizes writing effective sentences. For students who need to improve their basic skills in grammatical usage, capitalization, punctuation, spelling, division of words into syllables, vocabulary, functions of words and sentence structure. This course cannot be substituted for any part of the regular English curriculum. A student in English 0300 must earn a passing grade before being permitted to take English 0301 or 0311 . This course does not include a laboratory component.

## ENGL 0310 FUNDAMENTALS OF ENGLISH I

(3-3-2)
Prerequisite: None
Fees: Laboratory
Note: Formerly ENGL 0300
Emphasizes writing effective sentences. For students who need to improve their basic skills in grammatical usage, capitalization, punctuation, spelling, division of words into syllables, vocabulary, functions of words, and sentence structure. This course cannot be substituted for any part of the regular English curriculum. A student must earn a passing grade --"A," "B," or "C" -- in English 0300 or 0310 before being permitted to take English 0311. A grade of "IP" means the course must be repeated. This course includes a computer laboratory component.

ENGL 0301 BASIC ENGLISH II
Prerequisite: Appropriate placement score or credit for ENGL 0300 or 0310 (A grade of "IP" means the course must be repeated).
Fees: None
Note: Formerly ENGL 0311
A review of standard English with emphasis on fundamental grammatical principles, pronunciation, spelling, vocabulary, sentence structure, punctuation, and reading. Paragraphs and short themes are written for practice in clear expression. This course cannot be substituted for any part of the English curriculum. A student in English 0301 must earn a passing grade before being permitted to take English 1301. This course does not include a laboratory component.

ENGL 0311 FUNDAMENTALS OF ENGLISH II
(3-3-2)
Prerequisite: Appropriate placement score or credit for ENGL 0300 or 0310. (A grade of "IP" means the course must be repeated.)
Fees: Laboratory
Note: Formerly ENGL 0301
A review of standard English with emphasis on fundamental grammatical principles, pronunciation, spelling, vocabulary, sentence structure, punctuation, and reading. Paragraphs and short themes are written for practice in clear expression. This course cannot be substituted for any part of the regular English curriculum. A student must earn a passing grade --"A," "B," or "C" -- in English 0311 before being permitted to take English 1301. A grade of "IP" means the course must be repeated. This course includes a computer laboratory component.

ENGL 1301 FRESHMAN COMPOSITION I
Prerequisite: Appropriate placement score or credit for ENGL 0301 and/or ENGL 0311.

Notes: English 1301 and 1302 cannot be taken concurrently.
Emphasizes training in reading and writing skills. Course requires expository essays based on provocative and critical readings. A student must earn a passing grade in English 1301 before enrolling in English 1302. Students with Applied Science or Technology majors should enroll in classes labeled "T" or "Tech."

## ENGL 1302 FRESHMAN COMPOSITION II

Prerequisite: ENGL 1301
Emphasizes the interpretation and analysis of literature as the focus for essays in the course. Readings are expanded to explore major genres of literature including short stories, novels, poetry, and drama. A research paper or term project is required.

## ENGL 2307 CREATIVE WRITING: POETRY AND FICTION

Prerequisite: ENGL 1301
Designed for students interested in learning the craft of fiction and poetry and enhancing the development of creative writing skills. This course is generally taught as a workshop in imaginative writing.

## ENGL 2322 BRITISH LITERATURE I

(3-3-0)
Prerequisite: ENGL 1301 and ENGL 1302
Notes: Formerly ENGL 2310
A survey of British literature from the Old English Period through the Eighteenth Century. A research paper or term project is required.

## ENGL 2323 BRITISH LITERATURE II

(3-3-0)
Prerequisite: ENGL 1301 and ENGL 1302
Notes: Formerly ENGL 2311
A continuation of British literature from the beginnings of Pre-Romanticism through the 20th Century. A research paper or term project is required.

## ENGL 2327 AMERICAN LITERATURE I

(3-3-0)
Prerequisite: ENGL 1301 and ENGL 1302
Notes: Formerly ENGL 2315
A survey of American literature from the early Colonial Period to the beginnings of Realism. A term paper or term project is required.

## ENGL 2328AMERICAN LITERATURE II

Prerequisite: ENGL 1301 and ENGL 1302
Notes: Formerly ENGL 2316
A survey of American literature from the beginnings of Realism to the present. A term paper or term project is required.

## ENGL 2332 READINGS IN WORLD LITERATURE

(3-3-0)
Prerequisite: ENGL 1301 and ENGL 1302
Notes: Formerly ENGL 2313
A study of representative masterpieces of the literature of the Western World beginning with ancient writings and ending with the Renaissance.

## ENGL 2333 READINGS IN WORLD LITERATURE

Prerequisite: ENGL 1301 and ENGL 1302
Notes: Formerly ENGL 2314
A continuation of English 2332. A survey of representative works from the Neoclassical Period through the 20th Century.

## ENGL 2341 FORMS OF LITERATURE

The study of one or more literary genres including, but not limited to, poetry, fiction, drama, and film. A term paper or term project is required.

## ENGL2351 MEXICAN-AMERICAN LITERATURE

A survey of Mexican-American/Chicano/ a literature including fiction, nonfiction, poetry, and drama. A term paper or term project is required.

ENGL 2375 CHILDREN'S LITERATURE
Prerequisite: ENGL 1301 and 1302
Notes: Formerly ENGL 1307
A writing intensive survey of the history and development of literature for children. Recommended for students preparing for full-time teaching careers, paraprofessionals, teacher's aides, and/or child-care workers.

ENGL 2376 LITERATURE OFAMERICAN MINORITIES
Prerequisite: ENGL 1301 and 1302
Notes: Formerly ENGL 1305
An exploratory study of the literature of America's ethnic minorities. Critical examination of sociocultural elements in representative works by the American Indian, the African-American, the Latin American, and the Asian-American.

ENGL 2377 U.S. LATIN AMERICAN LITERATURE
Prerequisite: ENGL 1301 and ENGL 1302
A study of U.S. born writers of Latin American ethnicity, most particularly Mexican-Americans, Cuban-Americans, and Puerto Rican-Americans. This course will serve as an introduction to the variety of Latino literature represented in short stories, poems, novels, and folklore.

## ENGINEERING

## ENGR 1304 ENGINEERING GRAPHICS

Prerequisite: MATH 1314 or equivalent
Fees: Laboratory
An introductory course covering the basic principles of technical drawing. The course includes technical communication and an introduction to engineering drawing using standard drafting instruments and computer aided design.

## ENGR 1370 ENGINEERING PROBLEMS

Prerequisite: MATH 2412 or equivalent
Fees: Laboratory
This course is designed for students intending to major in engineering. Analysis and solutions of simple engineering concepts and problems are developed through problem-solving applications. Scientific calculators and computer terminals will be used.

## MANUFACTURING ENGINEERING TECHNOLOGY

## ENTC 1301 ROBOTICS I

Fees: Laboratory
An introduction to Robots/Automation. Topics include history, terminology, classification of robots, basic components, control systems, alternating current and hydraulic servomechanisms, programming, sensors, types of drive, end-ofarm tooling, end effectors, safety and design procedures.

## ENTC 2314 FACILITY OPERATION AND MAINTENANCE I

Interaction of facility, people, equipment, operation, service, and maintenance. Topics include building structure and interior elements, air conditioning, furniture, grounds, and waste management.

## ENGLISH FOR SPEAKERS OF OTHER LANGUAGES (Formerly English as a Second Language)

ESOL courses are designed to provide and enhance basic competency in the English language. These courses will assist students in attaining sufficient English competency, enabling them to experience success in college credit courses, technological, or job training programs.

These courses are taught at six levels. Courses at all levels emphasize the basic elements of communication: listening and speaking, reading, writing, grammar, and vocabulary. Placement in the appropriate course level includes both oral and written testing. The courses listed below represent the highest three levels and are offered for semester-hour credit, but may also be taken for no credit. The lowest three levels are offered only as non-credit courses. For information on non-credit courses, contact the Continuing Education Department at (210) 531-4770.

## ESOL 0340 SPEAKING AND LISTENING 4

Prerequisite: Placement testing or approval by instructor
Co-requisites: None
This is an intermediate-level course to develop the student's ability to listen and communicate in a range of social and academic situations using correct grammar structures for simple narrations, descriptions, as well as increasing vocabulary. Class activities include giving short presentations and leading group discussions. The pronunciation, stress, and intonation of spoken American English are practiced. The lab will give additional practice in oral production and increase oral comprehension of spoken American English.

ESOL 0341 READING 4
Prerequisites: Placement testing or approval by instructor
Co-requisites: None
This intermediate-level course is designed to develop academic reading skills by applying context clues, word order, pronoun reference, special signal words, by developing paraphrasing, summarizing, outlining, making inferences, and analyzing selected passages, and by distinguishing fact and opinion.

NOTE: Completion of ESOL 0341 with a "C" or better is equivalent to READ 0301

## ESOL 0342 GRAMMAR 4

Prerequisites: Placement testing or approval by instructor
Co-requisites: None
This is an intermediate-level course designed to develop the student's ability to understand and produce compound and complex sentence patterns of American English. Previously studied grammatical structures will be reviewed and practiced. Structures covered in this course will include: compound sentences; complex sentences with time clauses; noun phrases; adjective clauses; adverbial phrases; reflexive and impersonal pronouns; the present perfect tense; and simple modal auxiliaries.

ESOL 0343 WRITING 4
Prerequisites: Placement testing or approval by instructor
Co-requisites: None
This is an intermediate-level course designed to develop the student's ability to construct paragraphs with topic sentence, body (major and secondary supports), and a conclusion. Emphasis is on planning and writing expository paragraphs using illustrations and examples, definitions, comparison/contrast, and classification.

## ESOL 0350 SPEAKINGAND LISTENING 5

Prerequisites: Placement testing or approval by instructor Co-requisites: None

This advanced-level course develops the student's ability to discuss logically concrete topics related to particular interests and special fields using appropriate grammar structures. The students learn to state and support one's opinions, explain in detail and restate others' opinions. Class activities include group discussions and giving formal presentations. The pronunciation, stress, and intonation of spoken American English are practiced. The lab will give additional practice in oral production and increase aural comprehension of spoken American English.

ESOL 0351 READING 5
Prerequisites: Successful completion of READING 4, placement testing, or approval by instructor.
Co-requisites: None
This course focuses on the development of higher level reading skills by analyzing and synthesizing, summarizing and outlining, and using analytical thinking skills to recognize authors' purpose and point of view.

NOTE: Completion of ESOL 0351 with a "C" or better is equivalent to READ0302.

## ESOL 0352 GRAMMAR 5

Prerequisites: Successful completion of GRAMMAR 4, placement testing, or approval by instructor
Co-requisites: None
This is an advanced course designed to develop the student's ability to understand and produce more complicated sentence patterns of American English. Previously studied grammatical structures will be reviewed and practiced. Structures covered in this course will include: complex sentences with time and cause-effect clauses, restrictive and non-restrictive adjective clauses, collective and abstract nouns, past and future perfect verb tense, gerunds, infinitives, and causatives.

NOTE: Completion of ESOL 0352 and ESOL 0353 with a "C" or better is equivalent toENGL0300.

ESOL 0353 WRITING 5
(3-3-0)
Prerequisites: Successful completion of WRITING4, placement testing, or approval by instructor
Co-requisites: None
This is an advanced-level course to develop paragraph construction skills and begin to learn the essay format. Emphasis is on planning and generating expository paragraphs using cause and effect, persuasion, and definition.

NOTE: Completion of ESOL 0352 and ESOL 0353 with a "C" or better is equivalent toENGL0300.

## ESOL 0360 SPEAKINGAND LISTENING 6

Prerequisites: Successful completion ofSPEAKING/LISTENING5, placementtesting, or approval by instructor
Co-requisites: None
This is an advanced course designed to expand communication skills at various levels of discourse in an academic setting. Emphasis is on listening to lectures, taking notes, making presentations, and participating in discussions of an academic nature. The pronunciation, stress and intonation of spoken English are practiced. The lab will give additional practice in oral production and increase aural comprehension of spoken American English.

Prerequisites: Successful completion of READING 5, placement testing, or approval by instructor
Co-requisites: None
This is an advanced course where students begin reading college-level materials and using critical thinking by discussion and analysis as well as advanced reading skills to comprehend figurative language, to recognize stated and implied main ideas, to evaluate the validity of the author's conclusion and the credibility of selected passages.

NOTE: Completion of ESOL 0361 with a "C" or better is equivalent to READ 0303.

## ESOL 0362 GRAMMAR 6

Prerequisites: Successful completion of GRAMMAR 5, placement testing, or approval by instructor
Co-requisites: None
This is an advanced course designed to develop the student's ability to understand and produce more complicated sentence patterns of American English. Previously studied grammatical structures will be reviewed and practiced. Structures covered in this course will include: complex sentences (including noun clauses and conditionals) reduction of adjective clauses, the passive voice, and compound modal auxiliaries.

NOTE: Completion of ESOL 0362 andESOL 0363 with a "C" or better is equivalent toENGL0301.
ESOL 0363 WRITING 6
(3-3-1)
Prerequisites: Successful completion of WRITING 5, placement testing, or approval by instructor
Co-requisites: None
This advanced course is designed to perfect written communication in an academic setting. Emphasis is on writing multi-paragraph essays as well as recognizing and producing the type of paragraph or composition that each writing task requires, using language appropriate to audience and purpose.

NOTE: Completion of ESOL 0362 andESOL 0363 with a "C" or better is equivalent toENGL0301.

## ESOL0365ACCENTIMPROVEMENT

Prerequisites: None
Co-requisites: None
This course is designed to help students improve their pronunciation and intonations of American English. The phonetic structure of the consonant sounds as well as the vowel sounds, the rules, and the patterns of stress and rhythm are systematically analyzed, and students are given practice in correctly pronouncing each of these sounds and patterns. This course may be repeated.

NOTE: May be taken with Speaking/Listening 5 or Speaking/Listening 6.

## FOOD \& NUTRITION SCIENCES

## FDNS 1301 INTRODUCTION TO FOODS

Recommended Co-requisite: CHEF 1301
Prerequisite: None
A study of the composition of food and the chemical and biological changes that occur in storage and processing. Includes preparation techniques and selection principles. The student will explain aesthetic values applied to food preparation, acid/base characteristics, use of heat in cookery, protein properties, composition of milk, egg, cheese, meat and fish, and properties of starch foods; describe what makes a solution; define carbohydrates, lipids, objective food analysis; list standards of fruit/vegetable selection; demonstrate approved measuring techniques, microwave cookery, and cooking principles for cereal, pasta, starch, plant protein, fruit, vegetables, cheese, poultry, fish, meat and sauces; and explain and demonstrate principles of various dough products, quick and yeast breads, and cooking with fat. " $B$ " or better required for Culinary majors.

## FDNS 1305 NUTRITION

Prerequisite: MATH 0300
Notes: Offered in Fall, day and evening. Summer, day only
A study of nutrients including functions, food sources, digestion, absorption, and metabolism with application to normal and preventive nutrition needs. Includes nutrient intake analysis, energy expenditure evaluation, and diet planning. The student will recall and classify nutrient categories, their functions, digestion, absorption and metabolism; recall individual vitamin/mineral deficiencies and toxicities; cite nutrition-related disease prevention recommendations and calculate personalized energy needs; and plan a personalized diet according to the principles of the Exchange List System and the Dietary Guide Lines for Americans.

## MUSIC - PRIVATE FLUTE

## FLTE 1271 PRIVATE FLUTE ELEMENTARYLEVEL

Prerequisite: None
Fees: Laboratory
Beginning one-on-one instruction in the technique of playing the flute. This will include, but not be limited to, proper positioning of instrument and embouchure, fingering, intonation, and music reading skills.

## FLTE 1272 PRIVATE FLUTE INTERMEDIATE LEVEL

Prerequisite: FLTE 1271, or permission of instructor.
Fees: Laboratory
A continuation of FLTE 1271 at a more advanced level. The course will develop physical playing skills and reading on the flute.

## FRENCH

## FREN 1300 BEGINNING CONVERSATIONAL FRENCH I

Prerequisite: None
For students with little or no knowledge of French. Development of the ability to communicate in French. Language laboratory available.

## FREN 1310 BEGINNING CONVERSATIONAL FRENCH II

Prerequisite: FREN 1300 or departmental approval.
A continuation of FREN 1300. Language laboratory available.

FREN 1411 ELEMENTARY FRENCH I
Prerequisite: None
Fees: Laboratory
For students who have little or no knowledge of French. Teaching of the fundamentals of French in order to develop understanding, speaking, reading, and writing abilities. Language laboratory required.

FREN 1412 ELEMENTARY FRENCH II
Prerequisite: FREN 1411 or departmental approval.
Fees: Laboratory
A continuation of FREN 1411. Language laboratory required.

FREN 2311 INTERMEDIATE FRENCH I
(3-3-0)
Prerequisite: FREN 1412, two or more years of high school French, or departmental approval.

A review of French grammar and expansion of basic language skills. Language laboratory available.

FREN 2312 INTERMEDIATE FRENCH II
Prerequisite: FREN 2311 or departmental approval.
A continuation of FREN 2311. Language laboratory available.

## GEOGRAPHY

## GEOG 1303 GEOGRAPHY OF THE WORLD

Prerequisite: None
This course emphasizes the human geography of major world regions and provides a comparative survey of the major cultural regions of the world and their dissimilar developments.

## GEOG 2312 ECONOMIC GEOGRAPHY

Prerequisite: None
Notes: Formerly GEOG 2310
Analysis of location of population and leading economic activities (agriculture, fishing, lumbering, mining, manufacturing, transportation, and trade) in major world regions; the United States and Europe.

## GEOLOGY

## GEOL 1301 EARTH SCIENCE

Prerequisite: None
Survey of Physical and Historical Geology, Astronomy, Meteorology, Oceanography and Related Sciences. Some laboratory experience included.

## GEOL 1403 PHYSICAL GEOLOGY

Prerequisite: None
Fees: Laboratory
The nature and properties of rocks and minerals; processes by which they are formed, altered, and transported; nature and development of the landscape. Laboratory work includes the study of minerals, rocks, and topographic maps. One field trip is required.

## GEOL 1404 HISTORICAL GEOLOGY

Prerequisite: GEOL 1301 or 1403
Fees: Laboratory
The history of the earth and development of life relative to geologic time Laboratory work includes the study of fossils and geologic maps. One field trip is required.

## GERMAN

## GERM 1411 ELEMENTARY GERMAN I

Prerequisite: None
Fees: Laboratory
For students with little or no knowledge of German. Teaching of the fundamentals of German in order to develop understanding, speaking, reading, and writing abilities. Language laboratory required.

## GERM 1412 ELEMENTARY GERMAN II

Prerequisite: GERM 1411 or departmental approval.
Fees: Laboratory
A continuation of GERM 1411. Language laboratory required.

Prerequisite: GERM 1412, two or more years of high school German, or department approval.

A review of German grammar and expansion of basic language skills. Language laboratory available.

## GERM 2312 INTERMEDIATE GERMAN II

Prerequisite: GERM 2311 or departmental approval.
A continuation of GERM 2311. Language laboratory available.

## GOVERNMENT

## GOVT 2304 INTRODUCTION TO POLITICAL SCIENCE

Prerequisite: None
Notes: Formerly GOVT 1301
Concepts, theories, and principles of political sciences. The political processes and governmental institutions of several leading nations of today; the competing philosophies of the twentieth century (democracy, fascism, and communism). Cannot be used to satisfy the legislative requirement in government.

## GOVT 2305AMERICAN GOVERNMENT I (FEDERAL)

Prerequisite: None
Notes: Formerly GOVT 1306
A general survey course in American government covering the theories and concepts of government, politics, public opinion, parties, human rights problems, and functions of national, state, and local government.

## GOVT 2306 AMERICAN GOVERNMENT II (STATE)

Prerequisite: None
Notes: Formerly GOVT 1305
Comparison of the Texas and U.S. Constitutions, federalism, citizenship, voting, and local government with emphasis on Texas. Credit in both Government 2305 and 2306 is necessary to satisfy the legislative requirement for graduation. If only three hours of government are needed to meet the requirements of a technical curriculum or to satisfy the state requirements for teacher certification, that should be 2306 , which includes a study of both State and National constitutions.

## HOTEL MANAGEMENT

## HAMG 1313 FRONT OFFICE PROCEDURES

Prerequisite: ENGL 0300
Notes: Offered in Fall, day only.
A study of the flow of activities and functions in today's lodging operation. Topics include a comparison of manual, machine-assisted, and computer-based methods for each front file function. The student will discuss lodging industry, markets, service levels, and ownership; describe hotel organization, mission, and operation; and list and explain front office responsibilities. The student will explain and discuss front office accounting procedures, checkout and settlement procedures, night audit and functions, and verification.

## HAMG1321 INTRODUCTION TO HOSPITALITY INDUSTRY

## Prerequisite: READ 0300

Introduction to the elements of the hospitality industry. The student will explain the elements of the hospitality industry; discuss current issues facing food service; discuss current guest needs; and explain general hotel/motel operations. The student will explain and discuss the role of service in the hospitality industry.

## HAMG 1340 HOSPITALITY LEGAL ISSUES

(3-3-0)

## Prerequisite: ENGL 0300

Notes: Offered in Spring, day and evening
A course in the legal and regulatory requirements that impact the hospitality industry. Topics include Occupational Safety and Health Administration (OSHA), labor regulations, tax laws, tip reporting, franchise regulations, and product liability laws. The student will explain the basic legal principles governing the hospitality industry; describe guest relationship; list and explain the various laws governing the hospitality industry; and explain the legal environment in which hotels and restaurants must exist.

HAMG 1342 GUEST ROOM MAINTENANCE
Prerequisite: READ 0300
Notes: Offered in Fall, day only
Demonstrate the working relationship in the lodging industry between housekeeping and maintenance. The student will discuss and explain planning, organizing, and staffing in guest room operations; explain how housekeeping operations are directed and controlled; and determine budgeting requirements, inventory of guest, cleaning supplies, and laundry needs.

## HAMG 2267 PRACTICUM OR(FIELD EXPERIENCE)-HOSPITALITY ADMINISTRATION AND MANAGEMENT

Prerequisite: Instructor Approval, MATH 0301
Fees: Laboratory
Notes: Offered in Fall and Spring
Practical general training and experiences in the workplace. The College, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay. This course may be repeated if topics and learning outcomes vary. As outlined in the learning plan, the student will master the theory, concepts, and skills involving the tools, materials, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, and legal systems associated with the workplace; demonstrate ethical behavior, safety practices, interpersonal and teamwork skills, appropriate verbal and written communications in the workplace.

## HAMG 2305 HOSPITALITY MANAGEMENT AND LEADERSHIP

Prerequisite: HAMG 1321, READ 0301, ENGL 0301, and HAMG 1340
Notes: Offered in Fall, day and evening, and Summer
An overview of management and leadership in the hospitality industry with an emphasis on management philosophy, policy formulation, communications, motivation and team building. The student will identify and analyze various styles of leadership; describe the relationship among mission, goal, and objectives; and identify components of problem solving and relate them to specific situations.

## HAMG 2307 HOSPITALITY MARKETINGAND SALES

Prerequisite: HAMG 1321, READ 0302
Notes: Offered in Spring, day only
Identification of the core principles of marketing and their impact on the hospitality industry. The student will identify and discuss the eight principles of marketing; create or critique a marketing plan as it relates to an organizational mission statement and strategy plan; and demonstrate successful approaches and techniques to sales.

## HAMG 2330 CONVENTION AND GROUPMANAGEMENT AND

 SERVICESPrerequisite: ENGL 0301, READ 0302
Notes: Offered in Spring, day only
A course in the scope of the various segments of the convention market. Exploration of individual needs and the methods and techniques to provide better service to conventions and groups. The student will explain the importance of
conventions in terms of income and economic life of the hotel. The student will recognize, review, and describe convention and meeting planning. The student will describe facility types, cost factors, product analysis, marketing tools, and pre-planning strategy.

## HAMG 2332 HOSPITALITY FINANCIALMANAGEMENT

Prerequisite: HAMG 1313 and READ 0300
Notes: Offered in Spring, day only
Methods and application of financial management within the hospitality industry. Primary emphasis on sales accountability, internal controls, and report analysis. The student will perform various calculations; list and discuss cost percents, list, define, and discuss management reports; and explain the importance of cost, volume, profit relationships, and cost controls.

## AIR CONDITIONING

## HART 1403 AIR CONDITIONING CONTROL PRINCIPLES

Prerequisite: None
Fees: Laboratory
Notes: Formerly AC 1400
A basic study of electrical, pressure, and temperature controls including motor starting devices, operating relays, and troubleshooting safety controls and devices. Emphasis on use of wiring diagrams to analyze high and low voltage circuits. A review of Ohm's law as applied to $\mathrm{A} / \mathrm{C}$ controls and circuits.

## HART 1407 REFRIGERATION PRINCIPLES I

Prerequisite: None
Fees: Laboratory
This course is an introduction to the refrigeration cycle, basic thermodynamics, heat transfer, temperature/pressure relationship, safety, refrigeration containment, and refrigeration components.

## HART 1441 RESIDENTIALAIR CONDITIONING

Prerequisite: HART 1403, 1407, AND 1471
Fees: Laboratory
A study of components, applications, and installation of mechanical air conditioning systems including operating conditions, troubleshooting, repair, and charging of air-conditioning systems.

## HART 1445 GAS \& ELECTRIC HEATING

Prerequisite: HART 1403, 1407, and 1471
Fees: Laboratory
A study of the procedures and principles used in servicing heating systems including gas-fired and electric furnaces.

HART 1471 REFRIGERATION PRINCIPLES II
Prerequisite: None
Fees: Laboratory
This course is a continuation of the basic fundamentals and applications of air conditioning and refrigeration systems. Discussions will cover temperature recorders, primary and secondary refrigeration controls, types of insulation, heat energy system components and their theory operation. Different charging techniques of a refrigeration system will be demonstrated using a manifold gauge assembly. A review of electrical safety, electrical components, types of electrical circuits, and electric motors will be covered.

HART 1472 PSYCHROMETRY AND DUCT FABRICATION
Prerequisite: HART 1407 and 1471
Fees: Laboratory
Basic principles of duct fabrication, testing, and servicing. Psychrometrics are studied, the properties of air, (humidity, relative humidity, dew point and saturation point). Service, installation, and repair of humidifying devices. Pollen control and pollution-control devices are analyzed and discussed. Emphasis is placed on adaptability of air-filtering systems on both residential and commercial systems.

## HART 1473 INDUSTRIAL REFRIGERATION

Prerequisite: HART 1403, 1407, and 1471
Fees: Laboratory
Related technical instruction in the theory of advanced commercial and industrial installation, multiple staging and cascade systems as applied to ultra-low temperature, booster systems for dairies and cold storage plants. Emphasis on safety in handling toxic and high-pressure refrigerants.

## HART 2268 PRACTICUM

Formerly: HART 2468, AC 2440
Prerequisite: Need 20 credit hours for Air Conditioning OR Refrigeration Tech. Fees: Laboratory

Practical general training and experiences in the workplace. The College, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary.

## HART 2401 AIR CONDITIONING \& REFRIGERATION CODES (4-3-3)

 Fees: LaboratoryAn advanced course covering the components, accessories, and service of specialized refrigeration units, such as ice machines, soft-serve machines, cryogenics, and cascade systems.

HART 2434 ADVANCED AIR CONDITIONING CONTROL
Prerequisite: HART 1403, 1407, and 1471
Fees: Laboratory
Methods for troubleshooting electrical control devices and control circuits including correctly wiring electrical components.

## HART 2436 TROUBLESHOOTING

Prerequisite: HART 1403, 1407 and 1471
Fees: Laboratory
An advanced course in application of troubleshooting principles and use of test instruments to diagnose air conditioning and refrigeration components and system problems including conducting performance tests.
HART 2442 COMMERCIAL REFRIGERATION
Prerequisite: HART 1403, 1407, AND 1471
Fees: Laboratory
Theory of and practical application in the maintenance of commercial refrigeration; high, medium, and low temperature applications and ice machines.

## HART 2445 AIR CONDITIONING SYSTEMS DESIGN

Prerequisite: HART 1407 and 1471
Fees: Laboratory
A study of the properties of air and results of cooling, heating, humidifying or dehumidifying; heat gain and heat loss calculations including equipment selection and balancing the air system.

## HART 2449 HEAT PUMPS

Prerequisite: HART 1403, 1407, and 1471
Fees: Laboratory
Heat pump theory and operation. Heat pump systems, efficiencies, and supplemental resistance heaters. Installation and servicing heat pumps. Electrical wiring diagram interpretation, troubleshooting analysis, and fault isolation. Information will be provided in geothermal and solar heat pumps, the total energy systems. Safety awareness associated with heat pumps.

## HART 2457 ADVANCED COMMERCIAL REFRIGERATION

(4-3-3)
Prerequisite: HART 1403, 1407, 1471, and 2442
An advanced course covering the components, accessories, and service of specialized refrigeration units, such as ice machines, soft-serve machines, cryogenics, and cascade systems.

## DIESEL/HEAVY EQUIPMENT TECHNOLOGY

## HEMR 1401 TRACKS AND UNDERCARRIAGES

Prerequisite: None
Fees: Laboratory
Concepts in operation and maintenance of final drive track systems and undercarriages used on track and wheel type equipment.

## HISTORY

## HIST 1301 HISTORY OF THE UNITED STATES I

Prerequisite: None
Notes: Formerly HIST 1315
A general survey of United States history from the discovery of America through the Civil War era. Satisfies one-half the legislative requirement of six semester hours in American history.

## HIST 1302 HISTORY OF THE UNITED STATES II

Prerequisite: None
Notes: Formerly HIST 1316
A general survey of United States history from the Civil War era to the present. Satisfies one-half the legislative requirement for six semester hours in American history.

## HIST 1371 INTRODUCTION TO SOCIAL SCIENCE

Prerequisite: None
Notes: Formerly HIST 1301
This course is a survey of the basic concepts and methods of history, government, sociology, psychology, anthropology, and economics.

## HIST 2301 TEXAS HISTORY I

Prerequisite: None
History of Texas from the Spanish discovery to the present. The Spanish period and the Anglo-American occupation of the region north of the Rio Grande. This is a writing intensive course.

## HIST 2311 WESTERN CIVILIZATION TO THE 17TH CENTURY

Prerequisite: None
Notes: Formerly HIST 1308
History of western civilization from the earliest time through the seventeenth century. Surveys western civilization's roots in the ancient Middle East, Greece, and Rome. Emphasis of the course is on medieval Europe, Christian Church history, the Renaissance, and the Reformation.

## HIST 2312 WESTERN CIVILIZATION SINCE THE 17TH CENTURY

Prerequisite: None
Notes: Formerly HIST 1309
History of western civilization from the seventeenth century to the present. Surveys major aspects of political, social, economic, and intellectual history of France, England, Germany, Italy, Russia, Spain, and other Western European nations. Emphasis of the course is on the Enlightenment, the Age of Revolution, Romanticism, and twentieth century totalitarianism.

## HIST 2321 WORLD CIVILIZATION TO THE 15TH CENTURY I

Prerequisite: None
Notes: Formerly HIST 2303
Study of the cultural histories of particular civilizations important for understanding the modern world: Greco-Roman civilizations, China of the Han and Tang dynasties, Latin America, medieval Europe, Islam in the Middle East, and Africa through the fifteenth century. Within a general framework of political, social, and economic history, the course emphasizes the literature, philosophy, art, and music of each of these civilizations. Students who take HIST 2321 may not take IDST 2372.

## HIST 2322 WORLD CIVILIZATION SINCE THE 15TH CENTURY II

Prerequisite: None
Notes: Formerly HIST 2304
Study of the contact of civilizations and the cultural change since the fifteenth century. It emphasizes cultural history, literature, philosophy, art, and music of the following periods and movements: the Renaissance, the Scientific Revolution and the Enlightenment, the Age of Revolution and Romanticism, Victorian culture and imperialism, and the culture of the twentieth century. Students who take HIST 2322 may not take IDST 2373.

## HIST 2323 EASTERN CIVILIZATIONS

Prerequisite: None
(Credit cannot be earned for both HUMA 2372 or HIST 2323)
Introduction to the civilization and cultural achievements of ancient near and far eastern civilizations, including history, religion, philosophy, literature, and art. The course will focus on one or more of the following eastern civilizations: Mesopotamian, Ancient Egyptian, Persian, Ancient Hebrews, Ancient China, Ancient India, Civilizations of Asia Minor, Byzantine, Russian, and Islamic.

Prerequisite: None
Historical, economic, social, and cultural development of Mexican-American/ Chicanos/as.

HIST 2328 MEXICAN AMERICAN HISTORY II
Prerequisite: None
Historical, economic, social, and cultural development of Mexican-American/ Chicanos/as.

## HIST 2380 MEXICAN AMERICAN HISTORY

Prerequisite: None
The historical, economic, social, and cultural development of Mexican Americans from the Treaty of Guadalupe Hidalgo to the present. (OFFERED IN THE FALL SEMESTERS ONLY).

## HIST 2381 AFRICAN AMERICAN HISTORY

Prerequisite: None
The historical, economic, social, and cultural development of African Americans from 1619 to the present. (OFFERED IN THE SPRING SEMESTERS ONLY).

## HEALTH INFORMATION SYSTEMS (HEALTHINFORMATIONTECHNOLOGY)

## HITT 1301 HEALTH DATA CONTENT AND STRUCTURE*

Prerequisite: 12th grade reading, writing, and math. Acceptance in the HIT program and completion of HITT 1305 and BIOL 2404 (or BIOL 2401 and 2402). Fees: Laboratory

Introduction to systems and processes for collecting, maintaining, and disseminating primary and secondary health-related information. Instruction in delivery and organizational structure to include content of health record, documentation requirements, registries, indices, licensing, regulatory agencies, forms, and screens.

## HITT 1305 MEDICAL TERMINOLOGY

Prerequisite: 12th grade reading and writing level
Study of word origin and structure through the introduction of prefixes, suffixes, root words, plurals, abbreviations and symbols to describe surgical procedures, medical specialties, and diagnostic procedures.

## HITT 1311 COMPUTERS IN HEALTHCARE

Prerequisite: 12th grade reading and writing level
Fees: Laboratory
Introduction to the concepts of computer technology related to health care and the tools and techniques of collecting, storing, and retrieving health care data.

HITT 1341 CODINGAND CLASSIFICATION SYSTEMS*
(3-2-4)
Prerequisite: HITT 2331 and HITT 1349 with a grade of "C" or higher Co-requisite: HITT 1342
Fees: Laboratory
Application of basic coding rules, principles, guidelines, and conventions.

## HITT 1342 AMBULATORY CODING*

Prerequisite: HITT 2331 and HITT 1349 with a grade of "C" or higher Co-requisite: HITT 1341
Fees: Laboratory
Application of basic coding rules, principles, guidelines, and conventions with emphasis on ambulatory coding.
HITT 1345 HEALTH CARE DELIVERY SYSTEMS*
Co-requisite: HITT 1301
Fees: Laboratory
Introduction to organization, financing, and delivery of health care services, accreditation, licensure, and regulatory agencies.

HITT 1349 PHARMACOLOGY
Prerequisite: HITT 1305 and BIOL 2404 or BIOL 2401 and 2402 with a grade of "C" or higher
Co-requisite: HITT 2331
Fees: Laboratory
Overview of the basic concepts of the pharmacological treatment of various diseases affecting the major body systems.

## HITT 1353 LEGAL AND ETHICAL ASPECTS OF HEALTH INFORMATION

Prerequisite: 12th grade reading and writing level
Concepts of confidentiality, ethics, health care legislation, and regulations relating to the maintenance and use of health information.

## HITT 1355 HEALTH CARE STATISTICS*

Prerequisite: MATH 1373, HITT 1461 with a grade of "C" or higher
Fees: Laboratory
General principles of health care statistics with emphasis in hospital statistics. Skill development in computation and calculation of health data with overview of guidelines for Texas Department of Health Vital Statistics and Studies.

## HITT 1391 SPECIAL TOPICS IN HEALTH INFORMATION TECHNOLOGY*

Prerequisite: HITT 1461, 1345 and 1355 with a grade of "C" or higher Fees: Laboratory

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology of occupation and relevant to the professional development of the student.

## HITT 1461 CLINICAL I*

(4-0-16)
Prerequisite: HITT 1301, MRMT 1311, HITT 1353, with a grade "C" or higher Fees: Laboratory and Allied Health Insurance

Practical general training and experiences in the workplace. The College, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experience may be paid or unpaid. This course may be repeated if topics and learning outcomes vary.

## HITT 2261 CLINICAL II*

Prerequisite: HITT 2335 and HPRS 2301 with a grade of " C" or higher Fees: Laboratory and Allied Health Insurance

Practical general training and experience in the workplace. The College, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experience may be paid or unpaid. This course may be repeated if topics and learning outcomes vary.

## HITT 2331 MEDICAL TERMINOLOGY -ADVANCED

Prerequisite: HITT 1305 and BIOL 2404 (or BIOL 2401 AND 2402) with a grade of "C" or higher.
Corequisite: HITT 1349
Study of advanced terminology in various medical and surgical specialties.

## HITT 2335 CODINGAND REIMBURSEMENT METHODOLOGIES*

Prerequisite: HITT 1341 and 1342 with a grade of "C" or higher
Co-requisite: HPRS 2301
Fees: Laboratory
Development of advanced coding techniques with an emphasis on case studies, health records, and federal regulations regarding prospective payment systems and methods of reimbursement.

## HITT 2339 HEALTH INFORMATION ORGANIZATION AND

Prerequisite: 12th grade reading and writing level
Principles of organization and supervision of human, fiscal, and capital resources.

## HITT 2343 QUALITY ASSESSMENT AND PERFORMANCE*

Prerequisite: HITT 1345, HITT 1355, and HITT 2339 with a grade of "C" or higher Fees: Laboratory

Study of the many facets of quality standards and methodologies in the health information management environment. Topics include licensing, accreditation, compilation, and presentation of data in statistical formats, quality improvement functions, quality tools, utilization management, risk management, and medical staff data quality issues.

* Enrollment contingent on acceptance into the program


## HISTOLOGIC TECHNICIAN

## HLAB 1277 CHEMISTRY STAINS

(2-2-0)
Prerequisite: HLAB 1471, 1472
This course will introduce the basic principles and procedures of staining in histotechnology to include laboratory mathematics, tissue stain differentiation, quality control/statistics. The student will complete at least one written and oral presentation.

## HLAB 1301 INTRODUCTION TO HISTOTECHNOLOGY

Prerequisite:
Fees: None
Introduction to the healthcare environment and the histology laboratory. Includes laboratory safety and infection control; healthcare professionals; medical terminology; basic anatomy and physiology; laboratory mathematics; communication; and ethics legal and professional issues.

## HLAB 1302 HISTOTECHNOLOGY I

Prerequisite:
Fees: Laboratory
Introduction to the basic theories and practices of histotechnology. Includes laboratory safety, fixation, tissue processing, embedding, microtomy and cryotomy, and routine staining.

## HLAB 1305 FUNCTIONAL HISTOLOGY

Recognition, composition, and funtion of cells, cell life cycles, blood and basic tissue types.

HLAB 1443 HISTOTECHNOLOGY II
Prerequisite:
Fees: Laboratory
A continuation of Histotechnology I. Introduces both theory and practice of common histochemical staining techniques. Topics include laboratory safety; laboratory mathematics and reagent preparation; basic tissue/dye bonding; differentiation and quality control; and nuclear, connective tissue, and carbohydrate staining techniques.

## HLAB 1346 FUNCTIONAL HISTOLOGY II

Prerequisite:
Fees: None
A continuation of Functional Histology I. Emphasis on the recognition, composition, and function of organ systems. Includes skeletal tissues, central nervous system, circulatory system, endocrine glands, and reproductive system.

## HLAB 1362 HISTOLOGY CLINICAL III

Prerequisite: HLAB 1461
Fees: Laboratory
Practical application of advanced laboratory procedures and instrumentation used in histotechnology.

## HLAB 1363 HISTOLOGY CLINICAL IV

(3-0-16)
Pre-requisite: HLAB 1362
Fees: Laboratory
This course is a continuation of Histology Practicum III.

## HLAB 1374 PRINCIPLES \& TECHNIQUES OF HISTOLOGY II

Prerequisite: HLAB 1472
Fees: Laboratory
This course is a continuation of Principles \& Techniques of Histology I to include special stains, immunochemistry, and cryostat procedures.

## HLAB 1376 TISSUE IDENTIFICATION

Prerequisite: HLAB 1471
Fees: Laboratory
This course will cover correlations between processes and histotechnological procedures with emphasis on recognition of changes in tissues associated with various states in order to select special stains and techniques to identify these disease processes.

## HLAB 1460 CLINICAL - HISTOLOGIC TECHNOLOGY I

(4-0-16)
Co-requisite: HLAB 1471, HLAB 1472
Fees: Laboratory
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

HLAB 1461 HISTOLOGY CLINICAL II
Co-requisite: HLAB 1374, 1376, 1277
Fees: Laboratory
This course is a continuation of Histology Clinical I.

HLAB 1462 CLINICAL - HISTOLOGIC TECHNOLOGY III
Prerequisite: HLAB 1461
Fees: Laboratory
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

HLAB 1463 CLINICAL - HISTOLOGIC TECHNOLOGY IV
Pre-requisite: HLAB 1462
Fees: Laboratory
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

## HLAB 1471 INTRODUCTION TO HISTOLOGY

Prerequisite: Admission to Program
Fees: Laboratory
This course will introduce the fundamental principles of histotechnology to include history of the profession; microanatomy with emphasis on recognition, composition, and functions of the organs and tissues; and laboratory safety.

## HLAB 1472 PRINCIPLES \& TECHNIQUES OF HISTOLOGY I (4-3-3)

Prerequisite: Admission to Program
Fees: Laboratory
This course introduces the fundamental principles of histotechnology to include laboratory safety; laboratory mathematics; quality control/statistics; tissue preparation, fixation, processing, dehydration, clearing, embedding, sectioning/ microtomy; routine staining; and special staining. The student will complete at least on written and oral presentation.

## MUSIC - PRIVATE HORN

## HORN 1271 PRIVATE HORN ELEMENTARYLEVEL

Fees: Laboratory
Beginning one-on-one instruction in the technique of playing the Horn in F (French Horn). This will include, but not be limited to, proper positioning of instrument and embouchure, fingering, intonation, and music reading skills.

## HORN 1272 PRIVATE HORN INTERMEDIATE LEVEL

Prerequisite: HORN 1271, or permission of instructor.
Fees: Laboratory
A continuation of HORN 1271 at a more advanced level. The course will develop physical playing skills and reading on the horn.

## HEALTH INFORMATION SYSTEMS

## (ALLIED HEALTH FOUNDATION)

## HPRS 2301 PATHOPHYSIOLOGY

Prerequisite: HITT 2331 and HITT 1349 with a grade of "C" or higher
Study of the pathology and general health management of diseases and injuries across the life span. Topics include etiology, symptoms, and the physical and psychological reactions to diseases and injuries.

## BUSINESS MANAGMENT

## HRPO 1311 HUMAN RELATIONS

(3-3-0)
Prerequisite: None
Notes: Formerly BMGT 1305
Practical application of the principles and concepts of the behavioral sciences to interpersonal relationships in the business and industrial environment.

## HRPO 2307 ORGANIZATIONAL BEHAVIOR

(3-3-0)
The analysis and application of organizational theory, group dynamics, motivation theory, leadership concepts, and the integration of interdisciplinary concepts from the behavioral sciences.

## HUMANITIES

## HUMA 1301 INTRODUCTION TO THE HUMANITIES I

Prerequisite: None
Humanities 1301 is an interdisciplinary study of the roots of Western Civilization. The historical, cultural, philosophical, literary, and architectural developments of Western Civilization will be studied from its origins through the Renaissance.

## HUMA 1302 INTRODUCTION TO THE HUMANITIES II

## Prerequisite: None

Humanities 1302 is an interdisciplinary study of the roots of Western Civilization. The historical, cultural, philosophical, literary, and architectural developments of Western Civilization will be studied from the Renaissance through the Modern Age.

## HUMA 1371 THE SOUTHWEST: A SENSE OF PLACE

Prerequisite: None
An interdisciplinary study of Texas, as reflected in the history, the economy, the philosophy, the literature, and the architecture. Dates and topics may vary.

## HUMA 2319AMERICAN MINORITIES

## Prerequisite: None

Historical, economic, social, and cultural development of minority groups. May include African-American, Mexican American, Asian American, and Native American issues.

## HUMA 2323 WORLD CULTURES: (Cross-listed as ANTH 2346) (3-3-0)

Prerequisite: None
(Credit cannot be earned for both HUMA 2323 or 2346)
A study of human beings, their cultural behavior and institutions, from prehistory through the development of different civilizations throughout the world.

## BUSINESS MANAGEMENT

## IBUS 1305 INTRODUCTION TO INTERNATIONAL BUSINESS AND TRADE

The techniques for entering the international marketplace. Emphasis on the impact and dynamics of sociocultural, demographic, economic, technological, and political-legal factors in the foreign trade environment. Topics include patterns of world trade, internationalization of the firm, and operating procedures of the multinational enterprise.

## INTERDISCIPLINARY STUDIES

## IDST 2370 INDIVIDUAL, FAMILY, AND COMMUNITY

Prerequisite: None
A practical approach to the institution of marriage and of families. An examination of associated problems such as divorce. Includes analysis of human sexuality, sex roles, mate selection, marital adjustment, family patterns in the middle and the later years, and family disorganization. Students who take IDST 2370 may not take SOCI 2301.

## IDST 2371 SOCIETY AND SOCIAL ISSUES

Prerequisite: None
A survey of some of the major social problems of the present society: poverty, drug abuse, alcoholism, prejudice, discrimination, family disorganization, mental illness, energy sources, environment abuse, sexual deviance, and unemployment. Students who take IDST 2371 may not take SOCI 1306.

## IDST 2372 WORLD CIVILIZATION TO THE 15TH CENTURY

Prerequisite: None
Study of the cultural histories of particular civilizations important for understanding the modern world: classical Greco-Roman civilization, China of the Han and Tang dynasties, Latin America, medieval Europe, Islam in the Middle East, and Africa through the fifteenth century. Within a general framework of political, social, and economic history, the course emphasizes the literature, philosophy, art, and music of each of these civilizations. Students who take IDST 2372 may not take HIST 2321.

## IDST 2373 WORLD CIVILIZATION SINCE THE 15TH CENTURY

Prerequisite: None
Study of the contact of civilizations and cultural change since the fifteenth century. It emphasizes cultural history, literature, philosophy, art, and music of the following periods and movements: the Renaissance, the Scientific Revolution and Enlightenment, the Age of Revolution and Romanticism, Victorian culture and imperialism, and the culture of the twentieth century. Students who take IDST 2373 may not take HIST 2322.

## IDST 2377 MODES-INQUIRY ACROSS FIELDS OF STUDY

Study of thinking in the sciences, social studies, mathematics, language arts, and fine arts through interdisciplinary investigations. Course experiences include modeling, practice, and analysis of ways of inquiring in the several subject areas, seeking their implications for interdisciplinary inquiries. (OFFERED IN THE SPRING SEMESTERS ONLY).

## INFORMATION TECHNOLGY

## IMED 1301 INTRODUCTION TO MULTIMEDIA

Prerequisite: ITSC 1301, ITSC 1305, IMED 1316

## Fees: Laboratory

A survey of the theories, elements, and hardware/software components of multimedia. Topics include digital image editing, digital sound and video editing, animation, web page development, and interactive presentations. Emphasis on conceptualizing and producing effective multimedia presentations.

## IMED 1305 MULTIMEDIA COURSEWARE DEVELOPMENT I

Prerequisite: IMED 1301
Fees: Laboratory
Instruction in courseware development. Topics include interactivity, branching, navigation, evaluation techniques and interface/information design using industry standard authoring software.

## IMED 1316 WEB PAGE DESIGN I

Prerequisite: ITSC 1301, ITSC 1313 (Recommended)
Fees: Laboratory
Instruction in Internet web page design and related graphic design issues including mark-up languages, web sites, and browsers.

## IMED 1343 DIGITALSOUND

Prerequisite: IMED 1301
Fees: Laboratory
Instruction in digitizing sound and incorporating it into multimedia titles for various delivery systems. Emphasis on compression issues, sampling, synchronizing, and resource management.

## IMED 1351 DIGITAL VIDEO

Prerequisite: IMED 1301
Fees: Laboratory
Skill development in producing and editing video and sound for multimedia productions. Emphasis on the capture, editing, and outputting of video using a desktop digital video workstation.

## IMED 1391 SPECIALTOPICS EDUCATIONAL/INSTRUCTIONALMEDIA TECHNOLOGY/TECHNICIAN

## Fees: Laboratory

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

## IMED 2309 INTERNET COMMERCE

Fees: Laboratory
An overview of the Internet as a marketing and sales tool with emphasis on developing a prototype for electronic commerce. Topics include database technology, creating web sites in order to collect information, performing online transactions, and generating dynamic content.

## IMED 2315 WEB PAGE DESIGN II

Prerequisite: IMED 1316
Fees: Laboratory
A study of mark-up language advanced layout techniques for creating web pages. Emphasis on identifying the target audience and producing web sites according to accessibility standards, cultural appearance, and legal issues.

## INDUSTRIAL MANUFACTURING TECHNOLOGY

## INMT 1240 COMPUTER INTEGRATED MANUFACTURE

A study of the principles and application of computer integrated manufacturing. Employs all aspects of a system including but not limited to integration of material handling, manufacturing, and computer hardware and programming.

## INMT 1248 MANUFACTURING PROCESSES (Short Course)

Exploration of a variety of methods used in manufacturing. Theory and application of processes including but not limited to metal forming, welding, machining, heat treating, plating, assembly procedures, and process control considerations, casting and injection molding.

## INMT 1291 MANUFACTURING SYSTEMS AND PRODUCT DEVELOPMENT

(1-3-2)
A basic study of various manufacturing industries that produce products for the consumer and industrial market place. The course will address Job Shops, Batch, System Flow and Integrated Back Shop Manufacuture. The course will also explore the different forms of quality and production management used in global product producing companies to include Kaizan, KanBan, Lean Manufacturing, TQM, Six Sigma, etc. Product development process will also be emphasized to include design, testing, packaging, patenting, marketing, capitalization and company/corporate formation.

## INMT 2303 PUMPS, COMPRESSORS AND MECHANICAL DRIVES

Prerequisite: Proficient in the use of hand tools and precision measuring tools. Fees: Laboratory

A study of the theory and operations of various types of pumps and compressors. Topics includes mechanical power transmission systems including gears, v-belts, and chain drives.

## ELECTRONIC SYSTEMS TECHNOLOGY

## ITCC 1402 CCNA 1: NETWORKING BASICS

Prerequisite: Department approval
Fees: Laboratory
A course introducing the basics of networking including network terminology, local area networks (LAN) and wide area networks (WAN). Topics include network protocols such as TCP/IP, Open System Interconnection (OSI) models, cabling and routers.

## ITCC 1406 CCNA 2: ROUTER AND ROUTING BASICS

Prerequisite: Department approval
Fees: Laboratory
An introduction to basic Cisco router configuration for local area networks. Topics include initial router configuration for TCP/IP, management of Cisco IOS and router configuration files, routing protocols, and access control lists.

## ITCC 1442 CCNA 3: SWITCHING BASICS AND INTERMEDIATE ROUTING

Prerequisite: Department approval
Fees: Laboratory
A course focusing on advanced topics including IP addressing techniques, intermediate routing protocols, CLI configuration of switches, Ethernet switching, VLANs, Spanning Tree Protocol, and VLAN Trunking Protocol.

## ITCC 1446 CCNA 4: WAN TECHNOLGIES

Prerequisite: Department approval
Fees: Laboratory
This course focuses on advanced IP addressing techniques (Network Address Translation (NAT), Port Address Translation (PAT), and DHCP), WAN technology and terminology, PPP, ISDN, DDR, Frame Relay, network management and introduction to optical networking. In addition, the student will prepare for the CCNA exam.

ITCC 2432 CCNA 5: ADVANCED ROUTING
Prerequisite: Department approval
Fees: Laboratory
A study of advanced network deployment issues and methods used to configure Cisco routers for effective LAN and WAN traffic management. Topics include designing scalable internetworks, managing traffic, configuring OSPF in single and multiple areas, configuring EIGRP, and configuring and using interior and border gateway routing protocols.

Prerequisite: Department approval
Fees: Laboratory
Designing and building remote access networks with Cisco products. Topics include assembling and cabling WAN components, configuring network connections via asynchronous modem, ISDN, X.25, and frame relay architectures and associate protocols.

## ITCC 2440 CCNA 7: MULTILAYER SWITCHING

Prerequisite: Department approval
Fees: Laboratory
An introduction to Cisco switches and how to use Cisco switches effectively in networks. Topics include switching concepts, virtual LANs, switch architecture (hardware and software), switch configuration, management and troubleshooting.

## ITCC 2436 CCNA 8: NETWORK TROUBLESHOOTING

Prerequisite: Department approval
Fees: Laboratory
A study of troubleshooting methods for internetworks. Topics include Cisco Troubleshooting Tools, diagnosing and correcting problems within TCP/IP, Novell, and AppleTalk networks, and with Frame Relay and ISDN network connections.

## INFORMATION TECHNOLOGY

## ITMC 1401 MICROSOFT WINDOWS NETWORK \& OPERATING SYSTEMS ESSENTIALS

Fees: Laboratory
An introduction to Microsoft Windows network operating systems and to the fundamentals of the networking technologies that they support.

## ITMC 1441 IMPLEMENTING MICROSOFT WINDOWS PROFESSIONAL \& SERVER

Prerequisite: ITMC 1401 OR ITNW 1325
In-depth coverage of the knowledge and skills necessary to install and configure Microsoft Windows on stand-alone computers and on client computers that are part of a workgroup or domain, and the skills and knowledge necessary to install and configure Windows Server to create file, print, and servers.

## ITMC 1442 IMPLEMENTINGAMICROSOFTWINDOWS NETWORK INFRASTRUCTURE

Prerequisite: ITMC 1441
Skills development in installing, configuring, managing, and supporting a network infrastructure that uses the Microsoft Windows server family of products.

## ITMC 1443 IMPLEMENTING\&ADMINISTERINGMICROSOFT

 DIRECTORY SERVICESPrerequisite: ITMC 1442 OR ITMC 1441
Provides students with the knowledge and skills necessary to install, configure, and administer Microsoft Windows Active Directory service. Focuses on implementing Group Policy and understanding the Group Policy tasks required to centrally manage users and computers.

## ITMC 2303ADMINISTERINGAMICROSOFT SQLSERVER

 DATABASEIn-depth coverage of the knowledge and skills required to install, configure, administer, and troubleshoot the client-server database management system of Microsoft SQL Server databases.

## ITMC 2304 IMPLEMENTING AND MANAGING MICROSOFT EXCHANGE

(3-3-2)
In-depth coverage of the knowledge and skills required to install and administer Microsoft Exchange.

## ITMC 2306 POPULATING A DATA WAREHOUSE WITH MICROSOFT

SQL
(3-3-2)
Advanced concepts designing a data warehouse and populating data marts by using Data Transformation Services (DTS) in Microsoft SQL Server.

## ITMC 2308ADMINISTERINGMICROSOFTSYSTEMSMANAGEMENT SERVER

## Fees: Laboratory

Mastery of the knowledge and skills required to administer Microsoft systems management server.

## ITMC 2330 UPDATING SUPPORT SKILLS FOR MICROSOFT WINDOWS

## Fees: Laboratory

Provides Microsoft Windows support professionals with the knowledge and skills necessary to support newer versions of Microsoft Windows.

## ITMC 2336 DESIGNINGMICROSOFT EXCHANGE FOR THE ENTERPRISE

Mastery of the knowledge and skills necessary to design a Microsoft
Exchange organization for an enterprise environment.

## ITMC 2403 ADMINISTERINGAMICROSOFT SQLSERVER DATABASE

Prerequisite: ITNW 1325 AND ITMC 1401
In-depth coverage of the knowledge and skills required to install, configure, administer, and troubleshoot the client-server database management system of Microsoft SQL Server databases.

ITMC 2404 IMPLEMENTINGAND MANAGINGMICROSOFT EXCHANGE
Prerequisite: ADVISOR APPROVAL
In-depth coverage of the knowledge and skills required to install and administer Microsoft Exchange.

## ITMC 2409 DEPLOYING \& SUPPORTING MICROSOFT SMS SERVER

Prerequisite: ITMC1441
Mastery of the knowledge and skills required to deploy and support Microsoft systems management server 2.0.

ITMC 2431 DESIGNINGAMICROSOFTWINDOWS DIRECTORY SERVICES INFRASTRUCTURE (MS 1561)
Suggested Prerequisite: ITMC 2330
Fees: Laboratory
Advanced concepts in the knowledge and skills necessary to design a Microsoft Windows directory services infrastructure. Strategies are presented to assist the student in identifying the information technology needs of the organization and to designing the Active Directory structure that meets those needs.

## ITMC 2433 DESIGNINGA SECURE MS WINDOWS NETWORK

Prerequisite: ITMC 1443 OR ADVISOR APPROVAL
Provides students with the knowledge and skills necessary to design a security framework for small, medium, and enterprise networks by using Microsoft Windows networking technologies.

ITMC 2434 DESIGNINGAMS WINDOWS UPGRADE STRATEGY
(4-4-1)
Prerequisite: ITNW 1321 AND ITMC 1401
Topics cover the knowledge and skills necessary to select and design a strategy to migrate from Microsoft Windows NT Server directory services infrastructure to a Microsoft Windows Active Directory service by describing the planning processes and implications involved.

## ITMC 2436 DESIGNINGMICROSOFT EXCHANGE FOR THE ENTERPRISE

Prerequisite: ADVISOR APPROVAL
Mastery of the knowledge and skills necessary to design a Microsoft Exchange organization for an enterprise environment.

## ITMC 2437 PROGRAMMINGAMICROSOFT SQLSERVER DATABASE

(4-4-1)
Mastery of programming and implementing a database solution by using SQL Server.

## ITMC 2455DEPLOYINGAND MANAGINGMICROSOFTINTERNET SECURITY AND ACCELERATION SERVER

Prerequisite: ITMC 1441
Advanced concepts of deploying and managing Microsoft Internet Security and Acceleration (ISA) Server in an enterprise environment.

## ITNW 1325 FUNDAMENTALS OF NETWORKING TECHNOLOGIES

(May be substituted for ITNW 1321)
Fees: Laboratory
Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software.

ITNW 2313 NETWORKINGHARDWARE
Prerequisite: ITNW 1325 AND ITMC 1401
Maintain network hardware devices. Topics include network cables, servers, and workstations; network connectivity devices such as routers, hubs, bridges, gateways, repeaters, and uninterruptible power supplies; and other networking hardware devices.

## ITNW 2321 NETWORKING WITH TCP/IP

Prerequisite: ITNW1325 AND ITMC 1401
Set up, configure, use, and support Transmission Control Protocol/Internet Protocol (TCP/IP) on networking operating systems.

ITNW 2359 WEB SERVER SUPPORT AND MAINTENANCE
Prerequisite: ITNW 1325 and ITMC 1401
Instruction in the installation, configuration, and implementation of a Internet web servers.

## ITSC 1264 PRACTICUM - COMPUTER AND INFORMATION SCIENCES

Prerequisite: POFT 1220 and departmental permission
Practical, general workplace training supported by an individualized learning plan developed by the employer, college and student.

ITSC 1301 INTRODUCTION TO COMPUTERS
(REPLACES CIS 1301)
Prerequisite: 25 words per minute keyboarding skills
Overview of computer information systems. Introduces computer hardware, software, procedures, and human resources. Explores integration and application in business and other segments in society. Fundamentals of computer problemsolving and programming may be discussed and applied. Examines applications and software relating to a specific curricular area.

## ITSC 1305 INTRODUCTION TO PC OPERATING SYSTEMS

Prerequisite: ITSC 1301 or equivalent
Fees: Laboratory
A study of personal computer operating systems. Topics include installation and configuration, file management, memory and storage management, control of peripheral devices, and use of utilities.

## ITSC 1307 UNIX OPERATINGSYSTEM I

Prerequisite: ITSC 1305 or equivalent
A study of the UNIX operating system including multi-user concepts, terminal emulation, use of system editor, basic UNIX commands, and writing script files. Topics include introductory systems management concepts.

## ITSC 1309 INTEGRATED SOFTWARE APPLICATIONS I

Prerequisite: 25 words per minute keyboarding skills.
Fees: Laboratory
Integration of applications from popular business productivity software suites. Instruction in embedding data, linking and combining documents using word processing, spreadsheets, databases, and/or presentation media software.

## ITSC 1325 PERSONALCOMPUTER HARDWARE

Prerequisite: ITMC 1401 or ITSC 1305
A study of current personal computer hardware including personal computer assembly and upgrading, setup and configuration, and troubleshooting.

## ITSC 1391 SPECIAL TOPICS IN COMPUTERAND INFORMATION SCIENCES, GENERAL

Fees: Laboratory
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

Prerequisites: ITSW 1301, 1304, 1307
PERMISSION OF DEPARTMENT REQUIRED.
Fees: Laboratory
Utilization of current application software to solve advanced problems and generate customized solutions, involving project and software specific to a specific curricular area.

ITSC 2339 PERSONAL COMPUTER HELP DESK
Suggested Prerequisite: College-level computer application course or ITSC 1301 Fees: Laboratory
Diagnosis and solution of user hardware and software related problems with on-the-job projects.

## ITSC 2386 INTERNSHIP: COMPUTER \& INFORMATION SCIENCES, GENERAL <br> (3-0-16)

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.

## ITSC 2437 UNIX OPERATINGSYSTEM II

Prerequisite: ITSC 1307
Continued study of the UNIX operating system commands. Includes additional scripting topics such as CGI or PERL.

## INFORMATION TECHNOLOGY

ITSE 1301 WEB DESIGN TOOLS
Note: Previously ITSE 1305
Designing and publishing Web documents according to World Wide Web Consortium (W3C) standards. Includes graphic design issues and exploration of tools available for creating and editing Web documents.

## ITSE 1302 COMPUTER PROGRAMMING

## Fees: Laboratory

Introduction to computer programming with emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files.

## ITSE 1306 COMPUTER PROGRAMMING USING HYPERTEXT

 PREPOCESSOR (PHP)A study of hypertext preprocessor (PHP). Includes the basics of PHP, design of web-based applications, arrays, strings, regular expressions, file input/output, e-mail and database interfaces, stream and network programming, debugging, and security.

## ITSE 1311 BEGINNING WEB PAGE PROGRAMMING

Prerequisite: ITSC 1301, ITSC 1305, IMED 1316
Fees: Laboratory
Instruction in Internet Web page programming and related graphic design issues including mark-up languages, Web sites, Internet access software, and interactive topics. May include use of HTML, CGI, JAVA, or ASP.

## ITSE 1329 PROGRAMMINGLOGICAND DESIGN

Fees: Laboratory
A disciplined approach to problem-solving with structured techniques and representation of algorithms using appropriate design tools. Discussion of methods for testing, evaluation, and documentation.

## ITSE 1331 INTRODUCTION TO VISUAL BASIC PROGRAMMING (3-2-2)

## Prerequisite: ITSC 1305

Fees: Laboratory
Notes: This course uses Visual Basic.NET as a Programming Language
Introduction to computer programming using Visual Basic.NET. Emphasis on the fundamentals of structured design, development, testing, implementation and documentation. Includes language syntax, data and file structures, input/output devices and file management.

## ITSE 1332 INTRODUCTION TO VISUAL BASIC.NET

## PROGRAMMING

A study of Visual Basic.NET (VB.NET) syntax including: data types, control structures, functions, syntax, and semantics of the language, classes, class relationships, and exception handling.

## ITSE 1345 INTRODUCTION TO ORACLE SQL

Suggested Prerequisite: ITSW 1307
Fees: Laboratory
An introduction to the design and creation of relational databases using Oracle. Topics include storing, retrieving, updating, and displaying data using Structured Query Language (SQL).

## ITSE 1350 SYSTEM ANALYSIS AND DESIGN

Comprehensive introduction to the planning, design, and construction of computer information systems using the systems development life cycle and other appropriate design tools.

## ITSE 1356 EXTENSIBLE MARKUP LANGUAGE (XML)

Introduction of skills and practices related to Extensible Markup Language (XML). Includes Document Type Definition (DTD), well-formed and valid XML documents, XML schemes, and Extensible Style Language (XSL).

## ITSE 1392 SPECIAL TOPICS IN COMPUTER ETHICS

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Current topics include Computer ethics.

ITSE 1445 INTRODUCTION TO ORACLE SQL
Prerequisite: None
Fees: Laboratory
An introduction to the design and creation of relational databases using Oracle. Topics include storing, retrieving, updating, and displaying data using Structured Query Languages (SQL). Students will get hands-on experience in creating and modifying databases via the Oracle Academy website. Emphasis on why and how to model data for a database are highlighted.

## ITSE 2302 INTERMEDIATE WEB PROGRAMMING

Prerequisite: ITSE 1311
Fees: Laboratory
Intermediate applications for web authoring. Topics may include server side include (SSI), Perl, HTML, Java, Javascript, and/or ASP.

## ITSE 2309 INTRODUCTION TO DATABASE PROGRAMMING

Prerequisite: ITSE 1331, ITSW 1307
Fees: Laboratory
Application development using database programming techniques emphasizing database structures, modeling, and databases access.

## ITSE 2317 JAVA PROGRAMMING

Prerequisite: Introductory object-oriented programming course
Fees: Laboratory
Introduction to JAVA programming with object-orientation. Emphasis on the fundamental syntax and semantics of JAVA for applications and web applets.

## ITSE 2321 OBJECT-ORIENTED PROGRAMMING

Introduction to object-oriented programming. Emphasis on the fundamentals of structured design with classes, including development, testing, implementation, and documentation. Includes object-oriented programming techniques, classes, and objects.

ITSE 2345 DATA STRUCTURES
Further applications of programming techniques. Include an in-depth look at various data structures and the operations performed on them.

## ITSE 2347 ADVANCED DATABASE PROGRAMMING

Prerequisite: ITSE 2309
Fees: Laboratory
Application development using complex database programming techniques emphasizing multiple interrelated files, menu design, security implementation, and multiple access.

ITSE 2349 ADVANCED VISUAL BASIC PROGRAMMING
Prerequisite: ITSE 1331
Fees: Laboratory
Further applications of programming techniques using Visual BASIC. Topics include file access methods; data structures and modular programming; program testing; and documentation.

## INFORMATION TECHNOLOGY

ITSW 1301 INTRODUCTION TO WORD PROCESSING
Prerequisite: POFT 1329 or 25 wpm keyboarding skill.
Fees: Laboratory
An overview of the production of documents, tables, and graphics and other business documents.

ITSW 1304 INTRODUCTION TO SPREADSHEETS
Suggested Prerequisite: POFT 1329 or 25 wpm keyboarding skill.
Fees: Laboratory
Instruction in the concepts, procedures, and importance of electronic spreadsheets.

ITSW 1307 INTRODUCTION TO DATABASE
Suggested Prerequisite: POFT 1329 or 25 wpm keyboarding skill.
Fees: Laboratory
Introduction to database theory and the practical applications of a database. Includes developing databases, tables, forms, queries, reports and menu systems, and publishing such materials to the World Wide Web.

## ITSW 1310 INTRODUCTION TO PRESENTATION GRAPHICS SOFTWARE

Prerequisite: POFT 1329 or 25 wpm keyboarding skill.
Fees: Laboratory
Instruction in the utilization of presentation software to produce multi-media presentations. Graphics, text, sound, animation, and/or video may be used in presentation development.

## ITSW 1391 SPECIAL TOPICS IN DATA PROCESSING TECHNOLOGY/TECHNICIAN

## Fees: Laboratory

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

## ITSW 2331 ADVANCED WORD PROCESSING

(THIS COURSE HAS BEEN RENUMBERED TO POFI 2340).
Prerequisite: ITSW 1301 or MOS Certification.
Fees: Laboratory
Continuation of the study of word processing including advanced applications in merging, macros, graphics, desktop publishing, and extensive formatting for technical documents. Emphasis on business applications.

## ITSW 2334 ADVANCED SPREADSHEETS

Prerequisite: ITSW 1304 or MOS Certification.
Advanced techniques for developing and modifying spreadsheets. Includes macros and data analysis functions.

ITSW 2337 ADVANCED DATABASE
Prerequisite: ITSW 1307
Fees: Laboratory
Advanced techniques for developing spreadsheets. Includes macros and data analysis functions.

## INFORMATION TECHNOLOGY

## ITSY 1342 INFORMATION TECHNOLOGY SECURITY

Instruction in security for network hardware, software, and data, including physical security; backup procedures; relevant tools; encryption; and protection from viruses.

## ITSY 2359 SECURITY ASSESSMENT AND AUDITING

(3-3-1)
Capstone experience for the security curriculum. Synthesizes technical material covered in prior courses to monitor, audit, analyze, and revise computer and network security systems to ensure appropriate levels of protection are in place.

## ITSY 2341 SECURITY MANAGEMENT PRACTICES

(3-3-1)
In-depth coverage of security management practices, including asset evaluation and risk management; cyber law and ethics issues; policies and procedures; business recovery and business continuity planning; network security design; and developing and maintaining a security plan.

## ITSY 2342 INCIDENT RESPONSE \& HANDLING

(3-3-1)
In-depth coverage of incident response and incident handling, including identifying sources of attacks and security breaches; analyzing security logs; recovering the system to normal; performing postmortem analysis; and implementing and modifying security measures.

ITSY 2401 FIREWALLS AND NETWORK SECURITY
(4-4-1)
Identify elements of firewall design, types of security threats and responses to security attacks. Use best practices to design, implement, and monitor a network security plan. Examine security incident postmortem reporting and ongoing network security activities.

## ITSY 2443 COMPUTER SYSTEM FORENSICS

(4-4-1)
In-depth study of system forensics including methodologies used for analysis of computer security breaches. Gather and evaluate evidence to perform postmortem analysis of a security breach.

## KINESIOLOGY <br> (PHYSICAL EDUCATION)

KINE 1101 SPIN-BIKE I
(1-1-2)
Prerequisite: None
Fees: Laboratory
Group exercise class designed to improve individualized cardiovascular fitness with the use of stationary bicycles.

KINE 1102 SOFTBALL
Prerequisite: None
Fees: Laboratory
KINE 1103 YOGA I
Prerequisite: None
Fees: Laboratory
KINE 1104 CONDITIONING FOR FITNESS
Prerequisite: None
Fees: Laboratory
KINE 1105 BEGINNING GOLF
Prerequisite: None
Fees: Laboratory
KINE 1106 BEGINNING WEIGHT TRAINING
Prerequisite: None
Fees: Laboratory

KINE 1107 ADVANCED WEIGHT TRAINING
Prerequisite: KINE 1106 or equivalent skills.
Fees: Laboratory

KINE 1108 SPIN-BIKE II
Prerequisite: KINE 1101 or equivalent skills
Fees: Laboratory
Advanced cardiovascular conditioning class using stationary bicycles.

## KINE 1109 CARDIO KICKBOXING I

Prerequisite: None
Fees: Laboratory

KINE 1112 BADMINTON
(1-1-2)
Prerequisite: None
Fees: Laboratory

KINE 1113 BEGINNING BASKETBALL
Prerequisite: None
Fees: Laboratory

KINE 1114 WALKING/JOGGING
Prerequisite: None
Fees: Laboratory

KINE 1115 BEGINNING TENNIS
Prerequisite: None
Fees: Laboratory
KINE 1116 INTERMEDIATE TENNIS
Prerequisite: KINE 1115 or equivalent skills.
Fees: Laboratory

KINE 1117 BEGINNING VOLLEYBALL
Prerequisite: None
Fees: Laboratory

KINE 1118 INTERMEDIATE VOLLEYBALL
Prerequisite: KINE 1117 or equivalent skills.
Fees: Laboratory

KINE 1121 SELF DEFENSE
Prerequisite: None
Fees: Laboratory

360 St. Philip's College 2006-2008 Catalog
KINE 1123 INTERMEDIATE GOLF
Prerequisite: KINE 1105 or equivalent skills
Fees: Laboratory

KINE 1124 INTERMEDIATE BASKETBALL
Prerequisite: KINE 1113 or equivalent skills.
Fees: Laboratory

KINE 1127 CARDIO KICKBOXING II
Prerequisite: KINE 1109 or equivalent skills Fees: Laboratory

KINE 1130 LEARN TO SWIM
Prerequisite: None
Fees: Laboratory

KINE 1131 INTERMEDIATE SWIMMING
Prerequisite: KINE 1130 or equivalent skills.
Fees: Laboratory

KINE 1135 WATER AEROBICS I
Prerequisite: None
Fees: Laboratory

KINE 1136 WATER AEROBICS II
Prerequisite: KINE 1135 or equivalent skills
Fees: Laboratory
KINE 1140 AEROBICS I
Prerequisite: None
Fees: Laboratory

KINE 1141 AEROBICS II
Prerequisite: KINE 1140 or equivalent skills.
Fees: Laboratory
KINE 1142 BALLET I
Prerequisite: None
Fees: Laboratory
KINE 1144 TAI CHI I
Prerequisite: None
Fees: Laboratory

## KINE 1145 BEGINNING DANCE

Prerequisite: None
Fees: Laboratory
KINE 1146 INTERMEDIATE DANCE
Prerequisite: KINE 1145 or equivalent skills.
Fees: Laboratory
KINE 1147 SOCIAL DANCE
Prerequisite: None
Fees: Laboratory

## KINE 1148 TAP DANCING

Prerequisite: None
Fees: Laboratory
KINE 1149 TAI CHI II
Prerequisite: KINE 1144 or equivalent skills.
Fees: Laboratory

## KINE 1153 LIFEGUARD TRAINING

Prerequisite: KINE 1131 or equivalent skills.
Fees: Laboratory
American Red Cross Lifeguarding course provides training in lifeguarding and rescue skills. Certification available upon successful completion of the course requirements.

## KINE 1155 PILATES

Prerequisite: None
Fees: Laboratory
KINE 1157 YOGA II
Prerequisite: None
Fees: Laboratory
KINE 1170 FLAG FOOTBALL
Prerequisite: None
Fees: Laboratory

## KINE 1180 BOWLING

Prerequisite: None
Fees: Laboratory

KINE 1238 CONCEPTS OF FITNESS
Prerequisite: None
Students will participate in a physical activity program while exploring Internet sources to gain knowledge about the scientific principles on which Fitness/Wellness programs are founded. Course topics will include: healthy activity choices; stress management; body composition; healthy eating; and cardiovascular fitness, strength and flexibility programs.

## KINE 1301 FOUNDATIONS OF KINESIOLOGY

Prerequisite: None
Designed to orient the student to the Kinesiology profession and career opportunities within the profession. A study of history, philosophy, principles, objectives, and current concepts in Kinesiology.

## KINE 1304 HEALTH FOR TODAY

Prerequisite: None
A survey course that explores principles underlying good health practices and the nature, prevention, and treatment of common health problems. Major emphasis is placed on utilizing health information combined with self-assessments to enhance individual health status.

KINE 1306 FIRST AID
Prerequisite: None
Fees: Special
This course teaches laypersons to recognize and respond appropriately to emergencies. American Red Cross and American Heart Association certificates in First Aid and CPR may be earned.

## KINE 1308 OFFICIATING TEAM SPORTS

Prerequisite: KINE 1113 and KINE 1117 or equivalent skills.
Fees: Laboratory
Development of knowledge of rules of basketball and volleyball and application to actual game conditions.

## KINE 1321 COACHING VOLLEYBALL

Prerequisite: KINE 1118 or equivalent skills.
Fees: Laboratory
A thorough study of all phases of coaching volleyball. Methods of coaching, organizational techniques, and psychological principles will be studied through lectures, demonstrations, and practice hours per week.

## KINE 1322 COACHING BASKETBALL

Prerequisite: KINE 1119 or equivalent skills.
Fees: Laboratory
A thorough study of all the phases of coaching basketball. Methods of coaching, organizational techniques, and psychological principles will be studied through lectures, demonstrations, and practices per week.

## KINE 1346 SUBSTANCE ABUSE

Prerequisite: None
This course is about the use of various drugs and their impact on society. Students will examine the social, psychological, and biochemical ramifications of drug use/abuse as it relates to a growing and complex society.

## KINE 2255 WATER SAFETY INSTRUCTOR

Prerequisite: KINE 1131 or equivalent skills.
Fees: Laboratory
Principles and methods of teaching swimming and water safety. Red Cross Water Safety Instructor Certificate may be granted upon satisfactory completion of the course.

## ADMINISTRATIVE COMPUTER TECHNOLOGY

## LGLA 1291 SPECIAL TOPICS IN LEGALASSISTANT/PARALEGAL

(2-2-0)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

## LGLA 1307 INTRODUCTION TO LAW AND THE LEGAL PROFESSION

(3-3-0)
This course provides an overview of the law and the legal professions. Topics include legal concepts, systems, and terminology; ethical obligations and regulations; professional trends and issues with particular emphasis on the paralegal.

## LGLA 1342 CIVIL LITIGATION I

(3-3-0)
This course presents fundamental concepts of, and the paralegal's role in, employment and labor law. Topics include contracts of employment, governmental regulations, discrimination issues, and worker's compensation.

## LGLA 1344 CIVILLITIGATION II

(3-3-0)
This course presents fundamental concepts and procedures of civil litigation with emphasis on the paralegal's role. Civil Litigation II together with Civil Litigation I covers litigation from the pretrial stage to the post trial stage.

## LGLA 2307 LAW OFFICE MANAGEMENT

(3-3-0)
This course presents the fundamentals of law office management and organization including basic principles and structure of management, administrative and substantive systems in the law office, and law practice technology.

## ELECTRONIC SYSTEMS TECHNOLOGY

## LOTT 1401 INTRODUCTION TO FIBER OPTICS

(4-3-3)
Prerequisite: Department approval
Fees: Laboratory
An introductory course in fiber optics and its application including advantages of fiber, light transmission in fiber, types of fiber, sources, detectors, and connectors.

## LONG TERM CARE NURSING HOME ADMINISTRATOR

## LTCA 1311 INTRODUCTION TO LONG TERM

CARE ADMINISTRATION
An overview of the long term care industry. Includes a survey of the history and philosophy of long term care administration. Provides an introduction to and application of regulatory standards. Specializations within the long term care industry are discussed.

## LTCA 1312 RESIDENT CARE IN THE LONG TERM CARE FACILITIY

A study of the delivery of quality services to residents of long term care facilities. An overview of the methods for assessing and implementing strategies to promote quality resident care. A presentation of philosophical and ethical considerations.

## LTCA1313 ORGANIZATION AND MANAGEMENT OF LONG TERM CARE FACILITIES <br> (3-3-0)

An overview of the functional organizational structures common to long term health care facilities. An examination of the departments in long term care facilities, chain of command, personnel, regulatory requirements, quality indicators, and the role of the long term care administrator.

## LTCA 2314 LONG TERM CARE LAW

An examination of the types and sources of law relating to the long term care industry. A study of federal, state, and local statutes and regulations affecting the long term care industry.

## LTCA 2315 FINANCIALMANAGEMNET OF LONG TERM CARE FACILITIES

A study of the techniques and strategies for gathering and using financial information to make decisions in the long term care facility. An examination of budget processes, accounting principles, financial statements, and inventory controls. Topics include the special accounting requirements of Medicare, Medicaid, and other third-party payment systems.

## LTCA 2560 CLINICAL - HOSPITAL AND HEALTH CARE FACILITIES ADMINISTRATION/MANAGEMENT

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

## LTCA 2660 CLINICAL - HOSPITAL AND HEALTH CARE FACILITIES ADMINISTRATION/MANAGEMENT (6-0-32)

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

## AIR CONDITIONING

## MAIR 1449 REFRIGERATORS, FREEZERS, \& WINDOW UNITS

Prerequisite: HART 1403, 1407, and 1471
Fees: Laboratory
Service, installation, and repair of different types of domestic refrigeration systems along with a study of basic mechanical skills and troubleshooting. A basic study of the related electrical systems and controls and a detailed study of the instruments and tools related to this type of equipment.

## MATHEMATICS

## MATH 0310 BASIC MATHEMATICS

Prerequisite: None
Fees: Laboratory
Topics include operations and powers of whole numbers, fractions, decimals, and integers; ratio and proportion; percents: interpreting charts and graphs; and linear equations involving one operation. This course includes a laboratory component. Same as MATH 0300.

## MATH 0300 BASIC MATHEMATICS

Prerequisite: None
Fees: None
Topics include operations and powers of whole numbers, fractions, decimals, and integers; ratio and proportion; percents: interpreting charts and graphs; and linear equations involving one operation. This course does not include a laboratory component. Same as MATH 0310.

Prerequisite: MATH 0300 or 0310 with a grade of "C"or better or equivalent. Fees: Laboratory

Topics include problem-solving, inductive and deductive reasoning, informal geometry, linear equations, and introduction to polynomials and exponents. This course includes a laboratory component. Same as MATH 0301.

## MATH 0301 INTRODUCTION TO ALGEBRAAND GEOMETRY

Prerequisite: MATH 0300 or 0310 with a grade of "C" or better or equivalent. Fees: None

Topics include problem-solving, inductive and deductive reasoning, informal geometry, linear equations, and introduction to polynomials and exponents. This course does not include a laboratory component. Same as MATH 0311.

## MATH 0312 ELEMENTARY ALGEBRA

Prerequisite: MATH 0301 or 0311 with a grade of "C"or better or equivalent. Fees: Laboratory

Topics include polynomials, integral exponents, scientific notation, factoring, linear equations and inequalities, factoring sums and differences of cubes, factoring by grouping, graphs of linear equations in two variables, solutions of quadratic equations, systems of equations, determinants and Cramer's rule. This course includes a laboratory component. Same as MATH 0302.

## MATH 0302 ELEMENTARY ALGEBRA

Prerequisite: MATH 0301 or 0311 with a grade of "C"or better or equivalent. Fees: None

Topics include polynomials, integral exponents, scientific notation, factoring, linear equations and inequalities, factoring sums and differences of cubes, factoring by grouping, graphs of linear equations in two variables, solutions of quadratic equations, systems of equations, determinants and Cramer's rule. Same as MATH 0312.

## MATH 0313 INTERMEDIATE ALGEBRA

Prerequisite: MATH 0302 or 0312 with a grade of "C" or better or equivalent. Fees: Laboratory

Topics include introduction to relations and functions, radical expressions and equations, rational exponents, complex numbers, quadratic equations and inequalities, completing the square, graphs of inequalities in two variables, absolute value equations and inequalities, rational expressions and equation and the use of these concepts in problem solving. This course includes a laboratory component. Same as MATH 0303.

## MATH 0303 INTERMEDIATE ALGEBRA

Prerequisite: MATH 0302 or 0312 with a grade of "C"or better or equivalent. Fees: Laboratory

Topics include introduction to relations and functions, radical expressions and equations, rational exponets, ,complex numbers, quadratic equations and inequalities, completing the square, graphs of inequalities in two variables, absolute value equations and inequalities, rational expressions and equation and the use of these concepts in problem solving. Same as MATH 0313.

MATH 0350 MATH FOR THE APPLIED SCIENCES I
Prerequisite: None
Fees: Laboratory
Topics include operations and powers of whole numbers, fractions, decimals, and integers; ratio and proportion; percents; interpreting charts and graphs; problem solving; measurements; informal geometry; one step linear equations; evaluating and simplifying expressions; and exponents.

## MATH 0351 MATH FOR THE APPLIED SCIENCES II

Prerequisite: Math 0350 with a grade of "C" or better or equivalent. Fees: Laboratory

Topics include polynomials, exponents, scientific notation, factoring linear equations and inequalities, graphs of linear equations in two variables, solutions of quadratic equations by factoring, systems of two linear equations, radical expressions, and complex numbers.

## MATH 1314 COLLEGE ALGEBRA

(3-3-0)
Prerequisite: MATH 0303 or 0313 with a grade of "C"or better or equivalent. Topics include functions, including algebra of functions, composites, inverses, graphs, Remainder Theorem, Factor Theorem, Rational Root Theorem, logarithmic and exponential functions; systems of equations using Cramer's Rule, matrices and determinants; Binomial Theorem; and arithmetic and geometric sequences and series with Sigma notation.

## MATH 1324 MATHEMATICS FOR BUSINESS \& SOCIAL SCIENCES I (FINITEMATHEMATICS)

Prerequisite: Math 0303 with a grade of "C" or better or equivalent.
Topics include linear equations, quadratic equations, functions and graphs, inequalities, mathematics, of finance, set theory, introduction to probability and statistics, linear programming, matrices, systems of linear equations, applications to management, economics, and business.

## MATH 1325 CALCULUS FOR BUSINESS

Prerequisite: MATH 1314 with a grade of " C " or better or equivalent.
Topics include limits, continuity, derivatives of polynomial and other algebraic functions, implicit differentiation, higher order derivatives, extrema, logarithmic and exponential functions, definite and indefinite integrals, and applications to business and business related topics.

MATH 1332 LIBERALARTS MATHEMATICS
(3-3-0)
Prerequisite: MATH 0303 or MATH 0313 with a grade of "C" or better or equivalent. This course is designed for non-mathematics and non-science majors who need three hours of mathematics for degree requirements. This course may include topics from logic, trigonometry, number systems, functions, measurements, other geometric concepts, and an introduction to probability and statistics.

## MATH 1333 COLLEGE MATHEMATICS

Prerequisite: MATH 0301 or MATH 0350 with a grade of "C" or better or equivalent. Note: Previously MATH 1373

A course designed for non-mathematics and non-science majors. Topics normally include measurement, right triangle trigonometry, elementary statistical concepts, and the mathematics used in fields such as business and finance. Emphasis is on problem-solving skills and the use of calculators.

## MATH 1350 FUNDAMENTALS OF MATHEMATICS I FOR TEACHERS

Prerequisite: MATH 1314
Topics include sets, functions, numeration systems, number theory, and the properties of the natural, integer, and rational and real numbers. The emphasis is on conceptual understanding, problem solving, and critical thinking. This course is designed specifically for students seeking teacher certification through grade 8 .

## MATH 1351 FUNDAMENTALS OF MATHEMATICS II FOR TEACHERS

Prerequisite: MATH 1350
Topics include geometry, measurement, proportional reasoning, data representation, probability and statistics. The emphasis is on conceptual understanding, problem solving, and critical thinking. This course is designed specifically for students seeking teacher certification through grade 8 .

## MATH 1374 ALGEBRAAND TRIGONOMETRY

(3-3-0)
Prerequisite: MATH 0302 or MATH 0312 with a grade of "C" or better or equivalent. Effective Spring 2008, Prerequisite: MATH 0351 with a grade of "C" or better or equivalent.

This course is for students who need a working knowledge of the ways that algebra, trigonometry, and logarithms are used to solve practical problems. Emphasis is on problem-solving skills and the use of the scientific calculator.

## MATH 1442 ELEMENTARY STATISTICS

Prerequisite: MATH 1314 with a grade of "C" or better or equivalent.
Note: Formerly MATH 1342
This course is a non-calculus introduction to statistics with computer applications. Topics include distributions, histograms, exploratory data analysis,
measures of location and dispersion, elementary probability, probability functions (binomial, normal, t-distribution, and chi-square distribution), analysis of measurements (confidence intervals and hypothesis testing), analysis of paired data (linear regression and correlation), and the use of statistical software for the analysis of data.

## MATH 2318 LINEAR ALGEBRA

(3-3-0)
Prerequisite: MATH 2413 with a grade of "C" or better or equivalent.
Fees: None
Topics include systems of linear equations, matrices and matrix operations, determinants, vectors, and vector spaces, inner products, change of bases, linear transformations, and eigenvalues and eigenvectors.

## MATH 2320 DIFFERENTIALEQUATIONS

(3-3-0)
Prerequisite: MATH 2414 with a grade of "C" or better or equivalent.
Topics include ways in which differential equations arise and numerical - graphical solutions, equations of first order and degree with applications, higher order linear equations and applications, Laplace transforms, systems of equations, and sequences and series with application to power series solutions.

MATH 2405 DISCRETE MATHEMATICS
Prerequisite: Math 2412 with a grade of "C" or better or equivalent.
Introductory mathematical logic, mathematical induction, relations and functions, basic counting techniques, graphs and trees, and applications to computing devices.

## MATH 2412 PRECALCULUS

(4-4-0)
Prerequisite: MATH 1314 with a grade of "C" or better or equivalent.
Topics include functions, including composites, inverses, and graphs; conic sections; circular and trigonometric functions, inverse circular functions, identities, conditional equations, graphs, solution of triangles, polar coordinates, complex numbers, and vectors; and mathematical induction.

## MATH 2413 CALCULUS I

(4-4-0)
Prerequisite: MATH 1348 or MATH 2412 with a grade of "C" or better or equivalent.
Topics include limits, continuity, derivatives of algebraic and trigonometric functions, implicit differentiation and higher order derivatives; related rates, Rolle's Theorem, Mean Value Theorem, velocity acceleration, curve sketching and other applications of derivatives; antiderivatives, Riemann sums, definite integrals; Fundamental Theorem of Calculus, area; derivatives and integrals of exponential and logarithmic functions.

MATH 2414 CALCULUS II
(4-4-0)
Prerequisite: MATH 2413 with a grade of "C" or better or equivalent.
Topics include derivatives of inverse trigonometric functions, indeterminate forms, L'Hospital's Rule; techniques of integration, numerical methods, improper integrals, volume, arc length and other applications of integration; parametric equations, derivatives and areas in polar coordinates, sequences and series.

## MATH 2415 CALCULUS III

Prerequisite: MATH 2414 with a grade of "C" or better or equivalent.
Topics include vector calculus, vector valued functions, tangents to curves, velocity vector, curl; partial derivatives, chain rule, gradients, change of order, implicit functions; extrema of functions of several variables; multiple integrals; and path independent line integrals.

## MANUFACTURING ENGINEERING TECHNOLOGY

## MCHN 1171 WORKFORCE TRAINING SKILLS FOR SUCCESS (1-1-0)

Prerequisite: None
Fees: None
A study of the relationship between student, school, and work, including a study of how business organizations work, the competencies necessary to be productive employees, and college survival skills. Contents include an analysis of programs offered at the college, and possible career paths. State of the industry presentations will be made by selected guest speakers.

## MCHN 1217 MACHINING I

An introductory course that assists the student in understanding the machinist occupation in industry. The student begins by using basic machine tools such as the lathe, milling machine, drill press, power saw, and bench grinder. Machine terminology, theory, math, part layout, and bench work using common measuring tools is included. Emphasis is placed on shop safety, housekeeping, and preventive maintenance.

## MCHN 1320 PRECISION TOOLS AND MEASUREMENT

Prerequisite: None
An introduction to the modern science of dimensional metrology. Emphasis on the identification, selection, and application of various types of precision instruments associated with the machining trade. Practice of basic layout and piece part measurements while using standard measuring tools.

## MCHN 1354 INTERMEDIATE MACHINING II

Development of job process plan to include operation of lathes, milling machines, drill press machines, and power saws. Set-up, layout, and tool maintenance is included. Emphasis on shop safety and preventative maintenance.

## MCHN 1266 MACHINIST/MACHINE TECHNOLOGIST PRACTICUM (INTERNSHIP)

Practical, general workplace training supported by an individualized learning plan developed by the employer, college and student.

## MCHN 1302 MACHINIST II

## Fees: Laboratory

A study of different blueprints, with emphasis on machine blueprints and the application of each.

## MCHN 1326 INTRODUCTION TO CAM

A study of Computer-Assisted Manufacturing (CAM) systems. Software is used to develop applications for manufacturing. Emphasis on tool geometry, tool selection, and the tool library.

## MCHN 1330 STATISTICAL PROCESS CONTROL FOR MACHININST

Prerequisite: None
Fees: None
An introduction to statistical process control used by machinist and machine operators. Analysis of data collected from workpieces.

## MCHN 1408 BASIC LATHE

Prerequisite: None
Fees: Laboratory
An introduction to the common types of lathes. Emphasis on basic parts, nomenclature, lathe operations, safety, machine mathematics, blueprint reading, and theory.

## MCHN 1413 BASIC MILLING OPERATIONS

Prerequisite: None
Fees: Laboratory
An introduction to common types of milling machines, basic parts, nomenclature, basic operations and procedures, machine operations, safety, machine mathematics, blueprint reading and theory.

## MCHN 1426 INTRODUCTION TO CAM

Fees: Laboratory
A study of Computer-Assisted Manufacturing (CAM) systems. Software is used to develop applications for manufacturing. Emphasis on tool geometry, tool selection, and the tool library.

372 St. Philip's College 2006-2008 Catalog
MCHN 1435 GRINDERS, OUTSIDE, INTERNAL, SURFACE
Fees: Laboratory
An introduction to types and operations of outside diameter, internal diameter, and surface grinders. Emphasis on identification, selection, and replacement of grinding wheels. Related topics include math, blueprint reading, and safety.

MCHN 1438 BASIC MACHINE SHOP I
Fees: Laboratory
An introductory course that assists the student in understanding the machinist occupation in industry. The student begins by using basic machine tools such as the lathe, milling machine, drill press, power saw, and bench grinder. Machine terminology, theory, math, part layout, and bench work using common measuring tools are included. Emphasis is placed on shop safety, housekeeping, and preventive maintenance.

MCHN 2266 PRACTICUM-MACHINE TOOL TECHNOLOGY/MACHINIST

Prerequisite: None
Fees: None
Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.

MCHN 2303 FUNDAMENTALS OF CNC MACHINE CONTROLS (3-2-1)
An introduction to $G$ and $M$ codes (RS274-D) necessary to program Computer Numerical Controlled (CNC) machines.

MCHN 2403 FUNDAMENTALS OF CNC MACHINE CONTROL (4-2-4)
Fees: Laboratory
An introduction to G and M codes (RS274-D) necessary to program Computer Numerical Controlled (CNC) machines.

## MCHN 2425 ADVANCED CNC MACHINING

Fees: Laboratory
The study of advanced CNC operation with an emphasis on programming and operations of machining and turning centers.

MCHN 2431 OPERATION OF CNC TURNING CENTERS
Fees: Laboratory
A continuation of Fundamentals of CNC Machine Controls with an emphasis on turning centers.

## MCHN 2433 ADVANCED LATHE OPERATIONS

Prerequisite: None
Fees: Laboratory
An advanced study of lathe operations. The identification and/or use of special cutting tools and support tooling, such as form tools, carbide inserts, taper attachments, follower, and steady rest. Close tolerance machining required.

## MCHN 2434 OPERATION OF CNC MACHINING CENTERS

Fees: Laboratory
A continuation of Fundamentals of CNC Machine Controls with an emphasis on machining centers.

MCHN 2435 ADVANCED CNC MACHINING
Prerequisite: MCHN 1426
Fees: Laboratory
The study of advanced CNC operation with an emphasis on programming and operations of machining and turning centers.

## MCHN 2437 ADVANCED MILLING OPERATIONS

Prerequisite: None
Fees: Laboratory
An advanced study of milling machine operations. Identification and/or use of milling cutters and support tooling including end mills, slab mills, face mills, involve cutters, rotary tables, and indexing heads. A review of related math and machine theory.

## MCHN 2438 ADVANCED CAM

Fees: Laboratory
A study of advanced techniques in Computer-Assisted Manufacturing (CAM).

# MEDICAL TERMINOLOGY 

See Health Information Systems
(Allied Health Foundation)

MEDICAL TRANSCRIPTION
See Health Information Systems
(Medical Transcription)

## MEDICAL LABORATORY

MLAB 1160 CLINICAL I
(1-0-4)
Prerequisite: MLAB 1201, MLAB 1211, and MLAB 1223 with grades of "C" or higher
Fees: Laboratory
Faculty coordinating experience in cooperating hospital and clinical laboratories including collection of samples, performing tests, recording, and clinical discussion in the areas of blood collecting, laboratory safety, and urinalysis.

## MLAB 1201 INTRODUCTION TO CLINICAL LABORATORY SCIENCE

(2-1-2)
Prerequisite: None
Fees: Laboratory
An introduction to clinical laboratory science, including quality control, laboratory math, safety, basic laboratory equipment, laboratory settings, and accreditation and certification.

## MLAB 1311 URINALYSIS AND BODY FLUIDS

Co-requisite: BIOL 2404
Fees: Laboratory
An introduction to urinalysis and body fluid analysis, including the anatomy and physiology of the kidney and the physical, chemical and microscopic examination of urine, cerebrospinal fluid, and other body fluids.

## MLAB 1214 HEMATOLOGY II

Prerequisite: MLAB 1315 with a grade of "C" or higher.
Fees: Laboratory
A continuation of MLAB 1315- Hematology I. In this course, the student will study acute and chronic leukemias, myelodysplastic disorders, and special stains.

## MLAB 1227 COAGULATION

Prerequisite: MLAB 1315
Fees: Laboratory
A course in coagulation theory, procedures, and practical applications. Includes laboratory exercises which rely on commonly performed manual and semiautomated methods.

MLAB 1261 CLINICAL II
(2-0-8)
Prerequisite: MLAB 1214, MLAB 1227, and MLAB 1315 with a grade of "C" or higher.

Faculty coordinated experience in cooperating hospital and clinical laboratories including the performance tests, recordings, and clinical discussion in the areas of hematology and coagulation.

## MLAB 1315 HEMATOLOGY I

Prerequisite: None
Fees: Laboratory
Introduction to the theory and practical application of routine and special hematology procedures, both manual and automated; red blood cell and white blood cell maturation sequences; and normal and abnormal morphology. Anemias will also be covered.

## MLAB 1331 PARASITOLOGY/MYCOLOGY

Prerequisite: MLAB 2434
Fees: Laboratory
A study of the taxonomy, morphology, and pathogenesis of human parasites and fungi, including the practical application of laboratory procedures.

## MLAB 1335 IMMUNOLOGY/SEROLOGY

Prerequisite: BIOL 2404
Fees: Laboratory
An introduction to the theory and application of basic immunology, including the immune response, principles of antigen-antibody reactions, and the principles of serological procedures.

## MLAB 1415 HEMATOLOGY

Prerequisite:
Fees: Laboratory
Introduction to the theory and practical application of routine and special hematology procedures, both manual and automated; red blood cells and white blood cells maturation sequences, and normal and abnormal morphology and associated diseases.

## MLAB 2200 CLINICAL CHEMISTRY II

Prerequisite: MLAB 2401 with a grade of "C" or higher.
Fees: None
A continuation of MLAB 2401. This course will cover endorinology, toxicology, therapeutic drug monitoring, and computer and laboratory information systems.

## MLAB 2234 MICROBIOLOGY II

Prerequisite: MLAB 2434 with a grade of "C" or higher.
Fees: None
This is a continuation of MLAB 2434. Instruction in the theory, practical application, and pathogenesis of clinical microbiology.

MLAB 2261 CLINICAL III
(2-0-12)
Prerequisite: MLAB 2434, MLAB 2234, and MLAB 1331 with a grade of "C" or higher.
Fees: Laboratory
Faculty coordinated experience in cooperating hospital laboratories including the performance of tests, recording and clinical discussion in the areas of parasitology, clinical bacteriology, and clinical mycology.

## MLAB 2262 CLINICAL IV

(2-0-10)
Prerequisite: MLAB 1335 and MLAB 2431 with a grade of "C" or higher.
Fees: Laboratory
Faculty coordinated experience in cooperating hospital laboratories including the performing, recording, and clinical discussion in blood banking and transfusion services.

## MLAB 2263 CLINICAL V

Prerequisite: MLAB 2200 and MLAB 2401 with grades of "C" or higher.
Fees: Laboratory
Faculty coordinated experience in cooperating hospital laboratories including performing tests, recording, and clinical discussions in clinical chemistry and quality control.

## MLAB 2338 ADVANCED TOPICS IN MED LAB TECNICAL/ASSISTANT

Prerequisite:
Fees: None
This course examines the integration of all areas of the clinical laboratory and correlates laboratory test data with diagnostic applications and pathophysiology using critical thinking skills.

## MLAB 2371 ADVANCED TOPICS IN CLINICAL LABORATORY <br> SCIENCE

Prerequisite: By permission of instructor
Fees: None
This course is designed to introduce students to advanced topics in a case study format to enhance critical thinking skills. The topics will present the role of the clinical laboratory in diagnosis and treatment of diseases of different organs/ systems. The student will give at least two oral presentations of case studies.

## MLAB 2401 CLINICAL CHEMISTRY I

Prerequisite: CHEM 1411and CHEM 1412
Fees: Laboratory
An introduction to the principles and procedures of various tests performed in clinical chemistry. Presents the physiological basis for the test, the principle and procedure for the test, and the clinical significance of the test results, including
quality control and normal values. Also includes basic laboratory technique, chemical laboratory safety, electrolytes and acid-base balance, proteins, carbohydrates, lipids, enzymes, and metabolites.

## MLAB 2431 IMMUNOHEMATOLOGY

Prerequisite: MLAB1335 with a grade of "C" or higher.
Fees: Laboratory
A study of blood antigens and antibodies. Performance of routine blood banking procedures, including blood group and Rh typing, antibody screens, antibody identification, cross matching, elution, and absorption techniques.

## MLAB 2434 CLINICAL MICROBIOLOGY

Prerequisite: None
Instruction in the theory, practical application, and pathogenesis of clinical microbiology, including collection, setup, identification, susceptibility testing, and reporting procedures.

## MLAB 2501 CLINICAL CHEMISTRY

Prerequisite:
Fees: Laboratory
An introduction to the principles and procedures of various tests performed on Clinical Chemistry. Presents the physiological basis for the test, the principle and procedure for the test, and the clinical significance of the test results, including quality control and normal values. Also includes basic chemical laboratory technique, chemical laboratory safety, electrolytes and acid-base balance, proteins, carbohydrates, lipids, enzymes, metabolites, endocrine function, and toxicology.

## MLAB 2534 CLINICAL MICROBIOLOGY

## Prerequisite:

Fees: Laboratory
Instruction in the theory, practical application, and pathogenesis of clinical microbiology, including collection, setup, identification, susceptibility testing, and reporting procedures.

## MAGNETIC RESONANCE IMAGING (ENHANCED SKILLS)

## MRIT 2330 PRINCIPLES OF MAGNETIC RESONANCE IMAGING

(3-3-0)
Introduction of concepts and scientific principles employed in magnetic resonance imaging techniques. Principles of magnetism and interactions of living matter within magnetic fields are emphasized.

## MRIT 2360 MRI CLINICAL I

(3-0-9)
Clinical rotation that covers basic skills in the application of magnetic resonance imaging.

MRIT 2361 MRI CLINICAL II
Continuation of clinical rotation in magnetic resonance to include quality control and upper-level scanning parameters.

## BUSINESS MANAGEMENT

## MRKG 2349 ADVERTISING AND SALES PROMOTION

Notes: Formerly BMGT 2307
Introduction to the advertising principles, practices, and multi-media of persuasive communication including buyer behavior, budgeting, and regulatory constraints.

## HEALTH INFORMATION SYSTEMS <br> (MEDICAL TRANSCRIPTION)

MRMT 1407 MEDICAL TRANSCRIPTION FUNDAMENTALS* (4-2-6)
Prerequisite: 12 th grade reading and writing. Acceptance into the Medical Transcription program and completion HITT 1305 and BIOL 2404 (or BIOL 2401 and 2402).
Co-requisite: MRMT 1311
Fees: Laboratory
Fundamentals of medical transcription with a hands-on experience in transcribing physician dictation including basic reports such as history and physicals, discharge summaries, consultations, operative reports, and other medical reports. Utilizes transcribing and information processing equipment compatible with industry standards. Designed to develop speed and accuracy.

## MRMT 2433 ADVANCED MEDICALTRANSCRIPTION*

Prerequisite: MRMT 1407 and MRMT 1311 with a grade of "C" or higher Co-requisite: HITT 1349 and HITT 2331
Fees: Laboratory
Production of advanced reports of physician dictation with increasing speed and accuracy including history and physicals, consultations, discharge summaries, operative reports, and other medical reports.

## MRMT 2462 CLINICAL*

Prerequisite: MRMT 2433, HITT 1349, HITT 2331 with a grade of "C" or higher Fees: Laboratory and Allied Health Insurance

Practical general training and experiences in the workplace. The College, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experience to the student's general and technical course of study. The guided external experience may be paid or unpaid. This course may be repeated if topics and learning outcomes vary.
*Enrollment contingent on acceptance into the program

## MILITARY SCIENCE

## MSCI 1101 FUNDAMENTALS OF LEADERSHIPAND MANAGEMENT

Prerequisite: None
Organization of the Army and ROTC; career opportunities for ROTC graduates and the military as a profession. Customs and traditions of the service. Development of leadership potential, First Aid, and introduction to map reading.

## MSCI 1102 FUNDAMENTALS OF LEADERSHIP AND MANAGEMENT II

Prerequisite: None
Leadership studies of problems facing junior leaders in today's Army in noncombat situations. Effects of technological and sociological change on the military. Continuation of customs and traditions of the service. Development of leadership potential. Basic military skills training.

## MSCI 2202 APPLIED LEADERSHIPAND MANAGEMENT (2-0-2)

Prerequisite: None
Military use of maps and terrain analysis with emphasis on practical experiences. Introduction to the leadership techniques required to conduct patrolling, offensive and defensive tactical missions.

## MUSIC APPLIED

Freshman and Sophomore Level Courses.
MUAP 1201 FRESHMAN LEVEL VIOLIN I
(2-0-2)
Prerequisite: VIOL 1277 or equivalent
Fees: Laboratory
Technical studies in this course will include scales and bowings and Etudes of Sitt, Mazas and Dont. Repertoire will be selected from short compositions, concertos and sonatas such as those of Seitz, Accolay, Vivaldi, Handel and Verancini.

## MUAP 1202 FRESHMAN LEVEL VIOLIN II

Prerequisite: MUAP 1201
Fees: Laboratory
MUAP 1202 is a continuation of MUAP 1201.

## MUAP 1205 FRESHMANLEVEL VIOLAI

Prerequisite: VOLA 1277 or equivalent
Fees: Laboratory
The student of MUAP 1205 will study scales and bowings, Etudes of Hufman, Dont, Mazas and Hoffmeister, as well as short compositions and sonatas such as those of Vivaldi, Marcello and Handel.

## MUAP 1206FRESHMANLEVEL VIOLAII

Prerequisite: MUAP 1205
Fees: Laboratory
MUAP 1206 is a continuation of MUAP 1205.

## MUAP 1209 FRESHMANLEVELCELLO I

Prerequisite: CELL 1277 or equivalent
Fees: Laboratory
MUAP 1209 will include short compositions from standard repertoire, two octave scales with various bowings, easier sonatas, duets and sight-reading.

## MUAP 1210 FRESHMAN LEVEL CELLO II

Prerequisite: MUAP 1209
Fees: Laboratory
MUAP 1210 is a continuation of MUAP 1209.
MUAP 1213 FRESHMAN LEVEL DOUBLE BASS I
(2-0-2)
Prerequisite: BASS 1272 or equivalent
Fees: Laboratory
MUAP 1213 focuses on correct hand position and bowing techniques (either German or French style bow). Method books incorporated within the course can include Dimandi, Books I and II, Simandi, 30 Studies, Hrabe, 86 Studies, Volume I and short compositions from standard repertoire.

## MUAP 1214 FRESHMAN LEVEL DOUBLE BASS II

Prerequisite: MUAP 1213
Fees: Laboratory
MUAP 1214 is a continuation of MUAP 1213.

## MUAP 1217 FRESHMANLEVEL FLUTE I

Prerequisite: FLTE 1272 or equivalent
Fees: Laboratory
MUAP 1217 can include studies in chromatic scales, arpeggios, various articulations and short compositions from standard repertoire.

## MUAP 1218 FRESHMANLEVEL FLUTE II

Prerequisite: MUAP 1217
Fees: Laboratory
MUAP 1218 is a continuation of MUAP 1217.

## MUAP 1221 FRESHMAN LEVEL OBOE I

Prerequisite: OBOE 1277 or equivalent
Fees: Laboratory
MUAP 1221 includes all scales, exercises in various articulations, studies equivalent to Rubank, Verroust, Barret and short compositions from standard repertoire.

## MUAP 1222 FRESHMAN LEVEL OBOE II

Prerequisite: MUAP 1221
Fees: Laboratory
MUAP 1222 is a continuation of MUAP 1221.

## MUAP 1225 FRESHMAN LEVEL BASSOON I

Prerequisite: BASN 1272 or equivalent
Fees: Laboratory
MUAP 1225 can include the study of Lentz, Jancourt, Schroeder, all scales and articulation exercises. Short compositions from standard repertoire will be learned.

MUAP 1226 FRESHMAN LEVEL BASSOON II
(2-0-2)
Prerequisite: MUAP 1225
Fees: Laboratory
MUAP 1226 is a continuation of MUAP 1225.

MUAP 1229 FRESHMANLEVELCLARINETI
Prerequisite: CLAR 1272 or equivalent
Fees: Laboratory
MUAP 1229 can incorporates the Rose Studies, the Klose Method, all scales, exercises in various articulations and short compositions from standard epertoire.

## MUAP 1230 FRESHMAN LEVEL CLARINET II

Prerequisite: MUAP 1229
Fees: Laboratory
MUAP 1230 is a continuation of MUAP 1229.

MUAP 1233 FRESHMAN LEVEL SAXOPHONE I
Prerequisite: SAXO 1232 or equivalent.
Fees: Laboratory
Technique will be developed through the study of Voxman's Advanced Method and Selected Studies and major scales and arpeggios. Repertoire will include representative solos of various styles and periods.

MUAP 1234 FRESHMAN LEVEL SAXOPHONE II
Prerequisite: MUAP 1233
Fees: Laboratory
MUAP 1234 is a continuation of MUAP 1233.

## MUAP 1237 FRESHMAN LEVEL TRUMPET OR CORNET I

Prerequisite: TRPT 1236 or equivalent.
Fees: Laboratory
Technical studies will include St. Jacome, Sachse, Clarke, Voxman, all scales and arpeggios in extended register and transposition. Repertoire will include representative solos.

## MUAP 1238 FRESHMAN LEVEL TRUMPET OR CORNET II

Prerequisite: MUAP 1237
Fees: Laboratory
MUAP 1238 is a continuation of MUAP 1237.

## MUAP 1241 FRESHMAN LEVEL FRENCH HORN I

Prerequisite: HORN 1272 or equivalent
Fees: Laboratory
MUAP 1241 can include the study of all scales, exercises for embouchure development, various articulations, the studies of Alphonse, Pottag, Popprasch and short compositions from standard repertoire.

MUAP 1242 FRESHMANLEVEL FRENCH HORN II
Prerequisite: MUAP 1241
Fees: Laboratory
MUAP 1242 is a continuation of MUAP 1241.

## MUAP 1245 FRESHMAN LEVEL TROMBONE I

Prerequisite: TROM 1244 or equivalent.
Fees: Laboratory
Technique will be developed through the studies of Mantia, Couillad, Rochut, and exercises in various articulations. Repertoire will be selected from short compositions.

## MUAP 1246 FRESHMAN LEVEL TROMBONE II

Prerequisite: MUAP 1245
Fees: Laboratory
MUAP 1246 is a continuation of MUAP 1245.

## MUAP 1257 FRESHMAN LEVEL PERCUSSION I

Prerequisite: PERC 1256 or equivalent.
Fees: Laboratory
The topic of the course may include: snare drum, study of rudiments and shorter rudimentary solos, and studies of Gardner, Sternberg, Goldenberg, Podemski. Other topics will include drum set and pit drumming.

## MUAP 1258 FRESHMAN LEVEL PERCUSSION II

Prerequisite: MUAP 1257
Fees: Laboratory
MUAP 1258 is a continuation of MUAP 1257.

## MUAP 1263 FRESHMAN LEVEL GUITAR I

Prerequisite: PGTR 1262 or equivalent.
Fees: Laboratory
Notes: Formerly MUS 1231 and MUAP 1264.
Classical guitar. Studies of Guiliani, Sor, Carcassi. All scales. Segovia righthand fingering. Short composition from standard repertoire.

## MUAP 1264 FRESHMAN LEVEL GUITAR II

Prerequisite: MUAP 1263 or equivalent.
Fees: Laboratory
Notes: Formerly MUS 1232 and MUAP 2261.
Continuation of MUAP 1263.

## MUAP 1265 FRESHMAN LEVEL ORGAN I

Prerequisite: MUAP 1272 or equivalent.
Fees: Laboratory
Notes: Formerly MUS 1241.
Individual instruction in applied organ. Dickinson, The Art and Technique of Organ Playing; Bach Chorales and Little Preludes and Fugues; Romantic and modern compositions; hymn playing and studies.

MUAP 1266 FRESHMAN LEVEL ORGAN II
Prerequisite: MUAP 1265 or equivalent.
Fees: Laboratory
Notes: Formerly MUS 1242.
Continuation of MUAP 1265.

## MUAP 1271 FRESHMAN LEVEL PIANO I

Prerequisite: MUSI 2181, PPNO 1270, or permission of instructor.
Fees: Laboratory
Notes: Formerly MUS 1211 and MUAP 1272.
Private study in piano at the middle intermediate level.

## MUAP 1272 FRESHMAN LEVEL PIANO II

Prerequisite: MUSI 2182, MUAP 1271, or permission of the instructor.
Fees: Laboratory
Notes: Formerly MUS 1212 and MUAP 2269.
Private study in piano at the upper intermediate level.

## MUAP 1283 FRESHMAN LEVEL VOICE I

Prerequisite: PVCE 1282 or equivalent.
Fees: Laboratory
Notes: Formerly MUS 1221 and MUAP 1284.
Continuation of PVCE 1282. Principles of correct breathing and fundamentals of tone production and diction. Simple English and Italian songs and arias. Voice Studies. Music reading.

## MUAP 1284 FRESHMAN LEVEL VOICE II

Prerequisite: MUAP 1283.
Fees: Laboratory
Notes: Formerly MUS 1222 and MUAP 2281.
Continuation of MUAP 1283.

## MUAP 2201 SOPHOMORE LEVEL VIOLIN I

(2-0-2)
Prerequisite: MUAP 1202
Fees: Laboratory
Technical studies will include scales, arpeggios, bowings, double stops and the Etudes of Mazas, Dont, Kreutzer, Rode and Fiorello. Repertoire will be selected from short compositions, concertos and sonatas such as those of Vivaldi, Bach, Haydn, Viotti and Handel.

## MUAP 2202 SOPHOMORE LEVEL VIOLIN II

Prerequisite: MUAP 2201
Fees: Laboratory
MUAP 2202 is a continuation of MUAP 2201.

## MUAP 2205 SOPHOMORE LEVEL VIOLA I

Prerequisite: MUAP 1206
Fees: Laboratory
Technical studies in this course will include scales, arpeggios and bowings, as well as Etudes of Mazas, Dont and Kreutzer. Repertoire will be selected from short compositions, concertos and sonatas such as those of Marcello, Corelli, Handel, Telemann and Eccles.

## MUAP 2206 SOPHOMORE LEVEL VIOLA II

Prerequisite: MUAP 2205
Fees: Laboratory
MUAP 2206 is a continuation of MUAP 2205.

MUAP 2209 SOPHOMORE LEVEL CELLO I
Prerequisite: MUAP 1210
Fees: Laboratory
MUAP 2209 will include three octave scales with various bowings, easier concertos, selected movements from Bach cello suites, larger sonatas, ensemble work and sight-reading.

## MUAP 2210 SOPHOMORE LEVELCELLO II

Prerequisite: MUAP 2209
Fees: Laboratory
MUAP 2210 is a continuation of MUAP 2209.

## MUAP 2213 SOPHOMORE LEVEL DOUBLE BASS I

Prerequisite: MUAP 1214
Fees: Laboratory
MUAP 2213 can include studies from Simandi, Book II, Hrabe, 86 Studies, Volume II, Montanari Etudes, Volume I, orchestral studies and short repertoire pieces.

## MUAP 2214 SOPHOMORE LEVEL DOUBLE BASS II

Prerequisite: MUAP 2213
Fees: Laboratory
MUAP 2214 is a continuation of MUAP 2213

## MUAP 2217 SOPHOMORE LEVEL FLUTE I

Prerequisite: MUAP 1218
Fees: Laboratory
MUAP 2217 can include the study of all scales, studies of Anderson, Andurad, Bach and Handel sonatas, orchestral literature and transposition.

MUAP 2218 SOPHOMORE LEVEL FLUTE II
Prerequisite: MUAP 2217
Fees: Laboratory
MUAP 2218 is a continuation of MUAP 2217.

MUAP 2221 SOPHOMORE LEVEL OBOE I
(2-0-2)
Prerequisite: MUAP 1222
Fees: Laboratory
MUAP 2221 includes half-step and whole-step transposition, orchestral literature, studies equivalent to Ferling, Andraud, Barret and Sellner, and representative solos, including at least two pre-classical sonatas.

MUAP 2222 SOPHOMORE LEVEL OBOE II
Prerequisite: MUAP 2221
Fees: Laboratory
MUAP 2222 is a continuation of MUAP 2221.

MUAP 2225 SOPHOMORE LEVEL BASSOON I
Prerequisite: MUAP 1226
Fees: Laboratory
MUAP 2225 can include the study of Milde Etudes, Volume I, transposition, orchestral excerpts and standard bassoon repertoire.

## MUAP 2226 SOPHOMORE LEVEL BASSOON II

Prerequisite: MUAP 2225
Fees: Laboratory
MUAP 2226 is a continuation of MUAP 2225.

## MUAP 2229 SOPHOMORE LEVEL CLARINET I

Prerequisite: MUAP 1230
Fees: Laboratory
MUAP 2229 can include the study of all scales and arpeggios, and studies from the Baermann Method Part III, Rose 40 Etudes and Weber Concerti.

## MUAP 2230 SOPHOMORE LEVEL CLARINET II

(2-0-2)
Prerequisite: MUAP 2229
Fees: Laboratory
MUAP 2230 is a continuation of MUAP 2229.

## MUAP 2233 SOPHOMORE LEVEL SAXOPHONE I

Prerequisite: MUAP 1234
Fees: Laboratory
Technique will be developed through the studies by Mule, Ferling, Berbinguer, and all scales and arpeggios. Repertoire will be selected from Bach and Handel transcriptions and French recital pieces.

## MUAP 2234 SOPHOMORE LEVEL SAXOPHONE II

Prerequisite: MUAP 2233
Fees: Laboratory
MUAP 2234 is a continuation of MUAP 2233.

## MUAP 2237 SOPHOMORE LEVEL TRUMPET OR CORNET I

Prerequisite: MUAP 1238
Fees: Laboratory
MUAP 2237 will include all scales and arpeggios in extended register, studies of St. Jacome, Sachse, Clarke, and Voxman, as well as transposition and representative solos.

## MUAP 2238 SOPHOMORE LEVEL TRUMPET OR CORNET II

Prerequisite: MUAP 2237
Fees: Laboratory
MUAP 2238 is a continuation of MUAP 2237.

## MUAP 2241 SOPHOMORE LEVEL FRENCH HORN I

Prerequisite: MUAP 1242
Fees: Laboratory
MUAP 2241 can include the studies of Mixime-Alphonse, Gallay, Belolli, F. Strauss, Mozart, R. Strauss, Haydn, Saint-Saens Concert Piece, Haydn Sonata, the Reicha Trios and orchestral excerpts.

## MUAP 2242 SOPHOMORE LEVEL FRENCH HORN II

Prerequisite: MUAP 2241
Fees: Laboratory
MUAP 2242 is a continuation of MUAP 2241.

MUAP 2245 SOPHOMORE LEVEL TROMBONE I
Prerequisite: MUAP 1246
Fees: Laboratory
Technical studies will include Rochut, Blazhevich, Arban's triple and doubletonguing etudes, Bach, Marsteller, Blume, and Gillis. Repertoire will include orchestral excerpts and representative solos.

MUAP 2246 SOPHOMORE LEVEL TROMBONE II
Prerequisite: MUAP 2245
Fees: Laboratory
MUAP 2246 is a continuation of MUAP 2245.

388 St. Philip's College 2006-2008 Catalog
MUAP 2257 SOPHOMORE LEVEL PERCUSSION I
(2-0-2)
Prerequisite: MUAP 1258
Fees: Laboratory
MUAP 2257 is a comprehensive study of the performance techniques of snare drum, timpani, multiple percussion, and keyboard. Other topics will include drum set and pit drumming.

## MUAP 2258 SOPHOMORE LEVEL PERCUSSION II

Prerequisite: MUAP 2257
Fees: Laboratory
MUAP 2258 is a continuation of MUAP 2257.

## MUAP 2262 SOPHOMORE LEVEL GUITAR I

Prerequisite: MUAP 1264 or equivalent.
Fees: Laboratory
Notes: Formerly MUS 2231.
Selected pieces by Dowland and Bach. Selected studies by Carcassi. Minor scales, slures, and advanced Guiliani arpeggios.

## MUAP 2263 SOPHOMORE LEVEL GUITAR II

Prerequisite: MUAP 2262
Fees: Laboratory
Notes: Formerly MUS 2232.
Continuation of MUAP 2262.

## MUAP 2267 SOPHOMORE LEVEL ORGAN I

Prerequisite: MUAP 1266 or equivalent.
Fees: Laboratory
Notes: Formerly MUS 2241.
Individual instruction in applied organ. Bach Preludes and Fugues. Music of Mendelssohn, Widor, Franck, and Brahms. Modern composition and studies.

MUAP 2268 SOPHOMORE LEVEL ORGAN II
Prerequisite: MUAP 2267
Fees: Laboratory
Notes: Formerly MUS 2242
Continuation of MUAP 2267.

MUAP 2271 SOPHOMORE LEVEL PIANO I
(2-0-2)
Prerequisite: MUAP 1272 or equivalent.
Fees: Laboratory
Notes: Formerly MUS 2211.
Private study in piano at the early advanced level.

MUAP 2272 SOPHOMORE LEVEL PIANO II
Prerequisite: MUAP 2271.
Fees: Laboratory
Notes: Formerly MUS 2212.
Private study in piano at the intermediate advanced level.

## MUAP 2283 SOPHOMORE LEVEL VOICE I

(2-0-2)
Prerequisite: MUAP 1284 or equivalent.
Fees: Laboratory
Notes: Formerly MUS 2221.
Simple arias of opera and oratorio. Art songs. Material in foreign languages. Vocal studies. Music reading.

MUAP 2284 SOPHOMORE LEVEL VOICE II
(2-0-2)
Prerequisite: MUAP 2283 or equivalent.
Fees: Laboratory
Notes: Formerly MUS 2222.
Continuation of MUAP 2283.

## MUSIC ENSEMBLE

## MUEN 1131 INSTRUMENTALENSEMBLE (KEYBOARD)

Prerequisite: Permission of instructor.
Notes: Formerly MUSI 1131
Experience in ensemble playing for keyboardists. May be repeated for credit.

## MUEN 1132 JAZZ LAB

Prerequisite: None
Notes: Formerly MUS 1104, MUSI 1132
Open to students interested in jazz materials and practices. Performance of standards and original works. Students provide instruments. May be repeated for credit.

## MUEN 1134 INSTRUMENTALENSEMBLE (GUITAR)

Prerequisite: Permission of instructor.
Notes: Formerly MUSI 1134
Literature studied and performed includes small ensemble works from the sixteenth century to the present. Develops sight-reading skills. May be repeated for credit.

## MUEN 1141 COLLEGE CHOIR

Prerequisite: None
Notes: Formerly MUS 1101, MUSI 1141
Literature studied and performed includes representative sacred and secular works from the sixteenth century to the present. May be repeated for credit.

390 St. Philip's College 2006-2008 Catalog
MUEN 1142 CONTEMPORARY GOSPEL CHORALE
(1-0-3)
Prerequisite: None
Notes: Formerly MUSI 1142
The music literature studied and performed includes representative contemporary sacred music in the gospel genre. May be repeated for credit.

## MUEN 1151 CHAMBER CHOIR

Prerequisite: Permission of instructor.
Notes: Formerly MUS 1102, MUSI 1151
Literature studied and performed includes representative chamber works from the sixteenth century to the present. May be repeated for credit.

## MUSIC

For a listing of specific courses in Theory and Literature, Ensembles, Private Instruction and Class Instruction see "Music" in the Academic Programs section of this catalog.

## MUSI 1114 KEYBOARD HARMONY I

(1- - )
Analysis and writing of tonal melody and diatonic harmony up to and including the chords. Analysis and writing of small compositional forms. Correlated study at the keyboard.

## MUSI 1115 KEYBOARD HARMONY II

(1- - )
Analysis and writing of tonal melody and diatonic harmony up to and including the chords. Analysis and writing of small compositional forms. Correlated study at the keyboard.

## MUSI 1116 BASIC AURAL MUSICIANSHIP

(1-2-0)
Prerequisite: None
Corequisite: MUSI 1301
Notes: Formerly MUS 1185
Intensive drill in music reading and ear-training.

## MUSI 1133 JAZZ/SHOW CHOIR

(1-0-3)
Prerequisite: Permission of instructor.
Notes: Formerly MUS 1105
Literature studied and performed includes representative works in the vocal jazz and popular American music idioms. May be repeated for credit.

## MUSI 1135 PIANO ACCOMPANYING

Prerequisite: None
Fees: Laboratory
This class provides advanced pianists performance opportunities through accompanying their peers in repertoire classes, recitals, and juries. May be repeated for credit.

## MUSI 1159 MUSIC THEATRE WORKSHOP

Prerequisite: None
Notes: Formerly MUS 1109
An ensemble class devoted to the study and performance of music drama such as operas, musicals, operettas, excerpts from selected works or a full major production. May be repeated for credit.

## MUSI 1181 CLASS PIANO I

Prerequisite: None
Fees: Laboratory
Notes: Formerly MUS 1115
Group instruction in piano at the beginning level. Open to any student at the College with no previous study required.

## MUSI 1182 CLASS PIANO II

Prerequisite: MUSI 1181 or permission of instructor.
Fees: Laboratory
Notes: Formerly MUS 1116
Group instruction in piano at the middle to upper elementary level.
MUSI 1183 CLASS VOICE I
Prerequisite: None
Fees: Laboratory
Notes: Formerly MUS 1125
Group instruction in voice. Open to any student at the College. No previous study required.

## MUSI 1184 CLASS VOICE II

Prerequisite: MUSI 1183 or permission of instructor.
Fees: Laboratory
Notes: Formerly MUS 1126
Group instruction in voice. Open to any student at the College.

## MUSI 1192 CLASS GUITAR I

Prerequisite: None
Fees: Laboratory
Notes: Formerly MUS 1135
Group instruction in guitar. Open to any student at the College. No previous study required.

## MUSI 1193 CLASS GUITAR II

Prerequisite: MUSI 1192 or permission of instructor.
Fees: Laboratory
Notes: Formerly MUS 1136
Group instruction in guitar. Open to any student at the College.

## MUSI 1216 AURALMUSICIANSHIP I

Prerequisite: MUSI 1116 with a grade of "A" or "B" or meet Departmental criteria. Corequisite: MUSI 1311
Notes: Formerly MUS 1285
Training of the ear through computer-assisted instruction employing the principles and techniques of eighteenth, nineteenth, and twentieth century music.

## MUSI 1217 AURAL MUSICIANSHIP II

Prerequisite: MUSI 1216
Corequisite: MUSI 1312
Notes: Formerly MUS 1286
A continuation of MUSI 1216.

## MUSI 1263 JAZZ IMPROVISATION I

Prerequisite: Permission of instructor.
Fees: Laboratory
Notes: Formerly MUS 1270
Group instruction in the fundamentals of improvisation at the keyboard or other performing medium. Basic materials and practices in extemporaneous playing in the jazz idiom.

## MUSI 1264 JAZZ IMPROVISATION II

Prerequisite: MUSI 1263 or permission of instructor.
Fees: Laboratory
Notes: Formerly MUS 1271
A continuation of MUSI 1263.

## MUSI 1301 FUNDAMENTALS OF MUSIC

Prerequisite: None
Fees: Laboratory
A beginning course in the materials of music. The study of notation, rhythms, scales, keys, intervals, basic choral structures, and vocabulary.

## MUSI 1306 MUSIC APPRECIATION

Prerequisite: None
Notes: Formerly MUS 1302
Introduction to music for the college student. Information and techniques for intelligent appreciation of music: its basic elements, major forms, genres and style periods. Recital and concerts, radio and television programs make up required listening projects.

## MUSI 1308 INTRODUCTION TO MUSIC LITERATURE I

Prerequisite: None
Music literature of the Renaissance, Baroque, and classical periods. A survey emphasizing recordings, television and live performances as required listening.

## MUSI 1309 INTRODUCTION TO MUSIC LITERATURE II

Prerequisite: None
Music literature of the romantic and contemporary periods. A survey of vocal and instrumental literature, including forms and representative styles.

## MUSI 1310 AMERICAN MUSIC (SURVEY OF JAZZ LITERATURE)

Prerequisite: None
A course dealing with the characteristics and principal figures of the jazz tradition. Emphasis placed on listening. Major trends are studied by means of recordings and live performances.

## MUSI 1311 THEORY OF MUSIC I

Prerequisite: MUSI 1301 or meet Departmental criteria
Co-requisite: MUSI 1216
Notes: Formerly MUS 1380
Basic freshman level theory course for music majors and others desiring to learn the fundamentals of music composition. Chord progressions, two, three, and four-part writing, ear training, sight-reading, and keyboard work. Music majors who lack a keyboard facility should take class piano concurrently.

## MUSI 1312 THEORY OF MUSIC II

## MUSI 1377 INTRODUCTION TO MUSIC IN WORSHIP

Prerequisite: None
Notes: Formerly MUS 1307
This course introduces the student to Music in Worship. It includes a study of liturgy and worship, the role and function of music in worship, and basic hymnology. This course addresses practical topics such as selection of appropriate hymns, anthems, and solos, and selection of music appropriate to choral resources. Students will have the opportunity to observe choir rehearsal at local churches.

## MUSI 1386 MUSIC COMPOSITION I

Prerequisite: None
Notes: Formerly MUS 1387
The study of compositional techniques through creative writing of original works in small forms for simple media.

## MUSI 1390 ELECTRONIC MUSIC I

Prerequisite: Permission of instructor.
Introduction to the use of synthesizers, computers, sequencing and music printing software, multi-track recorders and other MIDI (Music Instrument Digital Interface) devices in the notation, arrangement, composition, and performance of music.

## MUSI 1391 ELECTRONIC MUSIC II

Prerequisite: MUSI 1390.
Continuation of MUSI 1390. More advanced uses of synthesizers, computers, sequencing and music printing software, multi-track recorders and other MIDI (Music Instrument Digital Interface) devices in the notation, arrangement, composition, and performance of music.

## MUSI 2114 KEYBOARD HARMONY III

(1- - )
Analysis and writing of tonal melody and diatonic harmony up to and including the chords. Analysis and writing of small compositional forms. Correlated study at the keyboard.

## MUSI 2115 KEYBOARD HARMONY IV

(1- - )
Analysis and writing of tonal melody and diatonic harmony up to and including the chords. Analysis and writing of small compositional forms. Correlated study at the keyboard.

MUSI 2181 CLASS PIANO III
Prerequisite: MUSI 1182 or permission of instructor.
Fees: Laboratory
Group instruction in piano.

## MUSI 2182 CLASS PIANO IV

Prerequisite: MUSI 2181 or permission of instructor.
Fees: Laboratory
Group instruction in piano.

## MUSI 2216 AURAL MUSICIANSHIP III

Prerequisite: MUSI 1216 and 1217.
Co-requisite: MUSI 2311
Notes: Formerly MUS 2285
Continuation of MUSI 1217.

## MUSI 2217 AURAL MUSICIANSHIPIV

Prerequisite: MUSI 1216, 1217, and 2216.
Co-requisite: MUSI 2312
Notes: Formerly MUS 2286
Continuation of MUSI 2216.

## MUSI 2311 THEORY OF MUSIC III

Prerequisite: MUSI 1311 and MUSI 1312.
Co-requisite: MUSI 2216
Notes: Formerly MUS 2380
Second year theoretical course for music majors and others desiring to learn compositional techniques. Techniques of composition of the eighteenth, nineteenth, and twentieth centuries. Modulation, chromaticism, modes, and modern structures.

## MUSI 2312 THEORY OF MUSIC IV

(3-3-0)
Prerequisite: MUSI 1311, 1312, and 2311.
Co-requisite: MUSI 2217
Notes: Formerly MUS 2381
Continuation of MUSI 2311.

## MUSI 2386 MUSIC COMPOSITION II

Prerequisite: MUSI 1386 or permission of instructor.
Notes: Formerly MUS 1389
A continuation of MUSI 1386 with expansion to larger forms using more complex instrumentation.

MUSI 2389 ACA COOPERATIVE IN THE FINE ARTS: MUSIC
Prerequisite: MUSI 2311 and MUSI 2216 or Instructor approval.
Fees: Laboratory
An instructional program designed to integrate on-campus study with practical hands-on work experience in music. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of music.

## NDTE 1340 EDDY CURRENT TESTING

(3-1-3)
General principles of Eddy Current Testing including theory, knowledge, and skills for basic examination; effects of material properties, probe types, calibration standards, and equipment selection.

## MUSIC - PRIVATE OBOE

## OBOE 1271 PRIVATE OBOE ELEMENTARY LEVEL

Prerequisite: None
Fees: Laboratory
Beginning one-on-one instruction in the technique of playing the oboe. This will include, but not be limited to, proper positioning of instrument and embouchure, fingering, intonation, and music reading skills.

OBOE 1272 PRIVATE OBOE INTERMEDIATE LEVEL
Prerequisite: OBOE 1271, or permission of instructor.
Fees: Laboratory
A continuation of OBOE 1271 at a more advanced level. The course will develop physical playing skills and reading on the oboe.

# OFFICE SYSTEMS TECHNOLOGY (SEE : ADMINISTRATIVE COMPUTER TECHNOLOGY) 

## MANUFACTURING TECHNOLOGY ACADEMY

OSHT 2209 SAFETY PROGRAM MANAGEMENT
(3-0-3)
Examine the major safety management issues that effect the workplace including safety awareness, loss control, regulatory issues, and human behavior modification.

## OCCUPATIONAL THERAPY ASSISTANT

## OTHA 1160 CLINICAL - OCCUPATIONAL THERAPIST ASSISTANT I

(1-0-6)
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

## OTHA 1166 PRACTICUM IN OCCUPATIONALTHERAPY

Fees: Allied Health Insurance
Practice basic occupational therapy assistant skills by assisting the occupational therapy staff with routine clinical procedures.

## OTHA 1211 OCCUPATIONAL PERFORMANCE THROUGHOUT THE LIFE SPAN

General principles of occupational performance throughout the life span.

## OTHA 1241 OCCUPATIONAL PERFORMANCE FROM BIRTH THROUGH

 ADOLESCENCEOccupational performance of newborns through adolescents. Includes frames of reference, assessment/evaluation tools and techniques, and intervention strategies specific to this population.

OTHA 1253 OCCUPATIONAL PERFORMANCE FOR ELDERS
Occupational performance of elders. Includes frames of reference, assessment/ evaluation tools and techniques, and intervention strategies specific to this population.

OTHA 1261 CLINICAL- OCCUPATIONAL THERAPIST ASSISTANT II

Prerequsite: Completion of OTHA 1160 with a grade of "C" or higher
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

OTHA 1267 PRACTICUM IN OCCUPATIONALTHERAPY
Fees: Allied Health Insurance
Continuation of Occupational Therapy 1166 with increased responsibility for direct care by assisting therapist in implementing prescribed treatment plan.

## OTHA 1401 INTRODUCTION TO OCCUPATIONAL THERAPY

Fees: Laboratory
Introduction to the historical development and philosophy of the profession of occupational therapy. Emphasis on the roles and functions of the occupational therapy assistant in current health care environments including moral, legal, and ethical issues.

## OTHA 1405 PRINCIPLES OF OCCUPATIONAL THERAPY

Fees: Laboratory
Introduction to occupational therapy including the historical development and philosophy. Emphasis on the roles of the occupational therapy assistant. Topics include occupation in daily life; education and functions; occupational therapy personnel; current health care environment; and moral, legal, and ethical issues.

## OTHA 1409 HUMAN STRUCTURE AND FUNCTION IN

## OCCUPATIONAL THERAPY

Fees: Laboratory
Study of the biomechanics of human motion. Emphasis on the musculoskeletal system including skeletal structure, muscles and nerves, and biomechanical assessment procedures.

## OTHA 1415 THERAPEUTIC USE OF OCCUPATIONS OR ACTIVITIES

Fees: Laboratory
Various occupations or activities used as therapeutic interventions in occupational therapy. Emphasis on awareness of activity demands, contexts, adapting, grading, and safe implementation of occupations or activities.

## OTHA 2301 PATHOPHYSIOLOGY IN OCCUPATIONAL THERAPY

Study of the pathology and general health management of diseases and injuries across the life span encountered in occupational therapy treatment settings. Topics include etilogy and symptoms, and the physical and psychological reactions to disease and injuries.

## OTHA 2309 MENTAL HEALTH IN OCCUPATIONAL THERAPY (3-2-4)

Fees: Laboratory
Study of the promotion of mental health through occupational therapy. Emphasis on theory and intervention strategies to enhance psycho-social function.

## OTHA 2331 PHYSICAL FUNCTION IN OCCUPATIONAL THERAPY

## Fees: Laboratory

Study of the promotion of physical function through occupational therapy assessment/evaluation, intervention, and patient/client education. Emphasis on developmental continue using the occupational performance approach and theory and application of rehabilitation techniques.

## OTHA 2335 HEALTH CARE MANAGEMENT IN OCCUPATIONAL THERAPY

Explores the roles of the occupational therapy assistant in health care delivery. Emphasis on documentation, occupational therapy standards and ethics, health care team role delineation, and management.

## OTHA 2402 THERAPEUTIC USE OF OCCUPATIONS OR ACTIVITIES II

Fees: Laboratory
Continuation of OTHA 1315/1415: Therapeutic Use of Occupations or Activities I. Emphasis on advanced techniques and applications used in traditional practice setting.

OTHA 2660 CLINICAL IN OCCUPATIONAL THERAPY

## Co-requisite: OTHA 2661

Fees: Allied Health Insurance
Supervised clinical experience with emphasis on attaining proficiency in all entry-level occupational therapy assistant skills. Requires concurrent enrollment in OTHA 2661 and successful completion of each with a grade of "C" or better in order to graduate. This course is identified as Level II Fieldwork Experience by the Accreditation Council for Occupational Therapy Education (ACOTE) and must be successfully completed within 18 months of the course work for the program.

## OTHA 2661 CLINICAL IN OCCUPATIONAL THERAPY

Co-requisite: OTHA 2660
Fees: Allied Health Insurance
Supervised clinical experience with emphasis on attaining proficiency in all entry-level occupational therapy assistant skills. Requires concurrent enrollment in OTHA 2660 and successful completion of each with a grade of "C" or better in order to graduate. This course is identified as Level II Fieldwork Experience by the Accreditation Council for Occupational Therapy Education (ACOTE) and must be successfully completed within 18 months of the course work for the program.

Prerequsite: OTHA 1261
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

OTHA 2663 CLINICAL- OCCUPATIONAL THERAPIST ASSISTANT IV
(6-0-18)
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

## MUSIC - PRIVATE PERCUSSION

## PERC 1255 ELEMENTARY LEVEL PERCUSSION

Prerequisite: None
Fees: Laboratory
Private instruction in percussion for those with no previous experience.

## PERC 1256 INTERMEDIATE LEVELPERCUSSION

(2-0-2)
Prerequisite: PERC 1255 or Instructor approval.
Fees: Laboratory
Continued study in percussion performance at the intermediate level.

## PLUMBING

## PFPB 1405 BASIC BLUEPRINT READING FOR PIPEFITTER AND PLUMBER

Prerequisite: None
An introduction to reading and interpreting working drawings including symbols and abbreviations and use of sketching techniques to create isometric and multiview drawings of piping and piping components.

PFPB 1413 INTRODUCTION TO THE PLUMBING TRADE
Prerequisite: None
Fees: Laboratory
An introduction to the plumbing craft including mathematical operations applicable to the plumbing trade, hand tools, power tools, safety practices, and material identification.

## PFPB 1421 PLUMBING MAINTENANCE AND REPAIR

Prerequisite: Program authorization.
Fees: Laboratory
Instruction in the practices and procedures employed by a plumber in the usual and unusual service work in the field of residential plumbing repairs including public relations.

## PFPB 1440 LAWN IRRIGATION SYSTEMS

Prerequisite: None
Fees: Laboratory
In-depth instruction in the design and layout installation of residential lawn irrigation systems.

PFPB 1450 PLUMBINGAND PIPEFITTING EQUIPMENT AND SAFETY
Prerequisite: None
Fees: Laboratory
Instruction in the safe use of construction equipment used in the process of the plumbing and pipefitting trades.

## PFPB 2409 RESIDENTIAL CONSTRUCTION PLUMBING I

Prerequisite: None
Fees: Laboratory
Skill development in the procedures and techniques employed by a plumber in the rough-in and top-out stages of a new home or the remodeling of an older home.

## PFPB 2436 COMMERCIALCONSTRUCTION AND FIXTURE

 SETTINGPrerequisite: None
Fees: Laboratory
Instruction in the use of practices and procedures employed by a plumber in the common construction of a commercial building including multi-level drain waste vent systems, water systems, and fixture installation.

## PFPB 2445 RESIDENTIAL CONSTRUCTION PLUMBING II

In-depth instruction in the setting of residential bathroom and kitchen plumbing fixtures.

## MUSIC - PRIVATE GUITAR

## PGTR 1261 ELEMENTARY LEVEL GUITAR

Prerequisite: None
Fees: Laboratory
Notes: Formerly MUS 1208 and MUAP 1262.
Basic principles of guitar playing. Guitar needed.

## PGTR 1262 INTERMEDIATE LEVELGUITAR

Prerequisite: PGTR 1261 or equivalent.
Fees: Laboratory
Notes: Formerly MUS 1230 and MUAP 1263. Continuation of PGTR 1261.

## PHILOSOPHY

## PHIL 1301 INTRODUCTION TO PHILOSOPHY

Prerequisite: None
Investigates fundamental questions regarding life, truth, freedom, the nature of human kind, social and political theory, and the existence of God.

## PHIL 1304 INTRODUCTION TO WORLD RELIGIOUS PHILOSOPHY

Prerequisite: None
A comparative introduction to the origins, developments, teachings and practice of the major world religions such as Taoism, Confucianism, Hinduism, Buddhism, Judaism, Christianity, and Islam.

## PHIL 2303 LOGIC

Prerequisite: None
Notes: Formerly PHIL 1302
Introduces the principles of clear, correct thinking and their application to various fields of study.

PHIL 2306 ETHICS
Prerequisite: None
Notes: Formerly PHIL 2314
Examines the principle of personal and social morality and its application to current issues such as abortion, sexuality, war, capital punishment, discrimination, business and medical ethics.

Prerequisite: None
This course is an examination of principles of moral conduct from theoretically diverse perspectives, with an emphasis on issues that guide behavior in the world of business. Specific problems to be considered may include topics such as corporate responsibility, employee rights, the nature of the free enterprise system, environmental concern, and ethical business practices.

## PHYSICAL EDUCATION <br> (SEE: KINESIOLOGY)

## PHYSICS

## PHYS 1305 INTRODUCTORY PHYSICS I

Prerequisite: None
This course covers the physics of mechanics, heat energy, and sound waves with little reliance on mathematical concepts.

## PHYS 1401 GENERAL PHYSICS I

Prerequisite: MATH 2412 or MATH 1374 or MATH 1314 equivalent.
This course is designed to cover the physics of mechanics, heat energy, and sound waves using mathematical concepts from college algebra and trigonometry.

## PHYS 1402 GENERAL PHYSICS II

Prerequisite: PHYS 1401 or equivalent.
Fees: Laboratory
This course is designed to cover the physics of electricity, magnetism, and light using mathematical concepts from college algebra and trigonometry.

## PHYS 1570 MECHANICS, HEAT AND WAVES

Prerequisite: Math 2413 or equivalent (may be taken concurrently)
Fees: Laboratory
This course is designed to cover the physics of mechanics, heat and sound waves using mathematical concepts from calculus.

## PHYS 2570 ELECTRICITY \& MANAGEMENT

Prerequisite: PHYS 1571 and MATH 2414 or equivalents.
Fees: Laboratory
This course is designed to cover the physics of electricity, magnetism, and light using mathematical concepts from calculus.

# MEDICAL LABORATORY 

PLAB 1223 PHLEBOTOMY
(2-1-3)
Prerequisite: None
Fees: Laboratory
Skill development in the performance of a variety of blood collection methods using proper techniques and universal precautions. Includes vacuum collection devices, syringes, capillary skin puncture, butterfly needles and blood cultures, and specimen collection on adults, children, and infants. Emphasis is on infection prevention, proper patient identification, labeling of specimens and quality assurance, specimen handling, processing, and accessioning.

PLAB 1263 PHLEBOTOMY CLINICAL ROTATION
Prerequisite: PLAB 1223
Faculty coordinated experience in cooperating hospital and laboratories for the student to gain practical experience in dermal punctures and venipunctures. This rotation must be taken in order for the student to apply for national certification in phlebotomy. The student will gain practical experience in dermal punctures and venipunctures.

## MANUFACTURING ENGINEERING TECHNOLOGY

PLTC 1301 INTRODUCTION TO PLASTICS
Fees: Laboratory
A survey course designed to introduce the student to the field of plastics. An overview of thermoplastic and thermoset materials and the major processing methods utilized by industry.

## PLTC 1206 PLASTIC QUALITY CONTROL

Prerequisite: None
Fees: Laboratory
A course in reading and interpreting blueprints for inspection purposes of plastic parts. Emphasis on geometric dimensioning and tolerancing and hands on setup using modern inspection tools and gages.

## PLTC 1306 PLASTIC QUALITY CONTROL

Fees: Laboratory
A course in reading and interpreting blueprints for inspection purposes of plastic parts. Emphasis on geometric dimensioning and tolerancing and hands on setup using modern inspection tools and gages.

## PLTC 1341 PLASTIC MATERIALS AND TESTING

Prerequisite: None
Fees: Laboratory
Properties, peculiarities, and applications of commercial polymers including identification techniques and testing methods. Experiments to determine various industrial required test results including strength, thermal, and hardness using appropriate testing equipment.

## PLTC 1343 MOLD DESIGN AND MAINTENANCE

Fees: Laboratory
An introductory course in the basic design parameters of plastic injection molds including mold flow, nominal walls projection, depressions, ejector systems, runners, gates, parting lines, and general mold configurations. Emphasis on maintenance techniques on in-house molds.

## PLTC 1441 PLASTIC MATERIALS AND TESTING

Fees: Laboratory
Properties, peculiarities, and applications of commercial polymers including identification techniques and testing methods. Experiments to determine various industrial required test results including strength, thermal, and hardness using appropriate testing equipment.

## PLTC 1445 PLASTIC PROCESSES I

Fees: Laboratory
Identification and examination of thermoplastic processes. Emphasis on safety, selection, and preparation of raw materials, machine functions, mold setup, and the use of auxiliary equipment associated with injection molding.

## PLTC 2331 TROUBLESHOOTING PLASTIC PROCESSES

Fees: Laboratory
A course in process diagnosis and corrective action including minor repair procedures for plastics processing equipment. (Capstone)

## PLTC 2346 PLASTIC PROCESSES II

Fees: Laboratory
A continuation of Plastic Processes I with further emphasis on injection molding techniques. Examination of thermoset molding utilizing both compression and transfer processes. A survey of vacuum forming, extrusion, and blow molding.

## ADMINISTRATIVE COMPUTER TECHNOLOGY

## POFI 1191 SPECIAL TOPICS: DATA ENTRY TECHNICIAN

(1-1-0)
Fee: Laboratory
Current topic emphasizes alphabetic and numeric data entry skill development using the computer.

## POFI 2331 DESKTOP PUBLISHING FOR THE OFFICE

Prerequisite: Proficiency in word processing software
Fees: Laboratory
In-depth coverage of desktop publishing terminology, text editing, and use of design principles to create publishing material using word processing desktop publishing features. Emphasis on layout techniques, graphics, and multiple page displays and business applications.

## POFI 2340 ADVANCED WORD PROCESSING

(THIS COURSE WAS RENUMBERED FROM ITSW 2331).
Prerequisite: ITSW 1301 or MOS Certification.
Fees: Laboratory
Continuation of the study of word processing including advanced applications in merging, macros, graphics, desktop publishing, and extensive formatting for technical documents. Emphasis on business applications.

## POFI 2431 DESKTOP PUBLISHING FOR THE OFFICE

Prerequisite: Proficiency in word processing software
Fees: Laboratory
In-depth coverage of desktop publishing terminology, text editing, and use of design principles. Emphasis on layout techniques, graphics, multiple page displays, and business applications.

## ADMINISTRATIVE COMPUTER TECHNOLOGY

## POFL 1245 LEGAL SECRETARY EXAM REVIEW

Review of the mandatory and optional topics covered in the Accredited Legal Secretary Examination administered by the National Association of Legal Secretaries.

## POFL 1264 PRACTICUM - LEGALADMINISTRATIVE ASSISTANT/

## SECRETARY

Prerequisites: POFT 1220 and departmental permission.
Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.

An introduction to legal terminology including spelling, pronunciation, and definition of legal terms and an overview of the law and the legal professions.

## POFL 1459 LEGAL TRANSCRIPTION

Prerequisite: High-level keyboarding skills
Fees: Laboratory
Skill development in comprehensive vocabulary, listening, organizing, and transcribing client-quality documents used in a legal office.

## POFL 2386 INTERNSHIP-LEGALADMINISTRATIVE ASSISTANT/ SECRETARY

Prerequisite: POFT 1220 and departmental permission.
A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.

## ADMINISTRATIVE COMPUTER TECHNOLOGY

## POFM 1264 PRACTICUM - MEDICALADMINISTRATIVE ASSISTANT/ SECRETARY

Prerequisite: POFT 1220 and departmental permission
Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.

## POFM 1302 MEDICAL SOFTWARE APPLICATIONS

Prerequisite: 25 wpm keyboarding skills, HITT 1305.
Fees: Laboratory
Introduction to a computerized method for the management and operation of health care information systems for various types of medical facilities.

## POFM 1317 MEDICALADMINISTRATIVE SUPPORT

Fees: Laboratory
Prerequisite: HITT 1305
Instruction in medical office procedures including appointment scheduling, medical records creation and maintenance, telephone communications, coding, billing, collecting, and third party reimbursement.

## POFM 2333 MEDICAL DOCUMENT PRODUCTION

Prerequisite: 25 wpm keyboarding skill, POFM 1317
Study of advanced concepts of medical office activities, practices, and procedures. Topics include advanced medical reports, coding, billing, insurance activities, and records management.

## POFM 2386 INTERNSHIP-MEDICALADMINISTRATIVE/EXECUTIVE ASSISTANT AND MEDICAL SECRETARY (3-0-16)

Prerequisite: POFT 1220 and Department Permission
A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.

## ADMINISTRATIVE COMPUTER TECHNOLOGY

## POFT 1220 JOB SEARCH SKILLS

(2-2-0)
A course to provide students with the necessary skills to seek and obtain employment in business and industry. Recommended for students within 15 hours of graduation.

## POFT 1264 PRACTICUMADMINISTRATIVE ASSISTANT/ SECRETARIAL SCIENCE (FOR CERTIFICATE MAJORS)

Prerequisite(s): POFT 1220 and department permission
Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.

POFT 1301 BUSINESS ENGLISH
(3-3-0)
Introduction to a practical application of basic language usage skills with emphasis on the fundamentals of writing and editing for business.

POFT 1307 PROOFREADINGAND EDITING
Prerequisite: POFT 1301
Instruction in proofreading and editing skills necessary to assure accuracy in business documents.

## POFT 1309 ADMINISTRATIVE OFFICE PROCEDURES I

Prerequisite: Word processing skill or ITSW 1301
Study of current office procedures, duties, and responsibilities applicable to an office environment. Topics include the office administration area as applied in the certified professional secretary exams.

POFT 1313 PROFESSIONAL DEV. FOR OFFICE PERSONNEL (3-3-0)
Preparation for the workforce including ethics, interpersonal relations, professional attire, and career advancement.

## POFT 1319 RECORDS AND INFORMATION MANAGEMENT I (3-3-0)

Introduction to basic records and information management. Includes the life cycle of a record, manual and electronic records management, and basic filing procedures and rules.

## POFT 1321 BUSINESS MATH

(3-3-0)
Instruction in the fundamentals of business mathematics including analytical and problem-solving skills for critical thinking in business applications.

## POFT 1329 BEGINNING KEYBOARDING

Fees: Laboratory
Skill development in the operation of the keyboard by touch, applying proper keyboarding techniques. Emphasis on development of acceptable speed and accuracy levels and formatting basic documents.

## POFT 1349 ADMINISTRATIVE OFFICE PROCEDURES II

Prerequisite: POFT 1309
In depth coverage of office applications with special emphasis on decision making, goal setting, management theories, and critical thinking. Topics covered in the Certified Public Secretary exam will be discussed.

## POFT 2203 SPEED AND ACCURACY BUILDING

Prerequisite: POFT 1329 or 25 wpm keyboarding skill.
Fees: Laboratory
Review, correct, improve, and/or perfect touch keyboarding techniques for the purpose of increasing speed and improving accuracy.

## POFT 2301 INTERMEDIATE KEYBOARDING

Suggested Prerequisite: POFT 1329 or 25 wpm keyboarding skills. Fees: Laboratory

A continuation of keyboarding skills in document formatting, speed, and accuracy. Emphasis on proofreading, editing, following instructions, and keying documents from various copy.

## POFT 2312 BUSINESS CORRESPONDENCE \& COMMUNICATION

Prerequisites: POFT 1301 and 1307
Development of writing skills and presentation skills to produce effective business documents. (Writing Intensive).

## POFT 2386 INTERNSHIP-ADMINISTRATIVE ASSISTANT AND

 SECRETARIAL SCIENCE, GENERALPrerequisite: POFT 1220 and department permission
A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.

POFT 2421 MACHINE TRANSCRIPTION
Prerequisite: POFT 2301, ITSW 1301, POFT 1301 or equivalents.
Fees: Laboratory
Skill development in mailable business document production using computers and dictation equipment. Skill refinement in grammar and punctuation with emphasis on proofreading and formatting.

POFT 2433 ADVANCED KEYBOARDING
Prerequisite: POFT 2301 or equivalent
Fees: Laboratory
Study of advanced concepts in a variety of office-simulated correspondence activities with emphasis on organization, prioritizing, decision making, composition, placement, and accuracy and speed development.

## POFT 2471 LOCAL NEEDS: CERTIFIED PROFESSIONAL

## SECRETARY

(4-3-3)
The Certified Administrative Professional program is intended to take the information learned in the fields of study covered by the Certified Professional Secretary program and apply them to work situations in various businesses. It is an application study, showing students how to apply the theoretical knowledge. Two goals: (1) enable the student to practice applying theories, procedures, and plans and (2) enable the student to pass the Certified Administrative Professional examination.

## PRIVATE INSTRUCTION IN MUSIC

Only Freshman \& Sophomore level courses (MUAP) satisfy the primary instrument requirement for music majors. Elementary and intermediate level courses may be used for secondary instrumental study.

## MUSIC - PRIVATE PIANO

## PPNO 1269 ELEMENTARY LEVEL PIANO

Prerequisite: MUSI 1181 or permission of instructor.
Fees: Laboratory
Notes: Formerly MUS 1206 and MUAP 1270.
Private study in piano at the middle to upper elementary level.

## PPNO 1270 INTERMEDIATE LEVELPIANO

Prerequisite: MUSI 1182, PPNO 1269, or permission of instructor.
Fees: Laboratory
Notes: Formerly MUS 1210 and MUAP 1271.
Private study in piano at the early intermediate level.

## PASTRY COURSES

PSTR 1305 BREADS AND ROLLS
Prerequisite: (CHEF 1301, FDNS 1301, PSTR 1401 with grade B or better), CHEF 1305
Fees: Laboratory
Concentration on fundamentals of chemically and yeast raised breads and rolls. Instruction on commercial preparation of a wide variety of products.

## PSTR 1306 CAKE DECORATING I

(3-2-2)
Prerequisite: (CHEF 1301, FDNS 1301, PSTR 1401 with grade B or better), CHEF 1305

Fees: Laboratory
Introduction to skills, concepts and techniques of cake decorating.

## PSTR 1310 PIE, TARTS, TEACAKES AND COOKIES

Prerequisite: (CHEF 1301, FDNS 1301, PSTR 1401 with grade B or better), CHEF 1305
Fees: Laboratory
Focus on preparation of American and European style pie and tart filling and dough, cookies, teacakes, custard and batters. Instruction in finishing and presentation techniques.

## PSTR 1312 LAMINATED DOUGH, PATE A CHOUX, AND DONUTS

Prerequisite: (CHEF 1301, FDNS 1301, PSTR 1401 with grade B or better), CHEF 1305
Fees: Laboratory
Focus on preparation of laminated dough to include puff pastry, croissant, and Danish and a variety of pate a choux (éclair paste) products and donuts. Fillings and finishing techniques included.

PSTR 1340 PLATED DESSERTS
Prerequisite: (CHEF 1301, FDNS 1301, PSTR 1401 with grade B or better), CHEF 1305
Fees: Laboratory
Preparation and service of hot and cold desserts with a focus on individual desserts, a la minute preparations, and numerous components within one preparation. Emphasis on station organization, timing, and service coordination for restaurant dessert production.

PSTR 1401 FUNDAMENTALS OF BAKING
Prerequisite: CHEF 1301, 1305, ENGL 0300
Fees: Laboratory
Fundamentals of baking including dough, quick breads, pies, cakes, cookies, tarts, and doughnuts. Instruction in flours, fillings, and ingredients. Topics include baking terminology, tool and equipment use, formula conversions, functions of ingredients, and the use of proper flours. The student will identify and explain baking terms, ingredients, equipment and tools; scale and measure ingredients; convert and cost recipes; safely operate baking equipment and tools; prepare yeast products, quick breads, pies, tarts, cookies, various cakes, icing, and demonstrate decorating techniques; and produce baked products in a commercial application. B or better required for Culinary majors.

PSTR 2301 CHOCOLATES AND CONFECTIONS
Prerequisite: (CHEF 1301, FDNS 1301, PSTR 1401 with grade B or better), CHEF 1305
Fees: Laboratory
Production and decoration of traditional truffles, marzipan, molded and handdipped chocolate, caramels, nougats, and pate de fruit.

PSTR 2307 CAKE DECORATING II
Prerequisite: (CHEF 1301, FDNS 1301, PSTR 1401 with grade B or better), CHEF 1305, CHEF 1306
Fees: Laboratory
A course in decoration of specialized and seasonal products.

PSTR 2350 WEDDING CAKES
Prerequisite: (CHEF 1301, FDNS 1301, PSTR 1401 with grade B or better), CHEF 1305, CHEF 2307

## Fees: Laboratory

Skills, concepts, and techniques for preparing wedding cakes. Includes marzipan, plastic chocolate-rolled fondant, chocolate garnish, flower making, and royal icing piping work.

## PSTR 2431 ADVANCED PASTRY SHOP

Prerequisite: PSTR 1401
Fees: Laboratory
The study of classical desserts, French and international pastries, hot and cold desserts, ice creams and ices, chocolate work, and decorations. Emphasis on advanced techniques. The student will discuss the application of mixes and other labor-saving products and nutritional concerns as they apply to the pastry shop including recipe modifications; prepare laminated doughs, choux, pastries, meringues, creams, custards, puddings, and related sauces; and prepare a variety of hot souffles, fritters, crepes, cobblers, crisps, and assorted inlays to include sugars and chocolates. " B " or better required for Culinary majors.

PSTR 2264 PRACTICUM
(2-0-16)
Prerequisite: Instructor Approval, MATH 0301
Fees: Laboratory
Practical general training and experiences in the workplace. The College, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay. This courses may be repeated if topics and learning outcomes vary. As outlined in the learning plan, the student will master the theory, concepts, and skills involving the tools, materials, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, and legal systems associated with the workplace. The student will also demonstrate ethical behavior, safety practices, interpersonal and teamwork skills, appropriate and written communications in the work place.

## PSYCHOLOGY

## PSYC 1370 PSYCHOLOGY OF GRIEF

Prerequisite: None
This course examines the social and psychological expressions and dimensions of loss with an emphasis upon dying and death.

## PSYC 2301 GENERAL PSYCHOLOGY

Prerequisite: Appropriate placement score or credit for ENGL 0301 and READ 0303.

Notes: Formerly PSY 1311
A study of the foundations and principles of behavior. The brain, motivation, emotions, learning theories, sensations, and personality theories will be studied.

## PSYC 2302 APPLIED PSYCHOLOGY

Prerequisite: None
This course examines the psychological knowledge and methods as they are used in business, education, medicine, law enforcement, social work, government work, marriage, and professional sports.

## PSYC 2303 INDUSTRIALAND ORGANIZATIONAL PSYCHOLOGY

## Prerequisite: None

This course examines employee selection, testing, motivation, personality improvement factors affecting general morale, and employer-employee relationships. This course is recommended as an elective for business administration majors.

PSYC 2306 HUMAN SEXUALITY
Prerequisite: PSYC 2301; Sophomore standing Notes: Formerly "Psychology of Human Sexuality"

This course examines the bio-physical and psychosocial aspects of human sexuality.

PSYC 2308 CHILD PSYCHOLOGY
Prerequisite: PSYC 2301
This course examines the behavior and development of the individual from conception through adolescence. The topics covered include the major phases of growth, physical and motor development, social relations, perception, emotion, and related areas.

PSYC 2314 DEVELOPMENTAL PSYCHOLOGY: LIFESPAN
(3-3-0)
Prerequisite: Appropriate placement score or credit for ENGL 0301 and READ 0303.

Notes: Formerly PSYC 2308
A course designed to explain parenting and the processes, events, and factors that contribute to change in a person from conception to death. Emphasizes foundations of normal development; cognitive development; social emotional and personality development; death and dying; with limited coverage of problems and disturbances.

PSYC 2315 PSYCHOLOGY OF PERSONALADJUSTMENT
Prerequisite: None
Notes: Formerly "Personal and Social Effectiveness"
This course examines the basic principles of adjustment and their application to the individual's coping with stress. The emphasis is placed on the normal development of persons coping with their environment.

PSYC 2316 PSYCHOLOGY OF PERSONALITY
Prerequisite: PSYC 2301 or permission of the Chairperson.
Notes: Formerly PSY 1313
This course explains the various theoretical approaches that describe the determinants, development, and assessment of personality.

PSYC 2317 INTRODUCTION TO STATISTICS
(3-3-0)
Prerequisite: Sophomore standing. Appropriate placement score or credit for MATH 0302 with a grade of "C" or better.
Notes: PSYCHOLOGY MAJORS: This course is NOT a substitution for MATH 1342, Elementary Statistics.

Basic descriptive and inferential statistics to include hypothesis testing for both correlational and experimental techniques applicable to the behavioral, and medical sciences and education.

PSYC 2319 SOCIAL PSYCHOLOGY
Prerequisite: PSYC 2301 or permission of the chairperson.
Notes: Formerly PSY 2317
This course describes the study of individual behavior within the social environment. Problems, methods, and major theories, which affect the individual within groups, will be studied.

## PSYC 2371 ABNORMAL PSYCHOLOGY

Prerequisite: PSYC 2301 or permission of the chairperson. Notes: Formerly PSY 2316

This course explains abnormal patterns compared to normal behavior. Functionaland organic-based disorders, mental health principles, psychotherapy, and defense mechanisms are studied.

## PHYSICAL THERAPIST ASSISTANT

PTHA 1301 THE PROFESSION OF PHYSICAL THERAPY
Prerequisite: ENGL 1301, BIOL 2401, BIOL 2402, PHYS 1305, MATH 1314 with a grade of "C" or better, and admission to the program.

Introduction to the profession of physical therapy including the historical and current scope of physical therapy.

PTHA 1305 BASIC PATIENT CARE SKILLS
Prerequisite: PTHA 1301, 1321, and 1413 with a grade of "C" or better. Fees: Laboratory

Introduction to the theory and application of basic patient handling, functional skills, assessment techniques, and measurement techniques.

PTHA 1317 ISSUES IN HEALTH CARE
Prerequisite: PTHA 1301, 1305, 1321, 1360, 1413, 1431, 2305, 2409, 2435, and 2460 with a grade of "C" or better.

Exploration of the organizational patterns, administrative principles, legal and ethical issues, communications, and job placement skills in physical therapy and health care.

PTHA 1321 CLINICAL PATHOPHYSIOLOGY
Prerequisite: ENGL 1301, BIOL 2401, BIOL 2402, PHYS 1305 with a grade of "C" or better, and admission to the Program.

Study of the pathogenesis, prognosis, and therapeutic management of diseases/ conditions commonly encountered in physical therapy.

## PTHA 1360 CLINICAL I - PHYSICAL THERAPIST ASSISTANT

(3-0-9)
Prerequisite: PTHA 1301, 1305, 1321, 1413, 1431, and 2305 with a grade of "C" or better, and admission to the Program.

A method of instruction providing detailed education, training, work-based experience, and directed patient/client care generally at the clinic site. Specific detailed learning objectives are developed for each course by the faculty. Onsite clinical instruction, supervision, evaluation, and placement is the responsibility of the College faculty. Course may be repeated if topics and learning outcomes vary.

## PTHA 1413 FUNCTIONALANATOMY

Prerequisite: ENGL 1301, BIOL 2401, BIOL 2402, PHYS 1305 with a grade of "C" or better, and admission to the Program.
Fees: Laboratory
Study of human anatomy and its application to the motion of the musculoskeletal system as it relates to normal activities and dysfunctions. Integration of skills related to the kinesiological assessment of the human body.

## PTHA 1431 PHYSICALAGENTS

Prerequisite: PTHA 1301, 1321, and 1413 with a grade of "C" or better. Fees: Laboratory

Study of the biophysical principles, assessment, and application of therapeutic physical agents with specific emphasis on indications, contraindications, medical efficacy, and physiological effects.

## PTHA 2305 NEUROLOGY

Prerequisite: PTHA 1301, 1321, and 1413 with a grade of "C" or better.
Study of neuroanatomy and neurophysiology as it relates to commonly encountered neurological conditions.

PTHA 2317 ISSUES IN HEALTH CARE
Prerequisite: PTHA 1301, 1305, 1321, 1360, 1413, 1431, 2305, 2409, 2435, and 2460 with a grade of "C" or better.

Exploration of the organizational patterns, administrative principles, legal and ethical issues, communications, and job placement skills in physical therapy and health care.

PTHA 2409 THERAPEUTIC EXERCISE
Prerequisite: PTHA 1301, 1305, 1321, 1360, 1413, 1431, and 2305 with a grade of "C" or better.
Fees: Laboratory
Critical examination of concepts and application of techniques related to therapeutic exercise and functional training.

## PTHA 2431 MANAGEMENT OF NEUROLOGICAL DISORDERS

(4-3-3)
Prerequisite: PHTA 1301, 1305, 1321, 1360, 1413, 1431, 2305, 2409, 2435, and 2460 with a grade of "C" or better.
Fees: Laboratory
Advanced course intergrating previously learned and new skills/techniques into the comprehensive rehabilitation of selected neurological disorders.

## PTHA 2435 REHABILITATION TECHNIQUES

Prerequisite: PTHA 1301, 1305, 1321, 1360, 1413, 1431, and 2305 with a grade of "C" or better.
Fees: Laboratory
Advanced course intergrating previously learned and new skills into the comprehensive rehabilitation of selected long-termed pathologies.

## PTHA 2460 CLINICAL II - PHYSICAL THERAPIST ASSISTANT

(3-0-13)
Prerequisite: PTHA 1301, 1305, 1321, 1360, 1413, 1431, and 2305 with a grade of "C" or better.

A method of instruction providing detailed education, training, work-based experience, and directed patient/client care generally at the clinic site. Specific detailed learning objectives are developed for each course by the faculty. Onsite clinical instruction, supervision, evaluation, and placement is the responsibility of the College faculty. Course may be repeated if topics and learning outcomes vary.

## PTHA 2660 CLINICAL III- PHYSICAL THERAPIST ASSISTANT

(6-0-24)
Prerequisite: PTHA 1301, 1305, 1321, 1360, 1413, 1431, 2305, 2409, 2435, and 2460 with a grade of "C" or better.

A method of instruction providing detailed education, training, work-based experience, and directed patient/client care generally at the clinic site. Specific detailed learning objectives are developed for each course by the faculty. On site clinical instruction, supervision, evaluation, and placement is the responsibility of the College faculty. Course may be repeated if topics and learning outcomes vary.

## MUSIC - PRIVATE VOICE

## PVCE 1281 ELEMENTARY LEVEL VOICE

Prerequisite: None
Fees: Laboratory
Notes: Formerly MUS 1207 and MUAP 1282.
Basic principles of correct posture and breathing. Music reading is stressed. Simple English songs.

## PVCE 1282 INTERMEDIATE LEVELVOICE

Prerequisite: PVCE 1281 or equivalent.
Fees: Laboratory
Notes: Formerly MUS 1220 and MUAP 1283.
Continuation of PVCE 1281. Principles of diction and tone production. Music reading and terminology stressed. Simple English songs.

## MANUFACTURING TECHNOLOGY ACADEMY

QCTC 1243 QUALITY ASSURANCE
Prerequisite:
Fees: Laboratory
Principles and applications designed to introduce quality assurance.

## QCTC 1271 SPECIAL TOPICS-TOTAL QULTY CNTL

The study of integrating work processes using team participation through employee empowerment and teamwork emphasizing the philosophy of customer service and satisfaction.

## QCTC 1276 TESTING AND INSPECTION SYSTEMS

The study of non-destructive Testing methods to include the selection and application of dye penetrate, eddy current, ultra-sonic and magnet particle principles as applied to the manufacturing industry. Mechanisms used in illustrating the need for maintaining quality to established standards.

## RADIOGRAPHY TECHNOLOGY

RADR 1201 INTRODUCTION TO RADIOGRAPHY
Prerequisite: Completion of RADR 2313 with a grade of "C" or higher. Fees: Laboratory

This course includes the historical development of radiography, basic radiation protection, an introduction to medical terminology, ethical and legal issues for health care professionals, and an orientation to the program and the health care system.

RADR 1203 PATIENT CARE
(2-2-1)
Prerequisite: Completion of RADR 1201 courses with a grade of "C" or higher Fees: Laboratory

A course in patient assessment, infection control procedures, emergency and safety procedures, communication and patient interaction skills, and basic pharmacology.

## RADR 1260 CLINICAL I

(2-0-10)
Prerequisite: RADR 2313 with a grade of "C" or higher Fees: Laboratory and film badge

Clinical rotation in a major affiliate to observe the roles of the Radiologic Technologists. Assistance with basic radiographic procedures under the supervision of a radiographer (RT).

## RADR 1261 CLINICAL II

(2-0-12)
Prerequisite: RADR 1260 with a grade of "C" or higher
Fees: Laboratory and film badge
Clinical experience to include standard radiographs of the chest, extremities, spine, skull, sinuses, and abdomen. Perform common radiographic procedures using contrast media and assist in obtaining radiographs of the patient with traumatic injuries.

## RADR 1262 CLINICAL III

Prerequisite: RADR 1261 with a grade of "C" or higher
Fees: Laboratory and film badge
Continuation of clinical experience of standard radiographs under the supervision of a qualified Radiologic Technologist.

## RADR 1263 CLINICAL IV

Prerequisite: RADR 1262 with a grade of "C" or higher
Fees: Laboratory and film badge
Clinical rotation through various areas in radiology performing varied radiographic procedures to include film critique.

## RADR 1313 PRINCIPLES OF RADIOGRAPHIC IMAGING I

Prerequisite: RADR 2313 with a grade of "C" or higher
Fees: Laboratory
This course will analyze radiographic image qualities and the effects of exposure variables upon these qualities.

RADR 1317 RADIOGRAPHIC ANATOMY \& PHYSIOLOGY I
Prerequisite:RADR 1411 with a grade of "C" or higher

## Fees: Laboratory

This course develops the student ability to relate basic human anatomy and physiology to the image. The localization and identification of human anatomy on the radiographic image is emphasized.

RADR 1411 BASIC RADIOGRAPHIC PROCEDURES
(4-3-4)
Prerequisite: Completion of RADR courses with a grade of "C" higher. Fees: Laboratory

This course includes an introduction to radiographic positioning, terminology; proper manipulation of equipment; positioning and alignment of the anatomical structure and equipment; and evaluation of images for proper demonstration of basic anatomy and related pathology.

## RADR 1460 CLINICAL V

(4-0-12)
Prerequisite: RADR 1263 with a grade of "C" or higher
Fees: Laboratory and film badge
Continuation of clinical rotation through various areas of radiology to include film critique under the supervision of radiologic technologists.

## RADR 2217 RADIOGRAPHIC PATHOLOGY

Prerequisite: Completion of course with a grade of "C" or higher Fees: Laboratory

An overview of the disease process and common diseases and their appearance on medical images.

## RADR 2235 RADIOLOGIC TECHNOLOGY SEMINAR

(2-2-1)
Prerequisite: Completion of course with a grade of "C" or higher (advanced placement with permission from Program Director.)
Fees: Laboratory
This is a capstone course focusing on the synthesis of professional knowledge, skills, and attitudes in preparation for professional employment and lifelong learning.

## RADR 2267 PRACTICUM II

Prerequisite: RADR 2366 with a grade of "C" or higher Fees: Laboratory and film badge

Continuation of clinical rotation in all areas of radiology and using varied imaging modalities and film critique under minimal supervision of radiologic technologists.

RADR 2301 INTERMEDIATE RADIOGRAPHIC PROCEDURES
Prerequisite: RADR 1317 with a grade of "C" or higher
Fees: Laboratory
A continuation of the study of the proper manipulation of radiographic equipment; positioning and alignment of the anatomical structures and equipment; and evaluation of images for proper demonstration of intermediate anatomy and related pathology.

RADR 2305 PRINCIPLES OF RADIOGRAPHIC IMAGING II
Prerequisite: RADR 1313 with a grade of "C" or higher

Fees: Laboratory
A continuation of the study of radiographic imaging technique formulation, image quality assurance, and the synthesis of all variables in image production.

## RADR 2309 RADIOGRAPHIC IMAGING EQUIPMENT

(3-3-1)
Prerequisite: Completion of RADR courses with grades of "C" or higher Fees: Laboratory

A study of equipment and physics of x-ray production, basic x-ray circuits, and the relationship of equipment components to the imaging process.

## RADR 2313 RADIATION BIOLOGY -PROTECTION

Prerequisite: Admission to the Program
A study of the effects of radiation exposure on biological systems, typical medical exposure levels, methods of measuring and monitoring radiation, and methods for protecting personnel and patients from excessive exposure.

## RADR 2333 ADVANCED MEDICALIMAGING

Prerequisite: Completion of course with a grade of "C" or higher Fees: Laboratory

An introduction to the use of computers in medical imaging and a survey of specialized imaging modalities.

RADR 2340 SECTION ANATOMY FOR MEDICAL IMAGING
In-depth coverage of anatomic relationships that are present under various sectional orientations as depicted by medical imaging.

## RADR 2366 PRACTICUM I

Prerequisite: RADR 1460 with a grade of "C" or higher
Fees: Laboratory
Clinical rotation in all areas of radiology using varied imaging modalities and film critique with minimal supervision by radiologic technologists.

## RADR 2371 EMERGING IMAGING CONCEPTS

Prerequisite: RADR 2305 with a grade of "C" or higher (advanced placement with permission from Program Director.)

This course is designed to present advanced selected topics in a case study format to enhance critical thinking skills. Pathological conditions of the patient, factors that impact the radiologic image, and film critique are an integral part of this course.

## RAILROAD OPERATIONS

RAIL 1371 THE HISTORY OF RAILROADING
Prerequisite: Must read at 0302 level or above
Co-requisite: Must enroll in ENG 0300 if below that level
Fees: none
This course covers the history and traditions of railroading and the industry's role in North American economic development. Upon successful completion of this course, students will be able to list and explain the significance of major events in North American railroading. The General Code of Operating Rules has evolved as the standard set of rules for North American railroads and part of this will be studied as a class project.

## RAIL 1372 RAILROAD TECHNICAL CAREERS

Prerequisite: Must read at 0302 level or above
Co-requisite: Must enroll in ENG 0300 if below that level
Fees: none
This course provides information about technical careers in railroading, which will enable students to choose suitable career paths. An overview of working conditions and expectations will be followed by an in-depth study of transportation, mechanical, and engineering department terminology and occupations. Upon successful completion of this course, students will be able to describe technical job functions, requirements, and characteristics. The General Code of Operating rules governs many of the activities of railroad employees and part of this will be studied as a class project.

## RAIL 2373 RAILROAD OPERATIONS

Prerequisite: Must read at 0302 level or above
Co-requisite: Must enroll in ENG 0300 and MATH 0300 if below those levels Fees: none
This course includes information about the industry, its major assets, structure, and typical operations. Upon successful completion of this course, students will be able to define current North American railroad industry characteristics, basic operation components and processes, industry structure, and administrative processes. A portion of the General Code of Operating Rules will be studied as a class project.

RAIL 2374 RAILROAD SAFETY, QUALITY \& ENVIRONMENT (3-3-0)
Prerequisite: Must read at 0302 level or above
Co-requisite: Must enroll in ENG 0300 if below that level
Fees: none
This course covers the importance of safety, quality, and environmental awareness to the railroad industry and the basic tools and techniques for improving these conditions on the job. Upon successful completion of this course, students should be able to explain the need for safety, quality, and environmental awareness
and describe their basic principles. A railroad's safety rules and hazardous material handling instructions will be studied as a class project.

## RAIL 2470 LOCOMOTIVE \& FREIGHT CAR FUNDAMENTALS (4-4-0)

Prerequisite: Must read at 0302 level or above
Co-requisite: Must enroll in ENG 0300 and MATH 0300 if below those levels Fees: None

This course familiarizes students with the characteristics and components of locomotives and freight cars, and introduces students to federal freight car safety standards. Basic components of freight cars and locomotive fuel, lubrication, cooling, and electrical systems will be studied through the use of schematics and diagrams. Principles of air brake systems will be included as well. Upon completion of this course, students will be able to identify the components of locomotives and freight cars, explain operation of air brake systems, describe basic locomotive systems, and interpret publications regarding federal freight car safety standards.

## ELECTRONIC SYSTEMS TECHNOLOGY

## RBTC 1447 ELECTRO-MECHANICAL DEVICES

Prerequisite: Department approval
Fees: Laboratory
A study of basic electro-mechanical devices found in robotic systems, including transformers, switches, and solid state relays.

## MANUFACTURING TECHNOLOGY ACADEMY

## RBTC 1301 PROGRAMMABLE LOGIC CONTROLLERS

A study in programmable logic controllers (PLC). Topics include processor units, numbering systems, memory organization, relay type devices, timers, counters, data manipulators, and programming.

## RBTC 1305 ROBOTIC FUNDAMENTALS

An introduction to flexible automation. Topics include installation, repair, maintenance, and development of flexible robotic manufacturing systems.

## RBTC 1355 SENSORS

A study of the basic principles of industrial sensors for automated systems. Emphasis on the operation and application of position, rate, proximity, optoelectronics, ranging, and pressure switches.

## RBTC 2239 ROBOT PROGRAMMING AND DIAGNOSTICS

A course in the programming of industrial robots, the development of programming techniques, and the diagnosis of faults in systems.

RBTC 2331 ROTARY DEVICES
A study of AC, DC, synchronous, induction, and step motors. Topics include motor control devices, transformers, starting circuits, semiconductors, and generators and their uses in automated systems.

## RBTC 2335 NUMERICAL CONTROLLED/COMPUTER NUMERICAL

## CONTROL PROGRAMMING

(2-2-3)
A study of the principles and concepts of numerical control through computer applications, specifically in the area of programming for the control of machine tools in CIM.

## RBTC 2447 COMPUTER INTEGRATED MANUFACTURING

Fees: Laboratory
The principles of computer integrated manufacturing, including case studies and implementation of process control techniques, CAD/CAM, operations, software, and networking for CIM systems.

## READING

Students are placed in reading classes according to entrance scores on appropriate placement tests. Reading remediation is required for those students whose assessment scores indicate a need. Meeting the requirements of the Texas Success Initiative is one of many goals of the reading courses. Course requirements must also be completed in order to receive a passing grade even when TSI is met.

## READ 0310 BASIC READING

Prerequisite: None
Fees: Laboratory
Designed for the student who reads below the 6th grade level. Skills emphasizing word attack, vocabulary development, comprehension of printed material and study habits are stressed. To successfully pass this course, two out of three of the following items must be completed: 1) an end-of-semester Nelson-Denny Reading Test score of $6.0 ; 2$ ) completion of all lab work on the 6th grade level; 3) a grade of $70 \%$ or higher on the Final Exam. If two of these items are not completed, a grade of "IP" (In Progress) is usually given, and re-enrollment in this course is necessary. This course includes a laboratory component.

## READ 0301 INTERMEDIATE READING

Prerequisite: READ 0310 with a grade of " C " or an equivalent placement score. Fees: Laboratory

Designed for the student who reads between the 6th and 8th grade level and needs additional review, refinement, and reinforcement of basic reading skills. Word recognition, vocabulary development, comprehension of printed material,
and study skills are stressed. To successfully pass this course, two out of three of the following items must be completed: 1) an end-of-semester NelsonDenny Reading Test score of $8.4 ; 2$ ) completion of all lab work on the 8th grade reading level; 3) a grade of $70 \%$ or higher on the final exam. If two of these items are not successfully completed, a grade of "IP" (In Progress) is usually assigned, and re-enrollment in this course would be necessary. This course requires laboratory registration.

## READ 0302 READING TECHNIQUES AND STUDY SKILLS

(3-3-1)
Prerequisite: READ 0301 with grade of "C" or equivalent placement score. Fees: Laboratory

Designed for the student who reads between the 8th and 10th grade level. Pertinent vocabulary, textbook comprehension, essential study skills, and flexibility of reading rates are emphasized. Efficient reading techniques appropriate for academic demands are developed. Library skills are reviewed. To successfully pass this course, two out of three of the following items must be completed: 1) an end-of-semester Nelson-Denny Reading Test score of $10.5 ; 2$ ) completion of all lab work on the 10th grade reading level; 3) a grade of $70 \%$ or higher on the final exam. If two of these items are not successfully completed, a grade of "IP" (In Progress) is usually assigned, and re-enrollment in this course would be necessary. This course requires laboratory registration.

## READ 0303 READING IMPROVEMENT AND STUDY SKILLS (3-3-1)

Prerequisite: READ 0302 with a grade of "C" or equivalent placement score. Fees: Laboratory

Designed for the student who reads between the 10th and 12th grade level. Enhancement of college-level vocabulary and comprehension of written material; practice in flexibility of reading rate are emphasized. Strong emphasis is placed on study skills, study strategies for content area texts, note taking, outlining and summarizing, and library and research skills. Course requirements must be completed in order to receive a passing grade even when TSI has been met during the semester. To successfully pass this course, two out of three of the following items must be completed: 1) an end-of-semester Nelson-Denny Reading Test score of $12.9 ; 2$ ) completion of all lab work on the 12th grade reading level; 3) a grade of $70 \%$ or higher on the final exam. If two of these items are not successfully completed, a grade of "IP" (In Progress) is usually assigned, and re-enrollment in this course would be necessary. This course requires laboratory registration.

Prerequisite: READ 0303 with a grade of "C" or a 12.9 grade or higher reading level as indicated on an appropriate test.

Analytical reading and critical thinking skills, emphasizing the development of inferential and interpretive comprehension skills and expansion of these skills into higher level analysis, synthesis, and evaluation. Study skills to include higher level vocabulary and research skills. Course requirements must be completed in order to receive a passing grade even if TSI has been met.

## NURSING EDUCATION <br> (LVN to ADN MOBILITY PROGRAM)

Students transferring to the St. Philip's Licensed Vocational Nurse (LVN) to Associate Degree Nurse (ADN) Mobiltiy Program from other institutions may be awarded credit for courses taken at the previous institution. It is always in the best interest of previously enrolled students to meet with the Program Director four months before the beginning of a term for a full review of his or her educational transcript.

The LVN-ADN Mobility Program student with two failures in nursing courses will be dismissed from the program without the option of readmission.

The LVN-ADN Mobility Program applicant who has failed two courses in another nursing program will have met the threshold for being dropped from St. Philip's nursing program and is therefore ineligible for transfer or admission to St. Philip's LVN-ADN Program.

## RNSG 1162 CLINICAL - TRANSITION FROM VOC. TO PROF. NURS

Prerequisite:
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

## RNSG 1261 CLINICAL - NURSING

Prerequisite: None
Co-requisite: RNSG 2213
A method of instruction providing detailed education, training, and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. Onsite clinical instruction, supervision, evaluation, and placement are the responsibility of the College faculty. Clinical experiences are unpaid external learning experiences.

## RNSG 1215 HEALTH ASSESSMENT

Prerequisite: None
Corequisite: None
Development of skills and techniques required for a comprehensive health assessment within a legal/ethical framework.

RNSG 1260 CLINICAL - NURSING
Prerequisite: None
Co-requisite: RNSG 1343
A method of instruction providing detailed education, training, and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. Onsite clinical instruction, supervision, evaluation, and placement are the responsibility of the College faculty. Clinical experiences are unpaid external learning experiences.

RNSG 1262 CLINICAL - MENTAL HEALTH
Prerequisite:
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

## RNSG 1301 PHARMACOLOGY

(3-3-0)
Prerequisite: None
Co-requisite: None
Introduction to the science of pharmacology with emphasis on the actions, interactions, adverse effects, and nursing implications of each drug classification. Topics include the roles and responsibilities of the nurse in safe administration of medications within a legal/ethical framework.

## RNSG 1327 TRANSITION FROM VOC. TO PROF. NURS.

## Prerequisite:

Topics include health promotion, expanded assessment, analysis of data, nursing process, pharmacology, multidisciplinary teamwork, communication, and applicable competencies in knowledge, judgment, skills, and professional values within a legal/ethical framework throughout the life span. this course lends itself to either a blocked or integrated approach.

## RNSG 1343 CONCEPTS OF ADULT HEALTH

## Prerequisite: None

Co-requisite: RNSG 1260
Integration of previous knowledge and skills into the continued development of the associate degree nurse as a provider of care, coordinator of care, and member of a profession in the care of adult clients/families in structured health care settings. Incorporates judgements, skills, and professional values within a legal/ethical framework.

## RNSG 2130 PROFESSIONAL NURSING REVIEW AND LICENSURE PREPARATION

## Prerequisite:

Review of concepts required for licensure examination and entry into the practice of professional nursing. Includes application of National Council Licensure Examination for Registered Nurses (NCLEX-RN) test plan, assessment of knowledge deficits, and remediation. This course lends itself to either a blocked or integrated approach.

## RNSG 2201 CARE OF CHILDREN AND FAMILIES

Prerequisite: RNSG 2207, 1343, 1260, 1261, 2213
Co-requisite: RNSG 2261
Study of concepts related to the provision of nursing care for children and families.

RNSG 2207 TRANSITION TO NURSING PRACTICE
Prerequisite: None
Co-requisite: None
Introduction to selected concepts related to the role of the associate degree nurse as a provider of care, coordinator of care, and member of the profession. Review of trends and issues impacting nursing and health care today and in the future. Topics include knowledge, judgement, skill, and professional values within a legal/ethical framework.

RNSG 2208 MATERNAL/NEWBORN NURSINGAND WOMEN'S HEALTH
Prerequisite: RNSG 2207, 1343, 1260, 1261, 2213
Co-requisite: RNSG 2260
Study of the concepts related to the provision of nursing care for normal childbearing families and those at risk, as well as women's health issues; competency in knowledge, judgement, skill, and professional values within a legal/ethical framework, including a focus on normal and high-risk needs for the childbearing family during the preconception, prenatal, intrapartum, neonatal, and postpartum periods; and consideration of selected issues in women's health.

RNSG 2213 MENTAL HEALTH NURSING
Prerequisite: None
Co-requisite: RNSG 1261
Principles and concepts of mental health, psychopathology, and treatment modalities related to the nursing care of clients and their families.

## RNSG 2221 MANAGEMENT OF CLIENT CARE

Prerequisite: RNSG 2207, 1343, 1260, 1261, 2213
Co-requisite: None
Exploration of leadership and management principles applicable to the role of the nurse as a provider of care, coordinator of care, and member of a profession. Includes application of knowledge, judgement, skill, and professional values within a legal/ethical framework. Five hours awarded for experiential learning after satisfactory completion of the third semester.

RNSG 2231 ADVANCED CONCEPTS OF ADULT HEALTH
Prerequisite:
Application of advanced concepts and skills for the development of the professional nurse's roles in complex nursing situations with adult clients/families with complex health needs involving multiple body systems in intermediate and critical care settings. Emphasis on knowledge, judgment, skills, and professional values within a legal/ethical framework. This course lends itself to a blocked approach.

RNSG 2260 CLINICAL - NURSING
Prerequisite: Completion of RNSG 2207, 1343, 1260, 2213
Co-requisite: RNSG 2208
A method of instruction providing detailed education, training, and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. Onsite clinical instruction, supervision, evaluation, and placement is the responsibility of the College faculty. Clinical experiences are unpaid external learning experiences.

RNSG 2261 CLINICAL - NURSING
(1-0-8)
Prerequisite: RNSG 2207, 1343, 1260, 2213, 1261
Co-requisite: RNSG 2201
A method of instruction providing detailed education, training, and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. Onsite clinical instruction, supervision, evaluation, and placement are the responsibility of the College faculty. Clinical experiences are unpaid external learning experiences.

## RNSG 2262 CLINICAL - NURSING

Prerequisite: RNSG 2207, 1343, 1260, 1261, 2213
Co-requisite: RNSG 2414
A method of instruction providing detailed education, training, and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. Onsite clinical instruction, supervision, evaluation, and placement are the responsibility of the College faculty. Clinical experiences are unpaid external learning experiences.

## RNSG 2263 CLINICAL - NURSING

(1-0-8)
Prerequisite: RNSG 2207, 1343, 1260, 1261, 2213
Co-requisite: RNSG 2435
A method of instruction providing detailed education, training, and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. Onsite clinical instruction, supervision, evaluation, and placement are the responsibility of the College faculty. Clinical experiences are unpaid external learning experiences.

RNSG 2414 CARE OF THE CLIENT WITH COMPLEX
HEALTH CARE NEEDS
(4-4-0)
Prerequisite: RNSG 2207, 1343, 1260, 2210, 1261, 2213
Co-requisite: RNSG 2262
Application of a systematic problem-solving process and critical-thinking skills to provide nursing care to diverse clients/families across the life span with complex health care needs in health maintenance and health care team. Topics include the role of the nurse as client advocate and coordinator of care, and applicable competencies in knowledge, judgement, skills, and professional values within a legal/ethical framework.

## RSNG 2435 INTEGRATED CLIENT CARE MANAGEMENT (CAPSTONE) <br> (4-4-0)

Prerequisite: RNSG 2207, 1343, 1260, 1261, 2213, 1301, 2414, and 2162
Co-requisite: RNSG 2263
Application of client assessment skills, critical thinking, and independent nursing interventions to care for diverse clients/families throughout the life span whose health care needs may be difficult to predict. Emphasis on collaborative clinical decision-making, nursing leadership skills, and client management. Topics include the significance of professional development, trends in nursing and health care, and applicable knowledge, judgement, skills, and professional values within a legal/ethical framework. The student is required to pass a nationally accredited exit examination in order to complete the program. After successful completion of the exit examination, the student will be recommended to apply for the national licensing exam.

## RESPIRATORY CARE TECHNOLOGY

## RSPT 1271 BASIC RESPIRATORY CARE PHARMACOLOGY (2-1-2)

A study of basic pharmacological principles/practices of respiratory care drugs. Emphasis on classification, routes of administration, dosages/calculations, and interactions of the autonomic nervous system.

## RSPT 1141 RESPIRATORY HOME CARE/REHABILITATION

(1-1-0)
Designed to develop an understanding of respiratory home care/rehabilitation equipment, procedures, and patient care, with emphasis on the use of special technology and equipment in the treatment of patients in a subacute and/or long-term patient care settings.

## RSPT 1207 CARDIOPULMONARY ANATOMY AND PHYSIOLOGY

(2-1-2)
An introduction to the anatomy and physiology of the cardiovascular, renal, and pulmonary systems. Includes the terminology used in respiratory physiology.

## RSPT 1360 INTRODUCTORY CLINICAL

(3-0-16)
A method of instruction providing detailed education, training, and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. Onsite clinical instruction, supervisor, evaluation and placement is the responsibility of the College faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary.

## RSPT 1315 BASIC RESPIRATORY CARE PROCEDURES I

This course presents the basic principles and procedures, including gas laws, medical gas theory, oxygen analyzers, humidity, and aerosol therapy.

## RSPT 1329 RESPIRATORY FUNDAMENTALS I

Provides a foundation for the development of knowledge and skills for respiratory care including history, medical terms/symbols, medical/legal, infection control, vital signs, physical assessment, chest x-ray interpretation, medical gas therapy, oxygen analyzers, and humidity/aerosol therapy.

## RSPT 1361 INTERMEDIATE CLINICAL

(3-0-16)
A method of instruction providing detailed education, training, and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. Onsite clinical instruction, supervisor, evaluation and placement is the responsibility of the College faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary.

## RSPT 1411 RESPIRATORY CARE PROCEDURES II

(4-3-3)
Provides student with essential knowledge of airway care and mechanical ventilation. Airway care includes indications, techniques, equipment, and hazards and complications. Mechanical ventilation includes indications, modes, clinical application, management, complications, and weaning.

## RSPT 1431 RESPIRATORY CARE FUNDAMENTALS II

(4-3-3)
Provides a foundation for the development of knowledge and skills for respiratory care including lung expansion therapy, postural drainage and percussion, artificial airways, manual resuscitation devices, suctioning, pulse oximetry, bedside spirometry, arterial sampling techniques, and blood gas analysis and interpretation.

## RSPT 1562 INTERMEDIATE CLINICAL

(3-0-16)
A method of instruction providing detailed education, training, and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. Onsite clinical instruction, supervision, evaluation and placement is the responsibility of the College faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary.

## RSPT 2210 CARDIOPULMONARY DISEASE

A discussion of pathogenesis, pathology, diagnosis, history, prognosis, manifestation, treatment, and detection of cardiopulmonary diseases.

RSPT 2325 CARDIOPULMONARY DIAGNOSTICS
A study of physical, radiological, hemodynamic, laboratory, nutritional, and cardiopulmonary diagnostic assessment of the pulmonary patient.

## RSPT 2231 CLINICAL SIMULATIONS IN RESPIRATORY CARE

(2-2-0)
The theory and history of clinical simulation examinations. Topics include the construction types, scoring, and mechanics of taking the exam along with practice in taking both written and computerized simulations, and basic concepts of computer usage.

## RSPT 2353 NEONATAL/PEDIATRIC CARDIOPULMONARY CARE

A study of acute care, monitoring, and management as applied to the neonatal and pediatric patient.

## RSPT 2361 ADVANCED CLINICAL

(3-0-16)
A method of instruction providing detailed education, training, and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. Onsite clinical instruction, supervision, evaluation and placement is the responsibility of the College faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary.

## RSPT 2405 PULMONARY DIAGNOSTICS

The theories and techniques involved in pulmonary function testing diagnostics with emphasis on blood gas theory and analysis, quality control, oximetry, and capnolgraphy.

## RSPT 2562 ADVANCED CLINICAL

(3-0-16)
A method of instruction providing detailed education, training, and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. Onsite clinical instruction, supervision, evaluation and placement is the responsibility of the College faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics are learning outcomes vary.

## RESTAURANT MANAGEMENT

## RSTO 1301 BEVERAGE MANAGEMENT

Prerequisite: READ 0300, ENGL 0300, MATH 0300
A study of the beverage service of the hospitality industry including spirits, wines, beers, and non-alcoholic beverages. Topics include purchasing, resource control, legislation, marketing, physical plant requirements, staffing, service, and the selection of wines to enhance foods. The student will relate local, state, and federal laws pertaining to the service and purchase of alcoholic beverages to include the Dram Shop Act and liquor law liability; identify levels of intoxication and methods of control consumption by guests; discuss the opening and closing
procedures of beverage operation; explain the procedures for internal beverage control; and recognize equipment and glassware used for beverage preparation, presentation, and service of alcoholic and non-alcoholic beverages; evaluate the relationship of beverages to food; explain the production processes for distilled spirits, liquors, beers, and brandies; and demonstrate knowledge of wines by grape and other fruit variety, country, growing region, and production process. Offered in Spring, day only.

## RSTO 1306 FACILITIES LAYOUT AND DESIGN

(3-3-0)
Prerequisite: ENGL 0300, READ 0300, MATH 0300, and/or Consent of Instructor
Overview of the planning, development, and feasibility aspects of building or renovating a food service facility. Application of principles of work and flow analysis, spatial relationships, and equipment selection as they relate to the overall layout and design. The student will identify types of food service systems, flow plans, and work-flow principles; select and place equipment understanding how its specific uses and care suit the needs of a given system; and examine infrastructure needs critical to equipment work flow and cost controls. Offered in Fall, day only.

## RSTO 1325 PURCHASING FOR HOSPITALITY OPERATIONS (3-3-0)

Prerequisites: READ 0300, MATH 0300
Study of purchasing and inventory management of foods and other supplies to include development of purchase specifications, determination of order quantities, formal and informal price comparisons, proper receiving procedures, storage management, and issues procedures. Emphasis on product cost analysis, yields, pricing formulas, controls, and record keeping at each stage of purchasing cycle. The student will explain market factors affecting cost and availability of goods including seasonality, supply and demand, distribution channel costs, and quality levels. The student will also describe the mechanics of purchasing including food and supply sources, formal and informal bid procedures, online computer purchasing, and legal and ethical considerations; explain inspection and grading of foods including the various designations of quality, and conduct yield and quality tests. The student will write effective purchase specifications; conduct proper receiving procedures assuring conformity of goods with specifications, prices with quotations, and quantities received with quantities ordered; explain inventory management principles including stock rotation, proper storage conditions, and effective issue procedures. Offered in Fall, day, evening, and Summer.

# RSTO 2301 PRINCIPLES OF FOOD AND BEVERAGE CONTROL 

Prerequisites: ENGL 0300, MATH 0300, READ 0300
A study of financial principles and controls of food service operation including review of operation policies and procedures. Topics include financial budgeting and cost analysis empathizing food and beverage labor costs, operational analysis, and international and regulatory reporting procedures. The student will calculate food, beverage, labor, and all other pertinent cost percentages; develop and construct food service financial statements and other relevant management and government reports; conduct financial analysis of operating statements, costs, and percentages; explain procedures and controls used in food service operations; and demonstrate an ability to use technology in financial applications. Offered in Spring, day and evening.

## RSTO 2307 CATERING

Prerequisites: HAMG 1321, ENGL 0300
Pre or Co-requisite CHEF 1400
Principles, techniques, and applications for both on-premises, off-premises and group marketing of catering operations including food preparation, holding and transporting techniques. The student will discuss the roles of the off-premise versus the accommodator; explain the difference between pricing based on a multiplier, on projected cost analysis, and on competition; and organize, manage, and execute an off-premise catering project. Offered in Fall, day only.

RSTO 2264 PRACTICUM
Prerequisites: Instructor Approval, MATH 0301
Fees: Laboratory
Practical general training and experiences in the workplace. The College, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay. This course may be repeated if topics and learning outcomes vary. As outlined in the learning plan, the student will master the theory, concepts, and skills involving the tools, materials, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, and legal systems associated with the workplace. The student will also demonstrate ethical behavior, safety practices, interpersonal and teamwork skills, as well as appropriate verbal and written communications in the workplace.

## RSTO 2405 MANAGEMENT OF FOOD PRODUCTION \& SERVICE

(4-2-4)
Prerequisite: MATH 0300, CHEF 1400, FDNS 1301, RSTO 1325, and 2301
Fees: Laboratory
A study of quantity cookery and management problems pertaining to commercial and institutional food service, merchandising and variety in menu planning, and
customer food preferences. Includes laboratory experiences in quantity food preparation and service. The student will develop menu plans, corresponding recipes and cost analysis, staffing, and food supply requisitions; execute menu plans using team strategy; manage relevant costs within budgetary constraints; complete pertinent administrative records; and critique quantity food service operations. Offered in Fall and Spring.

## MUSIC - PRIVATE SAXOPHONE

## SAXO 1231 ELEMENTARY LEVELSAXOPHONE

Prerequisite: None
Fees: Laboratory
Private instruction in saxophone for those with no previous experience.

## SAXO 1232 INTERMEDIATE LEVELSAXOPHONE

Prerequisite: SAXO 1231 or Instructor approval
Fees: Laboratory
Continued study in saxophone performance at the intermediate level.

## STUDENT DEVELOPMENT/ORIENTATION

## SDEV 0170 ORIENTATION TO COLLEGE

Prerequisite: None
This course is for the new student. It guides the student in the transition to college; its staff, facilities, services, policies and procedures. The course motivates students to become more actively involved in their education. It is required for both day and evening students who are either entering freshman or transfer students who have earned fewer than 15 semester hours. (See "Orientation" in the Student Services and Activities section of the catalog).

## SDEV 0370 PERSONAL \& ACADEMIC SUCCESS

Prerequisite: None
This course is designed to increase the student's success in college by assisting the student in obtaining skills necessary to reach his/her educational objectives. Topics covered include: campus services, critical thinking, time management and stress, career exploration, college reading skills, test-taking and study techniques, library use, decision-making skills and communication skills. This course is primarily designed for the students who need two or more remedial courses in the basic skills areas (English, Reading and Mathematics). Completion of this course will satisfy the orientation requirement for St. Philip's College

## SOCIOLOGY

## SOCI 1301 INTRODUCTION TO SOCIOLOGY

Prerequisite: None
This course is designed to achieve insights into the development and working of society. It includes a study and analysis of cultural factors which underlie social change, social organization, socialization, stratification, social institutions, and social issues.

## SOCI 1306 CONTEMPORARY SOCIAL PROBLEMS

Prerequisite: SOCI 1301 or its equivalent.
Notes: Formerly SOC 1303.
A survey of some of the major social problems of the present society: poverty, drug abuse, alcoholism, prejudice, discrimination, family disorganization, mental illness, energy sources, environment abuse, sexual deviance, and unemployment. Students who take SOCI 1306 may not take IDST 2371.

## SOCI 1370 SOCIOLOGY OF DEATH AND DYING

An examination of customs, taboos, and historical changes relating to American funeral rites. The role of family structure, class, church, ethnicity, and technological changes.

## SOCI 1372 WOMEN IN SOCIETY

Prerequisite: None
Notes: Formerly SOC 1302
A study of the status of women in society. Examines the women's liberation movement in the nineteenth and twentieth centuries and focuses on the problems women encounter in contemporary American society. This course also explores the roles of men as it relates to social changes and gender. (OFFERED IN THE SPRING SEMESTER ONLY).

## SOCI 2301 THE FAMILY

Prerequisite: None
Notes: Formerly SOC 1305
A practical approach to the institution of marriage and of families. An examination of associated problems such as divorce. Includes analysis of human sexuality, sex roles, mate selection, marital adjustment, family patterns in the middle and the later years, and family disorganization. Students who take SOCI 2301 may not take IDST 2370.

## SOCI 2319 MINORITY STUDIES I

Prerequisite: None
Notes: Students who enroll in SOCI 2319 may not take HUMA 2319
Historical, economic, social, and cultural development of minority groups. May include African-American, Mexican-American, Asian-American, and Native American issues. (OFFERED IN THE FALL SEMESTER ONLY).

## SOCI 2336 CRIMINOLOGY

Prerequisite: None
Notes: Formerly SOC 1313.
This course examines the sociological, psychological, and biological courses of criminal behavior. Analysis of society's reactions to crime treatment and preventative measures is a focal point.

## PRE-SOCIAL WORK

SOCW 2361 INTRODUCTION TO SOCIAL WORK
Prerequisite: None
Notes: Formerly SOC 1307
Provides the student who is interested in a degree in social work an opportunity to examine the field. An introduction to the history, philosophy and practice of social work as well as an examination of case work and community organization.

## SOCW 2362 INTRODUCTION TO WELFARE

Prerequisite: None
This course studies the role of the social worker as well as social welfare in American society with emphasis on programs and strengths of current programs.

## SPANISH

## SPAN 1300 BEGINNING CONVERSATIONAL SPANISH

Prerequisite: None
For students with little or no knowledge of Spanish. Development of ability to communicate in Spanish.

## SPAN 1310 BEGINNING CONVERSATIONAL SPANISH II

Prerequisite: SPAN 1300 or departmental approval.
A continuation of Spanish 1300.

SPAN 1411 ELEMENTARY SPANISH
Prerequisite: None
Fees: Laboratory
For students with little or no knowledge of Spanish. Teaching of the fundamentals of Spanish in order to develop understanding, speaking, reading, and writing abilities. Language laboratory is required.

SPAN 1412 ELEMENTARY SPANISH II
Prerequisite: SPAN 1411 or departmental approval.
Fees: Laboratory
A continuation of Spanish 1411. Added practice in listening, speaking, reading, and writing skills. Language laboratory is required.

SPAN 2311 INTERMEDIATE SPANISH I
Prerequisite: SPAN 1412 or placement test.
A continuation of SPAN 1412. It provides an expansion of listening, speaking, reading, and writing skills. Some review of Spanish grammar.

## SPAN 2312 INTERMEDIATE SPANISH II

Prerequisite: SPAN 2311 or an equivalent, or placement test.
A review of Spanish grammar, a practical approach to reading Hispanic literature, and familiarization with Hispanic culture and civilization.

## SPEECH

## SPCH 0301 ORAL COMMUNICATION SKILLS

Prerequisite: Eligible for placement in ENGL 0300.
Development of speaking, listening, and non-verbal communication skills for situations at home, school, and work. Emphasis on using communication skills to build self-confidence and reduce nervousness in oral presentation. Will not fulfill curricular requirements.

## SPCH 1144 FORENSICS

Prerequisite: None
Notes: Formerly SPE 1101
A laboratory course designed for students to enhance performance skills in public speaking, oral interpretations, and/or acting. Students are offered activities including tournament competition, community sponsored performances, and/or organized festivals. Individual attention for preparation of performances and rehearsal is offered. This course may be repeated each semester for a maximum of four semester hours.

## SPCH 1311 FUNDAMENTALS OF SPEECH

(3-3-0)
Prerequisite: None
Notes: Formerly SPE 1305
Aims at understanding and demonstrating the fundamentals of oral communication and requires participation in group speaking situations. Focuses on the role of critical thinking in preparing and delivering different types of speeches.

## SPCH 1318 INTERPERSONALCOMMUNICATION

Prerequisite: None
Notes: Formerly SPE 1304
Designed for the student who wants to improve communication skills in one-to-one and group settings. Students study interpersonal concepts and practice techniques to enhance personal and professional communication. The course content includes such topics as verbal and nonverbal communication, gender and cultural differences, critical thinking, effective listening, assertiveness training, and conflict management. The course focuses on understanding others and self-improvement.

## SPCH 1321 BUSINESS AND PROFESSIONAL SPEECH

## Prerequisite: None

Notes: Formerly SPE 1306
Designed to focus on communication in business and professional settings. Students study organizational communication and learn interpersonal communication skills for the various types of interaction unique to the business world. Students develop management and leadership skills as they learn to identify and correct communication problems occurring within the organization. Students practice the protocol for employment interviews, small group meetings, and multimedia business presentations.

## SPCH 1373 AMERICAN SIGN LANGUAGE BASIC I

(3-3-0)
Introduction to American Sign Language. Emphasis will be placed on acquiring visual receptive skills and basic communication using the direct experience method. Aspects of Deaf culture and community will be incorporated. (May be taken for foreign language credit.)

## SPCH 1374 AMERICAN SIGN LANGUAGE BASIC II

Prerequisite: SPCH 1373
A continuation of SPCH 1373. Further development of receptive, expressive, and basic conversation skills as well as the cultural features of the language. (May be taken for foreign language credit.)

Discussion and small group theories and techniques as they relate to group process and interaction.

## SURGICAL TECHNOLOGIST

## SRGT 1261 SURGICAL TECHNOLOGY CLINICAL I

Prerequisite: HITT 1331, ENGL 1301, BIOL 2401, BIOL 2420
Co-requisite: SRGT 1409, SRGT 1405, SRGT 1271
Notes: Available only in Fall semester.
On-site clinical instruction in a hospital surgical department. Basic skills are practiced while assisting the surgical team. All skills are performed under supervision by hospital staff and clinical instructors.

## SRGT 1271 INTRODUCTORY TECHNIQUES FOR SURGICAL TECHNOLOGY

Prerequisite: HITT 1331, ENGL 1301, BIOL 2401, BIOL 2420
Corequistie: SRGT 1409, SRGT 1405, SRGT 1261
Notes: Available only in the Fall semester.
Introduction to minimal access surgery, endoscopic surgery, laser surgery, diagnostic procedures, internal stapling and closure devices, and alternate healing techniques with an emphasis on cultural diversity.

## SRGT 1372 ADVANCED TECHNIQUES FOR SURGICAL TECHNOLOGY

Prerequisite: SRGT 1261, SRGT 1271, SRGT 1405, SRGT 1409
Co-requisite: SRGT 1561, SRGT 1441, PSYC 2301
Notes: Available only in the Spring semester.
Study of advanced surgical procedures to include: insertion of indwelling cathetus, shunting procedures, grafting techniques, robotics, total jointprocedures, and cardiac catheterigation.

## SRGT 1405 INTRODUCTION TO SURGICAL TECHNOLOGY (4-4-1)

Prerequisite: HITT 1331, ENGL 1301, BIOL 2401, BIOL 2420
Co-requisite: SRGT 1409, SRFT 1261, SRGT 1271
Fees: Laboratory
Notes: Available only in the Fall semester.
Orientation to surgical technology theory, surgical pharmacology and anesthesia, and patient care concepts.

## SRGT 1409 FUNDAMENTALS OF ASEPTIC TECHNIQUE

Prerequisite: HITT 1331, ENGL 1301, BIOL 2401, BIOL 2420
Co-requisite: SRGT 1405, SRGT 1261, SRGT 1271
Fees: Laboratory
Notes: Available only in the Fall semester.
In-depth study of aseptic technique principles and practices; creation and maintenance of the sterile field; preparing the patient for surgery; basic skills including instrumentation, supplies, and equipment; care of patients with special needs in the operating room.

## SRGT 1441 SURGICAL PROCEDURES

Prerequisite: SRGT 1261, SRGT 1271, SRGT 1405, SRGT 1409
Co-requisite: SRGT 1561, SRGT 1372, PSYC 2301
Notes: Available in the Spring semester.
Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the general, obstetrical/gynecologic, genitourinary, orthopedic, and ophthalmologic surgical specialities. Incorporates instruments, equipment, and supplies required for safe patient care.

## SRGT 1442 SURGICAL PROCEDURES II

(4-4-1)
Prerequisite: SRGT 1372, SRGT 1441, SRGT 1561
Co-requisite: SRGT 1661
Notes: Available in the Summer semester.
Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to thoracic, peripheral vascular, plastic/ reconstructive, EENT, cardiac, and neurological surgical specialities. Incorporates instruments, equipment, and supplies required for safe patient care.

## SRGT 1561 SURGICAL TECHNOLOGIST CLINICAL II

(5-0-15)
Prerequisite: SRGT 1261, SRGT 1271, SRGT 1405, SRGT 1409
Co-requisite: SRGT 1441, SRGT 1372, PSYC 2301
Notes: Available in the Spring semester.
Continuation of clinical practice with emphasis on intermediate skills.

## SRGT 1661 SURGICAL TECHNOLOGY CLINICAL III

Prerequisite: SRGT1372, SRGT 1441, SRGT 1561
Co-requisite: SRGT 1442
Notes: Available in Summer semester.
Continuation of clinical practice with emphasis on advanced skills. Includes "Synthesis Saw Bones" Workshop and Spinal Statilization Workshop.

## EARLY CHILD DEVELOPMENT

TECA 1303 FAMILIES, COMMUNITIESAND SCHOOLS
(3-3-0)
Prerequisite: TECA 1311 OR ENGL 0301 or concurrent enrollment
A study of the relationship among the child, family, community and schools, including parent education and involvement, family and community lifestyles, child abuse and current family life issues.

## TECA1311 EDUCATINGYOUNGCHILDREN

Prerequisite: SKILLLEVELS OF READ 0301 \& ENGL 0301 or concurrent enrollment
An introduction to the education of the young child, birth through age 12, including developmentally appropriate practices and programs, theoretical and historical perspectives, ethical and professional responsibilities and current issues.

TECA1318 WELLNESS OF THE YOUNGCHILD
Prerequisite: TECA 1311 or concurrent enrollment
A study of the factors that impact the well-being of the young child including healthy behavior, food, nutrition, fitness, and safety practices. Focus on local and national standards and legal implications of relevant policies and regulations.

## TECA 1354 CHILD GROWTHAND DEVELOPMENT

Prerequisite: TECA 1311
A study of the physical, emotional, social, and cognitive factors of growth and development of children birth through adolescence.

## TECHNICAL MATHEMATICS

## TECM 1303 TECHNICALMATHEMATICS

Pre-requisite: None
Fees: None
A review of basic mathematics including whole numbers, fractions, mixed numbers, decimals, percents, ratios, and proportions. Converting to different units of measure (standard and/or metric) and other topics as required by specific business and industries will be covered.

## THEATRE (See DRAMA)

## MUSIC - PRIVATE TROMBONE

## TROM 1243 ELEMENTARY LEVELTROMBONE

Pre-requisite: None
Fees: Laboratory
Private instruction in trombone for those with no previous experience.

## TROM 1244 INTERMEDIATE LEVELTROMBONE

Prerequisite: TROM 1243 or Instructor approval
Fees: Laboratory
Continued study in trombone performance at the intermediate level.

## MUSIC - PRIVATE TRUMPET

## TRPT 1235 ELEMENTARY LEVELTRUMPET

Prerequisite: None
Fees: Laboratory
Private instruction in trumpet for those with no previous experience.

## TOURISM MANAGEMENT

## TRVM 1323 GROUP TOUR OPERATIONS

Prerequisites: READ 0302, ENGL 0301
A study of the role of the group planner, selling to groups and planning itineraries, including components of a tour package, tour costing, advertising and promotion, group dynamics, and tour guide qualifications. The student will demonstrate an understanding of the group or tour wholesaling business including escorted independent tours; will compare and contrast the tour guide's and operational supervisor's responsibilities; examine the complexity of developing a customized tour; and evaluate budget, mid-range, and luxury tour companies. The student will compare and contrast selling to groups and individuals; explain the role of the group decision-maker, and the importance of setting a time line for selling to groups and discussing tour promotions, advertising, and followup procedures. The student will develop a 7- to 14-day tour; figure cost and markup of proposed tours; and create per diem cost comparisons for clients.

## TRVM 1327 SPECIAL EVENTS DESIGN

Prerequisites: READ 0302, ENGL 0301
The development of a special event from the conceptual stage through completion. Emphasis on industry terminology, factors to consider when planning a special event, and contingency plans. Identify key terms used in planning special events. Determine event objectives and budget requirements. Compare the differences in planning a special event and a convention/meeting. Identify suppliers including off-site venue, food and beverage providers, sanitation, entertainment, and security. Determine permits, insurance, and liabilities associated with planning a special event.

## TRVM 2267 PRACTICUM OR (FIELD EXPERIENCE)TRAVEL AND TOURISM

Prerequisites: Instructor Approval, MATH 0301
Fees: Laboratory
Notes: Offered in Fall and Spring
Practical general training and experiences in the workplace. The College, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay. This course may be repeated if topics and learning outcomes vary. As outlined in the learning plan, the student will master the theory, concepts, and skills involving the tools, materials, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, and legal systems associated with the workplace. The student will also demonstrate ethical behavior, safety practices, interpersonal and teamwork skills, appropriate verbal and written communications in the workplace.

## TRVM 2355 EXPOSITION AND TRADE SHOW OPERATIONS <br> (3-3-0)

Prerequisites: READ 0302, ENGL 0301
A discussion of management of the specific problems of trade shows and exhibitions, including design, construction, and regulation. Logistics for planning events, including crowd control, special effects, lighting, decorations and audio. Procedures for conducting fairs, festivals, sports events, and grand openings. Identify the elements in an exposition opening and closing and discuss the elements in an exposition/trade show security plan; create a communications and emergency management plan for on-site operations. Identify key operational issues in management of a trade show or special event; and create an event planning time line.

## TRVM 2345 ADVANCED TOPICS IN TOURISM

Prerequisites: READ 0302, ENGL 0301
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relation to the professional development of the student. Learning outcomes/objectives are determined by local occupational need and business and industry trends.

## MUSIC - PRIVATE VIOLIN <br> VIOL1271 PRIVATE VIOLINELEMENTARY LEVEL

Prerequisite: None
Fees: Laboratory
Beginning one-on-one instruction in the technique of playing the violin. This will include, but not be limited to, proper positioning of instrument and bow, fingering, intonation, and music reading skills.

VIOL 1272 PRIVATE VIOLIN INTERMEDIATE LEVEL
Prerequisite: VIOL 1271, or permission of instructor.
Fees: Laboratory
A continuation of VIOL 1271 at a more advanced level. The course will develop physical playing skills and reading on the violin.

## MUSIC - PRIVATE VIOLA

VOLA1271 PRIVATE VIOLAELEMENTARY LEVEL
Prerequisite: None
Fees: Laboratory
Beginning one-on-one instruction in the technique of playing the viola. This will include, but not be limited to, proper positioning of instrument and bow, fingering, intonation, and music reading skills.

## VOLA 1272 PRIVATE VIOLAINTERMEDIATE LEVEL

Prerequisite: VOLA 1271, or permission of instructor.
Fees: Laboratory
A continuation of VOLA 1271 at a more advanced level. The course will develop physical playing skills and reading on the viola.

## NURSING EDUCATION <br> (VOCATIONAL NURSING PROGRAM)

Students transferring to the St. Philip's Vocational Program from other institutions may be awarded credit for courses taken at the previous institution. It is always in the best interest of previously enrolled students to meet with the Program Director two months before the beginning of a term for a full review of his or her educational transcript.

VNSG 1136 MENTAL HEALTH
Prerequisite: VNSG 1227, 1304, 1323, 1420, 1260, and 1502
Co-requisite: None
No Fees for computer
Introduction to the principles and theories of positive mental health and human behaviors. Topics include emotional responses, coping mechanisms, and therapeutic communication skills.

## VNSG 1161 CLINICAL - PRACTICALNURSE (L.P.N. TRAINING)

Prerequisite: VNSG 1304, 1227, 1420, 1323, 1260, 1329, 1332, 1502, 2160, 2161, 2162 and 2331
Co-requisite: VNSG 1330
A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. Onsite clinical instruction, supervision, evaluation, and placement are the responsibility of the College faculty. Clinical experiences are unpaid external learning experiences.

## VNSG 1162 CLINICAL- PRACTICAL NURSE (L.P.N TRAINING)

(1-0-6)
Prerequisite: VNSG 1304, 1227, 1420, 1323, 1260, 1329, 1332, 1502, 2160, 2161, 2162, and 2331
Co-requisite: VNSG 1334
A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. Onsite clinical instruction, supervision, evaluation, and placement are the responsibility of the College faculty. Clinical experiences are unpaid external learning experiences.

VNSG 1163 CLINICAL - PRACTICALNURSE (L.P.N. TRAINING)

Prerequisite: VNSG 1304, 1227, 1420, 1502, 1260, and 1323
Co-requisite: VNSG 1238
A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. Onsite clinical instruction, supervision, evaluation, and placement are the responsibility of the College faculty. Clinical experiences are unpaid external learning experiences.

VNSG 1219 PROFESSIONAL DEVELOPMENT
(2-2-0)
Prerequisite: VNSG 1304, 1227, 1420, 1502, 1260, 1329, 1323, 1161, 1162, 2160, 1330, 1334, 1332, 2331, 2161 and 2162
Co-requisite: VNSG 2163
Study of the importance of professional growth. Topics include the role of the licensed vocational nurse in the multi-disciplinary health care team, professional organization, and continuing education. Objective review of the nursing process, management and coordination of safe effective care, patient physiology and psychological needs, and the maintenance and promotion of health.

## VNSG 1231 PHARMACOLOGY

Co-requisite: None
Dosage calculations. Fundamentals of medications and their diagnostics, therapeutic, and curative effects. Includes nursing interventions utilizing the nursing process.

VNSG 1238 MENTAL ILLNESS
Prerequisite: VNSG 1304, 1227, 1420, 1502, and 1260
Co-requisite: VNSG 1163
Fees: Computer Laboratory
Study of human behavior with emphasis on emotional and mental abnormalities and modes of treatment incorporating the nursing process.

## VNSG 1260 CLINICAL - PRACTICAL NURSE (L.P.N. TRAINING)

Co-requisite: VNSG 1502 and 1323
A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. Onsite clinical instruction, supervision, evaluation, and placement are the responsibility of the College faculty. Clinical experiences are unpaid external learning experiences.

VNSG 1304 FOUNDATIONS OF NURSING I
Co-requisite: None
Introduction to the nursing profession including history, standards of practice, legal and ethical issues, and role of the vocational nurse. Topics include mental health (stress adaptation), therapeutic communication, cultural/spiritual diversity, nursing process, holistic awareness, introduction to Gerontology and Nutrition/ Diet Therapy.

VNSG 1323 BASIC NURSING SKILLS
Co-requisite: VNSG 1502
Fees: Laboratory
Mastery of entry level nursing skills and competencies for a variety of health care settings. Utilization of the nursing process as the foundation for all nursing interventions.

VNSG 1329 MEDICAL SURGICAL NURSING I
Prerequisite: VNSG 1304, 1227, 1420, 1323, 1502, 1260
Co-requisite: VNSG 2160
Fees: Laboratory
Continuation of Medical Surgical Nursing with the study of nursing intervention through application of the nursing process for clients with medical surgical disorders related to the following systems: Cardiovascular, Respiratory, and Immune. Also included is an overview of patients with cancer, their treatment, and their care. The course will include anatomy and physiology review, medical and surgical treatment and the related nursing interventions, as well as the psychological approach in caring for these clients.

VNSG 1330 MATERNAL NEONATALNURSING
(3-3-0)
Prerequisite: VNSG 1304, 1227, 1420, 1502, 1323, 1260, 1329, 2160, 1332, 2161, 2331, and 2162
Co-requisite: VNSG 1161
Fees: Computer Laboratory
Utilization of the nursing process in the assessment and management of the childbearing family. Emphasis is on the bio-psycho-socio-cultural needs of the family during the phases of pregnancy, childbirth, and the neonatal period including abnormal conditions. Topics include physiological changes related to pregnancy, fetal development, and nursing care of the family during labor and delivery and the puerperium.

VNSG 1332 MEDICAL SURGICAL NURSING II
Prerequisite: VNSG 1304, 1227, 1420, 1323, 1260, 1502, Co-requisite: VNSG 2160
Fees: Computer Laboratory
Continuation of Medical Surgical Nursing with the study of nursing intervention through application of the nursing process for clients with medical surgical disorders
related to the following systems: Genitourinary, Musculoskeletal, Neurovascular, Sensory, and Integumentary systems. The course will include anatomy and physiology review, medical and surgical treatment and the related nursing interventions, as well as the psychological approach in caring for theses clients.

## VNSG 1334 PEDIATRIC NURSING

(3-3-0)
Prerequisite: VNSG 1304, 1227, 1420, 1323, 1502, 1329, 2160, 1332, 2161, 2331, 1260, and 2162
Co-requisite: VNSG 1162
Fees: Computer Laboratory
The study of childhood diseases and childcare from infancy through adolescence. Focus is on care of the well and ill child utilizing the nursing process.

## VNSG 1420 ANATOMY \& PHYSIOLOGY FOR ALLIED HLTH (4-4-0)

Co-requisite: None
This course introduces the Normal Structure and Function of the body including an understanding of the relationship of the body systems in maintaining homeostasis.

## VNSG 1502 APPLIED NURSING SKILLS

(5-5-1)
Co-requisite: VNSG 1260 and 1323
Fees: Computer Laboratory
In accordance with the Nursing Process and by utilizing related scientific principles, this course offers, in a simple to complex format, information concerning the application of primary nursing skills.

## VNSG 2160 CLINICAL- PRACTICAL NURSE (L.P.N. TRAINING)

Prerequisite: VNSG 1304, 1227, 1420, 1323, 1502, 1260
Co-requisite: VNSG 1329
A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. Onsite clinical instruction, supervision, evaluation, and placement are the responsibility of the College faculty. Clinical experiences are unpaid external learning experiences.

## VNSG 2161 CLINICAL- PRACTICAL NURSE (L.P.N. TRAINING)

Prerequisite: VNSG 1304, 1227, 1420, 1323, 1260, 1502
Co-requisite: VNSG 1332
A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. Onsite clinical instruction, supervision, evaluation, and placement are the responsibility of the College faculty. Clinical experiences are unpaid external learning experiences.

## VNSG 2162 CLINICAL - PRACTICAL NURSE (L.P.N. TRAINING)

Prerequisite: VNSG 1304, 1227, 1420, 1260, 1502, and 1323
Co-requisite: VNSG 2331
A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement are the responsibility of the College faculty. Clinical experiences are unpaid external learning experiences.

## VNSG 2163 CLINICAL- PRACTICALNURSE (L.P.N. TRAINING)

(1-0-4)
Prerequisite: VNSG 1304, 1227, 1420, 1323, 1502, 1260, 1329, 1330, 1334, 1161, 1162, 2160, 1332, 2161, 2331, and 2162
Co-requisite: VNSG 1219
Professional Development is a study of the importance of professional growth. Clinical experience shall include administration of team medications, and patient management skills to assist the graduate to practice within the scope of the vocational nurse. The student will be provided the opportunity to develop the knowledge and organization skills necessary to function as an entry-level vocational nurse in the health care setting and as a member of the multi-disciplinary health care team.

VNSG 2331 ADVANCED NURSING SKILLS
Prerequisite: VNSG 1304, 1227, 1420, 1323, 1260, and 1502
Co-requisite: VNSG 2162
Fees: Computer Laboratory
Continuation of Medical Surgical Nursing with the study of nursing intervention through application of the nursing process for clients with medical surgical disorders related to the following systems: Gastrointestinal, Endocrine and Male and Female Reproductive Systems to include Sexually Transmitted Diseases. The course will include anatomy and physiology review, medical and surgical treatment and the related nursing interventions, as well as the psychological approach in caring for these clients.

## HOME BUILDING

## WDWK 1413 CABINETMAKING I

Prerequisite: None
Fees: Laboratory
Includes the design and construction of base cabinets and wall cabinets for kitchens and bathrooms. Emphasis on the safe use of portable and stationary power tools

## WDWK 2451 CABINETMAKING II

Prerequisite: WDWK 1413
Fees: Laboratory
Advanced skills in machine woodworking and hand craftsmanship. Emphasizes advanced design and door and drawer construction, laminate laying.

## WELDING

PREREQUISITES: SEE PROGRAM ADVISOR FOR ALL PREREQUISITES.

## WLDG 1200 INTRODUCTION TO WELDING

Fees: Laboratory
Equipment used in oxy-fuel and arc welding. Includes cutting of ferrous metals. Emphasizes welding and cutting safety and basic welding process.

## WLDG 1221 INTRODUCTION TO WELDING FUNDAMENTALS (2-3-1)

An introduction to the fundamentals of equipment used in oxy-fuel and arc welding, including welding and cutting safety, basic oxy-fuel welding and cutting, basic arc welding processes and basic metallurgy.

## WLDG 1225 INTRODUCTION TO OXY-FUEL WELDINGAND CUTTING <br> (2-3-1)

An introduction to oxy-fuel welding and cutting, safety, setup and maintenance of oxy-fuel welding, and cutting equipment and supplies.

## WLDG 1230 INTRODUCTION TO GAS METAL ARC WELDING (2-3-1)

Fees: Laboratory
A study of industrial blueprints. Emphasis placed on terminology, symbols, graphic description, and welding processes, including systems of measurement and industry standards. Students will learn to interpret of plans and drawings used by industry.

## WLDG 1234 INTRODUCTION TO GAS TUNGSTENARC WELDING (GTAW)

An introduction to the principles of gas tungsten arc tungsten arc welding (GTAW), setup/use of GTAW equipment, and safe use of tools and equipment. Welding instruction in various positions on joint designs.

## WLDG 1413 INTRO TO BLUEPRINT READING FOR WELDERS (4-2-6)

## Fees: Laboratory

A study of industrial blueprints. Emphasis placed on terminology, symbols, graphic description, and welding processes, including systems of measurement and industry standards. Students will learn to interpret of plans and drawings used by industry.

## WLDG 1417 INTRO TO LAYOUT AND FABRICATION

Fees: Laboratory
A fundamental course in layout and fabrication related to the welding industry.
Major emphasis on structural shapes and use in construction.

## WLDG 1421 INTRO TO WELDING FUNDAMENTALS

## Fees: Laboratory

COURSE FOR NON-WELDING MAJORS ONLY.
An introduction to the fundamentals of equipment used in oxyacetylene and arc welding, including welding and cutting safety, basic oxyacetylene welding and cutting, basic arc welding processes, and basic metallurgy.

## WLDG 1428 INTRO TO SHIELDED METALARC WELDING

Fees: Laboratory
An introduction to shielded metal arc welding process. Emphasis placed on power sources, electrode selection, oxy-fuel cutting, and various joint designs. Instruction provided in SMAW fillet welds in various positions.

## WLDG 1430 INTRO TO GAS METALARC WELDING

Fees: Laboratory
A study of the principles of gas metal arc welding, setup and use of GMAW equipment, and safe use of tools/equipment. Instruction in various joint designs.

## WLDG 1534 INTRO TO GAS TUNGSTEN ARC WELDING

Fees: Laboratory
An introduction to the principles of gas tungsten arc welding (GTAW), setup/ use of GTAW equipment, and safe use of tools and equipment. Welding instruction in various positions on joint designs.

## WLDG 2435 ADVANCED LAYOUT AND FABRICATION

Fees: Laboratory
A continuation of the Intermediate Layout and Fabrication course which covers
production and fabrication layout tools and processes. Emphasis on application of fabrication and layout skills.

## WLDG 2439 ADVANCED OXY-FUELWELDING \& CUTTING

Fees: Laboratory
A study of all position welding on ferrous and nonferrous metals using oxyacetylene welding process, including welding and cutting, brazing, and soldering operations.

## WLDG 2447 ADVANCED GAS METALARC WELDING

Fees: Laboratory
Advanced topics in GMAW welding, including welding in various positions and directions.

## WLDG 2488 INTERNSHIP - WELDER/WELDING TECHNOLOGIST

Fees: Laboratory
An experience external to the College for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the College and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. This course may be repeated if topics and learning outcomes vary. See description under Practicums.

## WLDG 2543 ADVANCED SHIELDED METALARC WELDING

Fees: Laboratory
Advanced topics based on accepted welding codes. Training provided with various electrodes in shielded metal arc welding processes with open V-groove joints in all positions.

## WLDG 2551 ADVANCED GAS TUNGSTEN ARC WELDING

(5-3-6)

## Fees: Laboratory

Advanced topics in GTAW welding, including welding in various positions and directions.

## WLDG 2553 ADVANCED PIPE WELDING

Fees: Laboratory
Advanced topics involving welding of pipe using the shielded metal arc welding process. Topics include electrode selection, equipment setup, and safe shop practices. Emphasis on weld positions 5 G and 6 G using various electrodes.


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## APPLIED SCIENCE AND TECHNOLOGY



APPLIED SCIENCE AND TECHNOLOGY AT SOUTHWEST CAMPUS

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## A

A+ CERTIFICATION PREPARATION 206
A+ CERTIFICATION PREPARATION
(CC) 158

ACADEMIC CERTIFICATE OF COMPLETION 104
ACADEMIC STANDARDS 86
ACADEMICAND
PREPROFESSIONAL
CURRICULA 108
ACADEMICCALENDAR 5
ACADEMIC FRESH START 24
ACCD STUDENT LEADERSHIP
INSTITUTE 62
ACCOUNTING 260
ACCOUNTING INFORMATION
SYSTEMS 112, 261, 283
ACCOUNTING TECHNICIAN
(AAS) 112
ACCREDITATION: 438
Administration, Faculty, \& Staff 454
ADMINISTRATIVE COMPUTER
TECHNOLOGY 114
ADMINISTRATIVE ASSISTANT
(AAS) 114
ADMINISTRATIVE COMPUTER
TECHNOLOGY 364
ADMISSION OF INTERNATIONAL
STUDENTS 28
ADMISSIONAND
REGISTRATION 19
ADMISSIONAPPEAL
PROCEDURE 30
ADMISSION OF NEW
STUDENTS 19

ADMISSION OF NONTRADITIONAL HIGH SCHOOL STUDENTS 22
ADMISSION OF NURSING STUDENTS TOADN MOBILITY PROG 27
ADMISSION OF TRANSFER STUDENTS 20
ADMISSION TO ALLIED HEALTH 24
ADMISSION TO SUMMER SCHOOL 24
ADMISSION TO VOCATIONAL NURSINGPROGRAM 25
ADVANCEDCISCO CERTIFICATE 160
ADVANCED PLACEMENT GUIDELINES 40
ADVANCED STANDINGCREDIT 40
ADVISINGAND ASSESSMENT
CENTER 69
ADVISORY COMMITTEES 109
AIR CONDITIONING 333
AIR CONDITIONING AND HEATING (AAS) 121
AIR CONDITIONINGAND HEATING (CC) 122

AIRCRAFT TECHNOLOGY 124
AIRCRAFT MECHANIC
AIRFRAME 127
AIRCRAFTMECHANIC POWERPLANT(CC) 126
AIRCRAFT STRUCTURES MECHANIC(CC) 127
AIRCRAFT TECHNICIAN AIRFRAME (AAS) 125

AIRCRAFT TECHNICIAN POWERPLANT(AAS) 124
AIRCRAFTTECHNOLOGY 262, 276
AIRCRAFT TURBINES MECHANIC (CC) 128

ALAMOCOMMUNITY COLLEGE DISTRICTTUITIONAND FEES 48
ALLIED CONSTRUCTION TRADES 109
ALLIED HEALTH PROGRAMS 129
ALLIEDCONSTRUCTION TRADES PROGRAMS 109
ALLIEDHEALTH 129
ALLIEDHEALTHTRANSFER DEGREE(AS) 131
APPLICATION FOR GRADUATION 95
APPLIED SCIENCEAND TECHNOLOGY 108
APPLIED SCIENCESAND TECHNOLOGY (ASB) Building 14
ARCHITECTURALDRAFTING (MSC) 173
ARCHITECTURAL DRAFTING3D (ESC) 173
ART 132, 267
ART 2D (AA) 132
ART 3D (AA) 133
ARTS AND SCIENCES 107
ASSOCIATEDEGREES 97
ATTENDANCE 88
AUTOMOTIVE TECHNOLOGY 140
AUTOMOTIVE TECHNOLOGY 271
AUTOMOTIVEBODY
REPAIRER 138
AUTOMOTIVEBODY
REPAIRER(Collision Technology \& Ve 257
AUTOMOTIVE TECHNOLOGY
(AAS) 140
AUTOMOTIVE TECHNOLOGY
(CC) 141

AVIONICS 128

## B

BAKINGAND PASTRY ARTS
(AAS) 146
BAKINGPRINCIPLES (CC) 147
BEGINNINGACCOUNTING
TECHNICIAN 114
BIOLOGY 148, 278
BIOMEDICAL EQUIPMENT TECHNOLOGY PROGRAM 148
BIOMEDICAL EQUIPMENT
TECHNOLOGY (AAS) 149
BOWDEN BUILDING(BOWD) 14
BRAKEANDFRONT END
SPECIALIST - OPTION I
(CC) 143

BUILDING TRADES(CC) 195
BUSINESS ADMINISTRATION 151
BUSINESS MANAGEMENT 153
BUSINESSADMINISTRATION 284
BUSINESSADMINISTRATION (AA) 151
BUSINESS INFORMATION SOLUTIONS 152
BUSINESS
MANAGEMENT 282, 283

## C

CAMPUSCENTER(CC) 14
CAMPUS PARKING
REGULATIONS 77
CHEMISTRY 156, 291
CHEMISTRY(AS) 156
CHILD DEVELOPMENTASSOCIATE NATIONALCREDENTIAL (C 177
CHILDDEVELOPMENT
CENTER 14, 73
CISCO SYSTEMSNETWORKING (2656) 160

CLASSIFICATION OF
STUDENTS 36
CNCMANUFACTURING
TECHNICIAN (AAS) 212

CNC OPERATOR (CC) 213
CNCTOOLOPERATOR (CC) 214
CODING SPECIALIST(CC) 190
COLLEGEHEALTHSERVICES 75
COLLEGELOCATION 14
COLLISION/REFINISHING
TECHNICIAN (AAS) 138
COMIC BOOK (AA) 135
COMMUNICATIONS EQUIPMENT TECHNOLOGY 295
COMPUTED TOMOGRAPHY 242
COMPUTED TOMOGRAPHY
(Enhanced Skills) 299
COMPUTER MAINTENANCE TECHNOLOGY 157, 159
COMPUTER SCIENCE 161
COMPUTERAIDED DRAFTING
COMPUTERAIDED DRAFTING (ARCHITECTURAL) (AAS) 171
COMPUTERAIDEDDRAFTING TECHNICIAN (ARCHITECTURAL) 172
COMPUTER MAINTENANCE TECHNOLOGY (AAS) 157
COMPUTER MAINTENANCE TECHNOLOGY
(See: Electronics 295
COMPUTER SCIENCE 296
COMPUTER SCIENCE (AA) 161
COMPUTER SUPPORT SPECIALIST (CC) 203

COMPUTERIZEDACCOUNTING ADMINISTRATOR (CC) 113
CONCURRENTENROLLMENT 40
CONDITIONALADMISSION 21
CONSTRUCTION PROJECT
MANAGEMENT (AAS) 154
CONTINUEDPROGRESS
PROBATION 87
CONTINUED SCHOLASTIC PROBATION 87
CONTINUING EDUCATION
WORKFORCE
DEVELOPMENT, 33

CONTINUINGEDUCATION BUILDING(CEB) 14
COOPERATIVE EDUCATION 66
CORE COMPONENT COURSE SELECTIONHOURS 108
CORECURRICULUM 107
COUNSELING 68
COURSEDESCRIPTION
SECTIONS 256
COURSENUMBERINGSYSTEM 19
CREDIT BY NON-TRADITIONAL METHODS 41
CREDIT BY THE TEXAS HIGHER EDUCATION
COORDINATING 42
CREDIT TRANSFERABILITY 37
171 CRIMINAL JUSTICE 162
CRIMINAL JUSTICE (AA) 162
CRIMINALJUSTICE 298
CRITERIAFOR DETERMINING AWARDAMOUNTS 59
CULINARYARTS 289
CULINARYARTS (AAS) 163
CULINARYSTUDIES(CC) 164

## D

DANCE 299
DANCE CLASSES 165
DATAENTRY SPECIALIST 120
DEPARTMENT OFNURSING EDUCATION 223
DESIGN(AA) 136
DESKTOP SUPPORT SPECIALIST (AAS) 201
DIAGNOSTICMEDICAL SONOGRAPHY 242, 306
DIAGNOSTICMEDICAL SONOGRAPHY (AAS) 241
DIESEL BRAKE AND FRONT END SPECIALIST(CC) 170
DIESEL TRANSMISSION SPECIALIST(CC) 169

DIESELCONSTRUCTION
EQUIPMENT TECHNICIAN (AAS) 168
DIESEL TECHNOLOGY 166
DIESEL/HEAVYEQUIPMENT
TECHNOLOGY 336
DIESEL/HEAVYEQUIPMENT
TECHNOLOGY(AAS) 167
DIESEL/HEAVYEQUIPMENT
TECHNOLOGY (CC) 169
DIETARYMANAGER 306
DIGITAL PHOTOGRAPHY (AA) 137
DISCIPLINE 92
DISTANCELEARNING 35
DOCUMENTATIONCODING
SPECIALIST (CC) 191
DRAFTING 171, 267, 303
DRAMA 310
DROPS AND WITHDRAWALS 90

## E

E-BUSINESS(AAS) 153
E.L.TURBON STUDENT CENTER (TURB) 15
E.L. TURBONSTUDENT

CENTER 74
EARLYADMISSION 21
EARLYCHILDDEVELOPMENT 442
EARLYCHILDHOOD
STUDIES 176, 284
EARLYCHILDHOOD STUDIES (AAS) 174
ECONOMICS 312
ECONOMICS (AA) 178
EDUCATION 312
EDUCATIONAL SUPPORT SERVICES 78
ELECTRICAL TRADES (AAS) 180
ELECTRICAL TRADES (CC) 181
ELECTRICIAN 180
ELECTRONICSYSTEMS
TECHNOLOGY 281, 288, 297, 313
ELECTRONICSASSISTANT
(CC) 158

ELIGIBILITY FOR PUBLIC PARTICIPATIONAND SCHOOL RE 92
EMERGENCY TELEPHONE NUMBER 76
ENFORCED SCHOLASTIC
WITHDRAWAL 87
ENGLISH 317
ENGLISH(AA) 182
ENGLISHASASECONDLANGUAGE (ESL)PROGRAM 71
ENGLISHFOR SPEAKERS OF OTHER LANGUAGES (English a 321
ENTREPRENEURSHIP(CC) 155
ENVIRONMENTAL SCIENCE (AS) 184
EVALUATIONOF COLLEGE TRANSCRIPTS 40
EVALUATION OF FOREIGN CREDENTIALS 30
EVENINGPROGRAMS 34
EXAMINATIONS 89
EXTENDED SERVICES-OFF
CAMPUS PROGRAMS 34

## F

FACILITIES BUILDING 15
FEDERAL GRANTS 63
FEESFOREACHSEMESTER 49
FINANCIALAID APPEAL 58
FINANCIALAIDELIGIBILITY 66
FOOD \& NUTRITION SCIENCES 327
FORD MAINTENANCE AND LIGHTDUTY REPAIR (CC) 144
FOREIGNLANGUAGES (SPANISH) (AA) 248
FRENCH 328

## G

G. J. SUTTON LEARNING RESOURCESCENTER(SLC) 15
GE.D.PREPARATORY
PROGRAM 70

GENERALINFORMATION 10
GENERAL Medical TranscriptionisT (CC) 220

GENERALMOTORSAUTOMOTIVE SERVICE EDUCATIONAL PROG 145
GEOGRAPHY 329, 340
GEOLOGY 329
GERMAN 330
GLOBAL/INTERNATIONALSTUDIES
CONCENTRATION 111
GOVERNMENT 330
GOVERNMENT(AA) 185
GRADE POINTAVERAGE 89
GRADINGSYSTEMAND REPORTS 90
GRADUATE GUARANTEE 105
GRADUATIONREQUIREMENTS 95

## H

HAZLEWOOD ACT 54
HEALTHANDFITNESS CENTER (HFC) 15
HEALTH INFORMATION SPECIALIST(CC) 190
HEALTH INFORMATION SYSTEMS
(MEDICAL
TRANSCRIPTION) 380
HEALTH INFORMATION
SYSTEMS(ALLIED HEALTH
FOUNDATIO 344
HEALTH INFORMATION
SYSTEMS(health information
te 338
HEALTH INFORMATION
TECHNOLOGY(AAS) 189
HEALTH INFORMATION
TECHNOLOGY/
TECHNICIAN 187
HEATINGAND AIR CONDITIONING
SPECIALIST-OPTIONI 143
HIGH SCHOOL TRANSITION
PROGRAMS 31

HISTOLOGIC
TECHNICIAN 193, 341
HISTOLOGIC TECHNICIAN (CC) 193

HISTORICAL SKETCH 13
HISTORY 336
HISTORY (AA) 192
HOME BUILDING 194
HOMEBUILDING 195, 294, 450
HOMEBUILDING TECHNOLOGY 194
HONOR GRADUATES 96
HONOR ROLL 92
HOSPITALITY EVENT MANAGEMENT (AAS) 196
HOTELLIMITED SERVICE PROPERTY MANAGEMENT (CC) 198

HOTEL MANAGEMENT 331
HOTEL MANAGEMENT (AAS) 197
HUMANITIES (AA) 199

## I

IDENTIFICATION CARD (PHOTO
ID) 19
INDUSTRAIL MAINTENANCE
MANAGEMENT (AAS) 155
INDUSTRIALMANUFACTURING
TECHNOLOGY 348
INFORMATION
TECHNOLOGY 199, 200
INFORMATION
TECHNOLOGY 346, 350
INSTALLMENT PAYMENT PLAN 47
INSTRUCTIONAL TECHNOLOGY 81
INTEGRATEDARTS (AA) 134
INTERDISCIPLINARY STUDIES 345
INTRODUCTION TO MICROSOFT
OFFICE SPECIALIST 120

```
J
no entries
```


## K

```
KINESIOLOGY (AA) 209
KINESIOLOGY (PHYSICAL EDUCATION) 359
```


## L

```
LEARNINGRESOURCECENTER 71
LEGALADMINISTRATIVE ASSISTANT(AAS) 115
LEGAL WORDPROCESSING
SPECIALIST(CC) 116
LIBERALARTS (AA) 210
LOANS 64
LOCKERS 75
LONG TERMCARENURSINGHOME
ADMINISTRATOR (ATC) 211
LVN TOADNMOBILITY PROGRAM (AAS) 227
```


## M

MACHINIST/MACHINE
TECHNOLOGIST(CC) 214
MAGNETICRESONANCE
IMAGING 243
MAGNETIC RESONANCE IMAGING
(Enhanced Skills) 379
MANUAL/SEMI-MANUAL INERT
GAS WELDING GTAW/GMAW
WEL 255
MANUFACTURINGENGINEERING
TECHNOLOGY 212, 321, 372
MANUFACTURING OPERATIONS MAINTENANCEASSISTANT (CC 215, 216
MANUFACTURING TECHNOLOGY
ACADEMY 215, 300
MATHEMATICS 367
MATHEMATICS (AA) 217
MEDICALADMINISTRATIVE
ASSISTANT(AAS) 117

MEDICALLABORATORY 375
MEDICALLABORATORY
TECHNICIAN(AAS) 218
MEDICALOFFICEASSISTANT (CC) 118

MEDICAL TERMINOLOGY 375
MEDICAL TRANSCRIPTION 219
MICROSOFT OFFICE SPECIALIST (MOS)(CC) 119
MILITARY EDUCATION
PROGRAM 78
MILITARY SCIENCE 381
MILITARY SCIENCE (MS) Army
ROTC 83
MISSION OF ST. PHILIP'S
COLLEGE 11
MISSION OF THE ALAMO COMMUNITY COLLEGE DISTRICT 12
MULTI MODAL TRANSPORTATION
TECHNOLOGIES 109
MUSIC 391
MUSIC (AA) 221
MUSIC - PRIVATE BASS 277
MUSIC-PRIVATE BASSOON 277
MUSIC-PRIVATECELLO 288
MUSIC-PRIVATE CLARINET 293
MUSIC-PRIVATE FLUTE 328
MUSIC-PRIVATE GUITAR 402
MUSIC-PRIVATE HORN 343
MUSIC-PRIVATE OBOE 397
MUSIC-PRIVATE
PERCUSSION 400
MUSIC-PRIVATE PIANO 411
MUSIC-PRIVATE SAXOPHON 435
MUSIC - PRIVATE TROMBONE 443
MUSIC-PRIVATE TRUMPE 443
MUSIC-PRIVATE VIOLA 445
MUSIC-PRIVATE VIOLIN 445
MUSIC-PRIVATE VOICE 418
MUSICAPPLIED 381, 390

NETWORK MAINTENANCE SPECIALIZATION(AAS) 159

NETWORKADMINISTRATOR 202
NETWORKADMINISTRATOR (AAS) 200
NETWORK PROFESSIONAL (CC) 204

NETWORK PROFESSIONAL: NETWORK+(CC) 207, 208
NETWORK PROFESSIONAL: SERVER+(CC) 207
NETWORK SECRUITY ADMINISTRATOR (AAS) 202
NETWORK SYSTEMS TECHNICIAN (CC) 160

NON-CREDIT ORAUDIT
ADMISSION 24
NON-EMERGENCY NUMBER 76
NON-REFUNDABLEFEES 50
NORRIS TECHNICALCENTER BUILDING(NTB) 15
NORTHEAST CAMPUS (NECMP) 16
NURSINGEDUCATION 426
NURSING EDUCATION(Vocational Nursing Program) 445

## 0

OCCUPATIONALTHERAPY
ASSISTANT 397
OCCUPATIONALTHERAPY ASSISTANT(AAS) 229
OFFICEASSISTANT(CC) 118
OFFICE SYSTEMS TECHNOLOGY 397
OPENENTRY/OPENEXIT 34

## P

PASTRY COURSES 411
PAYROLLCLERK(CC) 113
PERFORMANCE SPECIALIST
(CC) 142

PERMANENTPROGRESS PROBATION 87
PHILOSOPHY 402
PHILOSOPHY (AA) 230

PHYSICALEDUCATION 403
PHYSICALPLANT 14
PHYSICAL THERAPIST
ASSISTANT 416
PHYSICAL THERAPistASSISTANT
(AAS) 231
PHYSICS 403
PLASTICS (CC) 215
PLUMBER'SHELPER(CC) 232
PLUMBING 401
PLUMBINGAND PIPEFITTING
TECHNOLOGY 232
PLUMBINGTRADES 232
PRACTICUMS 233
PRE-DENTISTRY(AS) 148
PRE-ENGINEERING(AA) 234
PRE-LAW (AA) 235
PRE-MEDICINE(AS) 148
PRE-NURSING(AS) 236
PRE-PHARMACY (AS) 237
PRE-SOCIAL WORK 437
PRE-SOCIAL WORK (AA) 238
PRECISION METAL WORKERS:
MANUFACTURING
OPERATIONS 213, 214
PRECISION METAL WORKERS: MANUFACTURING SKILLS
TRAD 216
PREREQUISITECOURSES 92
PRIVATE INSTRUCTION IN
MUSIC 411
PROGRESS PROBATION 87
PROJECT TEAMLEADER 156
PSYCHOLOGY 413
PSYCHOLOGY(AA) 239
PUBLIC SAFETY (CAMPUS
POLICE) 15
PUBLIC SAFETYAND POLICE
SERVICES 76

## Q

no entries

## R

RADIOGRAPHY -DIAGNOSTIC
MEDICALIMAGING 240
RADIOGRAPHY TECHNOLOGIST
(AAS) 240
RADIOGRAPHY TECHNOLOGY 419
RAILROAD OPERATIONS (CC) 243
RAILROAD OPERATIONS 422
RAILROAD OPERATIONS -
MECHANICAL(CC) 244
RE-ENROLLMENTELIGIBILITY 88
READING 424
READMISSION TO CLASS 89
READMISSION TO COLLEGE 23
REFINISHING TECHNOLOGY
(CC) 139

REFRIGERATION(CC) 123
REFRIGERATIONTECHNOLOGY
(AAS) 122
REFUND OF TUITION 47
REGULATIONS SECTION 87
REPAIR AND MANUFACTURING
TECHNOLOGY
PROGRAMS 110
REPETITION OF COURSES 91
REQUIREMENTSFOR2+2/
ASSOCIATE DEGREE 104
RESIDENCE VERIFICATION 45
RESIDENCE VERIFICATIONOF
INTERNATIONAL
STUDENTS 46
RESPIRATORYCARE TECHNOLOGY
(AAS) 245
RESPIRATORYCARE
TECHNOLOGY 431
RESTAURANT
MANAGEMENT 433
RESTAURANTMANAGEMENT
(AAS) 246
REVERSETRANSFERDEGREE 105
ROOMANDBOARD 73

## S

SATISFACTORYACADEMIC
PROGRESSPOLICY 57
SCHOLARSHIPS 59
SCIENCEBUILDING(SCI) 15
SENIOR CITIZENS 55
SERVICE-LEARNINGAT ST. PHILIP'S
COLLEGE 74
SOCIOLOGY 436
SOCIOLOGY(AA) 247
SOUTHWEST CAMPUS (SWC) 16
SOUTHWEST CAMPUS LEARNING
RESOURCECENTER 73
SPANISH 248, 438
SPECIALTYMEDICAL TRANSCRIPTIONIST(CC) 220
SPEECH 438
SPEECH(AA) 249
STAGE PRODUCTIONAND
TECHNOLOGY(AA) 252
STATE GRANTS 63
STRUCTURAL/PIPE LAYOUT (CC) 255

STUDENTDEVELOPMENT/
ORIENTATION 436
STUDENT FINANCIAL SERVICES 57, 58
STUDENTINFORMATION RELEASE POLICY 57
STUDENT INSURANCE 76
STUDENTLIFE 74
STUDENTLOAD 36
STUDENTOBLIGATIONS 86
STUDENT PERMANENT RECORDS 92
STUDENTPUBLICATIONS 75
STUDENTS SERVICESAND ACTIVITIES 56
SUBSTANCEABUSE PREVENTION 93
SURGICAL TECHNOLOGIST 440
SURGICAL TECHNOLOGY (CC) 250
SUSPENSION STATUS 58

```
T
TABLE OF CONTENTS 439
TEACHER EDUCATION(AA) 110, 179
TEXAS SUCCESS INITIATIVE (TSI) 18,110
THEATRE(AA) }25
THEATRE (SEE DRAMA) }44
TOOLREQUIREMENTSFOR STUDENTS 110
TOURISM, HOSPITALITY, AND CULINARY ARTS }25
TOURISMMANAGEMENT 443
TRANSCRIPT OF RECORD }1
TRANSFER CENTER }6
TRANSFER OF LOWER DIVISION COURSECREDIT }3
TRANSMISSION SPECIALIST - OPTION I(CC) }14
TUITIONAND FEES 48
TUITION REBATE POLICY 52
TUITION REIMBURSEMENT 46
```


## U

```
no entries
```


## X

```
no entries
```

```
v
```

v
VEHICLEINTERIORS 139
VEHICLEINTERIORS 139
VETERANS UNDERFEDERALPROGRAMS 52
VETERANS UNDERFEDERALPROGRAMS 52
VOCATIONALNURSING(CC) }22
VOCATIONALNURSING(CC) }22
VOCATIONALREHABILITATION 55
VOCATIONALREHABILITATION 55
W
W
WATSON FINEARTS CENTER(WFAC) }1
WATSON FINEARTS CENTER(WFAC) }1
WEB DEVELOPER(AAS) }20
WEB DEVELOPER(AAS) }20
WEB DEVELOPER(CC) }20
WEB DEVELOPER(CC) }20
WELDER/WELDINGTECHNOLOGIST(AAS) }25
WELDER/WELDINGTECHNOLOGIST(AAS) }25
WELDING 451
WELDING 451
WORKEXPERIENCECREDIT 42

```
WORKEXPERIENCECREDIT 42
```

496 St. Philip's College 2006-2008 Catalog

## Y

no entries

## Z

no entries



Adapted by David Gonzales from an original drawing by Jose Z. Gonzalez

NOTES


[^0]:    *Tentative--dates are subject to change.

[^1]:    *Tentative--dates are subject to change.

[^2]:    (1) Select one course: ARTS 1300-1311, DRAM 1310-1351, ENGL 1302-2399, HIST 2311, 2312, HUMA 1301, 1302, MUSI 1306-1310, PHIL 1301-2371, SPCH 1311, 1321
    (2) Select one course: MATH 1314, 1332, 1373, 1374, 1442, , 2412, 2413, 2414, 2415
    (3) Select one course: PSYC 2301, 2315
    *Prerequisite(s): Students with fewer than 25 wpm must take POFT 1329.

[^3]:    Semester 1
    POFI 1191 Special Topics: Info Processing/Data Entry
    $\qquad$
    POFT 1301 Business English -----------------------------------------------3
    POFT 1313 Prof. Development for Office Personnel----------- 3
    *ITSW 1301 Introduction to Word Processing ----------------------- 3

[^4]:    *This program was designated as Exemplary by the Texas Higher Education Coordinating Board

[^5]:    *General Academic Core Requirement for the Associate of Applied Science Degree; Section 7 of the college catalog. Any other substitutions must be approved prior to enrollment by a department advisor. Students wishing to transfer academic credits to other institutions or students transferring credits to St. Philip's College must also see a department advisor.

[^6]:    TOTAL CREDIT HOURS:
    49

[^7]:    First Semester
    RADR 2340 Sectional Anatomy for Medical Imaging ------------ 3
    CTMT 2332 Principles of Computed Tomography ----------------- 3
    Second Semester
    CTMT 2360 Clinical I - Computed Tomography ----------------------- 3
    Third Semester
    CTMT 2361 Clinical II - Computed Tomography --------------------3
    TOTAL CREDIT HOURS: --------------------------------------------------12

