#### 2018 Sullivan University Catalog Addendum/Errata

#### Supplement A Change – effective February 15, 2018

All ACTIVE military students will receive the reduced tuition rate of \$165 per credit hour for all SUS programs **except** Physician Assistant, PharmD and PhD in Management.

#### Supplement A Change – effective November 26, 2018

Additional TEAS Test Attempt (after 1st) \$55

**Correction (Omitted from most recent Supplement A)** 

Conflict Management Assessment Fee- \$55

#### p. 3 – Edit to Mission Statement – Effective June 1, 2018

Career Services specialists to assist graduates with their job search at graduation and thereafter as requested. throughout the graduates' career.

#### p. 4 – Updated ACPE Statement

Sullivan University's Doctor of Pharmacy program is accredited by the Accreditation Council for Pharmacy Education (ACPE), 135 190 S. LaSalle Street, Suite 4100 2850, Chicago, IL 60603-4810, 312/664-3575; FAX 312/664-4652, web site www.acpeaccredit.org

#### p. 4 – Edit to Pharmacy Technician program statement

The Pharmacy Technician training program conducted by Sullivan University is accredited by the American Society of Health-System Pharmacists/Accreditation Council for Pharmacy Education (ASHP/ACPE).

#### p. 4 – Updated ARC-PA Statement

The Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) has granted Accreditation-Continued status to the Sullivan University Physician Assistant Program sponsored by Sullivan University. Accreditation-Continued is an accreditation status granted when a currently accredited program is in compliance with the ARC-PA Standards. Accreditation remains in effect until the program closes or withdraws from the accreditation process or until accreditation is withdrawn for failure to comply with the Standards. The approximate date for the next validation review of the program by the ARC-PA will be March 2028. The review date is contingent upon continued compliance with the Accreditation Standards and ARC-PA policy.

#### p. 4 – Updated CCNE Statement – Address change

The baccalaureate degree in Nursing at Sullivan University is accredited by the Commission on Collegiate Nursing Education, One Dupont Circle, NW, Suite 530, Washington, DC 20036 655 K Street NW, Washington DC, 20001, 202-887-6791.

#### p. 4 – Updated KCPE Statement

Sullivan University is licensed to offer bachelor's, master's, and doctorate degrees by the Kentucky Council on Postsecondary Education in accordance with the provisions of KRS 164.945-164.992.

#### p. 4 – Additional Accreditations and Approvals effective 6/22//18

Sullivan University's Medical Assistant Diploma program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB).

The Surgical Technology program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), upon the recommendation of the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC-ST/SA).

Commission on Accreditation of Allied Health Education Programs 25400 U.S. Highway 19 North, Suite 158 | Clearwater, FL 33763 Telephone: (727) 210-2350

Sullivan University's Radiologic Technology A.S. program is accredited by the Joint Review Committee on Education in Radiologic Technology. Joint Review Committee on Education in Radiologic Technology 20 N. Wacker Drive, Suite 2850 | Chicago, IL 60606-3182 Telephone: (312) 704-5300

Sullivan University's Medical Laboratory Technician A.S. Program is accredited by the Accrediting Bureau of Health Education Schools (ABHES). Accrediting Bureau of Health Education Schools 7777 Leesburg Pike, Suite 314 N. | Falls Church, VA 22043 Telephone (703) 917-9503

Sullivan University's Practical Nursing Diploma program and Associate of Science (A.S.) Degree\* in Nursing program are approved by the Kentucky Board of Nursing.

\*See nursing addendum for more information

Sullivan University's Limited Medical Radiography Diploma program and Radiologic Technology Associate of Science (A.S.) Degree program are approved by the Kentucky Board of Medical Imaging and Radiation Therapy (KBMIRT).

Sullivan University's Massage Therapy program is approved by the Kentucky Board of Licensure for Massage Therapy.

Sullivan University's Massage Therapy diploma and associate degree programs are accredited by the Commission on Massage Therapy Accreditation.

Commission on Massage Therapy Accreditation (COMTA)

5335 Wisconsin Avenue NW, Suite 440 | Washington, DC 20015

Telephone: (202) 888-6790 | info@comta.org | www.comta.org

The Respiratory Therapy program at Sullivan University is accredited by the Commission on Accreditation for Respiratory Care (CoARC) – program #200581

Commission on Accreditation for Respiratory Care 1248 Harwood Road | Bedford, Texas 76021-4244

Telephone: (817)283-2835

The Heating, Ventilation, Air-Conditioning and Refrigeration program at Sullivan University is accredited by HVAC Excellence.

The Bachelor of Arts Degree in Interior Design is accredited by the Council for Interior Design Accreditation, accredit-id.org, 206 Grandville Avenue, Suite 350, Grand Rapids, MI, 49503-4014.

#### p. 9 - Edit to "Application Procedure" section

bullet point 4, sentence 6 (regarding waiving entrance evaluation requirement) - This policy does not apply to Paralegal, Medical Coding, Health Information Management, Medical Assisting or the Pharmacy Technician programs.

#### p. 11 – Addition to "Non-Degree Seeking Students" Section

Note: Courses with the prefixes BFS and PBA, as well as CAM 252, CAM 256, and CAM 260 may not be taken by non-degree seeking students.

#### p. 13-14 – Updated Request for Accommodation Section

Sullivan University supports the tenets and the spirit of the Americans with Disabilities Act of 1990 (ADA) and Section 504 of the Rehabilitation Act of 1973. To properly support those with disabilities and for responding to requests for disability-related accommodations, Sullivan University has identified and designated administrative professionals at each location who can assist with disability-related need(s).

Undergraduate and graduate students with learning or psychological disabilities should contact the ADA Coordinator at their campus or location. Students enrolled in the College of Pharmacy should contact the Assistant Dean for Student Affairs at the College of Pharmacy.

All students who have a mobility-related, physical or other need for accommodation should contact the Dean or Director responsible for physical accommodations at their campus or location. If a student needs special assistance in the case the building must be evacuated, the student must make an appointment with their Dean or Director responsible physical accommodations no later than the first week of each quarter to coordinate accommodations.

Sullivan University will not inquire as to whether a student or applicant (hereinafter referred to as "student") presently has a disability or if he/she has had one in the past. While an informational brochure or self-disclosure form may be provided to a student at any point, the decision to disclose a disability or, to not disclose a disability, is entirely up to the student. If a student chooses not to disclose his/her disability initially, he/she may later do so if desired. However, disclosure of a disability does not create an obligation for the university or instructor to re-test and/or re-grade any coursework, tests, etc. completed prior to the disclosure and verification process.

Students who come to Sullivan University who may have had an IEP (Individualized Education Plan) at any time throughout their K-12 education should understand that colleges and universities do not follow the same provisions of an IEP unless otherwise verified and affirmed through a separate verification process that is age and level-appropriate. Since IEPs are written specifically for students in K-12 environments, an IEP is not sufficient documentation to determine appropriate and reasonable accommodations at Sullivan University. To request accommodations at Sullivan University, the student must submit a Sullivan University Disability Verification Form, completed by an appropriately licensed professional along with any required information and supporting documentation.

Sullivan University will make a good faith effort to reasonably modify policies, practices, and procedures to ensure they do not discriminate against individuals with disabilities. Sullivan University cannot alter the standards of practice required by the program and industry. The University is not required under the law to provide modifications that would fundamentally alter the nature of a service, program, or activity.

The Verification Process and procedure for students to request disability-related accommodations is as follows:

- 1. The disability must be disclosed to the appropriate University official by using the Sullivan University Disability Self-Disclosure Form.
- 2. After a student discloses his/her disability, a Verification of Disability Form will be provided and is to be completed by an appropriately licensed professional. That completed form and all supporting documentation must be returned to the appropriate University official for further consideration.
- 3. The University official will normally, upon receipt, review the documentation within 3-5 business days and determine the following:
  - a. Does the condition rise to the level of a disability as defined by Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act?
  - b. What are the functional limitations of the disability in an educational setting?
  - c. What, if any, accommodations are reasonable and appropriate for the student?
- 4. After the student confirms delivery or personally provides delivery of the documentation to the University official, the student should confirm with the official that the documentation is sufficient. If it is not, the student will be informed that he/she is required to provide additional documentation.
- 5. If the documentation is sufficient, the student will meet (in person or virtually) with the administrator to develop a plan for accommodation. An Accommodation Agreement will be produced for the student that verifies the disability and describes the nature of each accommodation to be made.
- 6. The student then has the responsibility to deliver a copy of the Accommodation Agreement to his/her instructors and discuss, in confidence, the listed accommodation(s). If a student has difficulty receiving the accommodation(s) listed, the student should request assistance from the designated University official. If additional copies of the Accommodation Agreement are needed for subsequent terms, the student should contact the official with whom he/she originally worked.

Effort will be made by University officials to process requests and review material within a reasonable amount of time.

If you feel as though you have been discriminated against because of disability, please refer to the university's Grievance/Official Complaint Procedure. Or, you may contact the Office of Civil Rights (OCR) in the U.S. Department of Education. OCR is responsible for enforcing Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act.

#### Service and Emotional Support Animals

All students using Service Animals must request them using the Request for Accommodation process outlined above. An ID will be provided for the Service Animal. While Emotional Support Animals, which are different from Service Animals, are not allowed in the classroom, students who live in University housing may request approval to bring their Emotional Support Animal into University housing. For complete information on how to request approval for an Emotional Support Animal in University housing, please see the appropriate section of your campus or location's Housing Handbook. An I.D. will be provided for the service animal.

#### p. 15 – Edit to Review Privileges (Paragraph 1, Last sentences)

Courses no longer offered or whose context has changed substantially, as well as clinicals or practicums are excluded. Review privileges will be allowed for a class no longer offered at the original campus of record but is now offered with the equivalent content at another Sullivan University Campus location even if the class carries a different course code designation. For more information, contact the Academic Services Office.

#### p. 15 – Edit to Alumni Association

Graduates are encouraged to remain connected to Sullivan University by joining participating in the Alumni Association at <a href="https://alumni.sullivan.edu">https://alumni.sullivan.edu</a>. They have access to a wide variety of special services and offers designed specifically for them. Membership is FREE. , at no cost, for networking opportunities with other graduates, area employers and Sullivan University faculty and administrators. Graduates may stay in touch with their alma mater by updating alumni contact information at Alumni.sullivan.edu.

## p. 16 – 18 Edits to Financial Assistance Section (Effective July 20, 2018 this section should include the following information.)

#### Affording Sullivan University

Some students may believe they are not financially able to attend a college or university; however, almost everyone can afford Sullivan University. From this perspective, Sullivan approaches financing with the expectation that there is a way if a student really wants an education.

For this reason, Sullivan has an Office of Financial Planning with a staff that is thoroughly knowledgeable about today's student aid programs, private loan plans, scholarships and grants. In addition, the staff is current with all educational programs for veterans, as well as national, state and local vocational rehabilitation programs.

The Financial Planning staff will offer support and find ways to help obtain the financial assistance necessary to complete a university education. Students who wish to obtain financial assistance are urged to contact an admissions officer as early as possible to collaborate with Financial Planning.

#### **Financial Aid Programs**

Students attending Sullivan have access to numerous federal and state student financial aid programs. Note: Amounts described may change without notice

The first step for applying for federal and state aid is to complete the Free Application for Federal Student Aid (FAFSA). Completing and submitting the FAFSA is free and quick, and it gives you access to the largest source of financial aid to pay for college. In addition, many states and colleges use your FAFSA data to determine your eligibility for state and school aid. Visit www.fafsa.ed.gov for additional information regarding filing options and deadlines.

There are federal, state, and college deadlines for the school year for which you are applying for student aid. These deadlines can be found on the FAFSA website. Your state of legal residence determines state deadlines for the school year. You are encouraged to apply as early as possible after the FAFSA is made available in order to allow adequate processing time and increase the likelihood of qualifying for state aid. The FAFSA is available October 1st each year. All financial arrangements must be made before starting classes.

To ensure students receive the correct types and amounts of federal financial aid, the Department of Education has established procedures to verify the accuracy of the information reported on a students' FAFSA (Free Application for Federal Student Aid). Some students are selected for verification by the Department of Education and Sullivan University may select additional students for verification. All students selected for verification will receive an email to set up a secure account to complete verification documents. A student selected for verification should provide the documentation to the Financial Planning Office within 30 days of notification that the student was selected for verification. If there is an unforeseen circumstance that prevents the student from meeting this deadline, a student may submit a request for up to an additional 14 days in writing. For PELL grant fund consideration, students have 120 days after their last date of enrollment or by the deadline published in the Federal Register for each award year whichever is earlier, to complete verification. A student who is selected for verification but fails to complete the process will not receive federal financial aid.

Visit www.studentaid.ed.gov for more information regarding how to prepare for college, types of aid, qualifications, and how to apply.

In no case can the total amount of a student's financial aid exceed his or her cost of attendance.

#### **Federal Pell Grants**

Pell Grants are gift aid from the United States Federal Government, and available to all who are eligible by demonstrating a financial need as determined by the FAFSA. A lifetime undergraduate limit applies. Repayment is not required. Grant amounts are determined by the Department of Education, upon their approval and acceptance of your Free Application for Federal Student Aid (FAFSA). Aggregate limits apply.

#### William D. Ford Federal Direct Student Loans

Low interest loans for students are available through the Direct Student Loan Program. Under this Direct Loan program, the federal government makes loans directly to students and parents through schools. Once a Direct Loan is made, it is managed and collected by the U.S. Department of Education's Direct Loan Servicing Center.

Students must maintain at least a part-time enrollment status to be eligible and cannot be in default on any existing federal student loans. Aggregate limits apply.

#### **Direct Stafford Loans**

**Direct Subsidized Loans** – you must have financial need to receive a subsidized loan. The first academic year the maximum loan is \$3,500, the maximum amount increases during the sophomore year to \$4,500 per year, and to \$5,500 per year for junior and senior years. The U.S. Department of Education will pay the interest that accrues on your Direct Subsidized Loan during certain periods. Repayment begins six (6) months after graduation, ceasing studies, or changing enrollment to less than half-time.

Direct Unsubsidized Loans – financial need is not a requirement to obtain an unsubsidized loan. For the first academic year, the maximum is \$9,500 (\$3,500 of this amount may be in subsidized loans if eligible). The sophomore academic year maximum for this loan is \$10,500 (\$4,500 of this amount may be in subsidized loans if eligible). Junior and senior year maximums are \$12,500 each (\$5,500 of this amount may be in subsidized loans if eligible). The maximum for graduate and professional degree students is \$20,500. As an approved medical-related program, College of Pharmacy students can receive up to \$24,500 per year. You are responsible for paying the interest that accrues on your Direct Unsubsidized Loan. Repayment begins six (6) months after graduation, ceasing studies, or changing enrollment to less than half-time.

*Direct PLUS Loans (PLUS Loans)* are loans parents can obtain to help pay the cost of education for their dependent undergraduate children. In addition, graduate and professional degree students may obtain PLUS Loans to help pay for their own education. A PLUS Loan applicant must not have an adverse credit history. A credit check will be conducted to determine eligibility.

#### Alternative Loans

For those who qualify, various types of private, non-federal loans are available to help cover the cost of their education. For more information, interested students may speak to a financial planning coordinator.

#### Kentucky Tuition Grants (KTG)

The Kentucky Higher Education Assistance Authority awards Kentucky Tuition Grants to eligible students who are enrolled in a degree program. The student must be attending full-time and be a resident of Kentucky. When a student indicates during the admissions enrollment process that he or she is a Kentucky state resident, the student will be required to complete a residency status form and provide supporting documentation to support their status. The KTG is based on availability of state funds and amounts are determined by KHEAA. Repayment is not required. Aggregate limits apply.

#### College Access Program Grants (CAP)

Kentucky students with financial need may qualify for CAP grants. The student must be attending at least part-time (8 credit hours or more), enrolled in a degree program, and be a resident of Kentucky. When a student indicates during the admissions enrollment process that he or

she is a Kentucky state resident, the student will be required to complete a residency status form and provide supporting documentation to support their status. CAP is based on availability of state funds. Amounts are determined by the Kentucky Higher Education Assistance Authority Grant Program and CAP eligibility is in line with Pell Grant eligibility. Repayment is not required. Aggregate limits apply.

#### Federal Supplemental Educational Opportunity Grants (FSEOG)

FSEOGs are awarded to undergraduate students with exceptional financial need. Students who receive Pell Grants and have the most financial need will receive FSEOG awards first. FSEOG funds are based on availability. Repayment is not required.

#### Kentucky Educational Excellence Scholarship (KEES)

Students enrolled in a Kentucky high school who have a Grade Point Average (GPA) of 2.5 or better and ACT scores of 15 or better are eligible for this award. Upon graduation, the student's high school must provide information to the Kentucky Department of Education. The Kentucky Department of Education must share this information with the Kentucky Higher Education Assistance Authority (KHEAA). KHEAA must notify Sullivan University of the award after the end of the school year. Sullivan must maintain information about acceptance and college GPA. To keep the maximum award for the second year in college, the student must complete his/her first year with a cumulative 3.0 grade point average. Aggregate limits apply.

#### Federal Work Study (FWS)

Federal Work Study provides part-time jobs for undergraduate and graduate students with financial need, allowing them to earn money to help pay education expenses. The program encourages community service work and work related to the student's course of study. Eligibility for FWS is initially determined by filing the FAFSA and marking yes to being interested in work study on the FAFSA. Recipients are normally awarded 20 hour-per-week work assignments at or above minimum wage. Positions and eligibility are based upon availability and the applicant's application for work.

#### Workforce Investment Board

Available through the Workforce Investment Board, grants are provided to those eligible students who have been displaced or who are unemployed. Other minimum requirements also apply. Information can be obtained from the Workforce Investment Board in the student's hometown district or state.

#### **Vocational Rehabilitation Programs**

For those students who have a substantial handicap to employment, this financial assistance may be available while the student is training. The amount available depends on the individual circumstances of each applicant. Information can be obtained from the vocational rehabilitation counselor in the student's hometown district.

#### **Veterans Benefits**

Some of Sullivan University's programs are approved for the enrollment of veterans and other persons eligible for VA educational benefits. Interested veterans should contact the office of Financial Planning for an advisement appointment well in advance of the desired date of entry. More information about veterans' benefits can be found at www.gibill.va.gov.

#### Military Student Benefits

Active Duty, Reserve, and National Guard enrolled in specific programs may qualify for the Military Credit Hour Rate. See the Supplement A for the most current Military Credit Hour Rate and eligible programs.

Active Duty Service members must enroll and follow their respective service's direction for application and approval.

#### Company Pay

Sullivan University works with businesses in the community to provide educational opportunities for local employment. Check with your employer to see if you qualify.

#### **UPS Earn & Learn**

Due to a joint venture between Sullivan University's Louisville campus and United Parcel Service, students able and willing to work part-time can receive significant financial assistance to pay tuition and other costs. Contact the Admissions or Financial Planning department for details. For more information visit: <a href="https://www.jobs-ups.com/earn-and-learn">https://www.jobs-ups.com/earn-and-learn</a>

#### Part-Time Jobs

Available through information received by the Career Services office, students who are seeking part-time, after-school and weekend positions will find employment opportunities posted on the bulletin board and on the student portal.

#### College of Pharmacy Clinical Preceptor Educational Benefits

Sullivan University College of Pharmacy (SUCOP) continually seeks ways to provide benefits, beyond direct payment, to clinical faculty (preceptors) who are investing time in precepting students at his/her primary practice site, contributing to the education of our students in classrooms and laboratories, or are investing significant amounts of time in other activities (committees, taskforces, interviewing students, etc.).

One way to stay competitive in the marketplace and recruit and maintain superb clinical faculty is to provide a discounted educational benefit to those seeking to continue their education through a higher institute of learning. Please contact the Office of Experiential Education at the College of Pharmacy for more details on the benefit (OEE@sullivan.edu).

#### Career Education Fund (CEF)

CEF Loans may be available for students who qualify and

have a gap in funding after exhausting all other financial aid

resources, but can meet the eligibility requirements. Such

requirements include but are not limited to maintaining a full-time enrollment status, aggregate limits, and cash payments. Amount varies according to need.

#### **Competition Grant**

#### (Amounts effective for 2018 and 2019 HS Graduates who begin classes before the Fall 2020 term)

Application Procedure: Contact Admissions Department

Basis for Selection: High school students who participate in competitions in high school at the regional, state, or national levels have the opportunity to win one Sullivan University competition grant. The competition may be food competition, business related, etc. Sullivan University usually has representation at these events (i.e. FCCLA, ProStart, Skills USA, FBLA, etc.) to present grants to the winners

Deadline: Not applicable

Term: Paid equally over 6 quarters for full-time enrollment or equally up to 12 quarters for part-time enrollment

Eligibility: Only one competition grant will be awarded per student regardless of the number of competitions won during high school. Awards are payable toward majors related to the competition from which so earned.

Number of Students: Open number of grant recipients annually

Amounts: The amount of the grants will be determined by the Director of Admissions and may be up to the following amounts:

Regionals:

1st Place: \$12,000 2nd Place: \$8,000 3rd Place: \$4,000

State:

1st Place: \$16,000 2nd Place: \$10,000 3rd Place: \$6,000

National:

1st Place: Full Tuition and Fees

2nd Place: Full Tuition 3rd Place: \$20,000

#### Competition Grant

#### (Amounts effective for 2020 HS Graduates and after)

Application Procedure: Contact Admissions Department

Basis for Selection: High school students who participate in competitions in high school at the regional, state, or national levels have the opportunity to win one Sullivan University competition grant. The competition may be food competition, business related, etc. Sullivan University usually has representation at these events (i.e. FCCLA, ProStart, Skills USA, FBLA, etc.) to present grants to the winners.

Deadline: Not applicable

Term: Paid equally over 6 quarters for full-time enrollment or equally up to 12 quarters for part-time enrollment

Eligibility: Only one competition grant will be awarded per student regardless of the number of competitions won during high school.

Awards are payable toward majors related to the competition from which so earned.

Number of Students: Open number of grant recipients annually

Amounts: The amount of the grants will be determined by the Director of Admissions and may be up to the following amounts:

Regionals:

1st Place: \$10,000 2nd Place: \$6,000

3rd Place: \$3,000

State:

1st Place: \$12,000 2nd Place: \$8,000 3rd Place: \$4,000

National:

1st Place: Full Tuition and Fees

2nd Place: Full Tuition 3rd Place: \$20,000 **Early Start Grant** 

Application Procedure: Contact Admissions Department

Basis for Selection: Students who have actively enrolled for the fall quarter, but choose to make an early start in Summer.

Term: Paid equally over first academic year

Eligibility: Must be a first-time SU student enrolled full-time in an eligible program at Sullivan Louisville or Sullivan Lexington.

Number of Students: Open number of students annually

Amount: \$1,000

#### International Student Referral Grant

International Student Referral Program is a tuition reduction incentive that enables current Sullivan University international students to receive a \$1500 tuition credit for each referred international applicant that successfully enrolls at Sullivan University. The \$1500 credit will be awarded to the current international student in the form of credit towards tuition expenses of the next academic term. Students in their final academic term are not eligible to receive the referral incentive unless they are continuing their education with Sullivan University. The incentive would then be applied to the first academic term of their new program. If a current international student refers multiple international applicants for admission, the total amount of all awards shall not exceed the total cost of the student's tuition for the next academic term.

Written confirmation from each referred international applicant, verifying the identity of the specific current international student responsible for the referral, will be required prior to or concurrent with the submission of their application. The credit will only be applied to the referring international student after the referred international student pays the full tuition fee for the enrolled 1st quarter term, and completes a minimum of 7 weeks of classes. If the referred international student drops out of classes before the completion of 7 weeks of classes, the referring international student shall not receive the \$1500 tuition reduction incentive for that referred student. Questions regarding admission requirements for current international students or their referred international applicants can be directed to iadmissions@sullivan.edu or iadmissionslex@sullivan.edu.

#### Sullivan Scholars Grant

Application Procedure: Contact Admissions Department

Basis for Selection: must be enrolled in a Doctorate in Philosophy (Ph.D.) Degree in Management at Sullivan University [2] Deadline: prior to student's registration date

Term: paid equally over 9 quarters for full-time enrollment or equally up to 18 quarters for part time enrollment

Eligibility: must maintain a minimum of 3.0 quarterly GPA with continuous enrollment

Number of Students: open number of scholarship recipients annually

Amount: \$9,000

#### p. 19-31 Scholarship Section Changes

(Effective July 20, 2018, the following scholarships are the only internal scholarships available.)

#### Scholarship Specifications and Qualifications

These scholarships are valid only at Sullivan University and are funded by Sullivan University. All Sullivan University Scholarships are tuition only scholarships, unless noted otherwise within a scholarship description. Students are not eligible to receive residual funds from the awarded scholarships. They may not be transferred to another person or institution and some may only apply to specific campuses and/or programs. Scholarship recipients should note that maintaining a specific GPA may be required. Recipients must maintain continuous enrollment (at least part-time, 6-11 ½ quarter hours) to receive scholarship funds. If a student is taking less than 12 credit hours per quarter, only half of the scholarship amount will be awarded for that quarter. However, the total amount will remain the same. \*\*A student's combined amounts of Sullivan scholarship awards cannot exceed \$2,000 per quarter and may not exceed a total of \$12,000, unless it is a single scholarship award (i.e. Presidential Scholarship, Eagle Scout, Gold Award, etc.). Students receiving a single scholarship award, including full tuition, or more, automatically forfeit their eligibility for all other Sullivan University scholarships. All scholarships require approval by an authorized administrative official. In no case can the total amount of a student's financial aid, including scholarships, exceed his or her Cost of Attendance. Receiving scholarships could affect eligibility for other student financial aid. Additional scholarships may be offered at the discretion of the university.

- \* Additional requirements may be found in some of the scholarship applications. The applicant is required to satisfy all requirements found in this section and within the applications to be eligible.
- \* GPA requirements for all scholarships are based on a 4.0 scale.
- \* The University retains the right and authority to change the requirements for applying and receiving University scholarships with or without notice.
- \* The University may choose to not award a scholarship should it determine no candidate satisfies the requirements or intent of the scholarship.
- \* The University reserves the right and authority to not offer, temporarily or permanently, any scholarship listed in the catalog with or without notice.

#### HIGH SCHOOL SCHOLARSHIPS

The following scholarships are for high school seniors who want to attend Sullivan University during the year of their graduation. To be awarded one of these scholarships the student must start in the summer or fall quarter of the year of their high school graduation. The student must complete an application form and submit any other required documentation to be considered for these scholarships. These are one time scholarships and unless otherwise noted in the scholarship description, required applications and documentation are due before the student's registration date.

#### Academic Scholarships

#### Presidential Scholarship\*\*\*

Application Procedure: Submit a completed application, official high school transcript, and test scores to the Admissions Department. Any applicant who is not selected for the Presidential Scholarship will be entered into the Provost Scholarship applicant pool.

Basis for Selection: Must have a minimum 24 ACT, 1170 SAT or 24 APA score and a minimum 3.5 unweighted GPA.

Deadline: November 1st

Term: Paid equally over 6 quarters for full-time enrollment, equally up to 12 quarters for part-time enrollment, or over program length if enrolled in a program less than 6 quarters in length.

Eligibility: Must maintain continuous enrollment

Number of Students: up to 12 Awarded annually

Amount: \$10,000

#### Provost Scholarship\*\*\*

Application Procedure: Submit a completed application, official high school transcript, and test scores to the Admissions Department. Any applicant who is not selected for the Provost Scholarship will be entered into the Dean Scholarship applicant pool.

Basis for Selection: Must have a minimum 22 ACT, 1110 SAT or 21 APA score and a minimum 3.4 unweighted GPA.

Deadline: November 1st

Term: Paid equally over 6 quarters for full-time enrollment, equally up to 12 quarters for part-time enrollment, or over program length if enrolled in a program less than 6 quarters in length.

Eligibility: Must maintain continuous enrollment

Number of Students: up to 15 Awarded annually

Amount: \$7,000

\*\*\*Any students who receive the Presidential Scholarship or the Provost Scholarship automatically forfeit their eligibility for all other Sullivan University scholarships.

#### Dean Scholarship

Application Procedure: Submit a completed application, official high school transcript, and test scores to the Admissions Department.

Basis for Selection: Must have a minimum 21 ACT, 1090 SAT, or 20 APA score and a minimum 3.2 unweighted GPA.

Deadline: November 1st

Term: Paid equally over 6 quarters for full-time enrollment, equally up to 12 quarters for part-time enrollment, or over program length if enrolled in a program less than 6 quarters in length.

Eligibility: Must maintain continuous enrollment

Number of Students: up to 18 Awarded annually

Amount: \$3,000

#### Participation Scholarships

#### Eagle Scout Scholarship

Application Procedure: Contact Admissions Department

Basis for Selection: High school students must have attained recognition of Eagle Scout from the Boy Scouts of America; have a minimum 3.0 high school GPA; have a minimum 24 ACT or 1170 SAT score.

Deadline: Not applicable

Term: Paid equally over 6 quarters for full-time enrollment, equally up to 12 quarters for part-time enrollment, or over program length if enrolled in a program less than 6 quarters in length.

Eligibility: Must maintain continuous enrollment

Number of Students: Open number of scholarship recipients annually

Amounts: Full Tuition toward an associate degree

#### Gold Award Scholarship

Application Procedure: Contact Admissions Department

Basis for Selection: High school students must have attained the recognition of Gold Award from the Girl Scouts of America; have a minimum 3.0 high school GPA; have a minimum 24 ACT or 1170 SAT score.

Deadline: Not applicable

Term: Paid equally over 6 quarters for full-time enrollment, equally up to 12 quarters for part-time enrollment, or over program length if enrolled in a program less than 6 quarters in length.

Eligibility: Must maintain continuous enrollment

Number of Students: Open number of scholarship recipients annually

Amounts: Full Tuition toward an associate degree

#### Scholarship Fair

Application Procedure: Contact the Admissions Department

Basis for Selection: Prospective students compete in the program area of interest to the student. Tests or hands-on projects are judged and scholarships are awarded to the top participants in each division.

Deadline: Not applicable

Term: Paid equally over 6 quarters for full-time enrollment, equally up to 12 quarters for part-time enrollment, or over program length if enrolled in a program less than 6 quarters in length.

Eligibility: Must maintain continuous enrollment

Number of Students: up to 3 awards in each division

Amounts: Up to \$3,000 (Individual students may claim only one Scholarship Fair Award.)

#### Stephanie Thornton Memorial Scholarship

Application Procedure: This scholarship is given to a high school senior and junior that are chosen by RG Drage Technical Center in Ohio and the Thornton family. Applications and

questions regarding selection should be addressed to the RG Drage Technical Center Counseling Office.

Basis for selection: Two high school juniors and one high school senior currently attending RG Drage Technical Center will be selected annually to receive this scholarship.

Deadline: Determined by RG Drage Technical Center and is announced at the school annually.

Term: Scholarship will be applied equally over 6 quarters. This award amount will be in addition to the scholarship amount awarded directly from the Stephanie Thornton Memorial Scholarship fund. The junior and senior scholarship cannot be combined if the same student wins each year. The larger amount will be awarded. Any students who receive the Stephanie Thornton Senior Scholarship automatically forfeit their eligibility for all other Sullivan University scholarships excluding National Award of Excellence and Competition Scholarships.

Eligibility: Must maintain continuous enrollment

Number of students: 2 high school juniors and 1 high school senior annually.

Amounts: \$10,000 awarded to 1 high school senior. \$2,000 awarded to 2 high school juniors.

#### SPECIALTY SCHOLARSHIPS

#### Academic Performance Excellence Scholarship (PharmD Program)

Application Procedure: Submit a completed PharmCAS and supplemental application (includes, but not limited to, all official transcripts, standardized test score – PCAT preferred, other standardized test scores may be considered, 2 letters of recommendation).

Basis for Selection: Given to the Doctor of Pharmacy applicants offered acceptance with high academic achievement. Must have a minimum GPA of 3.75, fortieth percentile or higher standardized test score – PCAT preferred, other standardized test scores considered, and excellent letters of reference, interview, and professionalism.

Deadline: Annual application deadline. Contact the College of Pharmacy Office of the Dean for more information.

Term: Paid equally over 12 quarters for full-time enrollment

Eligibility: Must maintain a minimum 3.0 cumulative GPA with continuous enrollment and a high level of professional behavior.

Number of Students: varies annually

Amount: \$12,000

#### Admissions Test Performance Excellence Scholarship (PharmD Program)

Application Procedure: Submit a completed PharmCAS and supplemental application (includes, but not limited to, all official transcripts, standardized test score – PCAT preferred, other standardized test scores may be considered, 2 letters of recommendation).

Basis for Selection: Given to the Doctor of Pharmacy applicants offered acceptance with high academic achievement. Must have a sixtieth percentile or higher standardized test score – PCAT preferred, other standardized test scores considered, must have a minimum GPA of 3.0, and excellent letters of reference, interview, and professionalism.

Deadline: Annual application deadline. Contact the College of Pharmacy Office of the Dean for more information.

Term: Paid equally over 12 quarters for full-time enrollment

Eligibility: Must maintain a minimum 3.0 cumulative GPA with continuous enrollment and a high level of professional behavior.

Number of Students: varies annually

Amount: \$12,000

#### Sullivan University Ambassador Scholarship

Application Procedure: Submit an application and a letter of recommendation to the Admissions Department.

Basis for Selection: Must be a full-time student with a minimum 2.5 GPA. Recipients selected based on personal interviews

Deadline: Not Applicable

Term: Paid quarterly

Eligibility: Recipients must maintain a minimum 2.5 quarterly GPA with continuous full-time enrollment (Louisville and Lexington Campuses Only) and adhere to the Sullivan University Student Ambassador requirements, as stated in the Student Ambassador manual

Number of Students: Up to 10 awarded annually (per campus)

Amounts: Up to \$500 per quarter and additional compensation based on duties performed

#### Active Heroes Scholarship

This scholarship established by Sullivan University is in honor and support of Active Heroes, a non-profit organization dedicated to connecting and helping America's military families through physical and mental therapy, home repairs and community outreach, financial assistance and community reintegration.

Sullivan University assists veterans to prepare for fulfilling careers after military service, with emphasis on business and technology-related fields. Our fundamental objective is to enhance the educational and professional development of veterans.

Application Procedure: Submit a letter of application to Troy Yokum, President of Active Heroes, or contact the Admissions Department. Must submit official transcripts of all post-secondary institutions attended and military documentation that shows proof of honorable discharge.

Basis for Selection: must be a Veteran, or spouse, child, or stepchild of a Veteran.

Deadline: prior to student's registration date

Eligibility: Must maintain continuous enrollment.

Number of Students: 2 Awarded Annually (one Associate and one Bachelor)

Amount:

- 1. Associate Degree: Full tuition through completion of an Associate Degree Program (students are eligible if first enrolled in a diploma program). Scholarship will be applied prior to VA benefits. Certified amounts will be reduced by amount of scholarship awarded. Students using VA benefits will be eligible for VA tuition benefits based upon remaining tuition costs and percentage paid by VA and full fees if applicable. Books and fees are not covered with the scholarship. Students receiving this scholarship are not eligible to receive residual funds from scholarship funds.
- 2. Bachelor's Degree: 50% tuition discount through completion of Bachelor's Degree Program (students must have completed an associate degree program to be eligible). Scholarship will be applied prior to VA benefits. Certified amounts will be reduced by amount of scholarship awarded. Students using VA benefits will be eligible for VA tuition benefits based upon remaining tuition costs and percentage paid by VA and full fees if applicable. Books and fees are not covered with the scholarship. Students receiving this scholarship are not eligible to receive residual funds from scholarship funds.

#### Barbara S. Dean Scholarship

This scholarship established by Sullivan University honors the long-term service of Barbara S. Dean, Director of the Ft. Knox Campus.

Application Procedure: Contact the Ft. Knox Campus Administrative Office

Basis for Selection: Must be an outstanding sophomore at the Fort Knox campus. Minimum 3.0 GPA required.

Deadline: July 15 of each calendar year

Term: Quarterly tuition paid for each remaining quarter of the Bachelor program as long as eligibility standards are met.

Eligibility: Must maintain continuous enrollment

Number of Students: 1 Awarded annually

Amount: Full tuition; to pursue a bachelor's degree program through the Sullivan Fort Knox campus

#### Brennan Davis Memorial Scholarship

Application Procedure: Submit a completed application, one letter of recommendation, and an essay (500 words or less) answering the following questions, the Ombudsman, Sullivan University – Louisville Campus, Administrative Office

- 1. How your pursuit of higher education has/will change or shape your life?
- 2. What obstacles did you have to overcome to get where you are today?
- 3. How would you benefit from this scholarship in furthering your education at Sullivan University?

Basis for Selection: Must be either a current student at Sullivan University (any location or division), in at least the second year of studies, pursuing an associate or bachelor's degree within the College of Business Administration or Finance; or a Sullivan University alumnus currently pursuing a degree within the Graduate School. Must have a 2.5 GPA or higher if an undergraduate student or a 3.0 GPA or higher if a graduate school student. Must have a financial need/hardship and not be receiving parental or company financial support.

Deadline: July 15th

Term: Paid equally over 3 quarters or the remainder of the program (whichever is the least amount of time)

Eligibility: Must maintain continuous enrollment

Number of Students: 1 awarded annually

Amount: \$1,000

#### Chancellor's Excellence in Pharmacy Studies Scholarship (PharmD Program)

Application Procedure: Submit a completed PharmCAS and supplemental application (includes, but not limited to, all official transcripts, standardized test score – PCAT preferred, other standardized test scores considered, 2 letters of recommendation).

Basis for Selection: Given to the Doctor of Pharmacy applicants offered acceptance with the highest academic achievement. Must have a minimum GPA of 3.5, sixtieth percentile or higher standardized test score – PCAT preferred, other standardized test scores considered, excellent interview and professionalism, as judged based on the PharmCAS, supplemental application items and background check.

Deadline: Annual application deadline. Contact the College of Pharmacy Office of the Dean for more information.

Term: Paid equally over 12 quarters for full-time enrollment

Eligibility: Must maintain a minimum 3.0 cumulative GPA with continuous enrollment and a high level of professional behavior.

Number of Students: varies annually

Amount: \$45,000

#### Chef Thomas J. Hickey Sr. Scholarship

In honor of the long-time service of Chef Thomas J. Hickey, Sr., former Director of the National Center for Hospitality Studies at Sullivan University.

Application Procedure: Contact the National Center for Hospitality Studies (NCHS) Scholarship Committee

Basis for Selection: Must be an outstanding culinary arts student who has completed at least 54 credit hours at Sullivan University, maintaining continuous enrollment and a minimum 3.0 GPA. Scholarship award based on outstanding academic record, financial need, documented peer recommendations and student participation/accomplishments.

Deadline: To be announced by the NCHS Scholarship Committee during the Winter Quarter. Scholarships are awarded in the Spring Quarter.

Term: Award is equal to full tuition charged during quarters 4, 5 and 6 and paid equally each of those quarters as long as eligibility requirements are met.

Eligibility: Must maintain continuous enrollment

Number of Students: 2 Awarded Annually

Amount: Up to Full Tuition for Quarters 4, 5 and 6 (tuition variable dependent on time of enrollment and scholarship amount is not awarded retroactively)

#### Communication Excellence Scholarship (PharmD Program)

Application Procedure: Submit a completed PharmCAS and supplemental application (includes, but not limited to, all official transcripts, standardized test score – PCAT preferred, other standardized test scores may be considered, 2 letters of recommendation).

Basis for Selection: Given to the Doctor of Pharmacy applicants offered acceptance with high academic achievement. Must have excellent verbal and written performance, must have a minimum GPA of 3.0, fortieth percentile or higher standardized test score – PCAT preferred, other standardized test scores considered, and excellent letters of reference and professionalism.

Deadline: Annual application deadline. Contact the College of Pharmacy Office of the Dean for more information.

Term: Paid equally over 12 quarters for full-time enrollment

Eligibility: Must maintain a minimum 3.0 cumulative GPA with continuous enrollment and a high level of professional behavior.

Number of Students: varies annually

Amount: \$12,000

#### Dean's Scholarship of Student Excellence (PharmD Program)

Application Procedure: Submit a curriculum vitae, personal statement (max 500 words) on how you best demonstrate the tenets of community, commitment, care, and compassion, as well as one letter of recommendation from a mentor who can attest to your involvement in the community, commitment, care and compassion.

Basis for Selection: Must be a student who has accepted admittance to the Sullivan University College of Pharmacy (SUCOP) with a minimum GPA of 3.5 in pre-pharmacy coursework (or SUCOP coursework for continuing students) and who demonstrate financial need to study or continue their studies at SUCOP.

Deadline: Annual application deadline. Contact the College of Pharmacy Office of the Dean for more information.

Term: Paid in a single quarter for full-time enrollment

Eligibility: Must maintain continuous enrollment and a high level of professional behavior.

Number of Students: 4 awarded annually

Amount: \$2,500

#### ESLi Graduate Scholarship

ESLi (English as a Second Language International) is a CEA-accredited intensive English language program, whose mission is to improve the English language skills of international students and prepare them for academic success in North American universities. Academically eligible applicants may apply for enrollment in a Sullivan University Undergraduate program and ESLi Graduate Scholarship.

Application Procedure: Submit a completed application for admission to the University and include ESLi (English as a Second Language International) certificate of program completion.

Basis for Selection: Eligible graduates of ESLi program matriculating into qualified Sullivan University Undergraduate degree program

Deadline: Not Applicable

Term: \$2000 paid equally over 12 quarters of continuous enrollment (6 quarters for an Associates of Science Degree Program and 6 quarters for a Bachelor of Science Degree Program). Continuous enrollment is not voided by a quarter of Standard Period of Non-Enrollment taken in conjunction with F-1 Status.

Eligibility: Must meet Sullivan University minimum standards of Academic Progress; Continuous enrollment for minimum of 6 quarters for Associate of Science Degree program and an additional 6 quarters for Bachelor of Science Degree program. Continuous enrollment is not voided by a quarter of Standard Period of Non-Enrollment taken in conjunction with F-1 Status.

Number of Students: Open numbers of scholarship recipients annually

Amount: \$24,000 (\$12,000 for Associate of Science Degree Program and \$12,000 for Bachelor of Science Degree program)

#### **Graduate School Scholarship**

Application Procedure: Contact Admissions Department

Basis for Selection: Must be a first-time enrollment in a Sullivan University graduate level program and have a minimum of 3.0 incoming cumulative GPA.

Deadline: prior to student's registration date

Term: Paid equally over 6 quarters for full-time enrollment or over program length if less than 6 quarters.

Eligibility: Must maintain a minimum 3.0 quarterly GPA with continuous full-time enrollments. International students attending on an I-20 and who choose to have a Standard Period of Non- Enrollment, as allowed by federal regulations, will be able to have the scholarship reinstated upon return. Once reinstated the scholarship will be paid equally over 6 quarters; for program lengths less than 6 quarters, the grant will be paid equally over remaining program length. Fort Knox, Physician Assistant, Ph.D., and Pharm.D. students are not eligible for this scholarship. This scholarship cannot be combined with the alumni discount.

Number of students: open number of scholarship recipients annually

Amount: up to \$4,500 (based on incoming GPA)

3.0 - 3.24 cumulative GPA = \$3,000

3.25 - 3.49 cumulative GPA = \$3,600

3.5 and above cumulative GPA = \$4,500

#### Jan McKenzie Gordon Scholarship

Application Procedure: Selected as the Most Outstanding Nursing or Allied Health Student at the end of the student's first three quarters.

Basis for Selection: Department Director Recommendation, Instructor Recommendation, and GPA

Deadline: Not applicable

Term: Award is equal to tuition charged during quarters 4, 5 and 6 and paid equally each of those quarters as long as eligibility requirements are met.

Eligibility: Must maintain continuous enrollment

Number of Students: 1 per year

Amount: Up to Full Tuition for Quarters 4, 5 and 6

#### Order of the Golden Toque Scholarship

Application Procedure: Contact the National Center for Hospitality Studies (NCHS) Scholarship Committee. Applications are available at the NCHS Faculty Office.

Basis for Selection: Must be a current student in his or her 3rd or 4th quarter of studies in a NCHS program and have a minimum 3.0 GPA. Scholarship awarded based on financial need, academic history, documented peer recommendations and the applicant's personal essay.

Deadline: TBA by the NCHS Scholarship Committee each quarter. One scholarship is awarded each quarter.

Term: Award in the amount of \$5,000 will be applied in the quarter after scholarships are awarded

Eligibility: (Louisville and Lexington Campuses Only)

Number of Students: 2 awarded annually

Amount: \$5,000

#### Sullivan University Black Achiever's Scholarship

Application Procedure: Contact Admissions Department

Basis for Selection: Must have a minimum 22 ACT, 1635 SAT or 17 APA score and a minimum 3.0 high school GPA. The recipient for this scholarship will be chosen by the Chestnut Street Family YMCA and must be a participant in the Chestnut Street Family YMCA Black Achiever's program.

Deadline: Not applicable

Term: Paid equally over 6 quarters for full-time enrollment, equally up to 12 quarters for part-time enrollment, or over program length if enrolled in a program less than 6 quarters in length.

Eligibility: Must maintain continuous enrollment. (Louisville and Lexington campuses only)

Number of Students: 1 Awarded Annually

Amount: \$6,000

## Sullivan University Scholarship for the Salvation Army's Center of Hope Culinary Training Program

Application Procedure: The Center of Hope's director and chef instructor will select three finalists from past Center of Hope culinary program graduates. Final selection will be determined by a committee of four to include: two Center of Hope representatives and two Sullivan University representatives.

Basis for Selection: Must have successfully complete the Center of Hope Culinary Program, have a high school diploma or GED, pass the Sullivan University entrance exam, submit three letters of recommendation, and have nine months of acceptable work record documented by the employer (preferably foodservice experience).

Deadline: Not applicable

Term: Award is paid quarterly for all tuition, books and fees through the completion of an Associate of Science in Culinary Arts or an Associate of Science in Baking and Pastry Arts.

Eligibility: Recipients must meet all satisfactory academic progress standards, as described in the Sullivan University Catalog and must abide by all local, state, and federal laws and university policies. Students receiving this scholarship are not eligible to receive residual funds from scholarship funds.

Number of Students: Only one student can be utilizing this scholarship at any given time. A new recipient can be named if a recipient graduates or withdraws from the program.

Amount: Full tuition, books and fees toward an Associate Degree in Culinary Arts or Baking and Pastry Arts at the Sullivan University Louisville Campus.

#### The Sullivan University Southeast Christian Church Collaborative Scholarship

In January, 2007, Chancellor A.R. Sullivan, the founder of Sullivan University and Pastor David Stone, Senior Minister of Southeast Christian Church, worked collaboratively and established the formation of two scholarships, to be awarded at the discretion of Southeast Christian Church, immediately following the semi-annual commencement exercises of Sullivan University. The scholarships recognize Southeast Christian Church, an organization which has given and continues to give a great deal to the Louisville community and seeks to help those who receive the scholarship with defraying the cost of higher education.

Application Procedure: Scholarships are awarded at the discretion of Southeast Christian Church.

Basis for Selection: Selection is left to the discretion of Southeast Christian Church leadership. Recipients must meet regular admission requirements and standards.

Deadline: Not applicable

Term: Award is paid quarterly for all tuition, books and fees for one calendar year.

Eligibility: Must maintain continuous enrollment

Number of Students: Two are awarded at the discretion of Southeast Christian Church following each University commencement ceremony.

Amount: Full tuition, books and fees for one calendar year. A student may receive subsequent scholarships of up to a year, thereby granting additional years until completion of an associate, bachelors or master's degree.

#### Taste of Derby Chef Showdown Scholarship

Application Procedure: 1. Must submit an original Kentucky themed recipe to the Director of Culinary Arts (recipe must meet The Taste of Derby Chef Showdown Scholarship guidelines available from the Director of Culinary Arts). 2. Must execute the recipe in the preliminary event. 3. Must execute the revised recipe in the final portion of the event.

Basis for Selection: Must be an active NCHS student and participate in the three part Chef Showdown. The overall winner will be selected by the Taste of Derby judging panel based on his/her performance in the final event and will be awarded the scholarship.

Deadline: Initial recipe submissions are due by February, 28th of each calendar year

Term: Paid equally over 5 quarters for full-time enrollment, equally up to 10 quarters for part-time enrollment, or equally over remaining program length if less than 5 quarters for full-time or 10 quarters for part-time are remaining (Louisville Campus Only).

Eligibility: Any NCHS student with an enrollment status of "active" during the annual spring quarter.

Number of Students: 1 awarded annually to an active NCHS student

Amount: \$5,000

#### Transfer Student Scholarship

This scholarship is available to new transfer students planning to enroll at Sullivan University.

Application Procedure: Contact Admissions Department

Basis for Selection: must have an Associate Degree from another accredited institution, or approximately 90 quarter or 60 semester hours of credit and a minimum of 2.5 cumulative GPA.

Deadline: prior to student's registration date

Term: Paid equally over 6 quarters for full-time enrollment, equally up to 12 quarters for part-time enrollment, or over program length if enrolled in a program less than 6 quarters in length.

Eligibility: Must maintain continuous enrollment. Graduate School and Ft. Knox students are ineligible.

Number of Students: open number of scholarship recipients annually

Amount: \$2,000

#### University Housing Award (PharmD Students only)

Application Procedure: Submit a completed PharmCAS and supplemental application (includes, but not limited to, all official transcripts, standardized test scores, 2 letters of recommendation). To be considered for this award applicants must complete a Gardiner Point Housing Application (https://secure.sullivan.edu/admissions/Housing) along with an essay (500 words of less) describing the applicant's need due to currently living outside of the Louisville area or documented financial hardship.

Basis for Selection: Given to the Doctor of Pharmacy applicants offered acceptance. Applicants should have excellent verbal and written performance and must submit an essay describing their desire to secure university student housing accommodations. The housing award has been designed for applicants with need that may be currently living outside of the Louisville area or individuals with documented financial hardship.

Deadline: Annual application deadline. Contact the College of Pharmacy Office of the Dean for more information.

Term: Paid each quarter for up to 12 quarters of enrollment

Eligibility: Must maintain enrollment in the PharmD program with a high level of professional behavior.

Requirements: Double or single occupancy room in the designated "Quiet Wing". All residents and any visitors must follow the requirements as outline in the Housing and Residence Life Policies and Procedure Manual (https://sullivan.edu/wpcontent/uploads/2018/09/gardiner-point-policies-and-procedures.pdf)

Meal Plan: Not included in housing award

Number of Students: Varies annually

Amount: Valued at \$990/month single occupancy rate.

#### UPS College and Career Expo Scholarship

Application Procedure: Contact Admissions Department

Basis for Selection: Selected by a random drawing of participants at the annual UPS College and Career Expo. Recipients must meet regular admission requirements and enroll

Deadline: prior to student's registration date

Term: Paid equally over 6 quarters for full-time enrollment, equally up to 12 quarters for part-time enrollment, or over program length if enrolled in a program less than 6 quarters in length.

Eligibility: Must maintain continuous enrollment.

Number of Students: One annually

Amount: Varies by degree program. See event guide for details.

#### p. 32 – Additional General Education Courses

**DRF 231 Statics** 

DRF 258 Strengths

**DRF 331 Dynamics** 

HST 124 Art History I

HST 225 Art History II

MSS 123 Anatomy and Physiology I

MSS 133 Anatomy and Physiology II

MTH 113 Mathematical Concepts

MTH 123 Advanced Mathematics

MTH 243 Applied Algebra

MTH 253 Analytical Geometry and Trigonometry

MTH 263 Advanced Algebra

MTH 343 Technical Calculus

PHY 162 Physics

PHY 212 Physics II

PHY 232 Physics III

SOC 303 Cultural Diversity

#### p. 39 - Clarification regarding Conflict Management Certificate

The Certificate in Conflict Management is a stand-alone certification and not eligible for federal student aid. However, if a student has completed a Sullivan University degree, the student may apply for the Certificate in Conflict Management when completing the graduation application. The graduation application is electronic and available through the Office of the Registrar. Any courses eligible for transfer from their previous program will be reviewed at that time.

## p. 43 – Edits to Associate of Science in Logistics and Transportation Management curriculum

#### REQUIREMENTS FOR THE ASSOCIATE DEGREE

92 Credit Hours Length: 18 months

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles Cre	dit Hours
ACT 101	Principles of Accounting I	4
ACT 102	Principles of Accounting II	4
ACT 103	Principles of Accounting III	4
ACT 211	Cost Accounting	4
BUS 204	Introduction to Business Law and Ethic	s 4
BUS 224	Professional Development	4
CSC 118	Computer Applications I	4
CSC 218	Computer Applications II	4
ECO 201	Microeconomics	4
ENG 101	Composition I	4
ENG 102	Composition II	4
FYE 101	Information Literacy	4
GEN 215	Human Dynamics	4
MKT 114	Introduction to Marketing	4
MGT 114	Business Organization and Managemen	
MGT 274	Basic Supervision	4
MGT 284	Human Resource Fundamentals	4
MTH 101	College Mathematics	4
MTH 201	College Algebra	4
SCM 101	History and Evolution of	4
	<mark>-Logistics and Supply Chain</mark>	
SCM 102	The Logistics/Supply Chain Processes	4
SCM 105	Foundations of Logistics and Supply Ch	nain
	Management	4
SCM 201	Customer Service Strategies in	4
	Logistics Management	
SCM 203	Logistics Order Processing and	4
	Information Systems	
SCM 295	Administration of Transportation	4
General Stud	dies Elective (4 Additional Credit Hour	s) 4

Students must choose one additional General Education class from the Humanities/Fine Arts category. This class is in addition to the required General Education classes listed in the program. See the Table of Contents to find the complete list of General Education classes and minimum requirements.

Free Elective (4 Credit Hours)

Students must choose one additional class in consultation with their faculty advisor to balance the program in keeping with the <u>student's personal objectives.</u>

Total Credit Hours 92

#### p. 46 – Edits to the Bachelor of Science in Interdisciplinary Business Studies

General Education (48 Credit Hours) ENG 101 Composition I

**ENG 102 Composition II** 

Humanities and Fine Arts (16 8 Credit Hours) 300/400 Level Concentration Area #1 (20 hours) 300/400 Level Concentration Area #2 (20 hours)

### p. 47 – Edits to Program Names

Information Technology	
Cybersecurity Administration Certificate*	Louisville, Lexington, Online
Cybersecurity Professional Certificate*	Louisville, Lexington, Online
Computer Forensics Diploma	Louisville, Lexington, Online
Information Technology Diploma	Louisville, Lexington, Ft. Knox, Online
Network Security Cybersecurity Diploma	Louisville, Lexington, Online
Computer Forensics Associate of Science (A.S.) Degree	Louisville, Lexington, Online
Computer Information Technology Associate of Science (A.S.) Degree	ee Louisville, Lexington, Ft. Knox, Online
Information Technology Associate of Science (A.S.) Degree	Louisville, Lexington, Ft. Knox
Network Security Cybersecurity Associate of Science (A.S.) Degree	Louisville, Lexington, Online
Computer Forensics Bachelor of Science (B.S.) Degree	Louisville, Lexington, Online
Information Technology Bachelor of Science (B.S.I.T.) Degree	Louisville, Lexington, Ft. Knox
Network Security Cybersecurity Bachelor of Science (B.S.) Degree	Louisville, Lexington, Online

#### p. 53 – Edit to Program Names and Curriculum

Cybe	rs <del>S</del> ecuri	ty <del>Administratio</del>	<del>m</del> Certificate
Course	Titles		Credit Hours

Course	Titles Credit H	ours
MNE 108	Computer Hardware Fundamentals	4
MNE 109	Computer Network Fundamentals	4
MNE 111	Administrating Windows	4
MNE 112	Administrating Windows Server	4
MNE 203	Introduction to Linux	4
MNE 204	Linux Server Configuring the X Window	
	System	4
CSC 111	Introduction of Cybersecurity and Information	
	Assurance	4
MNE 212	Security Certified Specialist	4
CSC 207	Cybersecurity Threats, Attacks, and Defense	4
MNE 213	Computer Security Fundamentals	4
Total Cred	it Hours	32

#### **CybersSecurity** Professional Certificate

Course	Titles	Credit Hours
MNE 310	Security Certified Network	
	Professional (SCNP)	4
CSC 326	Incident Response and Disaster Reco	very 4
CSC 425	Security, Audits and Risk Assessment	4
MNE 314	Designing Security for Microsoft Ne	tworks 4
MNE 320	Certified Ethical Hacking	4
MNE 340	Network Security Architecture	4
MNE 360	Network Penetration Testing	4
MNE 365	Computer Hacking Forensic	
	Investigator	4
MNE 430	Security Design and Compliance I	4
MNE 450	Security Design and Compliance II	4
Total Cred	it Hours	32

#### p. 54 – Edits to program curriculum Information Technology Diploma

Course	Titles	Credit Hours
ACT 101	Principles of Accounting I	4
BUS 224	Professional Development	4
CSC 105	Introduction to Programming	4
CSC 108	Introduction to Computers	4
MNE 108	Computer Hardware Fundamentals	s 4
CSC 109	Introduction to Networking	4
MNE 109	Computer Network Fundamentals	4
CSC 118	Computer Applications I	4
CSC 200	Principles of Technology	4
CSC 209	Network and Security Design	4
MNE 213	Computer Security Fundamentals	4
CSC 210	Database Design	4
CSC 218	Computer Applications II	4
CSC 230	Website Design	4
CSC 240	Visual Programming	4
ENG 101	Composition I	4
FYE 101	Information Literacy	4
MGT 114	Business Organization and Manage	ment 4
MTH 101	College Mathematics	4
MTH 201	College Algebra	4
Advisor Appro	oved Elective	4
Total Credit	Hours	72

## p. 54 – Edits to program curriculum Information Technology Associate of Science Degree Course Titles Credit Hours

Course	Titles	Credit Hours
ACT 101	Principles of Accounting I	4
BUS 224	Professional Development	4
CSC 105	Introduction to Programming	4
CSC 108	Introduction to Computers	4
MNE 108	Computer Hardware Fundamental	
CSC 109	Introduction to Networking	4
MNE 109	Computer Network Fundamentals	4
CSC 118	Computer Applications I	4
CSC 200	Principles of Technology	4
CSC 209	Network and Security Design	4
MNE 213	Computer Security Fundamentals	4
CSC 210	Database Design	4
CSC 218	Computer Applications II	4
CSC 230	Website Design	4
CSC 240	Visual Programming	4
CSC 242	Object Oriented Programming	4
CSC 272	Principles of System Design	4
ECO 201	Microeconomics	4
ENG 101	Composition I	4
ENG 102	Composition II	4
FYE 101	Information Literacy	4
GEN 215	Human Dynamics	4
MGT 114	Business Organization and Manage	ement 4
MTH 101	College Mathematics	4
MTH 201	College Algebra	4

General Studies Elective (4 Additional Credit Hours)

Students must choose one additional General Education class from the Humanities/Fine Arts category. This class is in addition to the required General Education classes listed in the program. See the Table of Contents to find the complete list of General Education classes and minimum requirements.

#### p. 56 – Edits to Program Curriculum Bachelor of Science in Information Technology

Course	Titles	Credit Hours
Information	n Technology Core Courses	
CSC 105	Introduction to Programming	4
CSC 108	Introduction to Computers	4
MNE 108	Computer Hardware Fundamentals	4
CSC 109	Introduction to Networking	4
MNE 109	Computer Network Fundamentals	4
CSC 118	Computer Applications I	4
CSC 200	Principles of Technology	4
CSC 209	Network and Security Design	4
MNE 213	Computer Security Fundamentals	4
CSC 210	Database Design	4
CSC 230	Website Design	4
CSC 240	Visual Programming	4
CSC 303	Computer Operating Systems	4
CSC 306	Systems Architecture	4
CSC 364	Systems Analysis and Design	4
CSC 414	Senior Seminar in Information Techr	nology 4
CSC 420	IT Project Management	4
Credit Hou	rs	56

Course	Titles (	Credit Hours
Business Co	ore Courses	
ACT 101	Principles of Accounting I	4
BUS 204	Introduction to Business Law and Eth	ics 4
BUS 224	Professional Development	4
ECO 201	Microeconomics	4
ECO 202	Macroeconomics	4
ENG 101	Composition I	4
ENG 102	Composition II	4
ENG 204	Advanced Writing	4
FYE 101	Information Literacy	4
GEN 215	Human Dynamics	4
MGT 114	Business Organization and Manageme	ent 4
MGT 304	Principles of Management	4
MTH 101	College Math	4
MTH 201	College Algebra	4
MTH 202	Introduction to Statistics	4
MTH 301	Quantitative Methods	4
MTH 305	Discrete Math	4
Credit Hou	ırs	68

#### Information Technology/IT Academy

(36 Additional Credit Hours) 36

Students must choose nine additional courses, three of which are required at the 300/400 level. Elective courses are selected in consultation with the student's faculty advisor to meet the requirements for one or more concentration areas.

#### General Studies Electives (8 Additional Credit Hours)

Students must choose two additional General Education classes, including one from the Humanities/Fine Arts category and one from the Social/Behavioral Sciences category. These classes are in addition to the required General Education classes listed in the associate and bachelor's curricula. See the Table of Contents for the complete list of General Education classes and minimum requirements.

#### Free Electives (12 Credit Hours)

Elective classes are selected in consultation with the student's faculty advisor to balance the program in keeping with the student's personal objectives or associate degree.

#### Total Credit Hours 180

**Important note:** if the Associate degree or other transfer credit does not include the prerequisite courses for the required courses listed, those classes must also be completed for the Bachelor's degree.

# p. 58 – Edits to Program Titles and Curriculum Network SCybersecurity Diploma

Course	Titles	Credit Hours
ACT 101	Principles of Accounting I	4
CSC 105	Introduction to Programming	4
CSC 111	Introduction to Cybersecurity and I	Information
	Assurance	4
CSC 207	Cybersecurity Threats, Attacks, and	Defense 4
CSC 200	Principles of Technology	4
ENG 101	Composition I	4
ENG 102	Composition II	4
FYE 101	Information Literacy	4
MNE 108	Computer Hardware Fundamentals	s 4
MNE 109	Computer Network Fundamentals	4
MNE 111	Administrating Windows	4
MNE 112	Administrating Windows Server	4
MNE 203	Introduction to Linux	4
MNE 210	Active Directory	4
MNE 211	Network Infrastructure	4
MNE 213	Computer Security Fundamentals	4
MTH 101	College Mathematics	4
MTH 201	College Algebra	4
PSY 214	Introduction to Psychology	4
Total Credit	Hours	64

#### Network SCybersecurity Associate of Science Degree

Course	Titles	Credit Hours
ACT 101	Principles of Accounting I	4
BUS 224	Professional Development	4
CSC 105	Introduction to Programming	4
CSC 111	Introduction to Cybersecurity and	Information
	Assurance	4
CSC 147	Forensics I	4
CSC 207	Cybersecurity Threats, Attacks, and	l Defense 4
CSC 225	Principles of Information Security	4
CSC 200	Principles of Technology	4
CSC 240	Visual Programming	4
ENG 101	Composition I	4
ENG 102	Composition II	4
FYE 101	Information Literacy	4
GEN 215	Human Dynamics	4
MNE 108	Computer Hardware Fundamental	s 4
MNE 109	Computer Network Fundamentals	4
MNE 111	Administrating Windows	4
MNE 112	Administrating Windows Server	4
MNE 203	Introduction to Linux	4
MNE 210	Active Directory	4
MNE 211	Network Infrastructure	4
MNE 212	Security Certified Specialist	4
MNE 213	Computer Security Fundamentals	4
MNE 320	Certified Ethical Hacking	4
MNE 340	Network Security Infrastructure	4
MTH 101	College Mathematics	4
MTH 201	College Algebra	4
PSA 102	Introduction to Legal Systems	4
PSY 214	Introduction to Psychology	4
Total Credi	t Hours	92

# p. 60 – Edits to Program Title and Curriculum Network SCybersecurity Bachelor of Science Degree Course Titles Credit Hours

Course	Titles Credit Ho	urs
ACT 101	Principles of Accounting I	4
BUS 224	Professional Development	4
CSC 105	Introduction to Programming	4
CSC 111	Introduction to Cybersecurity and Information	ı
	Assurance	4
CSC 147	Forensics I	4
CSC 207	Cybersecurity Threats, Attacks, and Defense	4
CSC 210	Database Design	4
CSC 225	Principles of Information Security	4
CSC 200	Principles of Technology	4
CSC 240	Visual Programming	4
CSC 247	Forensics II	4
CSC 248	Digital Forensic Analysis	4
CSC 303	Computer Operating Systems	4
CSC 326	Incident Response and Disaster Recovery	4
CSC 347	File Forensics	4
CSC 348	Mobile Forensics	4
CSC 420	IT Project Management	4
CSC 425	Security Audits and Risk Management	4
CSC 364	System Analysis and Design	4
	, ,	
CSC 405	Advanced Telecommunications and	
	Networking	4
CSC 414	Senior Seminar in Information Technology	4
CSC 450	Software Engineering	4
ENG 101	Composition I	4
ENG 102	Composition II	4
FYE 101	Information Literacy	4
GEN 215	Human Dynamics	4
MGT 304	Principles of Management	4
MNE 108	Computer Hardware Fundamentals	4
MNE 109	Computer Network Fundamentals	4
MNE 111	Administrating Windows	4
MNE 112	Administrating Windows Server	4
MNE 203	Introduction to Linux	4
MNE 204	Linux Server-Configuring the X Window	•
WII VE 20 I	System	4
MNE 210	Active Directory	4
MNE 211	Network Infrastructure	4
MNE 212	Security Certified Specialist	4
MNE 213	Computer Security Fundamentals	4
MNE 241	Windows Server Application Infrastructure	4
MNE 320	Certified Ethical Hacking	4
MNE 340	Network Security Architecture	4
MNE 360	Network Penetration Testing	4
MNE 408	Installing Hyper V on Windows Server	4
MNE 409	Implementing and Managing Microsoft	
	Server Virtualization	4
MNE 430	Security Design and Compliance I	4
MTH 101	College Mathematics	4
MTH 201	College Algebra	4
MTH 202	Introduction to Statistics	4
MTH 305	Discrete Math	4
PSA 102	Introduction to Legal Systems	4
PSY 214	Introduction to Psychology	4
Credit Hou		<u>56</u>

#### General Studies Electives (16 Additional Credit Hours) 16

Students must choose four additional General Education classes, including one from the Humanities/Fine Arts category and one from the Social/Behavioral Sciences category. These classes are in addition to the required General Education classes listed in the associate and bachelor's curricula. See the Table of Contents for the complete list of General Education classes and minimum requirements.

Free Electives (24/8 Credit Hours)

Elective classes are selected in consultation with the student's faculty advisor to balance the program in keeping with the student's personal objectives or associate degree.

Total Credit Hours

180

**Important note:** if the Associate degree or other transfer credit does not include the prerequisite courses for the required courses listed, those classes must also be completed for the Bachelor's degree.

#### p. 65 – Edit to NCHS Note at the bottom of the page

Note: Courses with the prefixes BFS and PBA, as well as CAM 252, CAM 256, and CAM 260 may not be taken at the baccalaureate level, nor at the associate degree or certificate/diploma level by non-NCHS students. Non-Degree Seeking Students (NDS) students are not eligible to take these courses.

#### p. 76 – Edits to Program Curriculum MEDICAL CODING REQUIREMENTS FOR DIPLOMA

47 Credit Hours

Length: 15 months, 12 months accelerated (online program only)

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles	Credit Hours
BIO 103	Human Anatomy and Physiology	4
ENG 101	Composition I	4
FYE 101	Information Literacy	4
HIM 101	Medical Terminology <mark>I</mark>	4
HIM 110	Pathophysiology with Pharmacolog	y <mark>I</mark> 4
HIM <del>120</del> 12	1 Health Information Technology <del>I</del>	4
HIM <mark>130</mark> 13	1 CPT <del>Procedure</del> Coding I	4
HIM <mark>141</mark> 142	2 ICD-10-CM <mark>Diagnosis</mark> Coding I	4
HIM <mark>150</mark> 15	1 Healthcare Reimbursement	4
HIM <mark>230</mark> 23	1 CPT <del>Procedure</del> Coding II	<mark>-5</mark> 4
HIM <mark>241</mark> 242	2 ICD-10-CM <mark>Diagnosis</mark> Coding II	<mark>5</mark> 4
HIM <mark>270</mark> 27	1 ICD-10-PCS Coding	<mark>5</mark> 4
HIM 001	Medical Coding Practicum and CCA	A Review 0
Total Cred	it Hours	<mark>47</mark> 48

# p. 76 – New Program MEDICAL ASSISTANT DIPLOMA DIPLOMA

(CIP Code 51.0801)

This program provides the students with the training necessary to perform a variety of responsibilities for a physician's office, hospital, clinic or medical laboratory. Graduates of the medical assisting diploma program are prepared to take the Certified Medical Assistant (CMA (AAMA)) examination for certification.

Graduates of this program will be qualified to assist in all areas including administrative support duties, clinical procedures, insurance coding, and patient care.

Due to facility availability, externship hours must be completed during the day.

#### REQUIREMENTS FOR DIPLOMA

69 Credit Hours

Length: 18 months, 12 months accelerated

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles	Credit Hours
AOM 101*	Speed Development - NDT	1
BUS 224*	Professional Development	4
CSC 118	Computer Applications I	4
ENG 101	Composition I	4
FYE 101	Information Literacy	4
MSS 104*	Medical Terminology	4
MSS 123*	Anatomy and Physiology I	4
MSS 133*	Anatomy and Physiology II	4
MSS 144*	Medical Laboratory Procedures I - N	DT 4
MSS 154*	Health and Safety Techniques	4
MSS 204*	Medical Ethics - NDT	4
MSS 214*	Medical Software Applications - ND	Γ 4
MSS 234*	Medical Laboratory Procedures II - N	IDT 4
MSS 244*	Medical Laboratory Procedures III - I	NDT 4
MSS 254*	Pharmacology - NDT	4
MSS 274*	Medical Office Procedures - NDT	4
MSS 275*	Clinical Assisting Externship - NDT	4
MSS 276*	Medical Assisting Externship - NDT	4
Total Credi	it Hours	69

NDT = Not Designed to Transfer

All MSS courses require a minimum 70% "C" for successful completion.

\*Medical Assistant and Medical Assisting students are not permitted to take any Medical Science courses online at the Lexington Branch Campus. The Louisville campus is approved for online delivery. Foundations of Clinical Practices and Safety and Emergency practices are taught in courses that are only taught residentially or web-assisted. Students are required to perform all competencies and skills instruction, practices, and check-offs in the face-to-face environment either on campus or with an approved preceptor.

#### p. 77 – Edits to Program Curriculum HEALTH INFORMATION MANAGEMENT REQUIREMENTS FOR THE ASSOCIATE DEGREE

92 Credit Hours (effective, Fall term 2018)

Length: 24 months, 18 months accelerated

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles	<u>Credit Hours</u>
BIO 103	Human Anatomy and Physiology	4
BUS 224	Professional Development	4
CSC 118	Computer Applications I	4
ENG 101	Composition I	4
ENG 102	Composition II	4
FYE 101	Information Literacy	4
GEN 215	Human Dynamics	4
HIM 101	Medical Terminology <mark>I</mark>	4
HIM 110	Pathophysiology with Pharmacology	- <mark>I</mark> 4
HIM <mark>120</mark> 121	Health Information Technology <mark>I</mark>	4
HIM <mark>130</mark> 131	CPT <del>Procedure</del> Coding I	4
HIM <mark><del>141</del>142</mark>	ICD-10-CM <mark>Diagnosis</mark> Coding I	4
HIM <mark>150</mark> 151	Healthcare Reimbursement	4
HIM 160	Legal Aspects of Health Information	<del>- I                                   </del>
HIM 161	Legal Aspects of Health Information	4
HIM 170	Health Information Management	
	Performance Improvement	4
HIM 220	Health Information Technology II	4
	CPT <del>Procedure</del> Coding II	<mark>-5</mark> 4
HIM <mark>241</mark> 242	ICD-10-CM <mark><del>Diagnosis</del> Coding II</mark>	<mark>5</mark> 4
HIM 250	Healthcare Statistics	4
HIM 260	Legal Aspects of Health Information	
HIM 261	Healthcare Management	4
HIM <mark>270</mark> 271	ICD-10-PCS Coding	<mark>5</mark> 4
HIM 290	Health Information Practicum	4
MTH 101	College Mathematics	4
PSY 214	Introduction to Psychology	4
HIM 002	Health Information Technology Rev	view 0
	<mark>lies Elective (4 Additional Credit H</mark> e	
<del>Students must</del>	<del>: choose one additional General Educ</del> a	ation class. This class is in addition

Students must choose one additional General Education class. This class is in addition to the required General Education classes listed in the program. See the Table of Contents to find the complete list of General Education classes and minimum requirements.

Total Credit Hours 99 92

Sullivan University's Associate of Science in Health Information Management program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).

#### p. 78 – Updated Physician Assistant Calendar

## SULLIVAN UNIVERSITY COLLEGE OF HEALTH SCIENCESMASTER OF SCIENCE PHYSICIAN ASSISTANT ACADEMIC CALENDAR CHANGES

Starting with the incoming class in Summer 2018, the physician assistant program will be changing its academic calendar to match the College of Pharmacy. Below is the updated academic calendar for the 2018-2019, 2019-2020, and 2020-2021 academic years for the physician assistant program only.

Summer Q	2018	2019	2020
PA1* (didactic year)	Jul 2-Sep 16	Jul 1-Sep 15	Jul 6-Sep 20
	Holiday: Jul 4 (4th of July),	Holiday: Jul 4 (4th of July),	Holiday: Sep 7 (Labor Day)
	Sep 3 (Labor Day)	Sep 2 (Labor Day)	Break: Sep 21-Oct 4 (2 wks)
	Break: Sep 17-Sept 30 (2 wks)	Break: Sep 16-Sept 29 (2 wks)	
PA2* (Clinical): No	Jun 25-Sep 16	Jul 1-Sep 22	Jul 6-Sep 27
Holidays	Break: Sep 17-Sept 23 (1 wk)	Break: Sep 23-Sep 29 (1 wk)	Break: Sep 28-Oct 4 (1 wk)
	(6 wk APPE)	(6 wk APPE)	(6 wk APPE)
Fall Q			
PA1* (didactic year)	Oct 1-Dec 16	Sep 30-Dec 15	Oct 5-Dec 20
	Holiday: Nov 22-23 (Tday) &	Holiday: Nov 28-29 (Tday)	Holiday: Nov 26-27 (Tday)
	Jan 1 (New Year's Day)	Break: Dec 16-Jan 5 (3 wks)	Break: Dec 21-Jan 3 (3 wks)
	Break: Dec 17-Jan 1 (2 wks)		
PA2* (Clinical): No	Sept 24-Dec 16	Sept 30-Dec 22	Oct 5-Dec 27
Holidays	Break: Dec 17-Jan 1 (1 wk)	Break: Dec 23-Jan 5 (2 wks)	Break: Dec 28-Jan 3 (1 wk)
	(6 wk APPE)	(6 wk APPE)	(6 wk APPE)
Winter Q	Wed start		
PA1* (didactic year)	Jan 2-Mar 17	Jan 6-Mar 22	Jan 4-Mar 21
	Holiday: Jan 21 (MLK Day)	Holiday: Jan 20 (MLK Day)	Holiday: Jan 18 (MLK Day)
	Break: Mar 18-Mar 31 (2 wks)	Break: Mar 23-Apr 5 (2 wks)	Break: Mar 22-Apr 4 (2 wks)
PA2* (Clinical): No	Jan 2-Mar 24	Jan 6-Mar 29	Jan 4-Mar 28
Holidays	Break: Mar 25-Mar 31 (1 wk)	Break: Mar 30-Apr 5 (1 wk)	Break: Mar 29-Apr 4 (1 wk)
	(6 wk APPE)	(6 wk APPE)	(6 wk APPE)
Spring Q			
PA1* (didactic year)	Apr 1-Jun 16	Apr 6-Jun 21	Apr 5-Jun 20
	Holiday: May 27 (Memorial Day) Break: Jun 17-Jun 30 (2 wks)	Holiday: May 25 (Memorial Day) Break: Jun 22-Jul 5 (2 wks)	Holiday: May 31 (Memorial Day)
	Break. Juli 17 Juli 30 (2 WKS)	Break. Juli 22 Juli 3 (2 WKS)	Break: Jun 21-Jul 5 (2 wks)
PA2* (Clinical): No	Apr 1-Jun 23	Apr 6-Jun 28	Apr 5-Jun 27
Holidays	Break: Jun 24-Jun 30 (1 wk)	Break: Jun 29-Jul 5 (1 wk)	Break: Jun 28-Jul 5 (1 wk)
	(6 wk APPE)	(6 wk APPE)	(6 wk APPE)

<sup>\*</sup>PA1=first professional year; PA2=second professional year

#### p. 80 – Updated Graduate School Application Procedure

#### **Admission Requirements**

#### — Master's Degree and Master's Certificate Programs

Requirements for admission to Sullivan

University's Graduate School include:

- 1. A baccalaureate degree from a Council for Higher Education Accreditation (CHEA) or United States Department of Education (USDOE) recognized, accredited institution earning an undergraduate cumulative grade point average (CGPA) of 2.0 (out of 4.0);
- 2. Official transcripts of all previous undergraduate and graduate work;
- 3. A graduate school application and admission fee;
- 4. A successful interview (in-person, via phone, or electronic) with the Graduate School Admissions Committee or assigned Faculty member;
- 5. The Interview requirement may be waived with documentation of one of the following:
  - a An undergraduate GPA of at least 2.5 (out of 4.0); or
  - b. GMAT score of 550 (or better within the past five years); or
  - c. A combined GRE Qualitative Reasoning Score and GRE Verbal Reasoning Score (within the past five years) that equates to a GMAT score of 550 (or better); or
  - d. A master's degree from a CHEA or USDOE recognized, accredited institution; or
  - e. Completion of one full-time academic term in fulfillment of a master's degree program from a CHEA or USDOE recognized, accredited institution with GPA of at least 2.5 (out of 4.0)

Original materials submitted no later than twenty-one (21) calendar days after the beginning of the academic quarter for which the applicant is seeking admission.

Additionally, a current Sullivan University undergraduate student may enroll in the Graduate School and take up to four individual graduate classes that will apply to the student's undergraduate program of study if the following requirements are met:

- Has completed a minimum of 136 quarter hours;
- Is in the last academic year of study;
- Has a minimum GPA of 2.75 on a 4.0 scale;
- Is taking no more than one graduate class during any quarter;
- Has met all graduate school prerequisite coursework requirements;
- Has up to 16 quarter hours of available free elective space in their program of study.

#### Special Status—Master's and Master's Certificate Programs

Students who do not meet the requirements above must have approval of the Dean of the Graduate School.

Acceptance to The Graduate School is contingent upon approval from the Dean of The Graduate School. If a grade of "C" or lower is obtained during the first 16-quarter hours of graduate classes, the student's continuation in the program is at the discretion of The Dean of The Graduate School.

#### **Conditional Admission Requirements Section was REMOVED**

#### International Students Graduate School Admission—Master's and Graduate Certificate Programs

See specific policies for International Student Admission in the Admission To The University section of the catalog.

#### p. 81 – Edit to Master of Science in Management Replace

Free Graduate School Elective (4 Credit Hours) 4

One elective course from the following list is chosen by the student to complement the student's personal or professional interests.

#### **Choose One:**

MGT 571 Competing in Domestic and International Markets 4

MGT590 Project Management 4

MGT596/MGT597/MGT696/MGT697 Graduate Management Experientials 1, 2, 3, and 4

MPA 510 The Public Policy Process

#### p. 86 – Program Title and Curriculum Changes Master of Public Management Administration

Course	Titles	Credit Hours	
MGT 510	Leadership Communication	4	
CMM 550	Negotiation in Conflict Manageme	ent 4	
MGT 580	<del>-Strategic Human Resource Manage</del>	ement 4	
MGT 545	Leading Organizations	4	
MGT 620	Operational Efficiency and Effective	reness 4	
MP <mark>M-</mark> A 510	The Public Policy Process	4	
FIN 545	Public Sector Financial Manageme	nt 4	
MP <mark>M</mark> A 550	Public Policy Economic Analysis	4	
MP <mark>M</mark> A 680	Program and Policy Evaluation - M	IPM 4	
	Capstone		
ONT 550	Advanced Quantitative Methods	4	
Credit Hours 30			
Free Electives (12 Credit Hours)			
Three elective courses are chosen by the student to complement			
the student's personal of professional interests.			
Total Credit Hours 48			

#### p. 88 - Edit to "Admission to Ph.D. in Management", fourth bullet point should now read

\* Applicants may either provide a resume that demonstrates proven, progressive experience in a managerial capacity in business, government or not-for-profit management, OR, participate in an interview with the Ph.D. Acceptance Committee to describe how the candidate will be able to effectively utilize the scholar/practitioner model while enrolled in the program and within their scholarly research.

#### p. 92 – Changes to Doctor of Pharmacy curriculum Sullivan University College of Pharmacy Curriculum Change Addendum-Class 2020 and 2021

The College of Pharmacy has made two curriculum changes that affect the graduating Classes of 2020 and 2021 starting in the 2018-2019 academic year. The change for the Class of 2020 increases the total program credit hours to 175. The change for the Class of 2021 increases the total program credit hours to 176. Please see a description of the changes below.

#### Class 2020: increase to 175 hours

Curriculum changes include: addition of PHR 6006 Literature Evaluation and Application (2 credits), removal of PHR 6604 Research Design II (1 credit), and re-arrangement of elective credit hours to be evenly distributed across all four quarters in the second professional year. While the PHR 6006 course is listed in each quarter, students will only be required to take the course one time during the second professional year.

#### Class 2021: increase to 176 hours

Curriculum changes include the ones noted above for the Class of 2020 but also include a course change in Summer quarter of the first professional year. PHR 5000 Intro to the Practice of Pharmacy (1 credit) is being replaced by PHR 5009 Development of the Student Pharmacist (2 credits).

Updated 1-page curriculums are provided for both graduating classes below.

#### Class 2020 Sullivan University College of Pharmacy Curriculum (175 credit hours)

PY1 1st QU	ARTER (SUMMER)	CrHr
PHR5000	Into to the Prac of Pharm	1
PHR5001	Intro to Health Care System	2
PHR5002	Human Physiology	4
PHR5003	Pharmaceutics I	3
PHR5004	Pharm Calculations w/Lab	3
PHR5005	Pharmacy Law and Ethics	3
PHR5007	Patient Care Lab	1
PHR5008	IPPE Community	1
TOTAL		19

PY1 2 <sup>ND</sup> QUARTER (FALL)		CrHr
PHR5200	Immunology	3
PHR5201	Medication Safety	3
PHR5202	Biochemistry	4
PHR5203	Pharmaceutics II w/Lab	3
PHR5204	Comm & Collab Sol"ns	2
PHR5205	IPPE Community	1
PHR5206	Patient Care Lab	1
TOTAL		17

PY1 3 <sup>RD</sup> QUARTER (WINTER)		CrHr
PHR5400	Clin Micro/Antibiotics Basics	3
PHR5402	Research and Lit Eval I	3
PHR5404	Public Health Issues	2
PHR5405	Biotechnology	1
PHR5406	IPPE Community	1
PHR5407	Patient Care Lab	1
PHR5408	Self Care I	2
PHR5603	Sterile Dosages with Lab	2
TOTAL		15

PY1 4TH QUARTER (SPRING)		CrHr
PHR5600	IPPE Hospital	4
PHR5601	IPPE Commuity	1
PHR5604	Patient Care Lab	1
PHR5605	Intro to Pharm/Med Chem	2
PHR5606	Self Care II	2
TOTAL		10

<sup>\*</sup>Lit Eval and App—Each student will participate in this course during one quarter in the PY2 year.

PY2 1st QU	ARTER (SUMMER)	CrHr
PHR6001	Therapeutics I	4
PHR6002	Patient Care Lab	1
PHR6003	Biopharm and Kinetics I	2
PHR	Elective I	2
PHR6004	Pathophys	3
PHR6005	Pharm/Med Chem I	3.5
PHR6006	Lit Eval and App*	2
TOTAL		15.5-
		17.5

PY2 2 <sup>ND</sup> QU	JARTER (FALL)	CrHr
PHR6200	Pharm Prac Manage	2
PHR6202	Patient Care Lab	1
PHR6203	Biopharm & Kinetics II	2
PHR	Elective II	2
PHR6204	Therapeutics II	6
PHR6205	Pharm/Med Chem II	4.5
PHR6006	Lit Eval and App*	2
TOTAL		17.5-
		19.5

PY2 3RD QUA	CrHr	
PHR6400	Clinical Nutrition	2
PHR6401	Pharm/MedChem III	5
PHR6402	Therapeutics III	6
PHR6403	Patient Care Lab	1
PHR	Elective III	2
PHR6404	Genomics	2
PHR6006	Lit Eval and App*	2
TOTAL		18-
		20

PY2 4TH QUA	RTER (SPRING)	CrHr
PHR6600	Economics/outcomes	2
PHR6601	Therapeutics IV	6
PHR6602	Pharm/MedChem IV	5
PHR6603	Patient Care Lab	1
PHR	Elective IV	2
PHR6605	Clin App Kinetics lab	1
PHR6606	Profess Seminar Course	2
PHR6006	Lit Eval and App*	2
Total		19-
		21

<sup>\*\*</sup>PY3: 7 Advanced Pharmacy Practice Experiences of 6 weeks (community pharmacy, ambulatory patient care, hospital/health system pharmacy, inpatient general medicine patient care, 1 selective direct patient care, 2 electives) plus a Research Project and NAPLEX Review

#### Class 2021 Sullivan University College of Pharmacy Curriculum (176 credit hours)

PY1 1st QUARTER (SUMMER)		CrHr
PHR5009	Development of the Stud Pharm	2
PHR5001	Intro to Health Care System	2
PHR5002	Human Physiology	4
PHR5003	Pharmaceutics I	3
PHR5004	Pharm Calculations w/Lab	3
PHR5005	Pharmacy Law and Ethics	3
PHR5007	Patient Care Lab	1
PHR5008	IPPE Community	1
TOTAL		19

PY1 2 <sup>ND</sup> QUARTER (FALL)		CrHr
PHR5200	Immunology	3
PHR5201	Medication Safety	3
PHR5202	Biochemistry	4
PHR5203	Pharmaceutics II w/Lab	3
PHR5204	Comm & Collab Sol"ns	2
PHR5205	IPPE Community	1
PHR5206	Patient Care Lab	1
TOTAL		17

PY1 3 <sup>RD</sup> QUARTER (WINTER)		CrHr
PHR5400	Clin Micro/Antibiotics Basics	3
PHR5402	Research and Lit Eval I	3
PHR5404	Public Health Issues	2
PHR5405	Biotechnology	1
PHR5406	IPPE Community	1
PHR5407	Patient Care Lab	1
PHR5408	Self Care I	2
PHR5603	Sterile Dosages with Lab	2
TOTAL		15

PY1 4TH QUARTER (SPRING)		CrHr
PHR5600	IPPE Hospital	4
PHR5601	IPPE Commuity	1
PHR5604	Patient Care Lab	1
PHR5605	Intro to Pharm/Med Chem	2
PHR5606	Self Care II	2
TOTAL		10

<sup>\*</sup>Lit Eval and App—Each student will participate in this course during one quarter in the PY2 year.

PY2 1st QUARTER (SUMMER)		CrHr
PHR6001	Therapeutics I	4
PHR6002	Patient Care Lab	1
PHR6003	Biopharm and Kinetics I	2
PHR	Elective I	2
PHR6004	Pathophys	3
PHR6005	Pharm/Med Chem I	3.5
PHR6006	Lit Eval and App*	2
TOTAL		15.5-
		17.5

PY2 2 <sup>ND</sup> QUARTER (FALL)		CrHr
PHR6200	Pharm Prac Manage	2
PHR6202	Patient Care Lab	1
PHR6203	Biopharm & Kinetics II	2
PHR	Elective II	2
PHR6204	Therapeutics II	6
PHR6205	Pharm/Med Chem II	4.5
PHR6006	Lit Eval and App*	2
TOTAL		17.5-
		19.5

PY2 3 <sup>RD</sup> QUARTER (WINTER)		CrHr
PHR6400	Clinical Nutrition	2
PHR6401	Pharm/MedChem III	5
PHR6402	Therapeutics III	6
PHR6403	Patient Care Lab	1
PHR	Elective III	2
PHR6404	Genomics	2
PHR6006	Lit Eval and App*	2
TOTAL		18-
		20

PY2 4 <sup>TH</sup> QUARTER (SPRING)		CrHr
PHR6600	Economics/outcomes	2
PHR6601	Therapeutics IV	6
PHR6602	Pharm/MedChem IV	5
PHR6603	Patient Care Lab	1
PHR	Elective IV	2
PHR6605	Clin App Kinetics lab	1
PHR6606	Profess Seminar Course	2
PHR6006	Lit Eval and App*	2
Total		19-
		21

<sup>\*\*</sup>PY3: 7 Advanced Pharmacy Practice Experiences of 6 weeks (community pharmacy, ambulatory patient care, hospital/health system pharmacy, inpatient general medicine patient care, 1 selective direct patient care, 2 electives) plus a Research Project and NAPLEX Review

#### p. 96 – NEW Program Community Pharmacy Certificate **CERTIFICATE**

Pharmacy is a growing field with many opportunities for entry-level pharmacy technicians. Pharmacy technicians assist pharmacists in a variety of settings. The Community Pharmacy Certificate equips future pharmacy technicians with entry level skills needed to be successful in the field and prepares them to sit for the Pharmacy Technician Certification Exam. The program includes on-line learning with simulated skills and an externship that provides students real-world experience that will assist them in obtaining employment as a pharmacy technician. All course work is transferrable to the diploma and associate degree in pharmacy technician at Sullivan University.

All PHT core courses require a "C" or better for successful completion.

#### **REQUIREMENTS**

36 Credit Hours

Length: 9 months

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles	Credit Hours
MSS 104	Medical Terminology	4
MSS 154	Health and Safety Techniques	4
PHT 101	Introduction to Pharmacy Technic	ian 4
PHT 105	Pharmaceutical Calculations	4
PHT 150	Pharmacotherapeutics I	4
PHT 151	Pharmacotherapeutics II	4
PHT 201	Pharmacy Law and Ethics	4
PHT 203	Community Pharmacy Operations	4
PHT 299	Pharmacy Externship	4
Total Credit Hours		36

#### p. 96 - Updated Curriculum for Pharmacy Technician Diploma REQUIREMENTS

72 Credit Hours

Length: 12 months

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles	Credit Ho	ours
AOM 105	Keyboarding Essentials		_4
CSC 118	Computer Applications I		_4
ENG 101	Composition I		4
FYE 101	Information Literacy		4
MSS 104	Medical Terminology		4
MSS 154	Health and Safety Techniques		4
MTH 101	College Mathematics		4
PHT 101	Introduction to Pharmacy Technician	n	4
PHT 105	Pharmaceutical Calculations		4
PHT 110	Introduction to Disease and Patient (	Care	4
PHT 150	Pharmacotherapeutics I		4
PHT 151	Pharmacotherapeutics II		4
PHT 201	Pharmacy Law and Ethics		4
PHT 203	Community Pharmacy Operations		4
PHT 204	Institutional Pharmacy Operations		4
PHT 205	Principles of Customer Service		2
PHT 206	Sterile Compounding		4
PHT 209	Medication Safety		2
PHT 297	Advanced Pharmacy Externship		2
PHT 299	Pharmacy Externship		4
Total Cradi	t Hours	72	56

Total Credit Hours

#### p. 97 – Correction to Master of Science in Management listing

Conflict Management and Strategic Human Capital Management Concentrations are no longer available in the Master of Science in Management program.

#### p. 98 - Additional Language in Tuition and Fees section

If this supplement is missing or additional copies are required, please contact the University or visit https://sullivan.edu/academic-catalogs/ for a digital copy of the most recent Supplement A.

#### p. 98 – Edits to the Financial Planning section

Sullivan University is interested in assisting each student who is sincere in the pursuit of an education. It is for this reason that the Office of Financial Planning staff is available to assist students in finding all available student financial aid and to arrange a schedule of payments that will best meet each financial situation with minimal burden on student and/or family. Contact the Office of Financial Planning for an appointment. New students will have a financial planning appointment scheduled through the Admissions Department. Current students may contact the Financial Planning Office directly to schedule an appointment.

#### p. 98 - Edits to the Options for Payment section

For eligible students, Sullivan offers a quarterly tuition self-payment plan if students need to "pay-as-you-go" using income from a part-time job or from family or personal resources. See a financial planning coordinator for details. A plan that is tailored to meet a student's needs may be arranged by making an appointment with a staff member from the Office of Financial Planning-or Business Office. The Career Services Office also maintains a list of part-time positions to help finance a student's education. Pay-as-you-go is not available for students attending on an I-20.

#### p. 98 – Edits to the Books and Supplies section

Students are responsible for purchasing their own books and supplies unless arrangements have been made for purchase through the use of financial aid resources. Most books and supplies needed are available in the University Bookstore, but students may purchase books from any source they choose. In most cases, students utilizing their bookstore account are only permitted to charge books for their classes and a limited amount of program-specific classroom supplies.

#### p. 98 – Edits to Other Fees section

Some courses and programs at the University require additional fees. Additional fees are assessed in order to pay for non-tuition related costs which include but are not limited to: student activities and events; all expenses involving graduation; new technology acquisitions for academic programs; online course systems and services; program-specific supplies, equipment or credentialing; clinical fees; liability insurance; uniforms; and other miscellaneous programmatic items. These fees are disclosed on the enrollment agreement and/or in the Catalog's Supplement A. If this supplement is missing or additional copies are needed, please contact the University or visit https://sullivan.edu/academic-catalogs/ for a digital copy of the most recent Supplement A.

#### p. 98 – Policy Change Effective March 2018

**Tuition Reduction Policy (Withdrawal from the University):** 

This policy change takes effect in the spring, 2018 term:

#### **New and Re-entering Students**

In the event a student completely discontinues attendance from the University, the University reduces tuition charges on a pro rata basis, based on a student's last date of attendance (LDA), as follows:

Week 1 - 100% reduction of tuition and fees

Week 2 - 75% reduction, less the administrative fee of \$100

Week 3 - 70% reduction, less the administrative fee of \$100

Week 4 - 60% reduction, less the administrative fee of \$100

Week 5 - 50% reduction, less the administrative fee of \$100

Week 6 - 30% reduction, less the administrative fee of \$100

Weeks 7-11 - No reduction

#### **Continuing Students:**

In the event of a withdrawal from the University by the student or termination by the University during the second or subsequent quarters of attendance, the student will be subject to the institution's tuition reduction policy as follows:

Weeks 1-3: Tuition reduced 25% of the current quarter's tuition, less \$100 administrative fee Weeks 4-11: No reduction

Fort Knox campus only – all students are charged on a credit hour basis. Tuition is reduced for each class upon withdrawal at the same 1-6 week rate described for new and re-entering students. The administrative charge is 5% of tuition charged.

Students under a contract billing method who receive a tuition reduction will have the reduced tuition amount reinstated to the end of their remaining contract upon re-entry.

Textbooks, supplies and parking permits are not included in the above reduction scale. Students who withdraw may be eligible for a partial or full credit for textbooks that are returned to the Bookstore. See the Bookstore's policy on returned books and supplies for details.

Students enrolled on a contract are obligated for the entire amount of the contract upon completion of the program. Therefore, students who complete their program early and prior to the stated number of terms within the enrollment agreement will be charged the full remaining amount of the contract originally quoted. Any remaining amount will be charged prior to any financial reduction/credit that may be generated by the application of relevant transfer credit. See the Transfer of Credit policy for additional information regarding tuition credit for accepted transfer credit.

#### p. 99 – Additional Language College Interruption

There will be no refund of tuition, fees, charges or any other payments made to the University in the event the operation of the University is suspended at any time as a result of any "Act of God," strike, riot, disruption, or for any other reasons beyond the control of the University.

## p. 100 – Additional required disclosure for California Bureau for Private Postsecondary Education

The State of California established the Student Tuition Recovery Fund (STRF) to relieve or mitigate economic loss suffered by a student in an educational program at a qualifying institution, who is or was a California resident while enrolled, or was enrolled in a residency program, if the student enrolled in the institution, prepaid tuition, and suffered an economic loss. Unless relieved of the obligation to do so, you must pay the state-imposed assessment for the STRF, or it must be paid on your behalf, if you are a student in an educational program, who is a California resident, or are enrolled in a residency program, and prepay all or part of your tuition. You are not eligible for protection from the STRF and you are not required to pay the STRF assessment, if you are not a California resident, or are not enrolled in a residency program.

It is important that you keep copies of your enrollment agreement, financial aid documents, receipts, or any other information that documents the amount paid to the school. Questions regarding the STRF may be directed to the Bureau for Private Postsecondary Education, 2535 Capitol Oaks Drive, Suite 400, Sacramento, CA 95833, (916) 431-6959 or (888) 370-7589.

To be eligible for STRF, you must be a California resident or enrolled in a residency program, prepaid tuition, paid or deemed to have paid the STRF assessment, and suffered an economic loss as a result of any of the following:

- 1. The institution, a location of the institution, or an educational program offered by the institution was closed or discontinued, and you did not choose to participate in a teach-out plan approved by the Bureau or did not complete a chosen teach-out plan approved by the Bureau.
- 2. You were enrolled at an institution or a location of the institution within the 120 day period before the closure of the institution or location of the institution, or were enrolled in an educational program within the 120 day period before the program was discontinued.
- 3. You were enrolled at an institution or a location of the institution more than 120 days before the closure of the institution or location of the institution, in an educational program offered by the institution as to which the Bureau determined there was a significant decline in the quality or value of the program more than 120 days before closure.
- 4. The institution has been ordered to pay a refund by the Bureau but has failed to do so.
- 5. The institution has failed to pay or reimburse loan proceeds under a federal student loan program as required by law, or has failed to pay or reimburse proceeds received by the institution in excess of tuition and other costs.
- 6. You have been awarded restitution, a refund, or other monetary award by an arbitrator or court, based on a violation of this chapter by an institution or representative of an institution, but have been unable to collect the award from the institution.
- 7. You sought legal counsel that resulted in the cancellation of one or more of your student loans and have an invoice for services rendered and evidence of the cancellation of the student loan or loans.

To qualify for STRF reimbursement, the application must be received within four (4) years from the date of the action or event that made the student eligible for recovery from STRF.

A student whose loan is revived by a loan holder or debt collector after a period of noncollection may, at any time, file a written application for recovery from STRF for the debt that would have otherwise been eligible for recovery. If it has been more than four (4) years since the action or event that made the student eligible, the student must have filed a written application for recovery within the original four (4) year period, unless the period has been extended by another act of law. However, no claim can be paid to any student without a social security number or a taxpayer identification number.

### p. 101 – Addition (after Maximum Time Frame for Degree Completion) Veteran's Administration (VA) Round Out Policy:

VA Benefits, depending upon the chapter type, may allow the student to "round out" their graduating quarter with an additional course(s) outside of their current program. This permits the student to carry a full-time course load and remain eligible for other VA related benefits that require a full-time status. In rounding out a full-time schedule, eligible benefit recipients may use any credit hour course (level appropriate), including a subject that has previously been successfully completed (receiving a passing grade). The student will be charged for these additional courses at the current published credit hour rate.

This benefit can only be used once per program, and only in the last term of that program. This option must be requested through Academic Services and students must meet pre-requisite or entrance requirements outlined in the Catalog for the courses(s) requested. Due to federal and state regulations, students may not utilize a round out for the purposes of Title IV and state financial aid programs.

#### p. 105 – Edits to Dress Standards – New policy effective June 22, 2018

Students are expected to dress in a manner that is not distracting or distasteful for a classroom environment. A few simple guidelines are to be followed:

- A University-issued name badge/student ID must be worn and visible at all times.
- Clothes must be clean and appropriate for the classroom.
- Pants must not be allowed to sag and/or expose one's undergarments.
- Tops must minimize chest/stomach exposure.
- If applicable, students are required to wear appropriate safety equipment as required by the instructor and/or classroom safety rules.

Although these standards may not satisfy everyone's desire for personal dress freedom, we believe appropriate dress enhances the learning environment. Students who are not appropriately dressed will not be permitted to attend class.

The University or individual academic programs reserve the right to require professional dress attire as is deemed necessary to fulfill the objectives of a particular class or announced event.

#### **Professional Dress Wednesday**

On Wednesdays, students who attend during the day are to dress as if they were going on a job-interview. Dress Standards: - Professional skirt/pants - Professional shirt and tie/blouse - Professional dress/skirt suit/pantsuit - Professional foot attire Although these standards may not satisfy everyone's desire for personal dress freedom, we believe appropriate dress is important for the overall professional business image. Because we believe this is a constructive and vital part of your professional development, students are asked to follow these dress standards. Students who are not professionally dressed will not be permitted to attend class.

#### No changes were made to NCHS Professional Dress Standards

#### **Allied Health and Nursing Programs**

The student uniforms should be worn with pride and respect. The uniforms are designed to provide the students with clean, neat, and comfortable outfits that identify them as students. To maintain uniform cleanliness and a professional image, students should not sit on the ground, pavement, floor, or parking lot while in uniform.

Beginning the second week of every quarter, all first quarter students will wear the uniform designated by their department director. Students are expected to wear the assigned scrubs or other uniform every day they are on campus or at a clinical or externship site.

Returning students are expected to wear their department's uniform beginning the first day of the quarter and each day thereafter, whether on campus, on clinicals, or on externship site.

- 1. Students in the following programs will wear scrubs as designated by the program director: Limited Medical Radiography, Medical Laboratory Technology, Massage Therapy, Phlebotomy, Radiology Technology, Respiratory Therapy, Surgical Technology, Associate Degree Nursing, and Practical Nursing, Medical Coding, Healthcare Reimbursement Specialist, Medical Assistant, Clinical Assistant, Medical Administrative Assistant, Medical Administrative Management, and Medical Massage Therapy.
- 2. Students must wear ALL LEATHER shoes or a leather shoe that is OSHA compliant. No canvas tennis shoes in any laboratory or clinical medical program are permitted. Some clinical sites may require solid color shoes.
- 3. A lab coat is REQUIRED for certain lab classes in these programs.

Hygiene: The personal appearance of students is important in our interactions with fellow students, faculty, staff and the clinical environment. The following bullet points outline the personal hygiene expectations:

- Students are to be clean and free of body odor, which includes perfume, aftershave, cigarettes, or cigar smoke.
- Uniforms are to be clean and wrinkle free
- Facial hair must be neatly trimmed.
- No facial jewelry or body piercings
- All body art (tattoos) must be covered by clothing at all times.
- No artificial fingernails

Failure to comply with these policies could result in dismissal from program.

#### p. 106 Changes to Class Repeat Requirements/Policy

Any Sullivan University student must repeat any required course in his or her program in which a non-passing grade has been earned. The non-passing grade will remain on the student's transcript and will be calculated in the quarterly GPA, but will not be used in computing the student's cumulative GPA. The non-passing grade will, however, be calculated as hours attempted during the Satisfactory Academic Progress (SAP) review. The student will receive

the grade and grade points earned in the most recent attempt in any course. In repeating a class in which a non-passing grade was earned, the student agrees to accept for record the grade earned for the course repeated.

### p. 106 – New Policy for Grade Challenge Grade Challenge

Should a student believe that an error has been made on a final grade issued by an instructor, the student should first discuss his/her concern with the instructor. This discussion must take place no later than the first week of the following academic quarter. At the conclusion of that discussion, if the student is not satisfied with the outcome, she/he may challenge the disputed grade. The challenge must take place prior to the end of the second week of the quarter, following the challenged course grade. Challenges are to be presented, in writing, to the respective Dean of the College in whose department the course falls, and must be accompanied with all of the evidence necessary to support the student's claim.

### p. 113-114 – Updated Grievance Policy (effective May 24, 2018) Grievance/Official Complaint Procedure

Any Sullivan University student who wishes to file a formal grievance or official complaint with the University must do so in accordance with this policy. A grievance or official complaint is defined as notification by the student of a perceived hardship or harm to the student arising from a decision or action made by an institutional staff or faculty member the student believes was in violation or misinterpretation of an institutional policy or process, or a local, state or federal regulation or law. The grievance must be filed within 90 days of the date the student became aware, or should have become aware, of the perceived violation. Certainly, time sensitive issues must be brought forth within a time frame that appropriate resolutions may be implemented; i.e. grade challenges, transfer credit acceptance, etc.

Doctor of Pharmacy students must first follow the College of Pharmacy grievance/complaint policy as published in the College of Pharmacy Student Handbook. Once all avenues have been exhausted through the College of Pharmacy policy, further review may be sought by entering the following policy at Step 2.

To file an official grievance or complaint, the following process must be followed:

Step 1: Students who believe they have a valid grievance as defined above must first address the matter informally by speaking with the individual with whom they have the concern or they believe may have appropriate authority to resolve, unless unique circumstances exist that would render such a discussion impossible. Should the student receive a response he/she believes to be in continued noncompliance with University policy, etc., the student may wish to initiate step two of the University's grievance procedure.

Step 2: To implement step two of the grievance procedure the student should access <a href="http://sullivan.edu/studentgrievance">http://sullivan.edu/studentgrievance</a>, complete and submit the form with all required information, including a summary of their efforts and outcome via step one of the Grievance/Official Complaint Procedure. At this point in the process, the grievance/complaint is considered official. The grievance/complaint will be received and reviewed by University Ombudsman. The Ombudsman will normally review the grievance within seven calendar days

and may assign a relevant administrative or academic authority (typically a department chairperson for academic issues) to review the grievance and to respond to the student. The Ombudsman or assigned administrative or academic authority will make reasonable effort to conclude their investigation and respond to the student within ten calendar days of their being assigned to conduct a review/investigation. If additional time for investigation and response preparation is required, the student will be notified of the extension. If the student is not satisfied with the response of the administrator or academic authority assigned to investigate the grievance, the student may wish to implement step three of the grievance procedure.

- Step 3: To implement step three of the grievance procedure, the student may request official review by the Senior Vice President for Administration for non-academic matters, or, the Senior Vice President for Academic Affairs/Provost for academic matters. at the location of the student's enrollment by making To initiate this level of review, a formal request must be submitted in writing directly to the official via email or delivery to the official's office. The Senior Vice President for Administration or Senior Vice President for Academic Affairs/Provost may take one or more of the following action(s):
- a. Appoint a special committee to review the grievance and provide a recommendation to him/her. A decision may then be rendered by the official, normally within 14 days.
- b. Appoint a high-level administrator to individually review the grievance and provide a recommendation (typically a dean for academic issues). A decision may then be rendered by the official, normally within 14 days.
- c. Personally review the matter and render a decision, normally within 14 days.
- d. If the Senior Vice President for Administration or Senior Vice President for Academic Affairs/Provost was involved in Step 2, an independent committee will automatically be appointed by the President/CEO to whom a recommendation will be made and a decision rendered, normally within 14 days.
- Step 4: If the student is not satisfied with the result of step three of this process, he/she may request official review by the President/CEO of Sullivan University by mailing or delivering the request to the Administrative Office, Sullivan University, 3101 Bardstown Road, Louisville, KY 40205. During Step 4, the President/CEO's decision will normally be available within seven calendar days.

Step 5: While the University President/CEO's decision is normally final, allegations of gross errors in judgment after the

President/CEO's review may be filed with the Office of the President of the Sullivan University System, Inc.,

3101 Bardstown Road, Louisville, KY 40205.

Grievance reviews do not necessarily follow state or federal rules of evidence. Except as may be explicitly allowed by law or regulation, attorneys, parents, friends, advisors, etc., are typically excluded from meetings and hearings that may occur throughout the process. Examples of exceptions include situations that may relate to the Violence Against Women Act and others as appropriate.

Once all internal procedures for grievance resolution offered by the university are exhausted, a complaint can be submitted to the state authorizing authority, the Kentucky Council on Postsecondary Education (KCPE). KCPE complaints can be sent to:

CPE Consumer Complaint 1024 Capital Center Drive, Suite 320

Frankfort, KY 40601

Email: cpeconsumercomplaint@ky.gov

Learn more at http://cpe.ky.gov/campuses/consumer\_complaint.html

#### p. 115 – Add Statement under Rules and Regulations of Status

Any Sullivan University student who has their I-20 terminated or transferred will be administratively withdrawn from all courses on the termination or transfer date.

# p. 118 – Edits to I.D. Cards section – Replace Old Language I.D. Cards

During registration, each student is given a University photo I.D. card which is mandatory and gives entrance to University sponsored activities. In addition, a University I.D. is required to check out library materials, make bookstore purchases being charged to a financial aid account, and use the I.D. discount program. There will be a charge for replacing I.D. cards.

#### p. 118 – Edit to Injury/Illness Expense Policy (paragraph 2)

Students are strongly encouraged to maintain their own private health insurance and to carry with them, at all times, their health insurance identification card. Additionally, some programs will require health and/or liability insurance for compliance with programmatic regulations. Sullivan University does not act as an insurer and generally does not provide medical coverage for illness or injury sustained while at Sullivan University or while engaged in curricular and/or extra-curricular events. In some instances when a student enrolled in a National Center for Hospitality Studies degree program becomes injured due to an event in a lab, or, in direct relation to their major and the instruction of the program, a secondary policy maintained by the institution may assist with some of the costs for treatment. This policy is limited, however, and will always be secondary to any personal health insurance maintained by or for the presenting individual. In no instance will Sullivan University guarantee payment to any third-party provider for any type of medical care.

#### p. 119 – Edits to Printing/Paper Usage section

Sullivan University believes in responsible usage of natural resources. In addition to its recycling program and other initiatives, Sullivan seeks to encourage responsible paper and toner usage through a program known as Paper Cut. Each term, every student's "print account" is credited with \$15.00 which equates to 300 black and white printed pages at 5 cents each. In the rare instance When color pages are printed, such will accrue against the student's account at 10 cents each. Each time a student prints on campus, they receive an update from the Paper Cut system concerning usage during the term. If a student approaches or reaches their limit, additional print capability may be purchased in the bookstore in \$5.00 \$1.00 increments. Balances left on one's account may not carry over to subsequent terms, nor are unused amounts available for refund. Some accounts may vary based on program.

p. 119 – Language added to Public Safety/Security section – the end of first paragraph An emergency preparedness plan has been filed with Public Safety/Security and can be accessed at any time by any student.

## p. 122 – Edits to Student Behavior and Responsibilities

#### **Student-Behavior and Responsibilities**

Sullivan University students All individuals assume the responsibility for acting in a manner compatible with the institution's mission. Misconduct for which students are subject to discipline includes, but is not limited to:

#### Alcoholic Beverages and Illegal Drugs:

In addition to federal, state and local laws governing the use or possession of alcoholic beverages and illegal drugs, the University prohibits the possession, sale, use or furnishing of drugs and alcohol of any type by all persons while on campus property except as they may be used in a formal teaching environment. The University reserves the right to place a student on probation, suspension, or expulsion status and to exclude them from the campus and all campus functions for illegal sale, use, possession or furnishing of chemical substances, including all forms of illegal drugs and alcohol. The University may also require the student to participate in a substance abuse or rehabilitation program. In addition, the appropriate authorities will be notified and the student will be referred for prosecution. Students on campus who are found to be under the influence of alcohol and/or illegal drugs will also be subject to disciplinary action. This policy extends to any and all University-sponsored activities regardless of time, day or location. Some programs may require unannounced drug or alcohol testing of any student at any time.

#### Discrimination:

Discrimination based upon sexual orientation, gender, national origin, religion, veteran status, race, creed and disability is prohibited.

**Disorderly Conduct:** Disorderly, lewd, indecent or obscene conduct or expression on University property, on University online networks or at sponsored/supervised functions is prohibited.

**Minors:** Adults are responsible for ensuring the reasonable supervision of minors in their charge.

### p. 123 – Edits to Requirements for Graduation Undergraduate Programs

All undergraduate students must attain a minimum cumulative grade point average (GPA) of 2.0 to qualify for a certificate, diploma or degree. In order to graduate, Associate of Science degree students must complete the assessment of general studies and all students must complete the competency exam for their respective degree program.

The Associate of Science degree requires completion of a minimum of 90 credit hours, depending on the program of study. Dual Associate of Science degrees require completion of a varying number of credit hours depending on the student's program of study. A minimum of 20 additional hours is required for the second degree.

The Bachelor of Science degree requires a minimum of 180 credit hours, depending on the program of study. Dual concentrations in the Bachelor of Science in Business Administration program may be obtained by satisfactorily completing the concentration courses in another area

plus any prerequisite courses. Approval is required prior to enrolling in any course in an additional concentration area.

Transfer students must earn at least 25% of the credit hours required for the degree through instruction offered at Sullivan University.

#### Medical Assisting students are required to take a national certification exam.

Developmental/remedial courses, as required, will increase the total program credit hours required for program completion, and modify maximum timeframe calculations and graduation requirements accordingly.

### p. 129 – Prerequisite Changes

CSC 147 Forensics I

Prerequisite: CSC 146 None

#### **CSC 210 DATABASE DESIGN**

Prerequisite(s): CSC 200 105

#### p. 129 - New Course Descriptions

### CSC 111 Introduction of Cybersecurity and Information Assurance (4 Credits)

This course provides an overview of the importance of the interdisciplinary field of cybersecurity and information. Topics to be covered include the evolution of information security into cybersecurity, cybersecurity theory, and the relationship of cybersecurity to nations, businesses, society, and people. In addition, this course prepares students for the CSX Cybersecurity Fundamentals Certificate by providing an overview of the importance of the field of cybersecurity and the concept of information assurance in context and the rules and guidelines that control them. Topics to be covered include 1) cybersecurity concepts, 2) security architecture principles, 3) security of networks, systems, applications and data, 4) incident response, and 5) the security implications of the adoption of emerging technologies, and 6) information assurance.

In addition, the course covers the governance, compliance, the legal environment, and emerging laws and regulations related to the field and the challenges of governance, ethics, legal, and regulatory compliance through the eyes of information security professionals. Compliance requirements in response to key mandates and laws, including Sarbanes-Oxley, HIPAA, Privacy, Gramm-Leach-Bliley, the Foreign Corrupt Practices Act (FCA), and the Payment Card Industry Data Security Standards (PCI DSS). Lastly, we will examine some of the challenges of compliance and ethics in the practice of Information Security. Prerequisite(s): None

### CSC 207 Cybersecurity Threats, Attacks, and Defense (4 Credits)

This course examines cybersecurity threats and attacks which pose significant risk to governments and businesses. This course will provide knowledge, skills, and techniques to identify and address the many cybersecurity threats facing our world today. The course will continue coverage of key knowledge areas of the CISSP (Certified Information Systems Security Professional) common body of knowledge (CBOK) and provide students with basic information about the threats that may be present in the cyber realm. Students will gain a basic awareness of the options available to mitigate threats within a system. The course will also provide a framework for past, current, and future cybersecurity threats and apply

lessons learned in the past to current cybersecurity risks and defenses. Lastly, the course will attempt to predict future cybersecurity fears and defense strategies, how IT security threats are constantly evolving, and provide insight into cybersecurity defenses from business and government perspectives. (Prerequisite: CSC 111)

#### **CSC 225 Principles of Information Security (4 Credits)**

This course examines the world of cybersecurity threats, attacks, and defense strategies. The threat of a cyber-attack and worse, the attack itself poses significant risks to governments and businesses. This course will provide the knowledge, skills, and techniques to identify and address the many cybersecurity threats facing our world today. The course will cover the key knowledge areas of the CISSP (Certified Information Systems Security Professional) common body of knowledge (CBOK). Providing students with basic information about the threats that may be present in the cyber realm as well as a basic awareness of the options available to mitigate threats within a system. The course provides a framework for past, current, and future cybersecurity threats and applies lessons learned in the past to current cybersecurity risks and defenses. Lastly, the course will attempt to predict future cybersecurity fears and threats that are constantly evolving and appropriate defense strategies for both the public and private sectors. (Prerequisite: CSC 111)

#### p. 130 – Prerequisite Changes CSC 240 VISUAL PROGRAMMING

Prerequisite(s): CSC 200-105

#### **CSC 247 FORENSICS II**

Prerequisite(s): CSC 146 None

### p. 131 - Prerequisite Changes CSC 348 MOBILE FORENSICS

Prerequisite(s): CSC 146 MNE 109

#### **CSC 420 IT PROJECT MANAGEMENT**

Prerequisite(s): CSC 364 240, MTH 301

#### p. 131 – New Course Descriptions

#### CSC 326 Incident Response and Disaster Recovery (4 Credits)

The course is designed to provide the skills to handle and respond to the computer security incidents in an information system. The course addresses various underlying principles and techniques for detecting and responding to current and emerging computer security threats. The course covers incident response teams, incident management training methods, and incident recovery techniques in detail. Students will learn how to handle various types of incidents, risk assessment methodologies, and various laws and policies related to incident handling. After attending this course, they will be able to create incident handling and response policies as well as deal with various types of computer security incidents. The course will provide an examination of the tools and methods for incident response. Topics include preparation data collection, incident analysis preserving data, and recovery. The legal and ethical aspects of incident response will also be covered.

In addition, students will learn about computer forensics and its role in handling and responding to incidents. The course is also intended to provide students with a strong understanding of

incident response and disaster recovery principles, including conducting business impact analysis, assessing of risks, developing policies and procedures, and implementing a plan. It also teaches students how to secure data by putting policies and procedures in place, and how to recover and restore their organization's critical data in the aftermath of a disaster. The end product of this course is to prepare students for a career in the field of disaster recovery and advanced certification as an EC-Council Certified Incident Handler (ECIH) and EC-Council Disaster Recovery Professional (EDRP). Prerequisite(s): CSC 207, CSC 225

#### CSC 425 Security Audits and Risk Assessment (4 Credits)

A detailed look and examination of the IT security audit and control process as well as risk assessment various tools and frameworks to conduct a system security audit and risk assessment. Various IT audit frameworks, government and non-government, will be covered. Legal and ethical aspects of IT auditing and risk assessment will be covered. The purpose of this course is to establish the exact status of an IT operation. Students will create an audit based control structure, establish systematic accounting and control procedures and build complete and coherent information assurance capability into the IT function. This will revolve around defining a control framework, the associated control objectives and the reporting system for an organization. Guidance for carrying this out will be provided in the form of expert models; including ISACA's COBIT open standard, NIST 800-53A Assessing Security and Privacy Controls in Federal Information Systems and Organizations, and GAO Federal Information Systems Control Audit Methodology as well as the NIST Risk Management Framework The end product of this course is to prepare students for careers in Audit and Risk Assessment and advanced certifications such as ISACAs Certified Information Systems Auditor (CISA) and Certified in Risk and Information Systems Controls (CRISC) and the Institute of Internal Auditors (IIA) Certified Internal Auditor (CIA). Prerequisite(s): MNE 430

### p. 132 - New Course Descriptions

#### DCA101 Dale Carnegie High Impact Presentations (1 Credit)

The course focuses upon the planning, organization of professional presentations, creating and maintaining a positive impression, communicating ideas with clarity and force, and how to deliver presentations that can persuade and inspire others. Prerequisite(s): None

#### DCA103 Dale Carnegie Leadership Training for Managers (3 Credits)

This course focuses upon the principles of management and team building that will allow students to enhance their performance as managers. Topics covered in this course include developing personal leadership, understanding the innovation process, problem analysis and decision making, delegation, communication, and turning ideas into action. a pass/fail course (S and U grades). Prerequisite(s): None

## p. 133-134 – New Course Descriptions

#### **HIM 121-Health Information Technology (4 Credits)**

This course will introduce students to the practical aspects of health information management technology, healthcare reimbursement leadership and management. This includes the key concepts of health information and medical records. Students will be introduced to the types and content of the health record. Students will also learn concepts in health data structure, content and standards, data monitoring and compliance reporting. Prerequisite: None

#### **HIM 161-Legal Aspects of Health Information (4 Credits)**

This course begins with an introduction to legislative and regulatory processes, legal terminology, health information laws and regulations. It continues with the examination of the HIPAA Security Rule, the evaluation of patients' rights regarding the authorized and non-authorized release of personal health information (PHI) and legal terminology. It also reviews risk management, organization compliance and the release of PHI. The course continues with an evaluation of security threats and security protection of a Health Information Management organization. Last, the course evaluates professional and ethical workplace behavior and workplace laws of medical staff and medical facilities. Prerequisite: None

#### **HIM 261-Healthcare Management (4 Credits)**

This course will engage in the functions of a manager, planning, organizing, decision making, staffing, leading or directing, communication and motivating. Further study will include principles of authority/ responsibility, delegation and effective communication, organization charts, job descriptions, policies and procedures, employee motivation, discipline and performance evaluation. Prerequisites: HIM161, HIM171, ENG102

### p. 139 – Edit to Prerequisites MGT 434 OPERATIONS MANAGEMENT

Prerequisite(s): MGT 304, MTH 301 202

#### p. 144 and 145 – MED equivalencies to MSS courses

#### **MSS 104 MEDICAL TERMINOLOGY (4 Credits)**

This course introduces the skills necessary for understanding and properly using medical terminology by presenting a foundation of roots, prefixes, and suffixes. Word building and definitions are related to communications, written correspondence, and medical records. (Equivalent to MED 176) Prerequisite(s): None

#### MSS 123 ANATOMY AND PHYSIOLOGY I (4 Credits)

Students are introduced to the general plan of the human body, cells, tissues, organs, the musculoskeletal, neuro-sensory, and endocrine systems. Furthermore, concepts of the disease processes and disease-producing organisms are introduced. (Equivalent to MED 172) Prerequisite(s): None

#### MSS 133 ANATOMY AND PHYSIOLOGY II (4 Credits)

This is a continuation of Course MSS 123 with emphasis on the circulatory system, body defenses and immunity, urinary, respiratory, digestive, and reproductive systems. Further discussion of disease processes will be included. (Equivalent to MED 173) Prerequisite(s): MSS 123

#### MSS 144 MEDICAL LABORATORY PROCEDURES I

#### (4 Credits) – Not Designed to Transfer

This is a lecture and laboratory class designed to introduce the student to the clinical aspects of their profession. Some areas covered include electrocardiograms, pulmonary function testing, asepsis, sterile procedures. Students will address nutrition and special dietary needs of patients in this course. (Equivalent to MED 274) Prerequisite(s): MSS 133

#### MSS 204 MEDICAL ETHICS (4 Credits) - Not Designed to Transfer

Since the allied health profession is an important member of the medical team and their awareness of multiple legal and ethical issues are critical in today's health care environment, this course explores information relating to medical law and ethics. This course is designed to assist the healthcare professional in better understanding the legal and ethical obligations to patients, healthcare providers and healthcare employers. Topics in medical law, medical ethics, and bioethics are discussed. Scope of practice, state and federal legislation, and state and federal licensing and certification requirements are covered in this course. (Equivalent to MED 171) Prerequisite(s): None

#### p. 145 – Change in Pre-requisite(s):

Effective April 3, 2018:

#### Previous pre-requisite:

MSS 274 MEDICAL OFFICE PROCEDURES (4 Credits) The emphasis in this course is effective telephone practices, mail processing, medical records, accident and health insurance, claim processing, filing, preparing correspondence, and ordering supplies. Prerequisite(s): AOM 214

#### New pre-requisite:

MSS 274 MEDICAL OFFICE PROCEDURES (4 Credits) The emphasis in this course is effective telephone practices, mail processing, medical records, accident and health insurance, claim processing, filing, preparing correspondence, and ordering supplies. Prerequisite(s): CSC 118

# p. 148-150 – Updated Pharmacy Technician (PHT) Course Descriptions PHT 101 – Introduction to Pharmacy Technician

This course will cover the history of pharmacy, pharmacy organizations, and the healthcare system. The issues of ethics and professionalism will be presented and discussed. Students will be introduced to the basic skills required of a pharmacy technician, including medical terminology, prescription interpretation, basic calculations, and compounding. Students will learn the brand/generic names of the Top 200 drugs and will explore Over-the-Counter medications and supplements. Students will explore both the traditional and non-traditional roles pharmacy technicians can play in various practice settings. Prerequisite(s): Pharmacy Technician Students Only

#### **PHT 105 – Pharmaceutical Calculations**

This course explores common pharmacy calculations, to include converting between measurement systems, interpreting medication orders, routes of administration, and dosage calculations, including special populations. Prerequisite(s): MTH 101, PHT 101

#### PHT 110 – Introduction to Disease and Patient Care

This course focuses on the fundamental principles relating to etiology, nature, prevention, and control of both communicable and non-communicable diseases in human populations. The course will be organized by body system and will provide the basic fundamentals needed to understand the organization and function of the human body. Prerequisite(s): PHT 101

#### PHT 150 – Pharmacotherapeutics I

This course will explain the use and side effects of prescription and non-prescription medications, and alternative therapies used to treat common disease states. After this course, students will be able to list therapeutic effects, adverse effects, brand/generic names, dosage forms, route(s) of administration, drug interactions, contraindications, proper storage, and doses of various medications. Prerequisite(s): PHT 101, MSS 104

#### PHT 151 – Pharmacotherapeutics II

This course will continue the concepts introduced in PHT 150. This course will explain the use and side effects of prescription and non-prescription medications, and alternative therapies used to treat common disease states. After this course, students will be able to list therapeutic effects, adverse effects, brand/generic names, dosage forms, route(s) of administration, drug interactions, contraindications, proper storage, and doses of various medications. Prerequisite(s): PHT 150

#### PHT 201 – Pharmacy Law and Ethics

This course focuses on the laws, regulations, and ethical issues related to the practice of pharmacy. Both Federal and Kentucky state laws relating to the practice of pharmacy and control of drugs and medical devices will be included. Prerequisite(s): PHT 101

#### PHT 206 – Sterile Compounding

Course content will include organization and administration of an admixture program, requirements for clean room setup, equipment used in preparing sterile preparations, preparation of compounded sterile preparations, regulations governing preparation, distribution and storage of compounded sterile products, reviewing physician orders, calculating dosages, and administration of different types of parenteral products. Students will have the opportunity to practice in the laboratory the techniques related to the compounding of sterile dosage forms, and will be required to demonstrate competency in safe preparation of sterile dosage forms. Prerequisite(s): PHT 105, PHT 150, Advisor Approval

#### **PHT 208 – Nutrition for Pharmacy Technicians**

This course is an introductory study to the principles of human nutrition and its effect on health. Course topics will include prescription and over-the-counter nutritional products, supplements, enteral nutrition, parenteral nutrition, drug-food interactions, and special populations. Prerequisite(s): PHT 110, PHT 151

#### PHT 209 – Medication Safety

Students will learn about the mechanism and roots of medication errors and their consequences for patients and health care in general. This course is an introduction to the availability of various technologies applicable to the delivery of pharmacy care, their impact on pharmacy practice, and their applications to patient care. Coursework will focus on health literacy, cultural competency, and promoting medication safety and error prevention. Prerequisite(s): PHT 101

#### PHT 299 – Pharmacy Externship

The pharmacy technician externship is designed to enable students to obtain hands-on experience in the pharmacy setting. The student will gain practical experience, knowledge, skills, and insight into the various aspects of the pharmacy technician role. The externship includes 100 hours at an institutional-based pharmacy and 100 hours at a community-based pharmacy. Students will prepare to take the Pharmacy Technician Certification Exam (PTCE) at the end of their externship experience. Prerequisite(s): PHT 101, PHT 105, PHT 110, PHT 150, PHT 151,

PHT 201, PHT 203, PHT 204, PHT 206, Advisor Approval

### p. 153 – Additional Course Description SCM 105 FOUNDATIONS OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT (4 Credits)

This course familiarizes the student with issues related to supply chain management, purchasing, logistics and transportation. Students will learn how firms' emphasis has changed over time and how they addressed these changes through reorganization of structures and adoption of technology. The course also examines the fundamental history of supply chain management and how it affects domestic and international commerce as well as well normal department functions and interfaces within the company. Students also examine problems and opportunities associated with various logistics channels and the decisions required to solve these problems. Prerequisite(s): None

### p. 155 – Course Code/Course Title Change

CMM 540 CONFLICT AND CULTURE to MGT 541 CULTURE IN ORANIZATIONS

#### p. 158 – Course Title Change

FIN 540 – MANAGERIAL FINANCE to STATEGIC FINANCIAL MANAGEMENT

### p. 159 – Course Title Changes

MGT 510 MANAGERIAL COMMUNICATION SKILLS to LEADERSHIP COMMUNICATION

MGT 511 MANAGERIAL ETHICS to ETHICAL LEADERSHIP

MGT 545 **LEADERSHIP AND TEAM DEVELOPMENT** to LEADING ORGANIZATIONS

#### p. 160 – Course Code/Course Title Changes

MGT 620 OPERATIONS STRATEGY to OPERATIONAL EFFICIENCY AND EFFECTIVENESS

MKT 580 GLOBAL MARKETING MANAGEMENT to MKT 581 MANAGING GLOBAL MARKETS

#### p. 161 – Course Title Change

MKT 620 STRATEGIC BRAND MANAGEMENT

#### p. 161 – Course Code Change

MPM 545 to FIN 545 PUBLIC SECTOR FINANCIAL MANAGEMENT

### p. 161 – Edit to Prerequisites

MPM 510 THE PUBLIC POLICY PROCESS

Prerequisite(s): MGT 510 or concurrent

#### p. 163 – Course Title Change

QNT 550 ADVANCED QUANTITATIVE METHODS to DATA DRIVEN DECISION MAKING

#### p. 185 – Correction to Titles

Business Office Manager Bursar	.Brenda Gargano
Director, Louisa Learning Center NK Center for Learning	Vicki Berling

# p. 188 and Back Cover – Fort Knox Extension Address Change and new Mayfield Learning Center, effective January 2, 2019

#### **Fort Knox Extension**

PO Box 998 31 Warehouse St., Bldg. 65 Fort Knox, KY 40121 **502-942-8500** | **800-562-6713** 

Center for Learning – Mayfield 1102 Paris Rd.

Mayfield, KY 42006 **800-844-1354** 

### Additional Programs as of 6/22/18 from the former Spencerian College

# Computed Tomography

#### **CERTIFICATE**

The purpose of the Computed Tomography Certificate program is to prepare students who are ARRT credentialed radiology graduates with the skills and ability to perform and provide high quality computed tomography procedures. Graduates will be able to sit for the ARRT certification examination in Computed Tomography.

Students entering into the Computed Tomography program must have an associate's degree from an approved Joint Review Committee on Education in Radiologic Technology (JRCERT) program, a Radiologic Technology (RT) certification from the American Registry of Radiologic Technologists (ARRT), and confirmation of a Kentucky Radiation Operators License through the Kentucky Board of Medical Imaging and Radiation Therapy.

#### REQUIREMENTS FOR THE CERTIFICATE

19 Credit Hours

250 Contact Hours

Length: 6 months

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles	Credit Hours
RCT 507	Image Production in Computed	
	Tomography	5
RCT 509	Advanced Patient Care and Safety	3
RCT 605	Radiation Protection in Computed	
	Tomography	2
RCT 606	Computed Tomography Procedure	es 5
RCT 608	CT Registry Review	1
RCT 609	Clinical Practicum	3
Total Credi	t Hours	19

All courses require a "C" or better.

It is a requirement of the ARRT to complete a minimum of 125 repetitions of computed tomography procedures before the written test.

## **Phlebotomy**

#### **CERTIFICATE**

The purpose of the Phlebotomy Certificate program is to prepare students with the skills necessary to obtain quality laboratory specimens in a variety of medical settings. Graduates are eligible to sit for the American Society of Clinical Pathologists (ASCP) certification exam. Sullivan faculty and staff will assist students with certification examination registration in order for the student to become an important member of the healthcare team.

#### REQUIREMENTS FOR THE CERTIFICATE

36 Credit Hours

505 Clock Hours

Length: 9 months, 6 months accelerated#

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles	Credit Hours
CCS 110	College Success Strategies	2
CCS 245	Career Development	2
MED 171	Medical Ethics - NDT	4
MED 172	Anatomy & Physiology I	4
MED 173	Anatomy & Physiology II	4
MED 176	Medical Terminology	4
MED 211	Health & Safety Techniques - NDT	3
MED 214	Phlebotomy Techniques - NDT	6
MED 216*	Phlebotomy Examination Review -	NDT 3
MED 279**	Phlebotomy Externship - NDT	4
Total Credit	Hours	36

All courses require "C" or better

#Plus exam review and externship

NDT = Not Designed to Transfer

<sup>\*</sup>Course MED 216 is available online only.

<sup>\*\*</sup>The Phlebotomy externship consists of 120 hours of on-the-job training which is taken after all other coursework is completed. Students must complete 100 successful venipunctures and 25 successful capillary sticks. Some classes may require on-site clinical and/or residential skills training. Students may not receive payment/reimbursement of any type for clinical and/or externship hours required in their academic program. Students may also not perform these clinical and/or externship hours with their employer in the capacity of their regular position. Due to availability of clinical space, these hours must be completed during the day. The Phlebotomy Certificate program is also available online for Kentucky and Indiana residents. Sullivan classes are offered in a hybrid format where students complete a portion of the course online and a portion on campus or at approved sites/facilities. Students may need to purchase additional software required for a specific course. There is an additional per credit hour charge for online classes. See Supplement A.

### Clinical Assistant

#### **DIPLOMA**

The purpose of the Clinical Assistant program is to prepare the student to provide quality health service by performance of clinical skills in a medical office or clinic. Graduates of this program will be able to demonstrate safe practice in the performance of clinical procedures required by physicians, including CPR and First Aid. Also, these graduates will be taught to accurately perform limited waived medical laboratory tests and diagnostic procedures, including electrocardiograms. Due to the administrative content of the Clinical Assistant Program, graduates will be eligible to sit for certification through the American Medical Technologist (AMT) as a Registered Medical Assistant (RMA).

#### REQUIREMENTS FOR THE DIPLOMA

63 Credit Hours

908 Clock Hours

Length: 15 months, 9 months accelerated#

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles Credit	Hours
CCS 110	College Success Strategies	2
CCS 130	Keyboarding - NDT	5
CCS 245	Career Development	2
ENG 101	Composition I	4
MED 165*	Electronic Records Management - NDT	3
MED 171	Medical Ethics - NDT	4
MED 172	Anatomy & Physiology I	4
MED 173	Anatomy & Physiology II	4
MED 176	Medical Terminology	4
MED 177	Pharmacology/Laboratory	
	Terminology - NDT	4
MED 211	Health & Safety Techniques - NDT	3
MED 212	Medical Lab Procedures - NDT	6
MED 213	Advanced Clinical Skills - NDT	3
MED 274	Medical Assisting Techniques - NDT	3
MED 277	Introduction to Medical Coding - NDT	3
MED 278**	Clinical Practicum - NDT	3
MED 296***	Medical Administrative Externship - NDT	2
MTH 150	General Mathematics - NDT	4
<b>Total Credit</b>	Hours	63

All courses require C or better. See catalog addenda "C" for specialized program grading scale.

\*\*The Clinical practicum consists of 96 hours of on-the-job training which is taken after all other course work is completed. Students may not receive payment/reimbursement of any type for clinical and/or practicum hours required in their academic program. Students may also not perform these clinical and/or practicum hours with their employer in the capacity of their regular position. Due to facility availability, all practicum hours must be completed during the day.\*\*\*The Medical Administrative Externship consists of 64 hours of on-the-job training which is taken after all other course work is completed. Students may not receive payment/reimbursement of any type for clinical and/or externship hours required in their academic program. Students may also not perform these clinical and/or externship hours with their employer in the capacity of their regular position.

The Clinical Assistant program is also available online. Sullivan classes are offered in a hybrid format where students complete a portion of the course online and a portion on campus or at approved sites/facilities. Students may need to purchase additional software required for a specific course. Online enrollment in the Clinical Assistant portion of the program is limited to residents of Kentucky, Indiana, Ohio, and Tennessee

NDT = Not Designed to Transfer

This program is currently being taught out and no new enrollments are being accepted.

<sup>#</sup>Plus exam review and externship

<sup>\*</sup>Course offered in the day and online only.

## Limited Medical Radiography

#### **DIPLOMA**

The purpose of the Limited Medical Radiography (LMR) program is to provide a progressive academic and clinical educational environment by training students to become highly competent and qualified to administer ionizing radiation for medical diagnostic imaging purposes.

Graduates of the program are eligible to apply for Limited Scope of Practice in Radiography exam administered by the American Registry of Radiologic Technologists (ARRT) but offered through the KBMIRT. Through the LMR program, graduates are prepared to perform x-ray (radiographic) examinations in clinics, physicians' offices, and urgent care centers. They prepare patients for radiographic examinations by explaining the procedure, ensuring proper positioning of both the patient and the radiographic equipment. Because they provide the necessary x-rays needed to help with the diagnosis of the patient, the Limited Medical Radiographers are valued members of the healthcare team.

#### REQUIREMENTS FOR THE DIPLOMA

62 Credit Hours

978 Clock Hours

Length: 18 months, 12 months accelerated

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles	Credit Hours
CCS 110	College Success Strategies	2
CCS 245	Career Development	2
LMR 201	Radiographic Imaging - NDT	4
LMR 300*	Limited Medical Radiography	
	Clinical I - NDT	5
LMR 301*	Limited Medical Radiography	
	Clinical II - NDT	7
LMR 400	Limited Medical Radiographic	
	Certification Review - NDT	3
MED 171	Medical Ethics - NDT	4
MED 172	Anatomy & Physiology I	4
MED 173	Anatomy & Physiology II	4
MED 176	Medical Terminology	4
MED 211	Health & Safety Techniques - ND	T 3
MTH 101	College Math	4
RAD 100	Introduction to Radiography - ND	T 4
RAD 102	Introduction to Radiographic Clini	ical
	Topics I - NDT	3
RAD 121	Radiographic Positioning I - NDT	6
RAD 131	Radiographic Positioning II - NDT	3
<b>Total Credit</b>	Hours	62

All courses require "C" or better. See catalog addendum "C" for specialized program grading scale.

\*The LMR clinical requirement consists of 370 hours. Due to availability of clinical space, these hours must be completed during the day. Students may not receive payment/reimbursement of any type for clinical and/ or externship hours required in their academic program. Students may also not perform these clinical and/or externship hours with their employer in the capacity of their regular position.

Radiology Department has an additional policy and procedure manual.

Courses with RAD and LMR prefixes are not currently available online.

NDT = Not Designed to Transfer

## Massage Therapy

#### **DIPLOMA**

The purpose of the Massage Therapy program is to prepare the student with the knowledge, skills and experience to be employed or self-employed as a massage therapist. Graduates of this program will be able to implement a variety of massage techniques, perform client assessments, and develop individualized therapeutic massage treatment plans, communicate effectively with clients, the general public and other healthcare professionals, make referrals, understand the psychological and professional boundary issues in a touch therapy practice, act based upon ethical standards of practice, and understand and practice wellness including proper biomechanics. They will be prepared to obtain state licensure and local permits in massage therapy. The program is approved by the Kentucky Board of Licensure for Massage Therapy.

Sullivan University is a member of the American Massage Therapy Association.

#### REQUIREMENTS FOR THE DIPLOMA

61 Credit Hours

846 Clock Hours

Length: 15 months, 12 months accelerated

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles	Credit Hours
CCS 110	College Success Strategies	2
CCS 245	Career Development	2
MED 172	Anatomy & Physiology I	4
MED 173	Anatomy & Physiology II	4
MED 176	Medical Terminology	4
MED 211	Health & Safety Techniques - NDT	3
MST 100*	Introduction to Massage Therapy - I	NDT 2
MST 101*	CORE Massage I - NDT	5
MST 102*	CORE Massage II - NDT	6
MST 103*^	Massage Practice Lab - NDT	1
MST 104*	CORE Massage III - NDT	6
MST 110*	Holistic Therapies - NDT	2
MST 113*	Myology - NDT	4
MST 114*	Kinesiology - NDT	3
MST 116*	Massage Pathology - NDT	4
MST 118*	Licensure Exam Review - NDT	2
MST 121*	Business of Somatic Practices - NDT	$\Gamma$ 4
MST 130*	Massage Therapy Externship - NDT	3
Total Credit	Hours	61

All courses require "C" or better.

Evening students will need to arrange some afternoon times at school to accomplish the required hours. Some courses may require on site clinical skills training. Students may not receive payment/reimbursement of any type for clinical and/or externship hours required in their academic program. Students may also not perform these clinical and/or externship hours with their employer in the capacity of their regular position.

Some clinical settings may require TB or other specific tests or proof of current inoculations.

Kentucky and Indiana state law require the applicant to be 18 years of age to be a massage therapist.

NDT = Not Designed to Transfer

This program is currently being taught out and no new enrollments are being accepted.

<sup>\*</sup>May not be taken online. Many states, including IN and FL require 500 "in-class" hours to license, as does the optional National Certification.

<sup>^</sup>MST103 Massage Practice Lab time will extend beyond the normal class schedule. Students need to be aware that this lab will require them to be in school for extended time in order to meet the contact hour requirement.

## Medical Administrative Assistant

#### **DIPLOMA**

The Medical Administrative Assistant is an asset to physicians in private practice, staff physicians of hospitals and clinics, and other health professionals. The administrative procedures include telephone handling, appointment making, billing and collections, insurance, medical records maintenance, and communication with all patients and visitors.

The purpose of this program is to prepare the student to perform administrative duties in a variety of medical settings.

#### REQUIREMENTS FOR THE DIPLOMA

57 Credit Hours

768 Clock Hours

Length: 15 months, 9 months accelerated#

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles	Credit Hours
CCS 110	College Success Strategies	2
CCS 130	Keyboarding - NDT	5
CCS 245	Career Development	2
CCS 280	Word Processing I - NDT	3
ENG 101	Composition I	4
ENG 102	Composition II	4
MED 165*	Electronic Records Management - 1	NDT 3
MED 171	Medical Ethics - NDT	4
MED 172	Anatomy & Physiology I	4
MED 173	Anatomy & Physiology II	4
MED 176	Medical Terminology	4
MED 178*	Medical Insurance - NDT	3
MED 211	Health & Safety Techniques - ND	Γ 3
MED 223	Business Correspondence - NDT	4
MED 270*	Medical Administrative Techniques	s - NDT 3
MED 277	Introduction to Medical Coding - N	NDT 3
MED 296**	Medical Administrative Externship	- NDT 2
<b>Total Credit</b>	Hours	57

All courses require "C" or better.

A completed timed keyboard writing of 40 wpm with 5 errors or less is required.

#Plus practicum

The Medical Administrative Assistant Diploma is also available online. Sullivan classes are offered in a hybrid format where students complete a portion of the course online and a portion on campus or at approved sites/ facilities. Students may need to purchase additional software required for a specific course.

NDT = Not Designed to Transfer

This version of this program is currently being taught out and no new enrollments are being accepted.

<sup>\*</sup>Course offered in the day and online only.

<sup>\*\*</sup>The Medical Administrative practicum consists of 64 hours of on-the-job training which is taken after all other course work is completed. Students may not receive payment/reimbursement of any type for clinical and/or practicum hours required in their academic program. Students may also not perform these clinical and/or practicum hours with their employer in the capacity of their regular position.

## **Medical Assistant**

#### **DIPLOMA**

The goal of the Medical Assistant Diploma program is to provide education and training to the student in the cognitive, psychomotor, and affective domains required for competence in entry level employment. The program emphasizes the importance of academic knowledge base, clinical and administrative competence, professionalism, and critical thinking skills which students will incorporate into their on-the-job duties as Medical Assistants working in various ambulatory healthcare settings. The program works diligently with our communities of interest to delivery competently trained Medical Assistants who are vital members of the healthcare team. Graduates of the program are required to sit for the Certified Medical Assistant (CMA) exam of the American Association of Medical Assistants (AAMA) as a programmatic/graduation requirement.

#### REQUIREMENTS FOR THE DIPLOMA

75 Credit Hours

1084 Clock Hours

Length: 18 months, 12 months accelerated#

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles Credit H	lours
CCS 100	Accounting for the Business Office - NDT	3
CCS 110	College Success Strategies	2
CCS 130	Keyboarding - NDT	5
CCS 245	Career Development	2
CCS 280	Word Processing I - NDT	3
ENG 101	Composition I	4
MED 165*	Electronic Records Management - NDT	3
MED 171	Medical Ethics - NDT	4
MED 172	Anatomy & Physiology I	4
MED 173	Anatomy & Physiology II	4
MED 176	Medical Terminology	4
MED 177	Pharmacology/Lab Terminology - NDT	4
MED 178*	Medical Insurance - NDT	3
MED 211	Health & Safety Techniques - NDT	3
MED 212	Medical Lab Procedures - NDT	6
MED 213	Advanced Clinical Skills - NDT	3
MED 270*	Medical Administrative Techniques - NDT	3
MED 274	Medical Assisting Techniques - NDT	3
MED 277	Introduction to Medical Coding - NDT	3
MED 278**	Clinical Practicum - NDT	3
MED 296***	Medical Administrative Externship - NDT	2
MTH 101	College Mathematics	4
<b>Total Credit</b>	Hours	75

All courses require "C" or better.

A completed timed keyboard writing of 40 wpm with 5 errors or less is required.

#Plus practicum

\*\*\*The Medical Administrative practicum consists of 64 hours of on-the-job training which is taken after all other course work is completed. Students may not receive payment/ reimbursement of any type for clinical and/or practicum hours required in their academic program. Students may also not perform these clinical and/or practicum hours with their employer in the capacity of their regular position. The Medical Assistant Diploma is also available online. Sullivan classes are offered in a hybrid format where students complete a portion of the course online and a portion on campus or at approved sites/facilities. Online enrollment in the Medical Assistant portion of the program is limited to residents of Kentucky, Indiana, Ohio, and Tennessee. Students may need to purchase additional software required for a specific course.

NDT = Not Design to Transfer

This version of this program is currently being taught out and no new enrollments are being accepted.

<sup>\*</sup>Course offered in the day and online only.

<sup>\*\*</sup>The Clinical practicum consists of 96 hours of on-the-job training which is taken after all course work is completed. Due to facility availability, all practicum hours must be completed during the day.

## **Medical Coding Specialist**

#### **DIPLOMA**

The purpose of the Medical Coding Specialist Diploma program is to prepare the student to analyze medical records and abstract data for the purpose of billing and insurance reimbursement. Medical Coding Specialists learn to transform narrative descriptions of procedures and diagnoses into numerical billing format. Graduates possess the skills necessary for employment in doctors' offices, clinics, hospitals, insurance companies, and medical billing agencies. This program prepares the student for future certification with various professional organizations

#### REQUIREMENTS FOR THE DIPLOMA

66 Credit Hours

952 Clock Hours

Length: 18 months, 12 months accelerated#

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles C	redit Hours
CCS 110	College Success Strategies	2
CCS 130	Keyboarding - NDT	5
CCS 245	Career Development	2
CCS 280	Word Processing I - NDT	3
ENG 101	Composition I	4
MED 165*	Electronic Records Management - NI	OT 3
MED 171	Medical Ethics - NDT	4
MED 172	Anatomy & Physiology I	4
MED 173	Anatomy & Physiology II	4
MED 176	Medical Terminology	4
MED 177	Pharmacology/Laboratory	
	Terminology - NDT	4
MED 178	Medical Insurance - NDT	3
MED 209	Advanced Medical Terminology for	
	Medical Coding - NDT	4
MED 270	Medical Administrative Techniques -	NDT 3
MED 277	Introduction to Medical Coding - ND	T 3
MED 289	Medical Coding II - NDT	3
MED 290	Medical Coding III - NDT	3
MED 291*	Advanced CPT Coding - NDT	3
MED 298**	Medical Coding Externship - NDT	5
<b>Total Credit</b>	Hours	66

All courses require "C" or better.

A completed timed keyboard writing of 40 wpm with 5 errors or less is required.

#Plus externship

The Medical Coding Diploma program is also available online. Sullivan classes are offered in a hybrid format where students complete a portion of the course online and a portion on campus or at approved sites/facilities. Students may need to purchase additional software required for a specific course.

NDT = Not Designed to Transfer

This version of this program is currently being taught out and no new enrollments are being accepted.

<sup>\*</sup>Course offered in the day and online only.

<sup>\*\*\*</sup>The externship consists of 160 hours of on-the-job training, which is taken after all other course work is completed. Due to facility availability, these hours must be completed during the day. Students may not receive payment/reimbursement of any type for clinical and/or externship hours required in their academic program. Students may also not perform these clinical and/or externship hours with their employer in the capacity of their regular position.

## **Practical Nursing**

#### **DIPLOMA**

The Practical Nursing program prepares graduates to be employed within the discipline of nursing, in a variety of structured healthcare settings under the supervision of the registered nurse or physician. After successful program completion, graduates are eligible to apply to sit for the National Council Licensure Examination (NCLEX-PN). Upon licensure, the graduate may be employed as a Licensed Practical Nurse (LPN) and practice to the scope allowed by law. A student will gain on-the-job experience in the clinical phases of nursing.

This is accomplished in a variety of healthcare facilities in greater Louisville and southern Indiana under the supervision of qualified nursing faculty. This program is offered in both the day and evening.

#### REQUIREMENTS FOR THE DIPLOMA

87 Credit Hours

1435 Clock Hours (Includes 764 clinical and skills lab hours)

Length: 24 months, 15 months accelerated

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles	Credit Hours
PND 100	Anatomy & Physiology	7
PND 101	Personal & Vocational Relationship	os 2
PND 102	Math Concepts for Pharmacology	2
PND 103	Introduction to Nursing & Health	care 6
PND 104*	Development of the Care Giver Ro	le 10
PND 200*	Introduction to Health Deviations	7
PND 201	Pharmacology	3
PND 202*	Mental Health Concepts	7
PND 203*	Nursing & Child Bearing Family	7
PND 300**	Health Deviations I 1	4
PND 301	Nursing Trends & Issues	2
PND 302*	Management of the Geriatric Clien	t 4
PND 400***	Health Deviations II	16
<b>Total Credit</b>	Hours	87

All courses require a grade of "C" or better. See catalog Addendum "C" for specialized program grading scale.

<sup>\*</sup>The clinical requirements consist of 594 hours. Students may not receive payment/reimbursement of any type for clinical and/or externship hours required in their academic program. Students may also not perform these clinical and/or externship hours with their employer in the capacity of their regular position.

<sup>\*\*</sup>Course PND 300 Health Deviations I is delivered in two parts in the evening division. Part I is 10 credits and Part II is 4 credits.

<sup>\*\*\*</sup>Course PND 400 Health Deviations II is delivered in two parts in the evening division. Part I is 10 credits and Part II is 6 credits. Criminal Convictions: The Kentucky Board of Nursing requires that all criminal convictions (misdemeanors and felonies) be reported at the time of application for licensure. The Board may deny a license to practice nursing to an individual with a criminal conviction.

## Healthcare Reimbursement Specialist

#### ASSOCIATE OF SCIENCE

The purpose of the Associate of Science Degree in Healthcare Reimbursement Specialist program is to prepare students to become medical coders, and then go beyond that to become skilled in reviewing rejected medical claims and prepare them for resubmission. Students are also introduced to chart auditing, compliance issues, and management of coding services. This program prepares the graduate for future certification with various professional organizations. Healthcare Reimbursement Specialist graduates typically work at physician practices, clinics, insurance companies, consulting firms, medical billing companies, and hospitals.

#### REQUIREMENTS FOR THE DEGREE

100 Credit Hours

1348 Clock Hours

Length: 27 months, 18 months accelerated#

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles Credit I	lours
CCS 110	College Success Strategies	2
CCS 115	Computer Spreadsheet Applications I - ND	Γ 3
CCS 130	Keyboarding - NDT	5
CCS 245	Career Development	2
CCS 280	Word Processing I - NDT	3
CCS 281	Word Processing II - NDT	3
CCS 299	Management Principles - NDT	4
ENG 101	Composition I	4
ENG 102	Composition II	4
MED 165*	Electronic Records Management - NDT	3
MED 171	Medical Ethics - NDT	4
MED 172	Anatomy & Physiology I	4
MED 173	Anatomy & Physiology II	4
MED 176	Medical Terminology	4
MED 177	Pharmacology/Lab Terminology - NDT	4
MED 178*	Medical Insurance - NDT	3
MED 179*	Compliance Issues - NDT	4
MED 209*	Advanced Medical Terminology	
	for Medical Coding - NDT	4
MED 270*	Medical Administrative Techniques - NDT	3
MED 277	Introduction to Medical Coding - NDT	3
MED 289	Medical Coding II - NDT	3
MED 290	Medical Coding III - NDT	3
MED 291*	Advanced CPT Coding - NDT	3
MED 292*	Medical Billing &	
	Health Claims Review - NDT	4
MED 298**	Medical Coding Externship - NDT	5
MED 300*	Effective Management of	
	Coding Service - NDT	4
MTH 101	College Mathematics	4
PSY 214	Introduction to Psychology	4
<b>Total Credit</b>	Hours	100

All courses require "C" or better.

A completed timed keyboard writing of 40 wpm with 5 errors or less is required.

#Plus externship

Students may also not perform these clinical and/or externship hours with their employer in the capacity of their regular position. The Healthcare Reimbursement Specialist Associate Degree is also available online. Sullivan classes are offered in a hybrid format where students complete a portion of the course online and a portion on campus or at approved sites/facilities. Students may need to

<sup>\*</sup>Course offered in the day and online only.

<sup>\*\*</sup>The externship consists of 160 hours of on-the-job training, which is taken after all other coursework is completed. Due to facility availability, these hours must be completed during the day. Students may not receive payment/reimbursement of any type for clinical and/or externship hours required in their academic program.

purchase additional software required for a specific course.

NDT = Not Designed to Transfer

This program is currently being taught out and no new enrollments are being accepted.

## Medical Administrative Management

#### ASSOCIATE OF SCIENCE

The purpose of the Associate of Science Degree in Medical Administrative Management program is to train students first and foremost as Medical Assistants, then further expand this knowledge base with emphasis on management skills. Students are trained in the cognitive, psychomotor, and affective domains required for competence in entry level employment. The program emphasizes the importance of academic knowledge base, clinical and administrative competence, professionalism, and critical thinking skills which students will incorporate into their on-the-job duties as Medical Assistants working in various ambulatory healthcare settings. The additional course work in medical office management will aid in professional growth and the ability of graduates to seek future leadership roles in ambulatory healthcare facilities.

Students are required to take the Certified Medical Assistant (CMA) exam of the American Association of Medical Assistants (AAMA) as a programmatic/graduation requirement of the Medical Assistant portion of the Associate of Science degree in Medical Administrative Management program.

The Medical Administrative Management Associate Degree is also available online. Sullivan classes are offered in a hybrid format where students complete a portion of the course online and a portion on campus or at approved sites/facilities. Students may need to purchase additional software required for a specific course.

Online enrollment in the Medical Assistant portion of the AS Medical Administrative Management program is limited to residents of Kentucky, Indiana, Ohio, and Tennessee.

NDT = Not Designed to Transfer

This program is currently being taught out and no new enrollments are being accepted.

#### REQUIREMENTS FOR THE DEGREE

107 Credit Hours

1480 Clock Hours

Length: 27 months, 18 months accelerated#

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles	Credit Hours
CCS 100	Accounting for the Business Office	- NDT 3
CCS 110	College Success Strategies	2
CCS 130	Keyboarding - NDT	5
CCS 245	Career Development	2
CCS 280	Word Processing I - NDT	3
ENG 101	Composition I	4
MED 165*	Electronic Records Management -	NDT 3
MED 171	Medical Ethics - NDT	4
MED 172	Anatomy & Physiology I	4
MED 173	Anatomy & Physiology II	4
MED 176	Medical Terminology	4
MED 177	Pharmacology/Laboratory	
	Terminology - NDT	4
MED 178*	Medical Insurance - NDT	3
MED 211	Health & Safety Techniques - ND	T 3
MED 212	Medical Lab Procedures - NDT	6
MED 213	Advanced Clinical Skills - NDT	3
MED 270*	Medical Administrative Technique	s - NDT 3
MED 274	Medical Assisting Techniques - NI	OT 3

MED 277	Introduction to Medical Coding - NDT	3		
MED 278**	Clinical Practicum - NDT	3		
MED 296***	Medical Administrative Externship - NDT	2		
MTH 101	College Mathematics	4		
THE PRECE	DING COURSES COMPLETE THE MEDI	CAL ASSISTANT PORTION OF THE PROGRAM		
CCS 115	Computer Spreadsheet Applications I - NDT	3		
CCS 215	Computer Database Applications - NDT	3		
MED 223	Business Correspondence - NDT	4		
MED 299	Management Principles - NDT	4		
CCS 499	Human Resource Management - NDT	4		
ENG 102	Composition II	4		
MED 312^	Clinical Laboratory Management			
	Procedures - NDT	4		
MED 313	Medical Office Manager Techniques - NDT	2		
PSY 214	Introduction to Psychology	4		
Total Credit Hours 107				

All courses require "C" or better.

A completed timed keyboard writing of  $40\ wpm$  with 5 errors or less is required.

#Plus externship

<sup>\*</sup>Course offered in the day and online only.

<sup>\*\*</sup>The Clinical Practicum consists of 96 hours of on-the-job training which is taken after all other course work is completed.

<sup>\*\*\*</sup>The Medical Administrative Practicum consists of 64 hours of on-the-job training which is taken after all other course work is completed. Practicum hours must be completed during the day. Students may not receive payment/reimbursement of any type for clinical and/or practicum hours required in their academic program. Students may also not perform these clinical and/or practicum hours with their employer in the capacity of their regular position

<sup>^</sup>Course MED 312 is offered online only.

## Medical Clinical Specialties

#### ASSOCIATE OF SCIENCE

The purpose of the Associate of Science Degree in Medical Clinical Specialties program is to prepare the student to perform in multiple capacities in various healthcare facilities. The graduate possesses the skills of a Medical Assistant and Limited Medical Radiographer. Students are trained in the cognitive, psychomotor, and affective domains required for competence in entry level employment. The program emphasizes the importance of academic knowledge base, clinical and administrative competency, professionalism, and critical thinking skills which students will incorporate into their on-the-job duties. Graduates will possess the skills necessary to perform administrative and clinical duties, assist in patient care, obtain laboratory specimens, and perform radiologic exams (x-rays).

Graduates of the program are eligible to apply for Limited Scope of Practice in Radiography exam administered by the American Registry of Radiologic Technologists (ARRT) but offered through the KBMIRT. Students are required to take the Certified Medical Assistant (CMA) exam of the American Association of Medical Assistants (AAMA) as a programmatic graduation requirement of the Medical Assisting portion of the Associate of Science Degree in Medical Clinical Specialties. All students are also eligible to sit for the ASCP Phlebotomy Certification exam.

All courses require a "C" or better and completed timed keyboard writings of 40 wpm with 5 errors or less.

#Plus practicum/externship

- ++Course offered in the day and online only.
- \*The Clinical Practicum consists of 96 hours of on-the-job training which is taken after all other course work is completed
- \*\*The Medical Administrative Practicum consists of 64 hours of on-the-job training which is taken after all other course work is completed.
- \*\*\*The LMR clinical requirement consists of 370 hours.
- \*\*\*\*The Phlebotomy Externship consists of 120 hours of on-the-job training. Students must complete 100 successful venipunctures and 25 successful capillary sticks.

Students may not receive payment/reimbursement of any type for clinical and/or practicum hours required in their academic program. Students may also not perform these clinical and/or practicum hours with their employer in the capacity of their regular position. Due to facility availability, these hours must be completed during the day.

+++Course MED 216 is available online only.

Courses with RAD and LMR prefixes are not available online.

Online enrollment in the Phlebotomy portion of the program is limited to Kentucky or Indiana residents, and students must be part of a group that is "sponsored" by a local facility in their area. Online enrollment in the Medical Assistant portion of the program is limited to residents of Kentucky, Indiana, Ohio, and Tennessee.

NDT = Not Designed to Transfer

This version of this program is currently being taught out and no new enrollments are being accepted at this time.

#### REQUIREMENTS FOR THE DEGREE

131 Credit Hours

2051-2083 Clock Hours

Length: 33 months, 24 months accelerated#

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles	Credit Hours	ŝ
CCS 100	Accounting for the Business Office	- NDT 3	,
CCS 110	College Success Strategies	2	2
CCS 130	Keyboarding - NDT	5	,
CCS 245	Career Development	2	2
CCS 280	Word Processing I - NDT	3	,
ENG 101	Composition I	4	Ė

MED 165++	Electronic Records Management - NDT	3	
MED 171	Medical Ethics - NDT	4	
MED 172	Anatomy & Physiology	4	
MED 173	Anatomy & Physiology II	4	
MED 176	Medical Terminology	4	
MED 177	Pharmacology/Laboratory		
	Terminology - NDT	4	
MED 178++	Medical Insurance - NDT	3	
MED 211	Health & Safety Techniques - NDT	3	
MED 212	Medical Laboratory Procedures - NDT	6	
MED 213	Advanced Clinical Skills - NDT	3	
MED 270++	Medical Administrative Techniques - NDT	3	
MED 274++	Medical Assisting Techniques - NDT	3	
MED 277	Introduction to Medical Coding - NDT	3	
MED 278*	Clinical Practicum - NDT	3	
MED 296**	Medical Administrative Externship - NDT	2	
MTH 101	College Mathematics	4	
THE PRECE	DING COURSES COMPLETE THE MED	ICAL	ASSISTANT PORTION OF THE PROGRAM
ENG 102	Composition II	4	
LMR 201***	Radiographic Imaging - NDT	4	
LMR 300***	Limited Medical Radiography		
	Clinical I - NDT	5	
LMR 301***	Limited Medical Radiography		
	Clinical II - NDT	7	
LMR 400	LMR Certification Review - NDT	3	
PSY 293	Personal Psychology	4	
RAD 100	Introduction to Radiography - NDT	4	
RAD 102	Introduction to Radiographic Clinical		
	Topics I - NDT	3	
RAD 121	Radiographic Positioning I - NDT	6	
RAD 131	Radiographic Positioning II - NDT	3	
MED 214	Phlebotomy Techniques - NDT	6	
	Phlebotomy Examination Review - NDT	3	
	* Phlebotomy Externship - NDT	4	
Total Credit	Hours	131	

## Medical Laboratory Technician

#### ASSOCIATE OF SCIENCE

The purpose of the Medical Laboratory Technician Associate of Science program is to prepare students to become clinical laboratory technicians. The program provides students with a foundation of knowledge and skill necessary to function in a modern, highly technical medical laboratory setting. Graduates are eligible to sit for the MLT certification from American Medical Technologist (AMT) or the American Society for Clinical Pathology (ASCP).

Employment opportunities include private physicians, group medical practices, hospitals, community blood facilities, and reference laboratories.

#### REQUIREMENTS FOR THE DEGREE

135 Credit Hours 2200 Clock Hours Length: 24 months

(88 weeks - Day Division - for ABHES requirement)

Program Delivery: On-campus; \*selective courses - online

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles	Credit Hours	Clock Hours
BIO 101	Biology	6	88
BIO 202	Diagnostic Microbiology	6	88
CCS 110	College Success Strategies	2	22
CCS 245	Career Development	2	22
CHE 101	Chemistry I (Inorganic)	6	88
CHE 201	Chemistry II (organic)	6	88
ENG 101	Composition I	4	44
ENG 102	Composition II	4	44
MED 171	Medical Ethics - NDT	4	44
MED 172	Anatomy & Physiology I	4	44
MED 173	Anatomy & Physiology II	4	44
MED 176	Medical Terminology	4	44
MED 211	Health & Safety Techniques - NDT	3	44
MED 214	Phlebotomy Techniques - NDT	6	88
MLT 101	Introduction to Medical Lab	6	88
MLT 200	Clinical Chemistry	6	88
MLT 201	Hematology	6	88
MLT 202	Coagulation	6	88
MLT 203	Immunology/Immunohematology	6	88
MLT 204	Body Fluids	6	88
MLT 300**	Medical Laboratory Clinical I	11	352
MLT 301**	Medical laboratory Clinical II	11	352
MTH 101	College Mathematics	4	44
PSY 274	Developmental Psychology	4	44
PSY 214	Introduction to Psychology	4	44
SOC 214	Introduction to Sociology	4	44
Total Credit	Hours	135	2200

All courses require "C" or better.

NDT = Not Designed to Transfer

<sup>\*\*</sup>Students may not receive payment/reimbursement of any type for clinical and/or externship hours required in their academic program. Students may also not perform these clinical and/or externship hours with their employer in the capacity of their regular position. Some courses are available online. A list of these courses is available from the Registrar's Office. Courses with an MLT, BIO, or CHE prefix are not available online.

## Medical Massage Therapy

#### ASSOCIATE OF SCIENCE

The purpose of the Medical Massage Therapy Associate Degree program is to prepare graduates to work in a medical or specialized clinical setting. The associate degree program gives the student a deeper knowledge of neurology, analysis and application skills, and communication tools. Graduates of the Medical Massage Therapy A.S. program will be prepared to obtain state licensure and local permits in massage therapy. The program is approved by the Kentucky Board of Licensure for Massage Therapy. Sullivan University is a member of the American Massage Therapy Association.

NDT = Not Designed to Transfer

This program is currently being taught out and no new enrollments are being accepted.

#### REQUIREMENTS FOR THE DEGREE

94 credit hours

1242 Clock hours

Length: 24 months, 18 months accelerated

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles	Credit Hours
CCS 110	College Success Strategies	2
CCS 245	Career Development	2
ENG 101	Composition I	4
ENG 102	Composition II	4
MED 171	Medical Ethics - NDT	4
MED 172*	Anatomy & Physiology I	4
MED 173*	Anatomy & Physiology II	4
MED 176	Medical Terminology	4
MED 211	Health & Safety Techniques - NDT	3
MST 100*	Introduction to Massage Therapy - N	NDT 2
MST 101*	CORE Massage I - NDT	5
MST 102*	CORE Massage II - NDT	6
MST 103*^	Massage Practice Lab - NDT	1
MST 104*	CORE Massage III - NDT	6
MST 110*	Holistic Therapies - NDT	2
MST 113*	Myology - NDT	4
MST 114*	Kinesiology - NDT	3
MST 116	Massage Pathology - NDT	4
MST 118*	Licensure Exam Review - NDT	2
MST 121*	Business for Somatic Practices - ND	Γ 4
MST 130*	Massage Therapy Externship - NDT	3
MST 214*	Neurology - NDT	4
MST 216*	Neuromuscular Skeletal Assessment	- NDT 3
MST 230*	Medical Massage - NDT	6
MTH 101	College Mathematics	4
PSY 214	Introduction to Psychology	4
<b>Total Credit</b>	Hours	94

All courses require a C or better.

Evening students will need to arrange some afternoon times at school to accomplish the required hours.

Some courses may require on site clinical skills training. Students may not receive payment/reimbursement of any type for clinical and/or externship hours required in their academic program. Students may also not perform these clinical and/or externship hours with their employer in the capacity of their regular position. Some clinical settings may require TB or other specific tests or proof of current inoculations. Kentucky and Indiana state law require the applicant to be 18 years of age to be a massage therapist.

<sup>\*</sup>May not be taken online. Many states, including IN and FL require 500 "in-class" hours to license, as does the optional National Certification.

<sup>^</sup>MST103 Massage Practice Lab time will extend beyond the normal class schedule. Students need to be aware that this lab will require them to be in school for extended time in order to meet the contact hour requirement.

## Nursing: PN to RN

#### ASSOCIATE OF SCIENCE

The mission of the Sullivan University Associate of Science (A.S.) Degree in Nursing program is to educate individuals to provide holistic care for clients and the community across the lifespan. The A.S. in Nursing program recognizes the diversity of the student population and fosters development into professional healthcare providers. The A.S. in Nursing program incorporates community events to enrich student self-awareness and accountability. The A.S. in Nursing program advocates lifelong learning and the pursuit of excellence.

The Associate of Science in Nursing program enables graduates of a Practical Nursing program or a Practical Vocational Nursing program the opportunity to pursue the role of the professional registered nurse. Graduates of the program are eligible to apply to the National Council Licensure Examination (NCLEX-RN) to become a registered nurse. Core components of the program of study include professional behaviors, communication, assessment, clinical decision-making, evidence-based practice, caring interventions, teaching and learning, collaboration with members of the healthcare team, and the management of patient care.

The program is offered on campus and in an online hybrid format with both formats incorporating nursing and general education classes necessary for the degree. Clinical experiences are conducted in various hospital and healthcare facilities in greater Louisville and southern Indiana. Nursing courses must be taken and successfully completed in the sequence delineated in the program of study. Note: Online hybrid students are expected to be on campus for labs or in clinicals two days per week. All exams are administered during one of these two days.

#### REQUIREMENTS FOR THE DEGREE

93 Credit Hours

1430 Clock Hours (682 Lab & Clinical Hours)

Length: 24 months, 18 months accelerated

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles	Credit Hours
BIO 103	Human Anatomy & Physiology	4
BIO 103L	Human Anatomy & Physiology La	ıb 2
BIO 201	Medical Microbiology	4
BIO 201L	Medical Microbiology Lab	2
CHM 211	Introduction to General, Organic &	& Biological
	Chemistry	6
ENG 101	Composition I	4
ENG 102	Composition II	4
MTH 101	College Mathematics	4
NUR 220	Concepts of Basic Nursing Practice	e 6
NUR 230	Adult Nursing Care I	8
NUR 231	Pharmacology	4
NUR 240	Adult Nursing Care II	8
NUR 241	Nutrition	2
NUR 250	Mental Health Nursing	4
NUR 251	Maternal Nursing	5
NUR 252	Pediatric Nursing	6
NUR 260	Adult Nursing Care III	5
NUR 261	Seminar in Professional Developme	ent 3
NUR 262	Integrated Practicum	4
PSY 214	Introduction to Psychology	4
SOC 214	Introduction to Sociology	4
Total Credit	t Hours	93

All courses require a C or better. See catalog Addendum C for specialized program grading scale.

The Nursing A.S. program contains 396 clinical hours. Students may not receive payment/reimbursement of any type for clinical and/or practicum hours required in their academic program. Students may also not perform these clinical and/or practicum hours with their employer in the capacity of their regular position.

The Nursing A.S. program is also available online. Sullivan classes are offered in an online hybrid format where students complete a portion of the course online and a portion on campus or at approved sites/facilities.

Many classes will require on-site clinical and/or lab skills training of two days weekly. Students may need to purchase additional software required for a specific course.

## Nursing

# ASSOCIATE OF SCIENCE (New Program Version for Traditional ASN effective September 2018)

#### REQUIREMENTS FOR THE DEGREE

103 Credit Hours

1595 Clock Hours (781 Lab & Clinical Hours)

Length: 24 months, 18 months accelerated

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles	Credit Hours
BIO 103	Human Anatomy & Physiology	4
BIO 103L	Human Anatomy & Physiology La	Ь 2
BIO 201	Medical Microbiology	4
BIO 201L	Medical Microbiology Lab	2
CHM 211	Introduction to General, Organic 8	x Biological
	Chemistry	6
ENG 101	Composition I	4
ENG 102	Composition II	4
MTH 101	College Mathematics	4
NUR 210	Fundamentals of Nursing	10
NUR 220	Concepts of Basic Nursing Practice	6
NUR 230	Adult Nursing Care I	8
NUR 231	Pharmacology	4
NUR 240	Adult Nursing Care II	8
NUR 241	Nutrition	2
NUR 250	Mental Health Nursing	4
NUR 251	Maternal Nursing	5
NUR 252	Pediatric Nursing	6
NUR 260	Adult Nursing Care III	5
NUR 261	Seminar in Professional Developme	ent 3
NUR 262	Integrated Practicum	4
PSY 214	Introduction to Psychology	4
SOC 214	Introduction to Sociology	4
<b>Total Credit</b>	Hours	<b>103</b>

All courses require a C or better. See catalog Addendum C for specialized program grading scale.

The Traditional Nursing A.S. program contains 429 clinical hours. Students may not receive payment/reimbursement of any type for clinical and/or practicum hours required in their academic program. Students may also not perform these clinical and/or practicum hours with their employer in the capacity of their regular position.

The Nursing A.S. program is also available online. Sullivan classes are offered in an online hybrid format where students complete a portion of the course online and a portion on campus or at approved sites/facilities.

Many classes will require on-site clinical and/or lab skills training of two days weekly. Students may need to purchase additional software required for a specific course.

## Radiologic Technology

#### ASSOCIATE OF SCIENCE

The mission of the Radiologic Technology program is to provide a progressive academic and clinical educational environment by training students to become highly competent and qualified to administer ionizing radiation for medical diagnostic imaging purposes while preparing them for future licensing examination. Through knowledge gained from the Radiologic Technology program's didactic and clinical curriculum and from the liberal arts and sciences, the students develop the knowledge to consistently apply principles of radiologic technology and produce radiographs of diagnostic quality. The students will practice professional judgment, critical thinking, problem-solving skills, and leadership through the program curriculum.

Graduates of the Limited Medical Radiography program may apply to the Associate of Science in Radiologic Technology program and if accepted will be able to complete the program in a minimum of five additional quarters. (See admission requirements for the Associate of Science in Radiologic Technology program.) Didactic classes are held during the day, and clinicals are held during the day, evening, and on weekends.

Graduates of the Radiologic Technology A.S. program are eligible to sit for the required national certification examination given by aathe American Registry of Radiologic Technologists (ARRT) and obtain state licensure.

#### REQUIREMENTS FOR THE DEGREE

132 Credit Hours 2250 Clock Hours

Length: 24 months

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles Credit	Hours
CCS 110	College Success Strategies	2
CCS 245	Career Development	2
ENG 101	Composition I	4
ENG 102	Composition II	4
MED 171	Medical Ethics - NDT	4
MED 172	Anatomy & Physiology I	4
MED 173	Anatomy & Physiology II	4
MED 176	Medical Terminology	4
MED 211	Health & Safety Techniques - NDT	3
MTH 101	College Mathematics	4
PSY 214	Introduction to Psychology	4
RAD 100	Introduction to Radiography - NDT	4
RAD 102	Introduction to Radiographic	
	Clinical Topics - NDT	3
RAD 121	Radiographic Positioning I - NDT	6
RAD 131	Radiographic Positioning II - NDT	3
RTA 122*#	Radiographic Clinical I - NDT	3
RTA 132*#	Radiographic Clinical II - NDT	3
RTA 133	Advanced Radiographic Positioning - ND	Γ 3
RTA 141	Radiographic Imaging I - NDT	4
RTA 142*	Radiographic Clinical III - NDT	3
RTA 144	Patient Care & Education - NDT	4
RTA 251	Radiographic Imaging II - NDT	4
RTA 252*	Advanced Radiographic Clinical I - NDT	8
RTA 253	Radiation Physics - NDT	4
RTA 254	Radiation Protection & Biology - NDT	4
RTA 261	Radiographic Pathology - NDT	3
RTA 262*	Advanced Radiographic Clinical II - NDT	8
RTA 263	Advanced Topics & Current Trends in	
	Imaging - NDT	4
RTA 271	Radiographic Image Critique - NDT	4
RTA 272*	Advanced Radiographic Clinical III - NDT	8
RTA 282*	Advanced Radiographic Clinical IV - ND	Γ 7
RTA 283	Radiographic Registry Review - NDT	3
T 1 C 1:4	II	122

All courses require "C" or better. See catalog addendum "C" for specialized program grading scale. Radiology Department has an additional policy and procedure manual.

\*The clinical requirement consists of 1200 hours for the RTA program. Students may not receive payment/reimbursement of any type for clinical and/or externship hours required in their academic program. Students may also not perform these clinical and/or externship hours with their employer in the capacity of their regular position. Clinical rotations may be up to 90 miles away from the college campus. Clinical experiences will include 1st, 2nd and 3rd shift and some weekends.

#Not required if LMR 300 and LMR 301 have been taken.

NDT = Not Designed to Transfer

## Respiratory Therapy

#### ASSOCIATE OF SCIENCE

The goal of the Respiratory Therapy A.S. program is to prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRTs).

The Respiratory Therapy program prepares the student to sit for the following National Board for Respiratory Care (NBRC) credentialing exams: The Therapist Multiple Choice (TMC) exam [depending on the cut score the student will be granted either their Certified Respiratory Therapist (CRT) credential or be eligible to sit for the Registered Respiratory Therapist (RRT) Clinical Simulation examination]. The Kentucky Board for Respiratory Care (KBRC) is the state licensing agency for Respiratory Therapists. Proof of CRT is required when applying for state licensure.

#### REQUIREMENTS FOR THE DEGREE

104 credit hours

1764 clock hours

Length: 24 months

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles Credit I	<u> Iours</u>
BIO 100+	Fundamentals of Science - NDT	4
BIO 200	Essentials of Clinical Microbiology	4
CCS 110	College Success Strategies	2
CCS 245	Career Development	2
ENG 101	Composition I	4
ENG 102	Composition II	4
MED 171	Medical Ethics - NDT	4
MED 172	Anatomy & Physiology I	4
MED 173	Anatomy & Physiology II	4
MED 176	Medical Terminology	4
MTH 101	College Mathematics	4
PSY 214	Introduction to Psychology	4
RES 100	Introduction to Clinical Assessment - NDT	3
RES 200	Respiratory Fundamentals I - NDT	5
RES 300	Respiratory Fundamentals II - NDT	3
RES 305*	Respiratory Clinical I - NDT	4
RES 400	Respiratory Fundamentals III - NDT	3
RES 402	Cardiopulmonary Pathophysiology - NDT	4
RES 405*	Respiratory Clinical II - NDT	4
RES 500	Respiratory Pharmacology - NDT	4
RES 505*	Respiratory Clinical III - NDT	4
RES 600	Neonatal & Pediatric Respiratory	
	Therapy - NDT	3
RES 605*	Respiratory Clinical IV - NDT	4
RES 701	Respiratory Therapy Seminar - NDT	2
RES 705*	Respiratory Clinical V - NDT	4
RES 801	Respiratory Therapy Registry Review - ND7	3
RES 805*	Respiratory Clinical VI - NDT	6
SOC 214	Introduction to Sociology	4
Total Credit	Hours	104

All courses require a C or better.

\*The clinical requirement consists of 840 hours. Students may be placed in day, evening, or night shift clinical rotations depending on availability and course sequence. Some courses may require onsite clinical skills training. Students may not receive payment/reimbursement of any type for clinical hours required in their academic program. Students may also not perform these clinical hours with their employer in the capacity of their regular position. Some clinical settings may require TB, other specific tests or proof of current inoculations, and screening through the child abuse registry.

Respiratory Therapy Department has an additional policy and procedure manual.

NDT = Not Designed to Transfer

## Surgical Technology

#### ASSOCIATE OF SCIENCE

The objective of the A.S. Surgical Technology program is to utilize learning experiences in the cognitive, psychomotor, and affective domains to prepare students for entry-level employment positions and then future advancement in today's surgical technology profession.

The associate degree program offers both didactic and clinical training in current and advanced trends in surgical technology. In addition, biomedical sciences, laser surgery, and the impact of technological advances will be addressed. The program stresses the importance of academic knowledge, professional accountability, independent decision making, and the critical nature of self-assessment. Successful completion of A.S. Surgical Technology program prepares the graduate to take the nationally recognized Certified Surgical Technology (CST) credentialing exam, administered through the National Board of Surgical Technology and Surgical Assisting (NBSTSA).

#### REQUIREMENTS FOR THE DEGREE

94 Credit Hours 1426 Clock Hours Length: 18 months

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles	Credit Ho	urs
CCS 110	College Success Strategies		2
CCS 245	Career Development		2
ENG 101	Composition I		4
ENG 102	Composition II		4
MED 172	Anatomy & Physiology I		4
MED 173	Anatomy & Physiology II		4
MED 176	Medical Terminology		4
MED 211	Health & Safety Techniques - NDT	Γ	3
MTH 101	College Mathematics		4
PSY 214	Introduction to Psychology		4
SUR 100	Introduction to Surgical Technolog	y - NDT	6
SUR 101	Orientation to Surgical Technology	- NDT	3
SUR 174	Surgical Anatomy & Physiology - N	IDT	4
SUR 178	Surgical Pharmacology - NDT		4
SUR 199	Microbiology for Surgical		
	Technologists - NDT		6
SUR 200	Surgical Techniques - NDT		6
SUR 201*	Surgical Procedures I - NDT		14
SUR 202*	Surgical Procedures II - NDT		14
SUR 301	Professional Issues - NDT		2
<b>Total Credit</b>	Hours		94

All courses require "C" or better in the classroom and a passing grade of satisfactory in lab and/or clinicals. See catalog addendum "C" for specialized program grading scale.

For departmental guidelines, policies, and/or procedures, refer to the Surgical Technology Department's Handbook.

NDT = Not Designed to Transfer

<sup>\*</sup>The clinical requirement consists of a total of 480 hours.

### Clinical Laboratory Science

#### **BACHELOR OF SCIENCE**

The Bachelor of Science in Clinical Laboratory Science degree is intended for laboratory professionals seeking a baccalaureate degree program. The program prepares graduates for the employment responsibilities where knowledge and skills go beyond those typically attained at the associate degree level. The curriculum will provide students insight into high complexity laboratory testing, laboratory administration, and advanced quality control procedures. In addition, the general education courses expand general knowledge and critical thinking skills.

The curriculum is based on guidelines from The National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) and the Accrediting Bureau for Health Education Schools (ABHES) and is congruent with current laboratory standard requirements as outlined by Clinical Laboratory Improvement Amendments (CLIA) '88.

Meeting these objectives will prepare graduates to become employed as Medical Technologists or Clinical Laboratory Science professionals. Certification is available through the American Medical Technologists (AMT)-Medical Technologist (MT) examination. Graduates who are previously American Society for Clinical Pathologist (ASCP) Medical Laboratory Technician (MLT) certified also have the option of taking the Medical Laboratory Scientist (MLS) examination through the ASCP.

The program is designed as a bachelor's completion program. Students entering into the Clinical Laboratory Science B.S. program must have an associate's degree, MLT or CLT certification from American Medical Technologist (AMT) or The American Society for Clinical Pathology (ASCP), and one year of clinical experience; or must have completed the Medical Laboratory Technician A.S. program at Sullivan University and be eligible to sit for the AMT MLT certification examination. Graduates of Sullivan University's Medical Laboratory Technician A.S. program who have been out of the program for a year or more must meet both the certification and employment requirements. Graduates of an approved program may receive a credit block to satisfy the MLT component of the program. All 24 credits of general education requirements must have been met in the following disciplines: English (8), Math (4), and Social Sciences (12).

#### REQUIREMENTS FOR THE DEGREE

64 Credit Hours in Bachelor's Portion

(Add Sullivan's A.S. Portion of 122 Credit Hours for a Total Credit Hours of 186)

704 Clock Hours in Bachelor's Portion

Length: 15 months B.S. Portion, 39 months Total

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles	Credit Hours
CHE 301	Biochemistry	4
CLS 302	Genetics	4
CLS 401	Molecular Diagnostics	4
CLS 402	Parasitology/Mycology	4
CLS 403	Laboratory Management/Finance	4
COM 204	Interpersonal Communication	4
COM 214	Public Speaking	4
ECO 201	Microeconomics	4
ENG 244	Introduction to Literature	4
HCA 301	Principles of Healthcare Manageme	ent 4
HCA 302	The Legal Aspects & Compliance of	of
	Healthcare	4
HRL 465	Health & Safety in the Workplace	4
MTH 201	College Algebra	4
MTH 202	Introduction to Statistics	4
PHL 464	Ethics	4
SOC 303	Cultural Diversity	4
Credit Hours		64
Credit Hour	122	
Total Credit Hours		186

All courses require "C" or better

Students may need to purchase additional software required for a specific course.

# Additional Programs as of 6/22/18 from the former Sullivan College of Technology and Design

## Architectural Computer Aided Design Drafting ASSOCIATE OF SCIENCE

The objective of the Architectural Computer Aided Design Drafting (CADD) program is to develop the skills necessary to create working drawings for the construction of a variety of architectural disciplines. An integral part of the system includes the use of CADD software and related equipment.

Upon completion of the Architectural CADD program, you will have the skills needed to be successful, including an understanding of basic structural design principles using mathematics and physics an understanding of how CADD is used to solve real world problems; an understanding of foundation design and framing techniques for residential and commercial construction; the ability to use Building Information Modeling (BIM) and incorporate "green" technology into designs; and an understanding of the use of CADD software for problem solving and drawing creation.

The Associate of Science (A.S.) degree in Architectural Computer Aided Design Drafting will enable you to apply for entry and intermediate level positions such as the following:

- Architectural drafter or detailer
- Structural drafter
- Technical sales representative
- Field technician
- Design technician
- Project technician
- CADD operator

#### REQUIREMENTS FOR THE ASSOCIATE DEGREE

106 Credit Hours

1,320 Clock Hours

Length: 24 months, 18 months accelerated

Course	Titles Credit Ho	ours
ARH 140	Construction Estimating	3
ARH 160	Residential Design I	3
ARH 165	Residential Design II	3
ARH 170	Commercial Construction I	3
ARH 173	Commercial Construction II	3
CSC 118	Computer Applications I	4
DRF 105	Basic Board Drafting	6
DRF 135	Computer Aided Design Drafting I	3
DRF 145	Advanced Drafting Techniques	3
DRF 165	Computer Aided Design Drafting II	3
DRF 231	Statics	4
DRF 251	Electrical Power Distribution	4
DRF 255	Computer Aided Design Drafting III	3
DRF 258	Strengths	4
DRF 265	Computer Aided Design Drafting IV	3
DRF 271	Civil Drafting	3
DRF 285	Building Information Modeling Applications	3
ENG 101	Composition I	4
FYE 101	Information Literacy	4
MTH 113	Mathematical Concepts	4

Credit Hours		102
PHY 232	Physics III	4
PHY 212	Physics II	4
PHY 162	Physics I	4
NET 147	Operating Systems	4
MTH 263	Advanced Algebra	4
MTH 253	Analytical Geometry and Trigonometry	4
MTH 243	Applied Algebra	4
MTH 123	Advanced Mathematics	4

General Studies Elective (4 Additional Credit Hours)

Students must choose one additional General Education class from the Social/Behavioral Science category. This class is in addition to the required General Education classes listed in the program. See the Table of Contents to find the complete list of General Education classes and minimum requirements.

Total Credit Hours

## Mechanical Computer Aided Design Drafting

106

#### ASSOCIATE OF SCIENCE

The objective of the Mechanical Computer Aided Design Drafting (CADD) program is to develop the skills necessary to create technical drawings that can be used in a variety of mechanical fields.

Upon completion of the Mechanical CADD program, you will demonstrate the skills needed to be successful, including the creation of working drawings using mechanical design and drafting standards; the creation of 3D models using the X, Y and Z planes; a basic understanding of Geometric Tolerances and how they are used in design projects; an understanding of project design concepts; a basic understanding of project costs, schedules and phases; an understanding of material usage and characteristics; an understanding of how CADD is used to solve real world problems; and an ability to incorporate Building Information Modeling (BIM) and 'green' technology into designs.

The Associate of Science (A.S.) degree in Mechanical Computer Aided Design Drafting enables you to apply for entry level and intermediate level positions such as:

- Mechanical drafter or detailer
- Technical sales representative
- Field technician
- Design technician
- Project technician
- CADD operator

#### REQUIREMENTS FOR THE ASSOCIATE DEGREE

106 Credit Hours

1,320 Clock Hours

Length: 24 months, 18 months accelerated

Course	1 itles	Credit Hours
AMT 216	Fluid Power	3
CSC 118	Computer Applications I	4
DRF 105	Basic Board Drafting	6
DRF 135	Computer Aided Design Drafting I	3
DRF 145	Advanced Drafting Techniques	3
DRF 165	Computer Aided Design Drafting I	II 3
DRF 231	Statics	4
DRF 251	Electrical Power Distribution	4
DRF 255	Computer Aided Design Drafting I	III 3
DRF 258	Strengths	4
DRF 265	Computer Aided Design Drafting I	IV 3

DRF 271	Civil Drafting	3
DRF 285	<b>Building Information Modeling Application</b>	s 3
ENG 101	Composition I	4
FYE 101	Information Literacy	4
MEC 140	Introduction to Mechanical Drafting	3
MEC 160	Mechanical Design I	3
MEC 165	Mechanical Design II	3
MEC 170	Advanced Mechanical Drafting	3
MTH 113	Mathematical Concepts	4
MTH 123	Advanced Mathematics	4
MTH 143	Applied Algebra	4
MTH 253	Analytical Geometry & Trigonometry	4
MTH 263	Advanced Algebra	4
NET 147	Operating Systems	4
PHY 162	Physics I	4
PHY 212	Physics II	4
PHY 232	Physics III	4
Credit Hours		102
General Studies Elective (4 Additional Credit Hours)		4

Students must choose one additional General Education class from the Social/Behavioral Science category. This class is in addition to the required General Education classes listed in the program. See the Table of Contents to find the complete list of General Education classes and minimum requirements

**Total Credit Hours** 

106

## Computer Engineering Technology

#### ASSOCIATE OF SCIENCE

The objective of the Computer Engineering Technology program is to develop the skills and understanding necessary to maintain, repair and troubleshoot electrical, electronic and microprocessor based equipment.

Upon completion of this program, you will: understand the principles of electricity (both DC and AC); troubleshoot electronic circuitry to board and component level; select and operate test equipment for troubleshooting; assemble and debug digital circuits; understand a computer's architecture including peripheral devices and their operation; work with operating system fundamentals for file system operation; read schematic drawings; and network applications. You also have opportunities to learn about the installation and repair of sustainable energy products such as solar panels and wind turbines.

In this program, you will learn proper repair and maintenance of electronic equipment reduces waste and allows us to adopt an environmentally conservative approach. Otherwise, electronic components are difficult to dispose of, do not biodegrade, and add toxins to landfills.

You will also have the opportunity to obtain as many as 19 IPC certifications. IPC is a national organization devoted to the connectivity of electrical components.

The Associate of Science (A.S.) degree in Computer Engineering Technology prepares you to seek entry and intermediate level positions such as:

- Field service technician
- Electronic technician
- Computer repair technician
- Technical sales representative
- Junior technician
- Bench technician

#### REQUIREMENTS FOR THE ASSOCIATE DEGREE

105 Credit Hours

1,248 Clock Hours

Length: 24 months, 18 months accelerated

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer

credit accepted, lack of continuous enrollment, etc.

Course	Titles Credit I	<b>lours</b>
CET 244	Communications in Electronics# - NDT	4
CSC 118	Computer Applications I	4
DRF 135	Computer Aided Design Drafting I	3
ELC 114	Direct Current Theory & Applications	7
ELC 134	Alternating Current Theory & Applications	7
ELC 152	Semi-Conductors I	3
ELC 163	Digital Electronics I	3
ELC 212	Semi-Conductors II	3
ELC 219	Digital Electronics II	3
ELC 226	Electro-Mechanical Devices I	4
ELC 240	Opto-Electronics	4
ENG 101	Composition I	4
FYE 101	Information Literacy	4
MTH 243	Applied Algebra	4
MTH 253	Analytical Geometry & Trigonometry	4
MTH 263	Advanced Algebra	4
NET 130	Computer Essentials & Troubleshooting	12
NET 147	Operating Systems	4
NET 152	Introduction to Computer Networking	12
PHY 162	Physics I	4
PHY 212	Physics II	4
Credit Hours		101
General Stud	dies Elective (4 Additional Credit Hours)	4

Students must choose one additional General Education class from the Social/Behavioral Science category. This class is in addition to the required General Education classes listed in the program. See the Table of Contents to find the complete list of General Education classes and

minimum requirements.

Total Credit Hours 105

NDT = Not Designed to Transfer

# Heating, Ventilation, Air-Conditioning, and Refrigeration (HVAC-R) Technology

#### CERTIFICATE

The primary objective of the HVAC-R program is to prepare students for residential and commercial HVAC-R technician positions in the HVAC-R field through a curriculum that expects students to describe the operating principles of HVAC-R systems, demonstrate the skills necessary to obtain OSHA and EPA certifications as required for employment in the field, explain the refrigeration cycle, and demonstrate entry-level skills required to service HVAC-R equipment.

Students will be eligible for entry-level residential and commercial technician employment after three quarters of program content. They will also have the credentials of an HVAC-R certificate, OSHA 10 safety certification and EPA608 refrigerant handling certification.

The certificate program in Heating, Ventilation, Air Conditioning and Refrigeration has been developed as a 1+1 program, combining a certificate phase with the additional work required to complete an associate degree.

#### REQUIREMENTS FOR THE CERTIFICATE

43 Credit Hours

528 Clock Hours

Length: 9 months

Course	Titles	Credit Hours
CSC 118	Computer Applications I	4

ENG 101	Composition I	4
FYE 101	Information Literacy	4
HVA 100	Blueprint Reading	3
HVA 101	Introduction to HVAC-R Systems	4
HVA 115	Principles of Refrigeration	4
HVA 125	Heating Systems	3
HVA 135	Air-Conditioning	3
HVA 205	HVAC-R Electrical Applications	3
HVA 220	Building Automation I	4
HVA 225	Commercial HVAC Systems# or	3
HVA 290	Externship	3
MTH 123	Advanced Mathematics	4
Total Credit Hours		43

# Heating, Ventilation, Air-Conditioning, and Refrigeration (HVAC-R) Technology

#### ASSOCIATE OF SCIENCE DEGREE

The objective of the HVAC-R Technology program is to develop the skills and understanding necessary to obtain entry-level employment in such fields as HVAC-R sales, service, installation; facilities operation and sustainability; or energy efficiency technical work or auditing.

The curriculum focuses on basic operating principles of residential and commercial HVAC systems across the subsystems of cooling, heating, distribution, filtration and control. Emphasis will also be placed upon the skills and knowledge required to understand building automation systems and their efficient use of energy. Environmental responsibility is also stressed as you master EPA refrigerant handling requirements and through training to complete effective commercial energy audits.

Elements of the program may also be appropriate for experienced HVAC-R technicians who may need additional training.

Graduates may seek employment in such fields as:

- HVAC-R sales
- Service installation
- Facilities operation
- Sustainability or energy
- Energy efficiency
- Energy auditing

#### REQUIREMENTS FOR THE ASSOCIATE DEGREE

102 Credit Hours

1,278 Clock Hours

Length: 24 months, 18 months accelerated

Course	Titles	Credit Hours
BUS 224	Professional Development	4
CSC 118	Computer Applications I	4
ELC 226	Electro-Mechanical Devices I	4
ENG 101	Composition I	4
FYE 101	Information Literacy	4
HVA 101	Introduction to HVAC-R Systems	4
HVA 100	Blueprint Reading	3
HVA 115	Principles of Refrigeration	4
HVA 125	Heating Systems	3
HVA 135	Air-Conditioning	3
HVA 205	HVAC-R Electrical Applications	3

HVA 215	Commercial Refrigeration	3
HVA 220	Building Automation I	4
HVA 225	Commercial HVAC Systems	3
HVA 255	Air & Water Distribution Systems	4
HVA 260	HVAC-R Loads & Humidity	4
HVA 265	Troubleshooting/Systems Repair	3
HVA 272	Building Automations II	4
HVA 275	HVAC-R Applications	3
HVA 280	Energy Audit Procedures & Practices	3
HVA 290	Externship	3
HVA 295	Capstone Journeyman Prep	4
MTH 123	Advanced Mathematics	4
MTH 243	Applied Algebra	4
MTH 253	Analytical Geometry & Trigonometry	4
PHY 162	Physics I	4
PHY 212	Physics II	4
Total Credit Hours		98
General Studies Elective (4 Additional Credit Hours)		4

Students must choose one additional General Education class from the Social/Behavioral Science category. This class is in addition to the required General Education classes listed in the program. See the Table of Contents to find the complete list of

General Education classes and minimum requirements.

**Total Credit Hours** 

## **Advanced Manufacturing Technology**

#### ASSOCIATE OF SCIENCE

The objective of the Advanced Manufacturing Technology program is to develop the skills and understanding necessary to maintain, repair and troubleshoot automated equipment found in industrial and high technology environments.

Upon completion of this program, you will be able to read basic schematic and blueprint drawings; apply the principles of electricity (both DC and AC); work with hydraulic and pneumatic power systems; apply the essentials of electrical/electronic power and control requirements of an automated system; troubleshoot electronic equipment; select and operate test equipment for troubleshooting; operate robotic teach-pendants; program robot movement in work cell applications; write program subroutines for work cell interfacing; program and interface programmable controllers; troubleshoot automated equipment and its controllers; and utilize industrial safety techniques.

The Associate of Science (A.S.) degree in Advanced Manufacturing Technology enables you to qualify for entry and intermediate level positions such as:

- Engineering technician
- Maintenance technician
- Electro/mechanical technician
- Industrial maintenance technician
- Field service technician
- Junior technician
- Technical sales representative

#### REQUIREMENTS FOR THE ASSOCIATE DEGREE

106 Credit Hours

1,320 Clock Hours

Length: 24 months, 18 months accelerated

Course	Titles	Credit Hours
AMT 151	Mechanical Drives	3

General Studies Elective (4 Additional Credit Hours)		4
Credit Hour	rs	102
PHY 212	Physics II	4
PHY 162	Physics I	4
NET 147	Operating Systems	4
MTH 263	Advanced Algebra	4
MTH 253	Analytical Geometry & Trigonometry	4
MTH 243	Applied Algebra	4
FYE 101	Information Literacy	4
ENG 101	Composition I	4
ELC 253	Electro–Mechanical Devices II	4
ELC 240	Opto-Electronics	4
ELC 226	Electro–Mechanical Devices I	4
ELC 219	Digital Electronics II	3
ELC 212	Semi-Conductors II	3
ELC 163	Digital Electronics I	3
ELC 152	Semi-Conductors I	3
ELC 134	Alternating Current Theory & Applications	7
ELC 114	Direct Current Theory & Applications	7
DRF 135	Computer Aided Design Drafting I	3
CSC 118	Computer Applications I	4
AMT 267	Programmable Logic Controllers II	3
AMT 258	Work Cells	3
AMT 249	Manufacturing Methods	4
AMT 247	Programmable Logic Controllers I	3
AMT 238	Robot Applications	3
AMT 216	Fluid Power	3
AMT 158	Robot Fundamentals	3

Students must choose one additional General Education class from the Social/Behavioral Science category. This class is in addition to the required General Education classes listed in the program. See the Table of Contents to find the complete list of <u>General Education classes and minimum requirements</u>.

Total Credit Hours 10

## **Advanced Manufacturing Technology**

#### **BACHELOR OF SCIENCE DEGREE**

The objective of the Advanced Manufacturing Technology program is to develop the knowledge and technical skills necessary to maintain automated equipment, including principles of science, mathematics and engineering; the ability to research and develop new machines and products; and the ability to utilize productively the manufacturing processes and quality control measures found in industrial and highly technical environments.

The curriculum focuses on real-life practical applications you will encounter in the industry, helping you develop the applied skills to meet a constantly changing work place. The program also emphasizes the need for socially responsible solutions that are safe and reliable and that ensure a safe environment.

The Bachelor of Science in Advanced Manufacturing Technology enables you to qualify for entry and intermediate level positions such as:

- Engineering technician
- Maintenance technician
- Electro/mechanical technician
- Industrial maintenance technician
- Field service technician
- Junior technician
- Technical sales representative

#### REQUIREMENTS FOR THE BACHELOR'S DEGREE

185 Total Credit Hours

(Associate Phase 106; Bachelor's Phase 79)

2,288 Total Clock Hours (Associate Phase

1,320; Bachelor's Phase 968)

Length: 42 months

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Students wishing to obtain the bachelor's degree in Advanced Manufacturing Technology must complete all course work in the Advanced Manufacturing Technology associate degree program (or its equivalent) plus the upper-level bachelor's degree course work outlined below:

Course	Titles	Credit Hours
AMT 316	Fluid Power II	3
AMT 320	Statistical Quality Control	4
AMT 330	Instrumentation and Measurement	3
AMT 340	Engineering Programming Language	es 3
AMT 347	Programmable Logic Controllers III	1 3
AMT 351	Mechanical Drives II	3
AMT 367	Programmable Logic Controllers IV	3
AMT 420	Green Energy Technology	4
AMT 430	Advanced Automation	3
AMT 440	Sustainable Engineering	4
AMT 450	Project Management I	3
AMT 460	Project Management II	3
COM 204	Interpersonal Communication and	
	Conflict Management	4
DRF 231	Statics	4
DRF 258	Strengths	4
DRF 331	Dynamics	4
ENG 102	Composition II	4
GEO 244	North American Geography	4
GEO 274	Global Environment	4
HST 274	American Government	4
MTH 343	Technical Calculus	4
Credit Hours		75
General Studies Elective (4 Additional Credit Hours)		ours) 4

Students must choose one additional General Education class from the Social/Behavioral Science category. This class is in addition to the required General Education classes listed in the program. See the Table of Contents to find the complete list of General Education classes and minimum requirements.

Credit Hours for the A.S. degree	106
Total Credit Hours	185

### Computer Graphic Design

#### ASSOCIATE OF SCIENCE

The objective of the Computer Graphic Design program is to develop the skills and understanding necessary to obtain entry-level employment in industries that utilize computer graphics, animation and 3-D modeling, as well as digital publishing, web page design, and other related skills.

Upon completion of the program, you will be able to develop a variety of professional publications, documents, and imagery. Integral skills you will develop include the ability to use sophisticated software and associated peripheral equipment like scanners, printers and cameras. You will learn to generate and/or manipulate images to develop solutions to a variety of graphic and design problems. The program encourages usage of environmentally friendly materials and supplies throughout the practice of graphic design skills.

This field offers the creative and artistic designer a range of opportunities with advertising agencies, publishers, art studios and large corporations that use visual media for promotion and communication. Graduates of the Associate of Science (A.S.) degree in Computer Graphic Design will be able to seek employment in positions such as:

- Technical illustrator
- Renderer
- Advertising and graphic designer
- Corporate design professional
- Computer artists in various entertainment fields
- Web designer
- Computer graphic consultant

#### REQUIREMENTS FOR THE ASSOCIATE DEGREE

103 Credit Hours

1,410 Clock Hours

Length: 24 months, 18 months accelerated

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles	Credit Hours
CGD 110	Drawing	3
CGD 115	Introduction to Digital Imaging	3
CGD 131	Color Theory	3
CGD 135	Typography	3
CGD 142	Print I	3
CGD 151	Digital Illustration I	3
CGD 157	Digital Imagery & Image Making	I 3
CGD 164	Layout I	3
CGD 169	3-D Modeling	3
CGD 215	Layout II	3
CGD 229	Basic 3D Animation	3
CGD 234	Multi-Media I	3
CGD 242	Print II	3
CGD 243	Web I	3
CGD 244	Graphic Design	3
CGD 256	Multi-Media II	3
CGD 263	Web II	3
CGD 267	Portfolio	3
CGD 269	Externship	3
COM 204	Interpersonal Communication and	
	Conflict Management	4
CSC 118	Computer Applications I	4
DWD 265	Web III	3
ENG 101	Composition I	4
FYE 101	Information Literacy	4
HST 124	Art History I	4
HST 225	Art History II	4
MTH 113	Mathematical Concepts	4
MTH 123	Advanced Mathematics	4
MTH 243	Applied Algebra	4
Elective		3
CGD 250	Video Production	
	OR	
DWD 145	Programming Logic	
Credit Hour	rs	99

General Studies Elective (4 Additional Credit Hours)

Students must choose one additional General Education class from the Social/Behavioral Science category. This class is in addition to the required General Education classes listed in the program. See the Table of Contents to find the complete list of General Education classes and minimum requirements.

## Computer Graphic Design

#### **BACHELOR OF ARTS DEGREE**

The objective of the Bachelor of Arts in Computer Graphic Design program is to further develop the in-demand skills and qualifications needed to be successful in the industry. In addition to the knowledge developed at the associate degree level, you will enhance your creativity and broaden your skills in advertising, concepts of ideas, working with the community, and various other design specialties.

Upon completion of this program, you will be able to utilize industrY software in more creative ways. Examples of the software you'll use include Photoshop, Illustrator, InDesign, Dreamweaver, and AnimatePro. (Note: Software is subject to change). You will also be able to engage in copywriting, advertising, promotion and design for the environment.

This program will prepare you for careers in advertising, image creations, web design, commercial art and many other exciting and challenging areas.

The Bachelor of Arts program in Computer Graphic Design has been developed as a 2+2 program, combining an associate degree phase (103 credit hours) with the additional work required for the bachelor's degree (81 additional credit hours).

#### REQUIREMENTS FOR THE BACHELOR'S DEGREE

180 Total Credit Hours

(Associate Phase 103; Bachelor's Phase 77)

2,422 Total Clock Hours

(Associate Phase 1,410; Bachelor's Phase 1,012)

Length: 42 months

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Students wishing to obtain the bachelor's degree in Computer Graphic Design must complete all course work in the Computer Graphic Design associate degree program (or its equivalent) plus the upper-level bachelor's degree course work outlined below:

Course	Titles	Credit Hours
CGD 325	Graphic Design History	3
CGD 326	Design Methodology	3
CGD 327	Writing Copy for Design	3
CGD 342	Branding	3
CGD 351	Digital Illustration II	3
CGD 357	Digital Imagery & Image Making	II 3
CGD 430	Advertising Design	3
CGD 431	Product Design	3
CGD 445	Environmental Design	3
CGD 446	Collective Design	3
CGD 461	Design Studio/Community Project	ts 3
CGD 467	Portfolio	3
DWD 266	Multi-Media III	3
DWD	Dynamic Web Development Elect	ive 3
DWD	Dynamic Web Development Elect	ive 3
ENG 102	Composition II	4
GEO 244	North American Geography	4
GEO 274	Global Environment	4
HST 274	American Government	4
LNG 144	Conversational Spanish I	4
Elective	General Elective	4
Credit Hour	s	69

General Studies Electives (8 Additional Credit Hours)

Students must choose two additional General Education classes from the Social/Behavioral Science category. These classes are in addition to the required General Education classes listed in the program. See the Table of Contents to find the complete list of General Education classes and minimum requirements.

Dynamic Web Development Electives

You must select two (2) Dynamic Web Development electives from the following four (4) courses:

DWD 145 Programming Logic

DWD 150 Introduction to Programming

DWD 257 Client Side Programming

DWD 275 Web IV

## **Dynamic Web Development**

#### ASSOCIATE OF SCIENCE

The objective of the Dynamic Web Development program is to teach the skills and understanding necessary to obtain entry-level employment in fields like web design, web programming, web language, page layout and other related areas.

This program will show you how to develop and upload web pages and how to connect to databases, retrieve content from them and infuse that content into web pages. With a solid foundation in computer programming, you will also develop skills in console input and output, controlling flow, object-oriented programming and event handling.

Graduates of this program will qualify for employment opportunities such as:

- Web designer
- Web programmer
- Corporate web layout designer
- Computer artist

#### REQUIREMENTS FOR THE ASSOCIATE DEGREE

95 Credit Hours

1,322 Clock Hours

Length: 24 months, 18 months accelerated

Course	Titles	Credit Hours
CGD 115	Introduction to Digital Imaging	3
CGD 131	Color Theory	3
CGD 234	Multi-Media I	3
CGD 243	Web I	3
CGD 256	Multi-Media II	3
CGD 263	Web II	3
COM 204	Interpersonal Communication and	
	Conflict Management	4
CSC 118	Computer Applications I	4
DWD 145	Programming Logic	3
DWD 150	Introduction to Programming	3
DWD 255	Intermediate Programming -NDT	3
DWD 257	Client Side Programming	3
DWD 265	Web III	3
DWD 266	Multi-Media III	3
DWD 268	Portfolio - NDT	3
DWD 269	Externship - NDT	3
DWD 271	Dynamic Web Language I - NDT	3
DWD 272	Dynamic Web Language II - NDT	3
DWD 273	Dynamic Web Language III - NDT	Γ 3
DWD 275	Web IV	3
DWD 276	Mobile Application Development -	NDT 3
DWD 277	Dynamic Web Language IV - ND7	Γ 3
DWD 278	Dynamic Web Language V - NDT	3
ENG 101	Composition I	4

FYE 101	Information Literacy	4
MTH 113	Mathematical Concepts	4
MTH 123	Advanced Mathematics	4
MTH 243	Applied Algebra	4
Credit Hou	rs	91
General Studies Elective (4 Additional Credit Hours)		
Students must choose one additional General Education class		
from the Social/Behavioral Science category. This class is in		
addition to the required General Education classes listed in the		
program. See the Table of Contents to find the complete list of		
General Education classes and minimum requirements.		
Total Credi	t Hours	95

NDT = Not Designed to Transfer

## Computer Network Administration

#### ASSOCIATE OF SCIENCE

The Associate of Science degree in Computer Network Administration provides an advanced understanding of microcomputer concepts with emphasis on the maintenance of a server-oriented network. You will learn to build and support desktops laptops, servers and the associated network infrastructures for home and business communication. Classes incorporate intense hands-on training with both Windows and Lenix operating systems and CISCO routers. Job readiness is complemented with the inclusion of testing for industry certifications in these areas.

The Associate of Science (AS) degree in Computer Network Administrations will enable graduates to secure a variety of entry and intermediate positions.

Such opportunities may include positions like the following:

- Network technician
- Computer repair technician
- Help desk personnel
- Network administrator
- Network engineer
- Network consultant
- Manager of information systems.

#### REQUIREMENTS FOR THE ASSOCIATE DEGREE

108 Credit Hours

1,244 Clock Hours

Length: 24 months, 21 months accelerated

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Course	Titles	Credit Hours
ENG 101	Composition I	4
FYE 101	Information Literacy	4
MTH 243	Applied Algebra	4
NET 130	Computer Essentials & Troubleshoot	ing 12
NET 152	Introduction to Computer Networkin	ng 12
NET 181	Systems Architecture	12
NET 231	Microsoft Networking I	12
NET 241	Microsoft Networking II	12
NET 251	Microsoft Networking III	12
NET 261	Building a Network Infrastructure	12
Credit Hours		96

General Studies Elective (12 Additional Credit Hours)

Students must choose three additional General Education classes, including at least one from the Social/Behavioral Science category. These classes are in addition to the required General Education classes listed in the program. See the Table of Contents to find the complete list of General Education

classes and minimum requirements.

**Total Credit Hours** 

108

This program is currently being taught out and no new enrollments are being accepted.

## Computer Network Security/Forensics

#### ASSOCIATE OF SCIENCE

The Associate of Science degree in Computer Network Security/Forensics is designed to give you the ability to build, maintain, secure and recover computer networks. The program builds on the skills obtained from the basics of computer and network support to more refined avenues of defending those objects from internal and external threats. Subject matter encompasses risk assessment, fire walls, intrusion detection systems, virtual fire wall, networks, encryption authentication and forensic analysis of digital data. Opportunities for industry certifications are an integral part of this program.

The Associate of Science (A.S.) degree in Computer Network Security/Forensics will qualify you for a variety of entry and intermediate level positions in the Information Technology/Security industry.

Employment opportunities include roles such as:

- Network technician
- Help desk personnel
- LAN/WAN administrator
- Security analyst
- Security auditor
- Fire wall administrator
- Security consultant
- Information security specialist
- Security technologist
- Network administrator
- Security administrator

#### REQUIREMENTS FOR THE ASSOCIATE DEGREE

109 Credit hours

1,264 Clock hours

Length: 24 months, 21 months accelerated

Course	Titles Cred	it Hours
CNS 135	Fundamentals of Information Security	4
CNS 148	Risk Management for Computer Networ	ks 4
CNS 157	Network Defense Tactics	7
CNS 164	Computer Forensics	6
CNS 174	Encryption & Authentication Methods	4
CNS 180	Fundamentals of Digital Encryption	4
CNS 196	Advanced Topics in Information Security	4
ENG 101	Composition I	4
FYE 101	Information Literacy	4
MTH 243	Applied Algebra	4
NET 130	Computer Essentials & Trouble Shooting	g 12
NET 152	Introduction to Computer Networking	12

NET	Network Course Options	12
NET	Network Course Options	12
Credit Ho	ırs	93
General St	udies Electives (16 Additional Credit Hours)	16
Students mu	ust choose four additional General Education	
classes, inclu	iding at least one from the Social/Behavioral	
Science cate	gory. These classes are in addition to the require	ed
General Edu	ication classes listed in the program. See the Tab	ole
of Contents	to find the complete list of General Education	
classes and r	minimum requirements.	
<b>Total Cred</b>	it Hours	109

If you plan to pursue the bachelor's degree in this field, however,

you must choose MTH 253 Analytical Geometry & Trigonometry and MTH 263 Advanced Algebra, as two of the four General Education Electives.

Networking Course Options (pick 2 options) NET181 Systems Architecture 12 NET231 Microsoft Networking I 12 NET241 Microsoft Networking II 12

NET261 Building a Network Infrastructure 12

This program is currently being taught out and no new enrollments are being accepted.

## Computer Network Security/Forensics

#### **BACHELOR OF SCIENCE**

The objective of the Bachelor of Science degree in Computer Network Security and Forensics is to give you a thorough understanding of defense and attack techniques and the ability to apply these techniques in the field. The bachelor's degree phase of the curriculum places increased focus on attack strategies and computer network vulnerability to those strategies. Emphasis is also placed on tactical digital offense technique, secure network analysis, digital forensics, penetration testing and project management.

This program will prepare you to work in a technical environment, detect vulnerabilities in computer networks, and test new software vulnerability to attack.

You will be prepared for employment opportunities such as:

- IT security consultants
- Computer forensic examiners
- Pen testers
- IT security auditors
- Security managers
- Network analysts/engineer

#### REQUIREMENTS FOR THE BACHELOR'S DEGREE

195 Total Credit Hours

(Associate Phase 109; Bachelor's Phase 86)

2,296 Total Clock Hours

(Associate Phase 1,264; Bachelor's Phase 1,032)

Length: 42 months

Time length for program completion will vary depending upon the number of courses taken per term, developmental courses when required, transfer credit accepted, lack of continuous enrollment, etc.

Students wishing to obtain the bachelor's degree in Computer Network Security/Forensics must complete all course work in the Computer Network Security/Forensics associate degree program (or its equivalent) plus the upper level bachelor's degree course work outlined below:

Course	Titles	Credit Hours
CNS 310	Application Security	3

CNS 320	Tactical Digital Offense Techniques	6		
CNS 364	Advanced Digital Forensics	6		
CNS 435	Secure Network Analysis	8		
DWD 145	Programming Logic	3		
ENG 102	Composition II	4		
GEO 244	North American Geography	4		
GEO 274	Global Environment	4		
HST 274	American Government	4		
LNG 144	Conversational Spanish I	4		
MTH 343	Technical Calculus	4		
NET	Network Course Options	12		
NET	Network Course Options	12		
NET 400	IT Project Management	4		
NET 450	Current Trends in Network Security	4		
Credit Hours 82				
General Studies Elective (4 Additional Credit Hours) 4				
Students must choose one additional General Education				
class from the Social/Behavioral Science category. This class				
is in addition to the required General Education classes listed				

Credit Hours for the A.S. degree 109
Total Credit Hours 195

in the program. See the Table of Contents to find the complete list of General Education classes and minimum requirements.

Networking Course Options (pick 2 options)

NET181 Systems Architecture 12

NET231 Microsoft Networking I 12

NET241 Microsoft Networking II 12

NET261 Building a Network Infrastructure 12

NOTE: Student must choose options not selected in A.S.

This program is currently being taught out and no new enrollments are being accepted.

## Interior Design

#### **BACHELOR OF ARTS**

The objective of the bachelor's degree program is to prepare students for a professional career in interior design and/or the built environment. Students develop interiors centered on the interaction of the human being with the built environment and in the processes of designing interior spaces for a global market. Program goals develop student's understanding of the designer's role in an integrated process across multiple disciplines and client types. Interior Design studios measure student ability to execute design decisions on functionality, building codes, industry specific software, creative and innovative processes, and the health safety and welfare of the public.

The Bachelor of Arts in Interior Design prepares you for career opportunities in positions such as:

- Commercial and residential space planner and consultant
- Kitchen and bath designer
- Product or finish sales representative
- Lighting design specialist

#### REQUIREMENTS FOR THE BACHELOR'S DEGREE

185 Total Credit Hours

2,364 Total Clock Hours

Length: 42 months

Course	Titles C	redit Hours		
BUS 224	Professional Development	4		
COM 204	Interpersonal Communication and			
	Conflict Management	4		
CSC 118	Computer Applications I	4		
DRF 135	Computer Aided Design Drafting I	3		
ENG 101	Composition I	4		
ENG 102	Composition II	4		
FYE 101	Information Literacy	4		
GEO 244	North American Geography	4		
GEO 274	Global Environment	4		
HST 124	Art History I	4		
HST 225	Art History II	4		
HST 274	American Government	4		
IDB 101	Fundamentals of Interior Design	4		
IDB 111	Architectural Drafting	3		
IDB 121	Visual Communications I	3		
IDB 131	Design History and Theory I	4		
IDB 141	Human Factors	4		
IDB 151	Materials and Products	4		
IDB 161	Color Theory and Application	3		
IDB 171	Space and Form	3		
IDB 181	Residential Design Studio	3		
IDB 200	Design History and Theory II	4		
IDB 201	Studio I	3		
IDB 211	Visual Communications II	3		
IDB 221	Digital Modeling	3		
IDB 231	Design Programming	3		
IDB 241	Lighting Design	4		
IDB 251	Interior Systems and Construction	4		
IDB 261	Codes, Standards and Compliance	3		
IDB 271	Contract Documenting and Detailing	4		
IDB 281	Kitchen and Bath Studio I	3		
IDB 291	Studio II	3		
IDB 301	Special Topics	3		
IDB 311	Kitchen and Bath Studio II	3		
IDB 321	Studio III	3		
IDB 331	Environmentally Responsible Design	4		
IDB 341	Studio IV	3		
IDB 351	Business Practices and Ethical Design	4		
IDB 361	Furniture Design Studio	3		
IDB 371	Global Design Studio	3		
IDB 401	Studio V	3		
IDB 421	Graduate Studio I	3		
IDB 431	Portfolio and Critique	4		
IDB 441	Certification Preparation	3		
IDB 451	Graduate Studio II	3		
IDB 461	Internship/Co-op	,		
	(Department Chair Approval)	4		
LNG 144	Conversational Spanish I	4		
MTH 113	Mathematical Concepts	4		
MTH 123	Advanced Mathematics	<u>4</u>		
Credit Hou	173			
General Stu				
Students must choose three additional General Education				
classes from the Social/Behavioral Science category. These				
classes are in addition to the required General Education				
classes listed in the program. See the Table of Contents to find				
the complete list of General Education classes and minimum requirements.				

# Additional Course Descriptions as of 6/22/18 from the former Spencerian College

#### HEALTH INSURANCE PORTABILITY & ACCOUNTABILITY ACT (HIPAA)

In accordance with Federal laws implemented in April of 2003, Sullivan University maintains compliance with all guidelines set forth under the Health Insurance Portability and Accountability Act (HIPAA). All students are required to complete HIPAA training prior to placement for clinicals and/or externship in programs that have this requirement, or prior to graduation in programs that do not have the clinical or externship requirement. The Chief Privacy Officer appointed by the college oversees HIPAA compliance and is available as a resource person for HIPAA related questions and for reporting possible HIPAA violations involving the college.

#### BIO 100 FUNDAMENTALS OF SCIENCE (4 credits) - Not Designed to Transfer

This course is intended to provide the student with a basic introduction to principles in biology, chemistry, and physics. Students will explore fundamental elements of each of these basic areas of science and learn the practical applications for these sciences in this course. The course contains no laboratory component. Prerequisite(s): None

#### **BIO 101 BIOLOGY (6 credits)**

This course highlights key concepts, current understandings, and research trends for major fields of biology. Structure and function of several organisms are discussed in this course. The laboratory component of this course is used to enhance the students' comprehension of biological processes through hands on instruction. Prerequisite(s): None

#### BIO 200 ESSENTIALS OF CLINICAL MICROBIOLOGY (4 credits)

This course is designed to introduce the common organisms and infectious diseases found in the hospital and clinical setting. Topics include medically important microorganisms, including bacteria, fungi, parasites, and viruses and their disease pathology. Prerequisite(s): None

#### BIO 202 DIAGNOSTIC MICROBIOLOGY (6 credits)

This course is intended to introduce the student to the basic concepts and practices of microbiology. Lecture portions of the course will address basic biology of microorganisms, pathogenic mechanisms, host defense and immunity, and human diseases. This course is taken with a laboratory component. Prerequisite(s): MED 172, MED 176

#### CCS 100 ACCOUNTING FOR THE BUSINESS OFFICE (3 credits) - Not Designed to Transfer

This course acquaints the student with accounting principles and practices. Students demonstrate knowledge of the bookkeeping cycle, general journal, general ledger, financial statements, and cash control. Prerequisite(s): None

#### CCS 110 COLLEGE SUCCESS STRATEGIES (2 credits)

This course is designed to assist new students in developing strategies for a successful college experience, as well as strategies for achieving career goals. Students will develop oral communication skills, learn time management strategies, and improve study skills necessary to be successful in the college environment and the work place. Prerequisite(s): None

#### CCS 115 COMPUTER SPREADSHEET APPLICATIONS I (3 credits) - Not Designed to Transfer

This course is designed to familiarize the student with spreadsheet concepts and file management. It will give the students hands-on experience with applications necessary for business. Prerequisite(s): CCS 130

#### CCS 130 KEYBOARDING (5 credits) - Not Designed to Transfer

This course is designed for students with little or no previous keyboarding experience. Correct keyboarding techniques and special drill assignments are practiced to develop speed and accuracy. Basic word processing techniques and document formatting are introduced. Prerequisite(s): None

#### CCS 215 COMPUTER DATABASE APPLICATION (3 credits) - Not Designed to Transfer

Students are introduced to database concepts by creating electronic databases, indexing its records, and preparing useful reports. Students also learn the common database command in SSQL (Structured Query Language), which is common to all database applications. Prerequisite(s): CCS 130

#### CCS 245 CAREER DEVELOPMENT (2 credits)

This course is designed to instruct the student in job search skills and how to be an effective employee. The student will gain the skills to evaluate their capabilities, prepare a summary of those capabilities, write a resume, develop a job search plan, interview effectively, adjust to a new job and the work environment, and learn acceptable professional behavior. The student will learn to communicate with the employer and coworkers. Workplace values, goals and ethics will be emphasized. Prerequisite(s): None

#### CCS 280 WORD PROCESSING I (3 credits) - Not Designed to Transfer

This is an introduction to basic word processing applications. The student will learn various commands and operations and then will produce numerous documents. Prerequisite(s): CCS 130

#### CCS 281 WORD PROCESSING II (3 credits) - Not Designed to Transfer

This is an upper-level word processing course where students prepare documents and reports using advanced word processing functions. Prerequisite(s): CCS 280

#### CCS 299 MANAGEMENT PRINCIPLES (4 credits) - Not Designed to Transfer

In this introductory course, the student learns the interrelationship of office functions, services, facilities, office communications, problem-solving, and successful human relationships, with emphasis on first-line supervision duties. Prerequisite(s): None

#### CCS 499 HUMAN RESOURCE MANAGEMENT (4 credits) - Not Designed to Transfer

Topics of study in this course include job analysis, administration, testing and selection of employees, motivation, supervision, promotion and employee relations. Prerequisite(s): CCS 299

#### CHE 101 CHEMISTRY I (INORGANIC) (6 credits)

In this course, students are introduced to the basic principles of inorganic chemistry. Students will gain a working knowledge of the Periodic Table, matter, energy, basic chemical reactions, reaction rates, and acid/base theory and application. This course will be taken with a laboratory component. Prerequisite(s): None

#### CHE 201 CHEMISTRY II (ORGANIC) (6 credits)

Students in this course will apply the basic chemistry knowledge established in previous course work to understanding organic chemistry. This course concentrates on the classes of organic compounds and the reactions which have physiological activity of one sort or another and have biological importance. Prerequisite(s): CHE 101

#### CHE 301 BIOCHEMISTRY (4 credits)

This course focuses on the structure, function, and metabolism of biomolecules. Function of proteins, carbohydrates, lipids, nucleic acids, an understanding of acid/base pH, molecular buffers, enzyme kinetics, thermodynamics, and metabolism will be covered in this course. Prerequisite(s): CHE 101, CHE 201, MLT 200

#### CLS 302 GENETICS (4 credits)

This course incudes basic genetic principles, with emphasis on biochemical and molecular technologies that are used to study human health and disease. Prerequisite(s): CHE 301

#### CLS 401 MOLECULAR DIAGNOSTICS (4 credits)

The course explains the principles of molecular technology that is used for diagnostic procedures in healthcare. Students in the course will focus on purpose, principle, and interpretation of molecular diagnostic tests utilized in today's laboratory and healthcare settings. Prerequisite(s): CHE 301

#### CLS 402 PARASITOLOGY & MYCOLOGY (4 credits)

The course is designed to provide the student with extensive coverage of parasitic and fungal organisms and the disease processes associated with these organisms. Parasitic life cycles, transmission, and the correlation of clinical signs and symptoms of infection are discussed. The course presents the biology and physiology of fungi including epidemiology, disease states, and laboratory identification. Prerequisite(s): BIO 202

#### CLS 403 LABORATORY MANAGEMENT & FINANCE (4 credits)

The course provides the students with a problems-based approach to the application of laboratory management principles. The course contains an emphasis on laboratory finance, compliance issues, workflow and staffing, and computerized laboratory information systems. Prerequisite(s): HCA 301

#### LMR 201 RADIOGRAPHIC IMAGING (4 credits) - Not Designed to Transfer

This course provides the student with the principles of radiographic quality, distortion, and exposure factors to include specific equipment needed to produce the radiographic images. The student will acquire general knowledge of scattered radiation, radiographic film, inverse-square law, and the relationship between MAS and KvP. This course involves the use of radiographic mathematical principles used to produce radiographs. Prerequisite(s): RAD 100 Co-requisite: RAD 102 (may be taken previously)

#### LMR 300 LMR CLINICAL I (5 credits) - Not Designed to Transfer

This course is designed to provide the student with the opportunity to perform radiographic examinations in a clinical setting. Competency evaluations will be performed on specific examinations to determine the student's ability to produce quality radiographs according to the standards of the program and state law. Clinical rotation will be determined for each student based on examination availability and student needs. Prerequisite(s): RAD 121, MED 173, LMR 201 Co-requisites: MED 171 MED 211, RAD 131 (may be taken previously)

#### LMR 301 LMR CLINICAL II (7 credits) - Not Designed to Transfer

This course is a continuation of LMR 300. This course utilizes supervised experience with clinical affiliates that enable the student to become familiar with departmental policies, office in-procedures, body mechanics, and radiographic procedures. The student develops and refines skills in patient management, equipment manipulation and film evaluation. Prerequisite(s): LMR 300 Co-requisite: LMR 400

#### LMR 400 LIMITED MEDICAL RADIOGRAPHY CERTIFICATION REVIEW (3 credits) - Not Designed to Transfer

This course provides the student with a review of basic radiographic topics. Topics will include principles of radiographic positioning and procedures, physics and equipment of radiographic imaging, radiographic anatomy and physiology, radiation protection, and the theories and principles of test preparation and testing. This course will assess the student's understanding of the major subject areas in radiologic technology, recognize deficient areas of knowledge and prepare for Kentucky's Limited Scope of Practice examination in Radiography. Co-requisite: LMR 301

#### MED 165 ELECTRONIC RECORDS MANAGEMENT (3 credits) - Not Designed to Transfer

The course will provide students with a comprehensive overview of electronic health records management. The course will provide the student with the basic knowledge required to utilize health information system software to maintain patient health records. Prerequisite(s): MED 176, CCS 130, MED 172, MED 173 Course offered in the day and online divisions only.

#### MED 171 MEDICAL ETHICS (4 credits) - Not Designed to Transfer

This course explores the definition and importance of medical ethics, as well as the differentiation of ethics and law as applied to the practice of medicine and the medical office personnel. (Equivalent to MSS 204) Prerequisite(s): None

#### MED 172 ANATOMY & PHYSIOLOGY I (4 credits)

Students are introduced to the general plan of the human body, cells, tissues, organs, the musculoskeletal, neuro-sensory, and endocrine systems. Furthermore, concepts of the disease processes and disease-producing organisms are introduced. (Equivalent to MSS 123) Prerequisite(s): None

#### MED 173 ANATOMY & PHYSIOLOGY II (4 credits)

This is a continuation of course MED 172with emphasis on the circulatory system, body defenses and immunity, urinary, respiratory, digestive, and reproductive systems. Further discussion of disease processes will be included. (Equivalent to MSS 133) Prerequisite(s): MED 172

#### MED 176 MEDICAL TERMINOLOGY (4 credits)

Students learn the prefixes, roots, and suffixes used in medical terminology. Medical specialties, operative terms, and medical records terms complete the instruction. (Equivalent to MSS 104) Prerequisite(s): None

#### MED 177 PHARMACOLOGY/LABORATORY TERMINOLOGY (4 credits) - Not Designed to Transfer

This course introduces the principles of pharmacology, drug action, and therapy based on body systems and disease. A review of clinical laboratory procedures, indications for testing, and interpretation of results gives the student an understanding of pharmacology and laboratory terminology. Prerequisite(s): MED 172, MED 176

#### MED 178 MEDICAL INSURANCE (3 credits) - Not Designed to Transfer

This course familiarizes the student with health insurance and managed care, medical professional fees, and reimbursement through claim processing, billing, and collections. Prerequisite(s): MED 270 Course offered in the day and online divisions only.

#### MED 179 COMPLIANCE ISSUES (4 credits) - Not Designed to Transfer

This course will introduce the coding/healthcare reimbursement student to issues of medical billing compliance. Topics such as fraud and abuse, compliance plan elements, penalties, and OIG (Office of Inspector General) will be addressed. In addition, the student will learn comprehensive chart auditing techniques, which include documentation standards, third party requirements, and risk management. Prerequisite(s): MED 290 Co-requisite: MED 178 (may be taken previously) Course offered in the day and online divisions only.

#### MED 209 ADVANCED TERMINOLOGY FOR MEDICAL CODING (4 credits) - Not Designed to Transfer

In this course the coding student will gain additional knowledge of advanced medical terms pertaining to diagnoses, diseases, anatomy & physiology, and treatment modalities, and procedures to enhance the process of abstracting data from medical records to facilitate coding. Prerequisite(s): MED 176 Co-requisite: MED 277 (may be taken previously) Course offered in the day and online divisions only.

#### MED 211 HEALTH & SAFETY TECHNIQUES (3 credits) - Not Designed to Transfer

Students become certified CPR basic rescuers (American Heart Association Healthcare Provider with AED). Medical asepsis and infection control are discussed. Training in vital signs and first aid procedures complete this course. (MSS 154 may be substituted for MED 211) Prerequisite(s): None

#### MED 212 MEDICAL LABORATORY PROCEDURES (6 credits) - Not Designed to Transfer

Students are trained in patient instruction, quality control, blood collection, and laboratory procedures. These procedures include hematology, immunology, microbiology, chemistry, urinalysis, venipuncture, capillary sticks, and the care and use of the microscope. Prerequisite(s): MED 173, MED 176

#### MED 213 ADVANCED CLINICAL SKILLS (3 credits) - Not Designed to Transfer

The main focus of this course is pharmacology and the preparation and administration of medications. Also covered are radiation preparation and safety issues. Prerequisite(s): MED 173, MED 176

#### MED 214 PHLEBOTOMY TECHNIQUES (6 credits) - Not Designed to Transfer

In this course, students gain theoretical and practical skills necessary for preparation, collection, and processing biological specimens for laboratory testing. Prerequisite(s): MED 172

#### MED 216 PHLEBOTOMY EXAMINATION REVIEW (3 credits) - Not Designed to Transfer

In this course, students will review all of the theory elements required for successful completion of a national registry examination for Phlebotomists. Prerequisite(s): MED 214 Course offered in online division only.

#### MED 223 BUSINESS CORRESPONDENCE (4 credits) - Not Designed to Transfer

This course concentrates on effective word usage in composing various types of business correspondence. Emphasis is placed on letters and memos that are effective, grammatically correct, and properly punctuated. Prerequisite(s): ENG 102, CCS 280

#### MED 270 MEDICAL ADMINISTRATIVE TECHNIQUES (3 credits) - Not Designed to Transfer

This course covers the various administrative front office duties in a medical setting including patient communications, record keeping/health information management, appointment scheduling, patient reception, financial management of patient accounts, and general facility environment issues. Prerequisite(s): None Course offered in the day and online divisions only.

#### MED 274 MEDICAL ASSISTING TECHNIQUES (3 credits) - Not Designed to Transfer

The theory and principles of the clinical side of medical assisting are introduced, while providing the student with hands on practice to perfect the technique. Procedures covered include charting, height and weight, the physical exam, and minor office surgery. Proper electrocardiogram techniques complete this course. (Equivalent to MSS 144) Prerequisite(s): MED 173, MED 176

#### MED 277 INTRODUCTION TO MEDICAL CODING (3 credits) - Not Designed to Transfer

This course is an introduction to the history and basic concepts of medical coding. Students learn how to use CPT and ICD-10-CM coding manuals. They will perform CPT coding in areas of Evaluation and Management, Anesthesia, Surgery, Radiology, Pathology, Laboratory, and Medicine as well as basic ICD-10 coding. Prerequisite(s): MED 172, MED 176

#### MED 278 CLINICAL PRACTICUM (3 credits) - Not Designed to Transfer

In cooperation with physicians, hospitals, and allied health agencies, the advanced student is assigned to a specific location and serves 96 hours practicing clinical procedures. No payment for services is received. Prerequisite(s): All other courses in the curriculum

#### MED 279 PHLEBOTOMY EXTERNSHIP (4 credits) - Not Designed to Transfer

In cooperation with physicians, hospitals, and allied health agencies, the advanced student is assigned to a specific location and serves 120 hours practicing Phlebotomy procedures including all types of specimen collection and processing. The student must complete 100 successful venipunctures by a combination of vacutainer, syringe, and butterfly technique as well as, 25 successful capillary punctures. No payment for service is received. Prerequisite(s): All other courses in the curriculum Co-requisite: MED 216X

#### MED 289 MEDICAL CODING II (3 credits) - Not Designed to Transfer

This course will expand the student's coding knowledge into more advanced coding training in CPT and ICD-10. The student will also be introduced to Level II HCPCS codes, Documentation Guidelines, and Third-Party Reimbursement Issues. Students will learn and perform coding of various medical services from source documents (chart notes, written summaries, operative notes) and research employment opportunities in coding. Prerequisite(s): MED 173, MED 277

#### MED 290 MEDICAL CODING III (3 credits) - Not Designed to Transfer

This course will further expand the student's coding skills in abstracting full data from medical records and combining the coding systems (CPT, IC, and HCPCS) to insure accurate linkage of procedure to diagnosis. The student will also be introduced to ICD-CM, ICD-PCS, and DRG's for hospital inpatient and outpatient coding. The student will also gain knowledge of certification avenues through research and mock examinations.

Prerequisite(s): MED 209, MED 289

#### MED 291 ADVANCED CPT CODING (3 credits) - Not Designed to Transfer

This course will further expand the advanced coder's knowledge of coding (inpatient and outpatient) and provide more challenging coding scenarios and case studies. The student will gain knowledge of how to troubleshoot coding problems in the medical setting as well as more advanced issues of coding for maximum reimbursement and compliance. Prerequisite(s): MED 209, MED 289 Co-requisite: MED 290 (may be taken previously) Course offered in the day and online divisions only.

#### MED 292 MEDICAL BILLING & HEALTH CLAIMS REVIEW (4 credits) - Not Designed to Transfer

This course provides training and application in medical claims follow-up, troubleshooting, problem claims, reimbursement issues, and claims appeal. Prerequisite(s): MED 178, CCS 115, MED 291 Course offered in the day and online divisions only.

#### MED 296 MEDICAL ADMINISTRATIVE EXTERNSHIP (2 credits) - Not Designed to Transfer

In cooperation with physicians, hospitals, and allied health agencies, the advanced student is assigned to a specific location and serves 64 hours practicing medical administrative procedures. No payment for services is received. Prerequisite(s): All other courses in the curriculum and completion of programmatic timed writings for applicable programs

#### MED 298 MEDICAL CODING EXTERNSHIP (5 credits) - Not Designed to Transfer

In cooperation with physicians, hospitals, and allied health agencies, the advanced student is assigned to a specific location for 160 hours, practicing medical coding. No payment for services is received. Prerequisite(s): All other courses in the curriculum and keyboarding speed verification for speed requirement of each program

#### MED 300 EFFECTIVE MANAGEMENT OF CODING SERVICES (4 credits) - Not Designed to Transfer

This course will be a continuation of management principles with special emphasis on management issues specific to coding/healthcare reimbursement services, or other related health information areas. The student will be introduced to various topics, including scope of service, structure, and organization of coding services, management of coding/HIM personnel, HIM statistics, physician credentialing, contract negotiations, establishment of fee schedules, and quality control. Prerequisite(s): CCS 299, MTH 101, MED 291, MED 178 Course offered in the day and online divisions only.

#### MED 312 CLINICAL LABORATORY MANAGEMENT PROCEDURES (4 credits) - Not Designed to Transfer

Students gain advanced training in laboratory techniques, documentation, and laboratory management procedures. Procedures covered include review of automated technologies, quality control, record keeping, and CLIA and COLA applications and regulations. Offered in blended format only. Prerequisite(s): MED 212

#### MED 313 MEDICAL OFFICE MANAGER TECHNIQUES (2 credits) - Not Designed to Transfer

This course explores the role of the medical office manager and their vast diverse duties. Medical personnel, business, and financial management are discussed. Prerequisite(s): MED 178, MED 212, MED 213, MED 274, CCS 499 Co-requisite: MED 312 (may be taken previously)

#### MLT 101 INTRODUCTION TO MEDICAL LABORATORY (6 credits)

This introductory course discusses the principles of microscopy, laboratory math, reagent preparation, laboratory safety, quality control, and common laboratory equipment usage. Information is presented to increase the students' general knowledge of the medical laboratory. This course includes a laboratory portion so that students may perform various laboratory techniques. Prerequisite(s): None

#### MLT 200 CLINICAL CHEMISTRY (6 credits)

This course covers general laboratory chemistry principles. Specimen collection and transport requirements, quality control procedures, and routine chemical analysis of blood and body fluids are discussed. Interpretation and application of laboratory data is used in defining diagnoses and detecting unknown diseases. This course contains a laboratory component. Prerequisite(s): MLT 101, CHE 201

#### MLT 201 HEMATOLOGY (6 credits)

This course focuses on the origins, morphology, biochemistry and function of blood cells. The laboratory evaluation and importance is discussed in relation to diagnosis and treatment of hematological disorders. This course contains a laboratory component to help students develop the skills necessary for the performance of diagnostic tests. Prerequisite(s): MLT 101

#### MLT 202 COAGULATION (6 credits)

This course discusses the clinical symptoms and appropriate laboratory evaluation necessary for diagnosis and treatment of hemostatic disorders. The laboratory component of this course is used for students to develop the skills necessary for performance of diagnostic tests in this area of the medical laboratory. Prerequisite(s): MLT 201

#### MLT 203 IMMUNOLOGY/IMMUNOHEMATOLOGY (6 credits)

In this course, the immune system as it relates to the human body's defense against foreign substances is covered. It includes an overview of antigen-antibody test procedures including those clinical applications in blood group serology. Students are provided with a simulated laboratory setting in which to complete both basic immunology testing, as well as to develop skills necessary to function in a modern clinical immunohematology laboratory. Prerequisite(s): MLT 201

#### MLT 204 BODY FLUIDS (6 credits)

Body fluid analysis in relationship to diagnosis and treatment of various diseases is emphasized in this course. Spinal fluid, pleural fluid, synovial fluid, effusions, and urine are all discussed in the lecture portion of this course. Renal function and urinalysis are discussed in detail. The laboratory component of this course is designed to allow the student to demonstrate proficiency of analysis of all body fluids. Co-requisite: MLT 201

#### MLT 300 MEDICAL LABORATORY CLINICAL I (11 credits)

The student will perform a clinical rotation at an accredited medical laboratory. The 11-week rotation will include practical performance of all skills in the Clinical Chemistry, Hematology, and Coagulation departments of laboratory. Prerequisite(s): All courses in MLT curriculum

#### MLT 301 MEDICAL LABORATORY CLINICAL II (11 credits)

The student will complete the clinical portion of the program in an accredited medical laboratory. This 11-week rotation will include performance of all skills in the microbiology, immunohematology, and urinalysis departments of the laboratory. Prerequisite(s): MLT 300

#### MST 100 INTRODUCTION TO MASSAGE THERAPY (2 credits) - Not Designed to Transfer

This course is designed to allow students to explore the profession of Massage Therapy. Topics include massage therapy's history, laws, practice settings, range of modalities, professional affiliations, professional boundaries, career benefits and pitfalls, and the benefits of massage therapy as a wellness modality. Prerequisite(s): None

#### MST 101 CORE MASSAGE I (5 credits) - Not Designed to Transfer

Basic massage techniques, routines, and body mechanics will be established by the student in this course. Basic draping techniques, client interviews and simple documentation will be explained and practiced. Students will be exposed to various types of equipment and supplies. Prerequisite(s): None

#### MST 102 CORE MASSAGE II (6 credits) - Not Designed to Transfer

Adapting massage therapy to client needs will be emphasized in this course. The student will learn principles and practice techniques in advanced massage modalities and hydrotherapy. Prerequisite(s): MST 100, MST 101

#### MST 103 MASSAGE PRACTICE LAB (1 credit) - Not Designed to Transfer

This lab provides supervised practice in clinical massage therapy. The student will be assigned massage therapy sessions in the student clinic, and demonstrate client management from greeting and intakes to re-booking and treatment plan design. Students will manage clinic tasks between sessions. The student will receive consultation from the instructor on all aspects of clinic performance. Emphasis will be on customizing treatments for the client while integrating techniques learned in Core 1 and 2 into a Swedish massage. Teamwork and professionalism will also be developed. Prerequisite(s): MST 101 Co-requisite: MST 102

#### MST 104 CORE MASSAGE III (6 credits) - Not Designed to Transfer

Students will study and practice additional massage and bodywork modalities. The student will be given greater responsibility in the development of treatment plans and documentation. They will focus on integrating all techniques to develop cohesiveness and fluency in massage therapy sessions. A research survey and case studies will be presented. Prerequisite(s): MST 102

#### MST 110 HOLISTIC THERAPIES (2 credits) - Not Designed to Transfer

This course is designed for the students to explore holistic wellness modalities for both personal use and client referral. Prerequisite(s): None

#### MST 113 MYOLOGY (4 credits) - Not Designed to Transfer

This is an in-depth study of the anatomy of the musculoskeletal system and the physiology of muscles. Students will learn mechanisms and types of muscle contraction, skeletal system anatomy and function, as well as upper extremity, neck and face muscle attachments, actions, selected innervations, myototic units, and upper body accommodations and injuries due to poor use patterns. Prerequisite(s): MED 172

#### MST 114 KINESIOLOGY (3 credits) - Not Designed to Transfer

This course introduces the massage therapist to the principles of body movement based with emphasis on basic human anatomy as it relates to proper form in daily movements, common injury and correction of form. The relationship between the structure and function of the skeletal and muscular systems and their support structures is also covered. Students will learn lower extremity and spine muscle attachments, actions, innervations, myototic groups, and accommodations to poor use patterns. Prerequisite(s): MED 172, MST 113

#### MST 116 MASSAGE PATHOLOGY (4 credits) - Not Designed to Transfer

This course will address specific human illnesses such as fibromyalgia, sciatica, and chronic fatigue as they relate to massage therapy. Medical indications and contraindications of massage therapy will be presented. Precautions for commonly prescribed medications will be discussed. Prerequisite(s): MED 172, MST 101

#### MST 118 LICENSURE EXAM REVIEW (2 credits) - Not Designed to Transfer

This course provides the student with a review of basic massage therapy topics and assesses students' understanding in major subject areas of anatomy and physiology, massage therapy techniques and skills, business practices and legal and ethical requirements. Corequisite: MST 104

#### MST 121 BUSINESS FOR SOMATIC PRACTICES (4 credits) - Not Designed to Transfer

Management principles and techniques relevant to the business of somatic practitioners will be presented. Students will develop a business plan, develop marketing strategies and public speaking skills, discuss site selection, develop a budget, learn how to use software designed for the massage or personal training practice, compare advertising strategies and discuss how to hire and work with an accountant. Business structures and employee issues will be discussed. Client screening, safety and perception issues will be reviewed. Prerequisite(s): MST 100 or PT 100

#### MST 130 MASSAGE THERAPY EXTERNSHIP (3 credits) - Not Designed to Transfer

Students will use information from all previous courses in the practice of massage therapy in business and promotional settings. The student serves 100 hours practicing massage therapy procedures, techniques, documentation, and client retention. No payment for services is received. Prerequisite(s): current CPR certification (AHAHP) Co-requisite: MST 104 (may be taken previously)

#### MST 214 NEUROLOGY (4 credits) - Not Designed to Transfer

This course will expand the massage therapist's knowledge of the human nerve system. Classroom instruction will give the student a greater ability to understand the role of the nerve system in tissue dysfunction, wellness and therapeutic interventions. Prerequisite(s): MED 172, MST 114

#### MST 216 NEUROMUSCULAR SKELETAL ASSESSMENT (3 credits) - Not Designed to Transfer

This course will instruct the massage therapist in the knowledge, skills and abilities of how to assess dysfunction of the neuromuscular and skeletal systems. Classroom and hands-on instruction is used to help students understand and perform orthopedic and other types of testing for common physical conditions related to injury and overuse. Prerequisite(s): MED 172, MST 114

#### MST 230 MEDICAL MASSAGE (6 credits) - Not Designed to Transfer

This course covers elements of working safely and effectively on clients as part of a medical team versus independent orthopedic or wellness applications of massage therapy. Prerequisite(s): MST 104, MST 113

#### MTH 150 GENERAL MATHEMATICS (4 credits) - Not Designed to Transfer

This course is a review of mathematic concepts, including whole numbers, primes and multiples, fractions and mixed numbers, decimals, ratio and proportion, percents, measurement and geometry. It also provides an algebraic preview. Prerequisite(s): None

This course will assist the PN to transition into the role of the RN. Learners will be introduced to critical thinking skills and the responsibilities expected of the RN that they will continue to build on throughout the nursing program. The areas of study will include: building on the nursing process, teaching and learning processes, knowledge and skill acquisition, ethical and legal considerations in patient care, diversity in healthcare, communication techniques, managing patient care, stress management, health promotion and disease prevention, documentation, health assessment, and an introduction to evidence based practice. Prerequisite(s): BIO 103 Co-requisites: ENG 102, BIO 201, MTH 201, PSY 214

#### NUR 230 ADULT NURSING CARE I (8 credits)

This course is designed to assist practitioners in building on previously learned skills, to develop more complex physical assessment techniques, and therapeutic interventions. Written communication and the medical record will be explored. Evidence based practice guidelines will form the reference point for health assessment, restorative care, and health deviations. Life span development and cultural aspects of care will be integrated. Health deviations will focus on musculoskeletal, gastrointestinal, sensory, neurological, and integumentary systems. Aspects of specialized nursing care will be discussed in regard to surgical, oncological, and community healthcare. Non-pharmacological pain management and end of life issues will also be included. Lab assignments will reflect concepts related to theory sessions. Prerequisite(s): NUR 220 Co-requisites: CHM 211, NUR 231

#### NUR 231 PHARMACOLOGY (4 credits)

This course is an overview of the principles of pharmacology, drug action, and therapy based on body systems and disease. The emphasis is on drug dosage calculation for adults and children, nursing process, client teaching, and principles of drug administration. Lifespan issues and transcultural considerations will be included. Prerequisite(s): NUR 20l Corequisite: NUR 230

#### NUR 240 ADULT NURSING CARE II (8 credits)

This course includes utilization of previously learned skills, in order to develop more in-depth application of the core components of the nursing process for adult clients experiencing complex health deviations. Emphasis is on the care of clients experiencing health deviations in the endocrine, cardiovascular, respiratory, renal, hematological, and immunological body systems, as well in regard fluid and acid-base balance. The nursing process and evidence-based practice will be utilized as the foundation for the discussion on the care of the patent. Prerequisite(s): NUR 220, NUR 230, NUR 231 Co-requisite: NUR 241

#### NUR 241 NUTRITION (2 credits)

This course is designed to introduce basic principles of scientific nutrition and present the applications in client-centered care. Nursing process, life span development, and cultural aspect of nutrition will be integrated. Community nutrition is coordinated with an emphasis on weight management and physical fitness. Current medical treatment and approaches to nutrition management will be discussed. Special areas include developments in gastrointestinal disease, heart disease, diabetes mellitus, renal disease, surgery, cancer, and AIDS. Prerequisite(s): NUR 220, NUR 230, NUR 231 Co-requisite: NUR 240

#### NUR 250 MENTAL HEALTH NURSING (4 credits)

This course focuses on cultural aspects and therapeutic communication related to mental health issues. Mental health concepts, behavioral interventions, crisis interventions, coping interventions substance abuse, techniques of physical/psychosocial assessment, health screening, psychopharmacology, complementary/psychosocial therapies will be addressed. Special emphasis will be placed on therapeutic communication techniques in all healthcare settings. Prerequisite(s): NUR 220, NUR 230, NUR 231, NUR 240, NUR 241 Co-requisite: SOC 214

#### NUR 251 MATERNAL NURSING (5 credits)

Application and direction of nursing care of the client that incorporates the knowledge of lifespan development of women of childbearing ages with expected growth and development principles, cultural aspects of care, prevention and early detection of health problems, and strategies to achieve optimal health. Current health practices will serve as reference points for basis of care of individual and families with changes/deviations related to common health concerns. Reproductive health and pregnancy health problems are explored. Clinical assignments reflect concepts related to the theory sessions. Prerequisite(s): NUR 220, NUR 230, NUR 231, NUR 240, NUR 241 Co-requisites: NUR 250, NUR 252

#### NUR 252 PEDIATRIC NURSING (6 credits)

Application and direction of nursing care of the client that incorporates the knowledge of lifespan development with expected growth and development principles, cultural aspects of care, prevention and early detection of health problems, and strategies to achieve optimal health. Infant and child health including common childhood and adolescent health problems are explored. Clinical assignments reflect concepts related to the theory sessions. Prerequisite(s): NUR 220, NUR 230, NUR 231, NUR 240, NUR 241 Corequisites: NUR 250, NUR 251

#### NUR 260 ADULT NURSING CARE III (5 credits)

This course provides a didactic opportunity for the student to focus on individuals and families with complex and emergent care needs. Perceptions of being a critically ill patient will be examined. Cultural aspects, psychosocial needs, evidence-based practice of the patient in the critical care unit will be covered. In addition, but not limited to areas of discussion are hemodynamic monitoring, interpreting EKG rhythm strips, mechanical ventilation, artificial airways, circulatory assist devices, pressure monitoring systems, CVP monitoring, shock, systemic inflammatory response syndrome and multiple organ dysfunctions. Emergency and trauma nursing will be incorporated into the material. The nursing process will be utilized throughout this course. Acute/critical care concepts will be reinforced through observation in acute/emergent care setting in NUR 262. Prerequisite(s): NUR 220, NUR 230, NUR 231, NUR 240, NUR 241, NUR 250, NUR 251, NUR 252 Co-requisites: NUR 261, NUR 262

#### NUR 261 SEMINAR IN PROFESSIONAL DEVELOPMENT (3 credits)

This course provides a didactic opportunity for the student to apply theories of leadership and management. Methods of managing human, physical, financial, and technological resources in providing customer service will be discussed. Regulatory and accrediting standards/agencies will be reviewed. Theories of unit management, patient assignments, staff scheduling, and delegations to unlicensed personnel will be explored. Kentucky nursing law will be referenced. Transition from student to practicing professional nurse and member of the multidisciplinary healthcare team will be achieved. Prerequisite(s): NUR 220, NUR 230, NUR 231, NUR 240, NUR 241, NUR 250, NUR 251, NUR 252 Co-requisites: NUR 260, NUR 262

#### NUR 262 INTEGRATED PRACTICUM (4 credits)

Provides students opportunities to apply knowledge in the care of individuals and families in a dynamic healthcare setting. Emphasis is on developing the role of the professional nurse advocate. Acute/ critical care concepts presented in NUR 260 will be reinforced through observation in a critical care setting, denoted as dual objectives. Prerequisite(s): NUR 220, NUR 230, NUR 231, NUR 240, NUR 241, NUR 250, NUR 251, NUR 252 Co-requisites: NUR 260, NUR 261

#### PND 100 ANATOMY & PHYSIOLOGY (7 credits)

An overview of the systems of the body, its basic structure and function. Prerequisite(s): None

#### PND 101 PERSONAL & VOCATIONAL RELATIONSHIPS (2 credits)

Study skills, fundamentals of self-understanding, beginning communications skills, human relations (civic, ethical, social, vocational, and legal) as related to practical nursing. Prerequisite(s): None

#### PND 102 MATH CONCEPTS FOR PHARMACOLOGY (2 credits)

This course provides a systematic review of the principles of mathematics. The student is introduced to metric equivalences in drug measurements. The student is introduced to drug dosage calculation and basic general principles of medication administration. Prerequisite(s): None

#### PND 103 INTRODUCTION TO NURSING & HEALTHCARE (6 credits)

Historical overview of current healthcare including medical economics, ethical and legal parameters, roles ad responsibilities of healthcare team members with an emphasis on nursing and the role of the practical nurse. Medical terminology, concepts of health, health assessment, self-care, and functional health patterns across the life span are explored. Prerequisite(s): None

#### PND 104 DEVELOPMENT OF CAREGIVER ROLE (10 credits)

Introduction to nursing and the nursing process as related to promoting healthy functional health patterns across the life span; opportunity to develop and practice psychomotor skills related to health assessment, promotion, maintenance, and illness prevention. Prerequisite(s): None

#### PND 200 INTRODUCTION TO HEALTH DEVIATIONS (7 credits)

Application of the nursing process for selected adult clients experiencing common functional health deviations interfering with activities of daily living. Emphasis is on nurse as provider of care. Prerequisite(s): PND 100, PND 101, PND 102, PND 103, PND 104

#### PND 201 PHARMACOLOGY (3 credits)

Study of common drugs by classification and their effects with emphasis on legal responsibility, accountability, and application of the nursing process to drug therapy. Prerequisite(s): None

#### PND 202 MENTAL HEALTH CONCEPTS (7 credits)

Applies nursing process to clients experiencing common mental health problems. Explores chemical dependency, violence, and other stress and developmental problems related to mental health. Prerequisite(s): PND 100, PND 101, PND 102, PND 103, PND 104

#### PND 203 NURSING & CHILDBEARING FAMILY (7 credits)

Application of the nursing process with healthy childbearing families focusing on common growth and development processes associated with parenting. Reproductive health and pregnancy, child health, and common childhood health problems are explored. Prerequisite(s): PND 100, PND 101, PND 102, PND 103, PND 104

#### PND 300 HEALTH DEVIATIONS I (14 credits: broken into Parts I and II in evening division,

#### Part I is 10 credits and Part II is 4 credits)

Application of the nursing process for selected child/adult clients experiencing common health deviations that impose limitations on functional health patterns. Emphasis is on the nurse as provider of care. Prerequisite(s): PND 200

#### PND 301 NURSING TRENDS & ISSUES (2 credits)

Builds on PND101 with emphasis on current events in healthcare systems and nursing practice in preparation of the role transition from student to competent employee. Prerequisite(s): None

#### PND 302 MANAGEMENT OF GERIATRIC CLIENT (4 credits)

Exploration and application of geriatric client management principles in long-term care settings. Prerequisite(s): PND 100, PND 101, PND 102, PND 103, PND 104

## PND 400 HEALTH DEVIATIONS II (16 credits: broken into Parts I and II in evening division, Part I is 10 credits and Part II is 6 credits)

Application of the nursing process for selected child/adult clients experiencing selected health deviations that impose limitations on multiple functional health patterns. Emphasis is on the nurse as provider of care. Prerequisite(s): PND 300

#### RAD 100 INTRODUCTION TO RADIOGRAPHY (4 credits) - Not Designed to Transfer

This course introduces the student to his/her role as part of the healthcare team as well as the standards of the profession. Students will learn the basic concepts associated with radiographic equipment, imaging and radiation protection. Prerequisite(s): Limited to students in the LMR and/or RT programs

#### RAD 102 INTRODUCTION TO RADIOGRAPHIC CLINICAL TOPICS (3 credits) - Not Designed to Transfer

This course orients the student to basic positioning terminology, basic image analysis, body landmarks and radiographic positioning principles. Students will be introduced to the basic concepts of patient care, radiation protection, and radiographic procedures. Students will develop their knowledge of bony anatomy as it relates to radiographic images. Prerequisite(s): Limited to students in the LMR and/or RT programs

#### RAD 121 RADIOGRAPHIC POSITIONING I (6 credits) - Not Designed to Transfer

This course provides the student with the basic knowledge and skills necessary to accurately prepare and position the patient for introductory level procedures. Image evaluation criteria will be utilized for each position to determine the anatomy demonstrated, the accuracy of the position, and exposure quality. Lab practicum will be used to complement the lecture portion of this course. Prerequisite(s): MED 172, RAD 100, RAD 102 Co-requisite: LMR 201(may be taken previously)

#### RAD 131 RADIOGRAPHIC POSITIONING II (3 credits) - Not Designed to Transfer

This course provides the student with the knowledge of the anatomical structures as they relate to the radiographic positioning for intermediate level procedures. Students are also afforded opportunities to apply critical thinking skills while identifying and correcting positioning and technical errors. Lab practicum will be used to complement the lecture portion of this course. Prerequisite(s): MED 173, RAD 121 (RTA 122 for RT students)

#### RAD 401 QUALITY MANAGEMENT (3 credits) - Not Designed to Transfer

Quality management is important to ensure the proper functioning of equipment and compliance with government and accreditation standards. Thus, technologists should have an understanding of the activities and their role in the quality management (QM) process. This content is designed to expand the QM skills of the technologist to include digital imaging systems and the application of QM principles in an imaging department. Prerequisite(s): None

#### RAD 403 MANAGEMENT & LEADERSHIP IN IMAGING (3 credits) - Not Designed to Transfer

This course provides the students with a comprehensive reference for medical imaging mangers. It provides an in-depth overview of every major facet pertaining to the knowledge and skills necessary to become a department or imaging center supervisor or manger. This course will cover all aspects of the profession-operations, leadership, and finance. Prerequisite(s): None

#### RAD 406 CAPSTONE PROJECT (3 credits) - Not Designed to Transfer

The Capstone Project is the culminating academic endeavor which provides students with the opportunity to explore a problem or issue of particular personal or professional interest that is somehow related to one of the following areas of the imaging department: patient/employee centered workplace safety, teamwork/collaboration, quality management and assurance, or legal aspects of healthcare. The project must demonstrate the student's ability to synthesize and apply the knowledge and skills acquired in this academic program to real-world issues and problems. This final project will affirm the student's ability to think critically and creatively and to solve practical problems related to radiology practice. Prerequisite(s): All courses in the curriculum

#### RCT 507 IMAGE PRODUCTION IN COMPUTED TOMOGRAPHY (5 credits)

Through readings and assignments, this course deals with the physics and the technologic aspects of conventional and spiral/helical CT, including digital image processing radiation attenuation, data acquisition, and image reconstruction. In addition, this course will describe the major components of a CT scanner and discuss the factors affecting image quality and radiation dose to the patient. Prerequisite(s): Acceptance into the CT program

#### RCT 509 ADVANCED PATIENT CARE AND SAFETY (3 credits)

This course focuses on the ethical and professional standards in diagnostic imaging specifically in computed tomography. This will include information of patient interaction and management, patient assessment and education within the CT department. Students will learn how to manage accessory medical devices, lab values critical to the procedure and typical medications and dosages. An overview of contrast administration, venipuncture, injection techniques, and adverse reactions are also covered. Prerequisite(s): Acceptance into the CT program

#### RCT 605 RADIATION PROTECTION IN COMPUTED TOMOGRAPHY (2 credits)

This is a course in radiation protection in computed tomography for certified technologists. Included are the principles of radiation protection for the patient, computed scanning technologist and medical team. Production and control of the computed x-ray beam for scanning procedures and equipment techniques are studied. Prerequisite(s): Acceptance into the CT program

#### RCT 606 COMPUTED TOMOGRAPHY PROCEDURES (5 credits)

This course introduces the student to cross-sectional anatomy in all three fundamental body planes. Major anatomic features of the head, neck, spine, pelvis, abdomen and thorax are recognized and explained. Functions, anatomic and pathologic relationships among organs are also explored. Prerequisite(s): RCT 507, RCT 509

#### RCT 608 CT REGISTRY REVIEW (1 credit)

This course provides the students with a review of computed tomography topics. Fundamentals, sectional anatomy, physics and instrumentation, patient care, radiation protection and procedures, theories and principles of test preparation and testing. This course will assess the students' understanding of the major subject areas in computed tomography, recognize deficient areas of knowledge, and prepare for the American Registry of Radiologic Technologists (ARRT) Computed Tomography certification examination. Prerequisite(s): All radiology courses in curriculum

#### RCT 609 CLINICAL PRACTICUM (3 credits)

This course provides the opportunity to apply knowledge gained from didactic instruction to the computed tomography clinical setting. The clinical component is conducted at an approved clinical education center and requires supervised performance of computed tomography of the head, neck, spine, chest, abdomen, pelvis and musculoskeletal system. Upon completion, students should be able to assume a variety of duties and responsibilities within the computed tomography clinical environment. Prerequisite(s): All courses in the curriculum

#### RES 100 INTRODUCTION TO CLINICAL ASSESSMENT (3 credits) - Not Designed to Transfer

This course will prepare the respiratory therapy student to develop a professional bedside manner. As a respiratory therapist students must understand their role regarding patient assessment and the different stages of patient-clinician interaction. Students will learn some of the basic techniques and skills used by clinicians to approach, communicate with, and evaluate patients professionally and with concern. These skills will include, but are not limited to, obtaining the medical history and vital signs, physical examination, sampling arterial blood gases, ECG tracing, patient monitoring, and assessing common symptoms associated with cardiopulmonary disease. Prerequisite(s): None Co-requisite: MED 176

#### RES 200 RESPIRATORY FUNDAMENTALS I (5 credits) - Not Designed to Transfer

Respiratory Care is a healthcare discipline specializing in the promotion of cardiopulmonary (heart and lung) function and health. The respiratory therapist is involved in the assessment, treatment, management, and care of patients diagnosed with cardiopulmonary system deficiencies and abnormalities. This course is designed to help the student understand the clinical applications and therapeutic applications of respiratory care and the pathologic conditions treated by the respiratory therapist. This course has a lab component. Prerequisite(s): MED 172, MED 176, BIO 100 Co-requisite: RES 100

#### RES 300 RESPIRATORY FUNDAMENTALS II (3 credits) - Not Designed to Transfer

This course will expand on Respiratory Care Fundamentals I and broaden the student's knowledge and skill base in the assessment, management, care, and treatment of patients with respiratory deficiencies and abnormalities. Students will be instructed in airway management, bronchial hygiene therapies, invasive and non-invasive ventilation, management of mechanical ventilation, and assessment of arterial blood gases. This course has a lab component. Prerequisite(s): RES 200, MED 173

#### RES 305 RESPIRATORY CLINICAL I (4 credits) - Not Designed to Transfer

This course is the first in a series that provides the student with exposure to the practice of respiratory therapy. This clinical education course takes place in various respiratory departments (clinical affiliates). The student develops and refines skills in communication, patient management, equipment use, and clinical assessment. Rotating shifts and assignments. Prerequisite(s): RES 100, RES 200

#### RES 400 RESPIRATORY FUNDAMENTALS III (3 credits) - Not Designed to Transfer

This is the last course of respiratory fundamentals which emphasizes advanced critical thinking skills in regards to the intensive care unit patient. This course discusses the ventilator management of life threatening diseases and conditions related to the cardiopulmonary system. Cardiopulmonary diagnostic testing procedures will also be reviewed. This course has a lab component. Prerequisite(s): RES 300 Co-requisite: RES 402

#### RES 402 CARDIOPULMONARY PATHOPHYSIOLOGY (4 credits) - Not Designed to Transfer

Pathophysiology studies changes or disturbances in the functioning of an organ that can be attributed to disease. In this course, students will study what changes and disturbances affect the lungs, thoracic wall, and respiratory airways and muscles. These form a highly effective defense system that protects them from pathogenic (disease causing) organisms which can lead to respiratory distress and respiratory failure. Caring for the patient who has respiratory disease requires the respiratory therapist to identify specific problems to assist in the diagnosis of the underlying disorder. Prerequisite(s): RES 300 Co-requisite: RES 400

#### RES 405 RESPIRATORY CLINICAL II (4 credits) - Not Designed to Transfer

This course is the second in a series that provides the student with exposure to the practice of respiratory therapy. This clinical education course takes place in various respiratory departments (clinical affiliates). The student develops and refines skills in communication, patient management, equipment use, and clinical assessment. This rotation introduces the student to the intensive care unit environment. Rotating shifts and assignments. Prerequisite(s): RES 305, RES 300

#### RES 500 RESPIRATORY PHARMACOLOGY (4 credits) - Not Designed to Transfer

Respiratory Care Pharmacology studies the application of pharmacology (the study of drugs and chemicals) to the treatment of pulmonary disorders and critical care. This course will focus on the principles of drug action from dose administration to effect and clearance from the body as well as drug therapies that affect the respiratory system. Prerequisite(s): RES 400, RES 402

#### RES 505 RESPIRATORY CLINICAL III (4 credits) - Not Designed to Transfer

This course is the third in a series that provides the student with exposure to the practice of respiratory therapy. This clinical education course takes place in various respiratory departments (clinical affiliates). The student develops and refines skills in communication, patient management, equipment use, and clinical assessment. This course will introduce high tech respiratory equipment including ventilators. Rotating shifts and assignments. Prerequisite(s): RES 405, RES 400

#### RES 600 NEONATAL & PEDIATRIC RESPIRATORY THERAPY (3 credits) - Not Designed to Transfer

This course will instruct the student in the evaluation and management of the newborn and child with respiratory disease or with some other disorder that compromises the respiratory system, focusing on conditions most often seen by the pediatric respiratory care practitioner. Respiratory care of the newborn and child begins with a discussion of the development of the fetus and of the transition from fetal to neonatal life, which forms the basis for understanding the problems that may arise in the newborn period. Evaluation of the newborn is addressed from several aspects such as those that occur prenatally, assessment techniques vital to the care of the newborn, and non-invasive monitoring techniques. Students will learn about changes that have taken place in the practice of respiratory care for newborns, including new research findings, treatment approaches, and specialized equipment for assessment and care. This course has a lab component. Prerequisite(s): RES 400, RES 402, RES 505

#### RES 605 RESPIRATORY CLINICAL IV (4 credits) - Not Designed to Transfer

This course is the fourth in a series that provides the student with exposure to the practice of respiratory therapy. This clinical education course takes place in various respiratory departments (clinical affiliates). The student develops and refines skills in communication, patient management, equipment use, and clinical assessment. Students will be introduced to rotations in the NICU (Neonatal Intensive Care Unit) and PICU (Pediatric Intensive Care Unit). Rotating shifts and assignments. Prerequisite(s): RES 505 Co-requisite: RES 600

#### RES 701 RESPIRATORY THERAPY SEMINAR (2 credits) - Not Designed to Transfer

This course will expand the knowledge base of Respiratory Therapy to the non-hospitalized patient. This course will also cover professionalism, cultural diversity, insurance claims, medical reimbursement, diagnosis related groups (DRG's), and healthcare management. The student will also write a professional paper on a respiratory pathology of their choice. Prerequisite(s): ENG 102, RES 402, RES 500, RES 600

#### RES 705 RESPIRATORY CLINICAL V (4 credits) - Not Designed to Transfer

This course is fifth in a series that provides the student with exposure to the practice of respiratory therapy. This clinical education course takes place in various respiratory departments (clinical affiliates). The student develops and refines skills in communication, patient management, equipment use, and clinical assessment. Students will rotate mainly through intensive care units with emphasis on ventilator management skills. Students will be introduced to alternate site care. Rotating shifts and assignments. Prerequisite(s): RES 605

#### RES 801 RESPIRATORY THERAPY REGISTRY REVIEW (3 credits) - Not Designed to Transfer

This course will prepare the respiratory therapy student to sit for the National Board for Respiratory Care (NBRC) Registry and Clinical Simulation Examination. Prerequisite(s): Completion of all RES classes through 700

#### RES 805 RESPIRATORY CLINICAL VI (6 credits) - Not Designed to Transfer

This course is last in a series that provides the student with exposure to the practice of respiratory therapy. This clinical education course takes place in various respiratory departments (clinical affiliates). The student develops and refines skills in communication, patient management, equipment use, and clinical assessment. Students will rotate mainly through intensive care units with emphasis on ventilator management skills. Rotating shifts and assignments. Prerequisite(s): RES 705

#### RTA 122 RADIOGRAPHIC CLINICAL I (3 credits) - Not Designed to Transfer

This course provides the student with exposure to the practice of radiography. This clinical education course takes place in various imaging departments (clinical affiliates). The student develops and refines skills in patient management, equipment manipulation, positioning, technique manipulation, and image evaluation. There may be rotating shifts and assignments. Prerequisite(s): MED 211 Co-Requisites MED 171 & MED 176 (may be taken previously)

#### RTA 132 RADIOGRAPHIC CLINICAL II (3 credits) - Not Designed to Transfer

This course continues to provide the student with exposure to the practice of radiography. This clinical education course takes place in various imaging departments (clinical affiliates). The student develops and refines skills in patient management, equipment manipulation, positioning, technique manipulation, and image evaluation. There may be rotating shifts and assignments. Prerequisite(s): MED 171, RAD 121, RTA 122

#### RTA 133 ADVANCED RADIOGRAPHIC POSITIONING (3 credits) - Not Designed to Transfer

This course provides the student with the knowledge and skill of fluoroscopic equipment. Students will gain knowledge of the anatomical relationships necessary to perform general radiographic fluoroscopic procedures. This course will also include information regarding contrast types and administration. Lab practicum will be used to complement the lecture portion of this course. Prerequisite(s): MED 173, RAD 121, RTA 122 or LMR program completion

#### RTA 141 RADIOGRAPHIC IMAGING I (4 credits) - Not Designed to Transfer

This course introduces the student to basic imaging concepts including an overview of radiographic imaging equipment and associated technical factors. The student will learn how radiographic images are formed and processed utilizing both conventional and digital imaging systems. Factors which negatively impact image quality will also be discussed. Changes in equipment, technical factors and patient size/condition will also be explored with regard to how such changes affect image quality. Prerequisite(s): RAD 131, RTA 122 or LMR program completion

#### RTA 142 RADIOGRAPHIC CLINICAL III (3 credits) - Not Designed to Transfer

This course continues to provide the student with exposure to the practice of radiography. This clinical education course takes place in various imaging departments (clinical affiliates). The student develops and refines skills in patient management, equipment manipulation, positioning, technique manipulation, and image evaluation. There may be rotating shifts and assignments. Prerequisite(s): RTA 132 or LMR program completion

#### RTA 144 PATIENT CARE & EDUCATION (4 credits) - Not Designed to Transfer

This course focuses on the field of radiologic technology's ethical and professional standards. This will include basic knowledge of communication, patient assessment, and patient education within the imaging department. Students will learn the cycle of infection and prevention of disease transmission. An overview of patient care techniques such as cardiac monitoring, and venipuncture will also be discussed. Prerequisite(s) or Co-requisite: RTA 132 or LMR program completion

#### RTA 251 RADIOGRAPHIC IMAGING II (4 credits) - Not Designed to Transfer

This course builds upon basic topics covered in Imaging I. It will provide the student with a more in-depth knowledge of the concepts of image acquisition, image processing, image display, and dynamic imaging. Effective utilization of equipment will be introduced and a critical-thinking approach will be utilized to effectively reinforce the concepts of image evaluation, dose limitation and exposure technique selection. Image archiving and medical imaging informatics will also be discussed. Prerequisite(s): RTA 141, RTA 142, RTA 144

#### RTA 252 ADVANCED RADIOGRAPHIC CLINICAL I (8 credits) - Not Designed to Transfer

This course provides the student with advanced competencies and clinical experience in radiography. This clinical education course takes place in various imaging departments (clinical affiliates). The student develops and refines skills in patient management, equipment manipulation, positioning, technique manipulation, and image evaluation. There are rotating shifts and assignments. Prerequisite(s): RTA 141, RTA 142, RTA 144

#### RTA 253 RADIATION PHYSICS (4 credits) - Not Designed to Transfer

This course provides the student with the fundamentals of physics as it relates to radiation physics. This will include explanations of matter and energy, electricity and magnetism, x-ray production and interaction, x-ray emission and units of measurement. Prerequisite(s): RTA 141, RTA 142

#### RTA 254 RADIATION PROTECTION & BIOLOGY (4 credits) - Not Designed to Transfer

This course provides the student with an overview of radiobiology and radiation protection with an emphasis on the safe use of ionizing radiation. This course will also discuss the regulations and recommendations regarding permissible dose and monitoring. Prerequisite(s): RTA 141, RTA 142, RTA 144

#### RTA 261 RADIOGRAPHIC PATHOLOGY (3 credits) - Not Designed to Transfer

This course provides an introduction to concepts and terminology related to pathological processes. An emphasis is placed on the radiographic appearance of disease and the impact on exposure factor selection. Case studies and critical thinking exercises are designed to enhance the student's knowledge of radiographic procedures with regards to technical and patient considerations. Basic oral presentation skills are practiced and critiqued during course completion. Prerequisite(s): RTA 251, RTA 252

#### RTA 262 ADVANCED RADIOGRAPHIC CLINICAL II (8 credits) - Not Designed to Transfer

This course continues to provide the student with advanced competencies and clinical experience in radiography. This clinical education course takes place in various imaging departments (clinical affiliates). The student develops and refines skills in patient management, equipment manipulation, positioning, technique manipulation, and image evaluation. There may be rotating shifts and assignments. Prerequisite(s): RTA 251, RTA 252

#### RTA 263 ADVANCED TOPICS & CURRENT TRENDS IN IMAGING (4 credits) - Not Designed to Transfer

This course will provide the student with a basic overview of quality control, cross-sectional anatomy, and advanced imaging modalities. It will also provide the student an in depth discussion of trauma and pediatric positioning. Current trends within the industry will also be discussed. Prerequisite(s) or Co-requisites: RTA 251, RTA 252

#### RTA 271 RADIOGRAPHIC IMAGE CRITIQUE (4 credits) - Not Designed to Transfer

This course provides the student with the skills and methodologies needed to critically analyze radiographic images. Emphasis is placed on proper positioning, exposure factors, equipment selection/utilization and patient instructions. Review of relevant anatomy and positioning are also provided. Students are afforded opportunities to critique a variety of images both individually and in group settings. Prerequisite(s) or Co-requisites: RTA 261, RTA 262, RTA 263

#### RTA 272 ADVANCED RADIOGRAPHIC CLINICAL III (8 credits) - Not Designed to Transfer

This course continues to provide the student with advanced competencies and clinical experience in radiography. This clinical education course takes place in various imaging departments (clinical affiliates). The student develops and refines skills in patient management, equipment manipulation, positioning, technique manipulation, and image evaluation. There may be rotating shifts and assignments. Prerequisite(s): RTA 262.

#### RTA 282 ADVANCED RADIOGRAPHIC CLINICAL IV (7 credits) - Not Designed to Transfer

This course concludes the students' clinical experience in radiography. This clinical education course takes place in various imaging departments (clinical affiliates). The student develops and refines skills in patient management, equipment manipulation, positioning, technique manipulation, and image evaluation. There may be rotating shifts and assignments. Prerequisite(s): All radiology core courses in the curriculum. Co-requisite: RTA 283

#### RTA 283 RADIOGRAPHIC REGISTRY REVIEW (4 credits) - Not Designed to Transfer

This course provides the student with a review of the content specifications in preparation for the American Registry of Radiologic Technologists (ARRT) certification exam. This course will assess the student's understanding of the major content areas, reinforce the student's knowledge, identify deficient areas of knowledge, and prepare the student for ARRT Registry Exam. Prerequisite(s): All radiology core courses in the curriculum. Co-requisite: RTA 282

#### SOC 303 CULTURAL DIVERSITY (4 credits)

This course explores the multi-dimensional relationship of diversity with investigation of the nature and sources of cultural differences and the impact on our changing society. Students will examine the characteristics of different cultural systems and how they influence a medical setting and the challenges and benefits of communicating in culturally sensitive and ethical ways. Prerequisite(s): None

#### SUR 100 INTRODUCTION TO SURGICAL TECHNOLOGY (6 credits) - Not Designed to Transfer

This course is designed to build on the fundamental theories and concepts of aseptic technique necessary to function as an entry-level surgical technologist. The contents of this course address all-hazards preparation, disinfection and sterilization, and a novice level of knowledge in aseptic technique, technological sciences, patient care concepts, professional practice, legal, ethical, and moral issues, the pre-, intra- and post-operative roles of a surgical technologist, and perioperative case management. The lab skill assessments include scrubbing, gowning, closed gloving, draping furniture, sterilization and disinfection, sterile set-up for basic surgical procedures, and novice instrumentation, supplies, sharps, patient draping and sterile dressing application. Prerequisite(s): SUR 101 Co-requisite: MED 173

#### SUR 101 ORIENTATION TO SURGICAL TECHNOLOGY (3 credits) - Not Designed to Transfer

This course is designed to introduce the student to the fundamental theories necessary to function as an entry-level surgical technologist. The contents of this course address healthcare facility information and the physical environment, communication skills and teamwork, and the basic knowledge of aseptic technique, patient care concepts, professional responsibilities, duties, legal, ethical, and moral issues, the pre-, intra- and post-operative roles of a surgical technologist, and perioperative case management. The lab skill assessments include equipment identification and use, sterile packaging and opening, draping furniture, medical hand wash, open gloving, basic instrumentation, and patient transfers. Prerequisite(s): None Co-requisite: MED 172

#### SUR 174 SURGICAL ANATOMY & PHYSIOLOGY (4 credits) - Not Designed to Transfer

This course is designed to build on the fundamental anatomy and physiology by applying the knowledge and concepts to enable the student to relate pathophysiology to perioperative case management. The contents of this course address surgically treatable diseases and disorders found in each body system and identifies various surgical procedures and the relative instrumentation, supplies, equipment and techniques utilized in surgery. Prerequisite(s): MED 173

#### SUR 178 SURGICAL PHARMACOLOGY (4 credits) - Not Designed to Transfer

This course is designed to provide the surgical technology student with an in-depth study of the concepts and principles of pharmacology with emphasis on anesthesia, medications used in surgery, and their measurement, care, handling, and administration during perioperative case management. The contents of this course address preoperative medications, general, local, and alternative anesthesia and their complications, protocol related to medication in the operating room, medications and their specific uses in surgery, realities of drug abuse, and the potential dangers presented in the healthcare field. Prerequisite(s): SUR 100 Co-requisite: SUR 200

#### SUR 199 MICROBIOLOGY FOR SURGICAL TECHNOLOGISTS (6 credits) - Not Designed to Transfer

This course is designed to introduce the theories, concepts and practices of microbiology to enable the student to relate the infectious process to surgical practice, correlate the impact of microbiology in relationship to the practice of sterile technique and infection control in perioperative case management. The content of this course provides an introduction to microbiology and nomenclature, cells, types of microorganisms, staining methods, culture media, host microbe relationships, common causative agents, immunology and the process of infection. The lab skill assessments include microscope identification, culture, gram-staining, and identifying microorganisms and their characteristics. Prerequisite(s): MED 172

#### SUR 200 SURGICAL TECHNIQUES (6 credits) - Not Designed to Transfer

This course is designed to build on the novice theories and concepts of aseptic technique necessary to function as an entry-level surgical technologist. The contents of this course address pathophysiology, surgical procedures, and an intermediate level of knowledge in aseptic technique, technological sciences, patient care concepts, professional practice, legal, ethical, and moral issues, pre-, intra- and post-operative roles of a surgical technologist, and perioperative case management. The lab skill assessments include sterile set-up for open and minimally invasive surgical procedures, counting, and intermediate instrumentation, supplies, sharps, patient draping and sterile dressing application. Prerequisite(s): SUR 100 Co-requisite: SUR 178

#### SUR 201 SURGICAL PROCEDURES I (14 credits) - Not Designed to Transfer

This course is designed to build on the intermediate theories and concepts of aseptic technique necessary to function as an entry-level surgical technologist. The contents of this course address the surgical rotation requirements and an advanced-intermediate level of knowledge in patient care concepts, professional practice, the pre-, intra- and post-operative roles of a surgical technologist, perioperative case management, pathophysiology and surgical procedures in the General & Gastrointestinal, Gynecological & obstetrical, Genitourinary, Otorhinolaryngologic (ENT) Ear, Nose & Throat, Oral & Maxillofacial, and Orthopedic surgical specialties. This course requires a clinical component in addition. Prerequisite(s): SUR 200, SUR 174, SUR 178, MED 211

#### SUR 202 SURGICAL PROCEDURES II (14 credits) - Not Designed to Transfer

This course is designed to further build on the intermediate theories and concepts of aseptic technique necessary to function as an entry-level surgical technologist. The contents of this course address the an advanced intermediate level of knowledge in patient care concepts, professional practice, pre-, intra- and post-operative roles of a surgical technologist, perioperative case management, surgical rotation requirements, pathophysiology and surgical procedures in the Plastic & Reconstructive, Ophthalmic, Cardiothoracic, Peripheral Vascular, Neurosurgery, Pediatric and Organ Transplant surgical specialties. This course requires a clinical component in addition. Prerequisite(s): SUR 201 Co-requisite: SUR 301

#### SUR 301 PROFESSIONAL ISSUES (2 credits) - Not Designed to Transfer

This course reinforces academic knowledge, professional accountability, independent decision-making, and the critical nature of self-assessment. Students will explore alternate career options for the surgical technologist. An in-depth view of the surgical technology professional organization is given and emphasis is placed on professional development. The course provides surgical technology students with the needed preparation to complete the certification exam process. A mock Certified Surgical Technologist (CST) exam is a required and vital element of this course. Prerequisite(s): SUR 201 Co-requisite: SUR 202

# Additional Course Descriptions as of 6/22/18 from the former Sullivan College of Technology and Design

#### AMT 151 MECHANICAL DRIVES (3 Credits)

In this course, students will learn how to select, install, adjust, troubleshoot, and repair a range of mechanical systems including belt, chain and gear power transmission systems which are commonly found in both automated and manual machines used in every industry around the world. These industries include manufacturing, construction, the military and transportation. Prerequisite(s): None

#### **AMT 158 ROBOT FUNDAMENTALS (3 Credits)**

This course, through lecture and laboratory, will explore the major system elements of a robot system. Topics covered will include the development of the robotics industry to date, basic parts, classifications, end-of-arm tooling, teach pendant operation, fundamental programming techniques, and industrial robot safety applications. Prerequisite(s): ELC 134, and/or taken concurrently with ELC 152 and ELC 163

#### AMT 216 FLUID POWER (3 Credits)

This introductory course provides, through lecture and laboratory experience, knowledge about fluid power industrial components and systems. This class covers the fundamentals of fluid power operation, properties and types of fluids, conductors, and contamination control. Also covered: the function, construction, and operation of pumps, motors, cylinders, valves, efficient power sources, and system accessories. Prerequisite(s): MTH 243

#### **AMT 238 ROBOT APPLICATIONS (3 Credits)**

The student will learn, through the use of industrial quality laboratory equipment, computer software, videos, written text and laboratory activities, the basics of robotic applications. These applications include the operation and programming of robots, material transfer, machine tending, quality control and the interfacing of supporting equipment. Prerequisite(s): AMT 158 and AMT 216

#### AMT 247 PROGRAMMABLE LOGIC CONTROLLERS I (3 Credits)

This course is designed to introduce the student to the basic operation principles of Programmable Logic Controllers (PLCs). An industrial level PLC will be utilized throughout the course to teach the basic principles and programming of the PLC. The course will utilize lectures and hands-on laboratory exercises with PLC hardware and programming software to achieve the course objectives. Prerequisite(s): ELC 163 and ELC 226

#### AMT 249 MANUFACTURING METHODS (4 Credits)

The course focuses on organizing and planning of manufacturing, specifications, properties and types of materials, casting, injection molding, forging, materials forming processing, machine tool technology and welding technology. An emphasis on reducing, reusing, and recycling in the manufacturing process is a component of this course. Prerequisite(s): MTH 243, PHY 162

#### AMT 258 WORK CELLS (3 Credits)

The student will learn, through the use of industrial quality laboratory equipment, computer software, written text, and laboratory activities, how to set up work-cells. The student will learn how to program a robotic work-cell, maintain production control, program off-line using robot simulation software. Prerequisite(s): AMT 238

#### AMT 267 PROGRAMMABLE LOGIC CONTROLLERS II (3 Credits)

This course is designed to provide the student with exposure to additional and more advanced operating principles of a Programmable Logic Controller (PLC). The student, through the use of lecture and hands-on laboratory activities, will learn to program an industrial-level PLC utilizing its accompanying software. Topics covered include processor data instructions, ladder diagram programming, including timers and counters, and troubleshooting programs. Prerequisite(s): AMT 247

#### AMT 316 FLUID POWER II (3 Credits)

This course provides, through lecture and laboratory experience, more knowledge about fluid power industrial components and systems, continuing from Fluid Power I. This class covers the function, construction and operation of pressure and flow control valves, cartridge and stack valves, proportional and servo valves, pumps and system accessories. Prerequisite(s): AMT 216

#### AMT 320 STATISTICAL QUALITY CONTROL (4 Credits)

This advanced class focuses on the major aspects of using statistical methodology for quality control and improvement. Both traditional and modern methods are presented, including state-of-the-art techniques for statistical process monitoring and control and statistically designed experiments for process characterization, organization, and process robustness studies. Topics covered include DMAIC (define, measure, analyze, improve and control the problem-solving strategy of Six Sigma) and the implementation process. Prerequisite(s): MTH 263

#### AMT 330 INSTRUMENTATION AND MEASUREMENT (3 Credits)

This advanced class takes a systems level approach to integrating instruments and controllers in typical industrial control systems. Topics covered include an introduction to instrumentation, temperature, pressure, level, flow, and position measurement, analyzers, transmission and communication, automatic control, final elements, and safety systems. Prerequisite(s): AMT 258 and AMT 267

#### AMT 340 ENGINEERING PROGRAMMING LANGUAGES (3 Credits)

This course introduces the student to the C++ programming language, Excel, numerical programming methods, and Matlab. The student will experience a unique integrated electronic learning system that allows for quick and efficient navigation to a multitude of examples, exercises and projects. Prerequisite(s): CSC 118

#### AMT 347 PROGRAMMABLE LOGIC CONTROLLERS III (3 Credits)

This course is designed to provide the student with exposure to the CLX series controllers and operating principles. The student, through the use of lecture and hands-on training, will be able to program a CLX series controller and use its accompanying software. Topics covered will include advanced use of timers and counters, messaging instructions, project management, memory, and controller tag usage. Prerequisite(s): AMT 267

#### AMT 351 MECHANICAL DRIVES II (3 Credits)

In this course, students will learn how to select, install, adjust, troubleshoot and repair a range of mechanical systems, including heavy duty V-belt, synchronous belt, lubrication concepts, precision shaft alignment, couplings, and heavy duty chain and gear power transmission systems which are commonly found in both automated and manual machines used in every industry around the world. These industries include manufacturing, construction, the military and transportation. Prerequisite(s): AMT 151

#### AMT 367 PROGRAMMABLE LOGIC CONTROLLERS IV (3 Credits)

This course allows students to apply the knowledge gained in the previous PLC and robot courses to simulated real world applications. The student will design PLC programs with solutions for five simulated industrial applications. The students will generate professional documentation and present their work to the instructor and the class. This is a hands-on design and application course. Prerequisite(s): AMT 258

#### AMT 420 GREEN ENERGY TECHNOLOGY (4 Credits)

Photovoltaic and other renewable energy technologies are a rapidly growing sector of the energy market. This class is a guide to the design, installation, and evaluation of residential and commercial photovoltaic (PV) systems. Topics covered will be the principles of photovoltaic energy and how to effectively incorporate PV systems into stand-alone or interconnected electrical systems. The content includes system advantages and disadvantages, site evaluation, component operation, system design and sizing, and installation requirements and recommended practices. Common scenarios and procedures are discussed throughout. Specific electrical requirements are in accordance with the National Electrical Code. Prerequisite(s): ELC 253, AMT 320, AMT 330

#### AMT 430 ADVANCED AUTOMATION (3 Credits)

The student will learn, through the use of industrial quality laboratory equipment, computer software, written text, and laboratory activities, how to set up an advanced automated work cell. Prerequisite(s): AMT 258

#### AMT 440 SUSTAINABLE ENGINEERING (4 Credits)

Industrial ecology, the "study of the human-induced transformation of materials and energy from the perspectives of the environment and sustainability", is an organizing concept that explores both natural and altered biophysical environments. Most analyses are contemporaneous, but historical and predictive studies are also part of the subject. Prerequisite(s): ELC 253, AMT 320, AMT 330

#### AMT 450 PROJECT MANAGEMENT I (3 Credits)

This course guides the student through the intricate framework of organizational behavior and structure that can determine project success with respect to the planning, scheduling, and controlling processes vital to effective project management. Topics include an overview, organizational structures, organizing and staffing, management function, time management, conflicts, planning and project graphics. Prerequisite(s): AMT 320

#### AMT 460 PROJECT MANAGEMENT II-SENIOR CAPSTONE (3 Credits)

This course moves the student from the theory of project management studied in Project Management I to application of theory to real world projects. Students may experience externships with manufacturing companies or work with projects assigned to the

college by companies. Students will implement processes involved in planning, scheduling, maintaining records, pricing, controlling costs, managing risks, managing contracts, and managing quality of a real-world project. Prerequisite(s): AMT 450

# ARH 140 CONSTRUCTION ESTIMATING (3 Credits)

This course will provide you with a solid understanding of quantification necessary in creating estimates of both residential and commercial structures. You will create spreadsheets using available software to collect data from architectural drawings and create estimate reports. Prerequisite(s): DRF 105

# ARH 160 RESIDENTIAL DESIGN I (3 Credits)

This course may be taken concurrently with ARH 165 and is an introduction to terminology and standard drafting practices used in the residential construction. Topics include building code requirements, room design, floor plan layout, dimensioning and use of manufacturer's technical reports. Prerequisite(s): DRF 135 and ARH 140

### ARH 165 RESIDENTIAL DESIGN II (3 Credits)

This course may be taken concurrently with ARH 160 and is an introduction to the types of foundation systems and framing systems used in residential construction. Topics include foundation design and layout, cross section detailing and structural analysis. Prerequisite(s): DRF 135 and ARH 140

#### ARH 170 COMMERCIAL CONSTRUCTION I (3 Credits)

This course may be taken concurrently with ARH 173 and will introduce you to various codes that affect commercial construction. Drawings completed in lab exercises will illustrate codes used as well as CADD techniques. Prerequisite(s): DRF 135, ARH 140

# ARH 173 COMMERCIAL CONSTRUCTION II (3 Credits)

This course may be taken concurrently with ARH 170 and will introduce you to various materials and practices used in construction of commercial buildings. Materials discussed include wood, masonry, concrete and steel. Using these materials, you will detail various drawings from typical structures. Prerequisite(s): DRF 135, ARH 140

# CET 244 COMMUNICATIONS IN ELECTRONICS (4 Credits) - Not Designed to Transfer

This course is designed to give you a basic understanding of the various parts of communications: AM/FM receivers, mixers, RF, IF, telecommunications and transmission devices. Prerequisite(s): and/or concurrently with ELC 212 and ELC 219

#### CGD 110 DRAWING (3 Credits)

This is an introductory level course that will focus on development of basic drawing techniques using various traditional media. You will be acquainted with basic techniques of sketching, shading and rendering primary shapes. You will further be exposed to the more advanced concepts of line, line value, texture, form and linear perspective. You will also be exposed to the advanced concept of drawing the human figure. Drawing and illustration, as applied to the graphic design field, will be explored as a final phase of the course, as well as the basic tools and techniques associated with this type of drawing. Prerequisite(s): None

### CGD 115 INTRODUCTION TO DIGITAL IMAGING (3 Credits)

This course will concentrate on the use of a computer as a tool for pixel-based image creation and manipulation. The course will focus on the use of Photoshop, the scanner and printers. Emphasis will also be placed on understanding resolution, use of Photoshop as a design tool, understanding image acquisition and manipulation. The student will be exposed to a variety of opportunities to create, edit and manipulate pixel-based images. You will also be introduced to ethical, legal and copyright issues surrounding manipulation and acquisition of images. Prerequisite(s): None

#### CGD 131 COLOR THEORY (3 Credits)

This is an introductory level course designed to expose you to color as a design element. You will initially be introduced to how the human eye sees and the brain perceives color. The two-color modes (additive and subtractive) will be introduced along with the concepts of primary colors, secondary colors and the color wheels of both color models respectively. You will complete visual exercises designed to acquaint you with associated lecture. Both the psychological and physiological effects of color will be introduced. Finally, color as an element in computer graphic design will be introduced, various computer models discussed. Prerequisite(s): None

#### CGD 135 TYPOGRAPHY (3 Credits)

This course will concentrate on the use of type as a tool for the creation of clear communication. The course will also focus on the history of type, classification of type, and type as it is used within the context of words, sentences and paragraphs. You will be exposed to a variety of projects to understand the beauty of letter forms as well as the power of type in communication. Prerequisite(s): CGD 151, CGD 164

# CGD 142 PRINT I (3 Credits)

This is an introductory level course designed to acquaint you with the basic elements of a modern graphic design studio. The course will begin with a brief history of graphic design and print history as well as lithography and photo. You will also be introduced to type and text as design elements, semantics of typography, choosing and recognizing typefaces and various printing processes used to reproduce type and images. You will be introduced to color separations and how they are used in the printing process. You will then be introduced to pre-press processes, proofing, mechanical-prep film makeup and digital prepress (computer graphics). Prerequisite(s): CGD 151

#### CGD 151 DIGITAL ILLUSTRATION I (3 Credits)

This course will focus on the use of the computer as an illustration tool. You will first be exposed to computer illustration basics, use of primitive drawing tools in an illustration program and line as a design element. You will then be instructed in the alteration of primitives to create irregular shapes and color fills. You will additionally be instructed in the use of typography as an illustration element. Additionally, you will be exposed to the concept of clip art and legal and ethical issues involved in their use. Prerequisite(s): None

### CGD 157 DIGITAL IMAGERY & IMAGE MAKING I (3 Credits)

The components of digital imagery and image making will be discussed, including the various types of computers, monitors, scanners and printers. Basic two-dimensional graphics will be developed. You will be exposed to intermediate and advanced stages of digital design that have not been covered in previous classes. Prerequisite(s): CGD 115

### CGD 164 LAYOUT I (3 Credits)

This introductory level course is designed to acquaint you with computer layout and desktop publishing as well as expand the concepts of design and the computer as a tool for image creation taught in beginning level courses. You will be exposed to the basic concepts of desktop publishing software. Concepts of computer typography will be explored in detail as well as fundamental ad and page layout. Prerequisite(s): CGD 142

#### CGD 169 3-D MODELING (3 Credits)

You will be introduced to the basics of generating three dimensional models on a computer system. These models will be developed utilizing wire-frame, surface and solid representational model techniques. You will also learn the basics of material application and camera and lighting uses. Prerequisite(s): CGD 157

#### CGD 215 LAYOUT II (3 Credits)

This is an advanced level course. This course is designed to allow you to bring together the many skills and knowledge acquired in the lower level courses to design projects that are ready to go to press. You will create a corporate identity package, from logo concept to a printed brochure. Students will be exposed to logo design, Graphic Standards, business cards, package design, manipulating images for print, designing sales materials and press specifications. You will learn to follow a job from design stage to final printed production and how the computer functions as an essential tool. Prerequisite(s): CGD 164

#### CGD 229 BASIC 3D ANIMATION (3 Credits)

This course is designed to introduce you to the concept of basic 3D animation. You will be provided with the opportunity to create basic computer animation from the initial concept phase to a finished product. You will be exposed to the concepts of storyboards, object movement and interaction, keyframing techniques, and set and lighting design. Prerequisite(s): CGD 169

## CGD 234 MULTI-MEDIA I (3 Credits)

The multi-media I course is designed to pull together many various aspects of computer graphics, animation, digital video, and digital imaging and design to create a multi-media portfolio. You will plan for the creation of a multi-media project and use appropriate computer hardware and software to create design and edit the project. You will use programming to navigate and animate to present portfolio materials. Prerequisite(s): CGD 115, CGD 243

# CGD 242 PRINT II (3 Credits)

This course looks deeper into the printing industry with advanced color separation techniques and pressroom methods, plus paper and ink differences. Also, this class will develop the relationship between digital press and conventional pressroom methods. Print II will look at four-color separation methods as well as spot color for different types of media and paper. Prerequisite(s): CGD 142

# CGD 243 WEB I (3 Credits)

This is an introductory course in web design. You will learn the elements and technology that comprise a website. Additionally, you will learn how to utilize html and various computer programs to build basic websites. Prerequisite(s): CGD 115

## CGD 244 GRAPHIC DESIGN (3 Credits)

Communication is the vital element in Graphic Design. Design education is a lifetime activity, and as such, constant change requires constant renewal. To be competitive, you must approach the basic principles and practices with a flexible and curious mind. You will examine art design principles and techniques that apply. You will be introduced to proper procedures for preparing design materials and services for today's marketplace. You will be presented with the opportunity to discover how applying basic design principles can enhance visual messages. Prerequisite(s): CGD 110

#### CGD 250 VIDEO PRODUCTION (3 Credits)

This is an introductory course covering a broad range of topics. You will learn about usage of digital video as a communications medium. Emphasis will be on learning the processes involved in taking footage from source tapes to a final edited work. Prerequisite(s): None

# CGD 256 MULTI-MEDIA II (3 Credits)

This is an advanced course in Internet multi-media covering a broad range of topics. You will learn about the Internet and how to obtain information and skillfully navigate the structure of the World-Wide-Web. Additionally, you will learn how to create and edit

content for the Web. Prerequisite(s): CGD 234

#### CGD 263 WEB II (3 Credits)

This is an upper level course in web design. You will learn technologies utilized in sophisticated commercial sites. Additionally, you will learn how to utilize web animation and interaction to enhance the viewers' experience. Prerequisite(s): CGD 243

### CGD 267 PORTFOLIO (3 Credits)

This class is designed to allow you the opportunity to compile a cross-section of your work, with the assistance of a faculty advisor, for presentation to potential employers. You will receive instruction in interview techniques as well as job hunting strategies and career advice. You will also be allowed to use the lab facilities to develop any partially completed work or ideas from past classes. Prerequisite(s): Must be taken within final quarter or Department Chair approval.

### CGD 269 EXTERNSHIP (3 Credits)

A combination work/study program with you receiving exposure to the daily operations and procedures of a graphic design firm or in a related area. You are required to work a minimum of 90 hours of practical, on-the-job training. You will work with professional graphic designers to attain training and exposure in the field. Prerequisite(s): Must be taken within final quarter or Department Chair approval.

#### CGD 325 GRAPHIC DESIGN HISTORY (3 Credits)

This course surveys the pivotal events and achievements that led to the current state of visual communication. The unceasing quest to give form to ideas is traced from the pictographs painted on cave walls to the latest imaginative designs. Through lectures, presentations, discussions and research, you are introduced to the creative thinkers, important innovations and breakthrough technologies that have shaped the evolution of visual communication. Prerequisite(s): None

# CGD 326 DESIGN METHODOLOGY (3 Credits)

The objective of this course is to assist you in the development of methodologies for exploration, investigation, and construction of a well-designed proposal of work. This class provides you with a variety of exploratory means to identify, locate, reflect on and develop areas of pursuit of design solutions. Prerequisite(s): None

### CGD 327 WRITING COPY FOR DESIGN (3 Credits)

This course is an introduction to the basic elements of writing for print advertising. You will be introduced to the function and methodologies of copy writing. You will also learn the structure of writing and how it lures the viewer deeper into the advertising message. Prerequisite(s): None.

#### CGD 342 BRANDING (3 Credits)

In this course, you will research, develop and design a corporate logo that is then used in marketing, packaging, identity package, advertising and other projects. You will understand the collaborating between the sales, marketing and design teams, which is needed to complete branding for a client. Prerequisite(s): None

#### CGD 351 DIGITAL ILLUSTRATION II (3 Credits)

This advanced class takes the you beyond the basics of the Digital Illustration I class to widen your horizons and use the program to its fullest potential. You will examine and utilize more advanced features of vector-based software to create finely tuned images for multiple purposes. Prerequisite(s): CGD151

#### CGD 357 DIGITAL IMAGERY & IMAGE MAKING II (3 Credits)

This advanced class is designed to hone the your skills on and with various digital methods of image creation. You will be instructed on the interactions between some traditional forms of image creation as well as their digital counterparts. Instruction will also include usage of the camera for image creation, digitizing tablets and scanner usage. The class will also help you learn to merge and manipulate several different media, ranging from still images to moving imagery. Prerequisite(s): CGD 157 and CGD 244

#### CGD 430 ADVERTISING DESIGN (3 Credits)

This course introduces you to advertising design. You will learn the art of advertising and the structure of advertising agencies. You will also learn the concepts and approaches used to develop an advertising campaign. The goal in this class is to have you develop, design and produce materials for client presentation.

Prerequisite(s): CGD 342

#### CGD 431 PRODUCT DESIGN (3 Credits)

Product Design is a class that will explore the facets of commercial and industrial packaging from actual box/package creation to its outer design and advertising. You will learn to create not only prototype product designs but the packages they are housed in, as well as subsequent sales and dispersal methods. Prerequisite(s): CGD 244

#### CGD 445 ENVIRONMENTAL DESIGN (3 Credits)

From Olympic events to museum directories, you will learn how concepts of direction and space (navigating through the human scale environment) present challenges for the designer. This class focuses on type and image as elements to orient a person within a specific

environment. You will explore each stage of developing a way-finding system, from sketches to 3D information graphics. You will learn how to guide an audience through new and/or unfamiliar environments and the exciting typographic and symbol system opportunities such work presents. Prerequisite(s): CCS 229

### CGD 446 COLLECTIVE DESIGN (3 Credits)

Collective Design is a class that will explore the uses of combining models, vector art and photos from different software into one project. You will use various programs and multi-media software to create one campaign, which may include products from a variety of software sources. Prerequisite(s): CGD 431

### CGD 461 DESIGN STUDIO/COMMUNITY PROJECTS (3 Credits)

This class is designed to allow you to work on projects for a variety of non-profit agencies. You will have an opportunity to strengthen your portfolio with these projects. Non-profit agencies will provide the real opportunities for you to produce artwork that will be displayed and utilized. You will be able to create in a non-obstructive environment. Prerequisite(s): Must be taken within final quarter or Department Chair approval.

# CGD 467 PORTFOLIO (3 Credits)

This is an advanced course that will prepare the student for exiting the bachelor's degree program. The course requires you to apply different concepts of portfolios and explore options of communicating using various portfolio types. You will have the opportunity to create a resume, business card, mailer portfolio, hard portfolio (book) and digital portfolio. You will be exposed to various techniques to help your portfolio stand out when seen by potential employers. Prerequisite(s): Must be taken within final quarter or Department Chair approval.

#### CNS 135 FUNDAMENTALS OF INFORMATION SECURITY (4 Credits)

This course introduces you to the basic principles of information security as it applies to computer networks. Upon successful completion of the course, you will understand the theory behind securing computer resources for protection against internal and external threats such as: malicious code, web vulnerabilities, email exploits and various denial-of-service attacks. This course is designed to offer a broad overview of the security field, familiarize you with common terms and definitions, and act as entry point into the more sophisticated concentrations of the security specialties available. Prerequisite(s): NET 152

#### CNS 148 RISK MANAGEMENT FOR COMPUTER NETWORKS (4 Credits)

This course will examine industry best practices and the various measures needed to implement an economically sound security management policy. The lectures are geared toward providing upper management and security officers with the knowledge and tools they need to balance risk levels with legal and ethical compliance and to prevent business interruption. Techniques for effective policy writing and awareness training will also be covered. The primary topics included in this course will be structuring, performing and reporting a security assessment. Prerequisite(s): CNS 135

# CNS 157 NETWORK DEFENSE TACTICS (7 Credits)

This course introduces you to the principles behind network defense techniques and how they fit into the information security architecture. It prepares you in strengthening the corporate infrastructure through the use of firewalls, VPNs, and Intrusion Detection/Prevention Systems and other defense tools. Upon completion of this course, you will be able to identify network security threats, assess the risk plane and implement an effective preventive or defensive tactic. Common attack profiles and secure remote access will be reviewed from a protocol perspective. Prerequisite(s): NET 181, NET 231 or NET 261

## **CNS 164 COMPUTER FORENSICS (6 Credits)**

This class will focus on the proper way to maintain a legitimate chain-of-custody, how to secure an electronic crime scene and the various methods used to provide a means for event reconstruction. You will learn basic profiling techniques as well as the proper procedures for examining system logs and audit trails. Discovery, containment and preservation of electronic evidence and writing comprehensive reports will be the focus of this course. The lesson plan will emphasize analytical thinking through various case studies and real life examples and give you an in-depth understanding of the criminal justice process. Prerequisite(s): CNS 135, and (NET 181 or NET 231)

#### CNS 174 ENCRYPTION & AUTHENTICATION METHODS (4 Credits)

This course is concerned with the assorted strong authentication procedures available in today's modern, complex computer networks. These methods include: biometric applications, digital signatures, smart-cards and token-based confirmation. Router and transport protocol security will also be addressed, along with the different types of validation methods such as role-based, discretionary, and mandatory access controls. Prerequisite(s): CNS 135

#### CNS 180 FUNDAMENTALS OF DIGITAL ENCRYPTION (4 Credits)

This course introduces you to Public Key Infrastructure (PKI) and how it helps to provide authentication, privacy, integrity and non-repudiation. You will learn key distribution and management, symmetric and asymmetric key models and hashing functions. You will learn how PKI helps to provide trust in the digital world. Prerequisite(s): CNS 135 and/or concurrent with CNS 196

#### CNS 196 ADVANCED TOPICS IN INFORMATION SECURITY (4 Credits)

This course will focus on various industry standard technologies and practices as they apply to computer networking and data security. You will be exposed to the latest products, theories and applications that comprise the current defense and countermeasure arsenal in use by modern information systems and the security professionals that implement and maintain them. Prerequisite(s): CNS 135 and/or concurrent with CNS 180

# CNS 310 APPLICATION SECURITY (3 Credits)

Many security vulnerabilities are a result of ineffective programming or inherent weaknesses in application designs. This course is designed to enhance your knowledge by focusing on key programming/database coding to mitigate these risks in today's popular applications using these structures. Prerequisite(s): DWD 145

### CNS 320 TACTICAL DIGITAL OFFENSE TECHNIQUES (6 Credits)

This course prepares you in ethical ways to test and challenge the defense strategies you have previously learned. In a business environment, blind defense can lead to illegal and damaging penetration activity, leaving critical data unprotected and vulnerable. Through the techniques learned in this class using various tool of the trade, you can more effectively protect the valuable data assets. Increased knowledge of Trojans, back doors, database attacks and network attacks are

gained, along with a substantial appreciation for the ethics and legality in the use of these techniques. Prerequisite(s): CNS 157

#### CNS 364 ADVANCED DIGITAL FORENSICS (6 Credits)

This is an advanced study in cyber-crime investigation that builds upon the knowledge and principles gained in previous courses. You will explore the methods, techniques and advanced forensics tools implemented to identify and track activity of cyber-criminals. The course will prepare you in proper collection and containment of evidence and will provide an in-depth understanding of the legal process surrounding the forensic investigation. Focus will be placed on live attacks and their system footprints and incident handling from a forensic perspective. Prerequisite(s): CNS 164, CNS 320

#### CNS 435 SECURE NETWORK ANALYSIS (8 Credits)

This course is an advanced study in computer offense techniques to effectively secure digital resources. It is designed to expose you to internal auditing processes and methodologies, known as penetration tests, to evaluate, analyze and report on the corporate digital security risk plane. Ethics in the use of these tools is a key concept embedded in this course. Prerequisite(s): CNS 364

#### DRF 105 BASIC BOARD DRAFTING (6 Credits)

This course introduces you to drafting as the universal "language of industry" and provides the basic instruction for proper use of drafting tools and instruments. The course will cover the use of orthographic projection, sketching, lettering, dimensioning, line quality, and other principles needed for understanding while producing engineering drawings. Prerequisite(s): None

# DRF 135 COMPUTER AIDED DESIGN DRAFTING I (3 Credits)

You will be introduced to Computer Aided Drafting equipment, fundamental commands, terminology, and theory of operation. The hands-on use of a CADD system will be an integral part in reinforcing these topics. Prerequisite(s): None

### DRF 145 ADVANCED DRAFTING TECHNIQUES (3 Credits)

You will learn to visualize complex sections from standard orthographic views. The development of complex views using primary and secondary auxiliary views and the development of complex flat patterns for sheet metal work are taught. Welded fabrication and American Welding Society symbols (which are now the adopted world standard) will be taught to prepare you for American Design Drafting Association certification. The rules of two-point perspective will be reviewed, and the perspective of a small house will be drawn to prepare you for a more thorough treatment in AutoCAD, which is more suited to this technique. Prerequisite(s): DRF 105

# DRF 165 COMPUTER AIDED DESIGN DRAFTING II (3 Credits)

This course is designed to refine your skills learned in Computer Aided Design Drafting I. You will learn new advanced skills enabling them to create complete working drawings with dimensioning. You will work with architectural and mechanical drawings, overlaying these drawings to form a finished product that can be plotted and used for reference. Prerequisite(s): DRF 135

# **DRF 231 STATICS (4 Credits)**

This course is an introduction to the analysis of the basic forces that act on rigid structural members. You will study forces applied to beams, the principles of equilibrium for rigid bodies, and the analysis of structures. Prerequisite(s): MTH 253, PHY 162, CCS 165

# DRF 251 ELECTRICAL POWER DISTRIBUTION (4 Credits)

This course will teach you the concepts of how to design and balance electrical power systems in residential, commercial and industrial environments.

Prerequisite(s): None.

#### DRF 255 COMPUTER AIDED DESIGN DRAFTING III (3 Credits)

You are introduced to problem solving techniques, programming language and concepts, and customization using AutoCAD. This class will help you develop an understanding of how the software works, how to customize the user interface and how to write various types of routines to perform complex tasks. Prerequisite(s): DRF 165

#### **DRF 258 STRENGTHS (4 Credits)**

This course is designed as a study in stress and strain analysis, shear and moments in design of structural members. Prerequisite(s): DRF 231

# DRF 265 COMPUTER AIDED DESIGN DRAFTING IV (3)

This class is designed to teach you how to utilize three dimensional commands to construct architectural, civil or mechanical data bases. You will understand the xyz axis system and develop advanced drawings utilizing this system. Prerequisite(s): None

## **DRF 271 CIVIL DRAFTING (3 Credits)**

This course introduces the student to Civil Drafting and a variety of different drawings that can be created using Computer Aided Drafting. Topics include Mapping, Site Plan and Legal Descriptions, Highway/Roadway Design, Profiles, Earthwork and Geographic Information Systems. Prerequisite(s): DRF 165

### DRF 285 BUILDING INFORMATION MODELING (BIM) APPLICATIONS (3 Credits)

This course introduces you to Building Information Modeling (BIM) and sustainability, two revolutionary movements. You will learn how to create environmentally friendly design through a streamlined process. Prerequisite(s): DRF 165

### **DRF 331 DYNAMICS (4 Credits)**

This course is a student-focused approach to dynamics. The course strongly emphasizes drawing free body diagrams and the associated inertial response diagrams, an integrated use of structured problem- solving methodology, and the inclusion of real-world case studies. Prerequisite(s): MTH 343

### **DWD 145 PROGRAMMING LOGIC (3 Credits)**

This course introduces you to critical thinking and problem solving, and to the design and use of programming techniques, including variables, data types, modules, logic structures, arrays, data structures and object-oriented design. You will apply these concepts using problem solving tools, including algorithms, flowcharts, pseudocode, structure charts and IPO charts. Prerequisite(s): None

### DWD 150 INTRODUCTION TO PROGRAMMING (3 Credits)

This introduction to programming teaches you how to create an object-oriented program. Instruction will cover the use of variables, data types, I/O, loops, exemption handling and creating GUI. This course provides a developed structure for program design. You will learn to develop systems and classes. Prerequisite(s): DWD 145

### DWD 255 INTERMEDIATE PROGRAMMING (3 Credits) - Not Designed to Transfer

Continuing on the foundation built in DWD 150, you will learn how to use VB.NET to work with structures, classes, objects and arrays. Prerequisite(s): DWD 145

## **DWD 257 CLIENT-SIDE PROGRAMMING (3 Credits)**

This course introduces you to client side web programming. Using current technologies, you will learn how to make existing web pages interactive. Techniques to be taught include event handling, modifying the content of the web page, using web services to add new functionality to the web site and adding visual effects/animations to a web site. Prerequisite(s): DWD 145, DWD 150

#### DWD 265 WEB III (3 Credits)

Web III covers advanced web techniques and how dynamic content integrates with static pages. You will learn CSS, Server Side Includes, DreamWeaver behaviors and JavaScript. Prerequisite(s): CGD 263

## DWD 266 MULTI-MEDIA III (3 Credits)

Multi-Media III concentrates on Edge software and JavaScript. This course focuses on scripting of Flash games. Other topics include how Flash integrates with various web technologies. Prerequisite(s): CGD256

### DWD 268 PORTFOLIO (3 Credits) - Not Designed to Transfer

This class is designed to allow you the opportunity to compile a cross-section of your work, with the assistance of a faculty advisor, for presentation to potential employers. You will receive instruction in interview techniques as well as job hunting strategies and career advice. You will also be allowed to use the lab facilities to develop any partially completed work or ideas from past classes. Prerequisite(s): Must be taken within final quarter or Department Chair approval.

# DWD 269 EXTERNSHIP (3 Credits) - Not Designed to Transfer

A combination work/study program with you receiving exposure to the daily operations and procedures of a graphic design firm or in a related area. You are required to work a minimum of 90 hours of practical, on-the-job training. You will work with professional graphic designers to attain training and exposure in the field. Prerequisite(s): Must be taken within final quarter or Department Chair approval.

# DWD 271 DYNAMIC WEB LANGUAGE I (3 Credits) - Not Designed to Transfer

This course provides a complete introduction to database concepts and the relational database model. Topics include QBE, SQL, normalization, design methodology, DBMS functions, database administration and other database management approaches, such as client/server databases, object-oriented databases and data warehouses.

Prerequisite(s): DWD 145, DWD 150

### DWD 272 DYNAMIC WEB LANGUAGE II (3 Credits) - Not Designed to Transfer

You will learn PHP which allows you to mix conventional web pages with programmable dynamic content. This course steps through connecting to a database to manipulating data for a wide range of functionalities. Prerequisite(s): DWD 145, DWD 150, DWD 271

## DWD 273 DYNAMIC WEB LANGUAGE III (3 Credits) - Not Designed to Transfer

This course introduces you to creating active server pages. Creating and maintaining interactive and dynamic web applications will be covered, in addition to object-oriented programming techniques and advanced form server controls. Prerequisite(s): DWD 145, DWD 150, DWD 271

### DWD 275 WEB IV (3 Credits)

Web IV builds on the previous web design courses to cover more advanced web techniques and integration of dynamic content with static pages. You will learn advanced CSS, how to integrate information stored in a database into a web site, and how to incorporate scripts into a web site. Prerequisite(s): DWD 265

# DWD 276 MOBILE APPLICATION DEVELOPMENT (3 Credits) - Not Designed to Transfer

In this course, you will utilize modern mobile application development principles to create applications targeted for cell phones. The course will cover the limitations of mobile devices and privacy/ethical considerations of mobile application development. Prerequisite(s): DWD 145, DWD 150

## DWD 277 DYNAMIC WEB LANGUAGE IV (3 Credits) - Not Designed to Transfer

This course continues to explore PHP as a web development language. The topics covered include advanced database interaction, object-oriented programming and an introduction to various design patterns as they relate to PHP. Prerequisite(s): DWD 150, DWD 272

## DWD 278 DYNAMIC WEB LANGUAGE V (3 Credits) - Not Designed to Transfer

This course continues to explore ASP.NET as a web development language. The topics covered include advanced database interaction, object-oriented programming and an introduction to various design patterns as they relate to ASP.NET. Prerequisite(s): DWD 150, DWD 271 and DWD 273

### ELC 114 DIRECT CURRENT THEORY AND APPLICATIONS (7 Credits)

This is an introductory course in electricity. Topics include resistance, voltage, voltage divider circuits, current, bridges, Ohm's Law, series and parallel circuits, meter circuits and power. Prerequisite(s): None

# ELC 134 ALTERNATING CURRENT THEORY & APPLICATIONS (7 Credits)

This course presents the fundamental principles of alternating current. Topics include impedance, reactance, power factor phase, relationships, and metering techniques. Prerequisite(s): ELC 114

# **ELC 152 SEMICONDUCTORS I (3 Credits)**

Introduction to semiconductor properties and devices. The utilization of diodes and transistors in rectifying, switching, amplifying and other solid state circuits are discussed in a lab setting. Prerequisite(s): MTH 243 and ELC 134

#### ELC 163 DIGITAL ELECTRONICS I (3 Credits)

This is an introduction to digital integrated circuits. Topics will include numbering systems, logic gates, logic probes, Multiplexers, encoders, and decoders are covered in a lab setting. Prerequisite(s): MTH 243 and ELC 134

## ELC 212 SEMICONDUCTORS II (3 Credits)

A comprehensive study of semiconductor devices used in power control, power supply, sensing and control circuits with hands-on labs that reinforce the lecture studies. The lab exercises will further educate the student on the use of and the importance of the oscilloscope, digital meters, and regulated power supplies. Green content includes the manufacture of lead-free products. Prerequisite(s): ELC 152

# ELC 219 DIGITAL ELECTRONICS II (3 Credits)

This is a continuation of ELC 163. This course deals with more advanced digital electronic topics such as serial/parallel/universal shift registers and counters, flip-flops, digital addition, subtraction, multiplication and division, and a look into random-access, read-only, programmable, and magnetic core memories. Integration of digital systems with analog systems is also introduced. Green content includes study of solid state devices that use energy as efficiently as our current technology allows. Prerequisite(s): ELC 163

# ELC 226 ELECTRO-MECHANICAL DEVICES I (4 Credits)

This course introduces basic electro-mechanical devices found in typical industrial systems. Industrial electrical symbols, ladder diagrams, contactors, motor starters, solenoids, transformers, relays and motors: DC, single-phase and three-phase will be covered. Prerequisite(s): ELC 134 or HVA 205

### ELC 240 OPTO-ELECTRONICS (4 Credits)

This course is designed to give students a basic foundation in the use of optoelectronic devices and their numerous applications. Students will develop an understanding of how these devices can be used to replace mechanical and electrical switches in various kinds of equipment. Students will understand how communications can take place by means of light, and how fiber optic cable can replace

metallic cables. Green component includes a solar panel project. Prerequisite(s) or taken concurrently: and/or concurrent with ELC 212 and ELC 219

# ELC 253 ELECTRO-MECHANICAL DEVICES II (4 Credits)

This course includes a review of the basic electrical and solid state principles. Reversing motor circuits, frequency drives, solid-state relays/starters, sensing devises, reduce voltage starters, accelerating and decelerating methods along with preventive maintenance will be covered. Prerequisite(s): ELC 226, ELC 212, ELC 219

### HST 124 ART HISTORY I (4 Credits)

This course is a study of significant works of art throughout history up to the Modern era, intended to heighten perception and enjoyment of the visual arts. You will become acquainted with an historic panorama of the visual arts, the trends and the creative spirit of the masters. Prerequisite(s): None

### HST 225 ART HISTORY II (4 Credits)

This course is a continuation of Art History I with a focus on Modern art, history and culture. You gain an understanding of Modern movements in the visual arts and their impact on current design trends. This course will also explore the impact of changing worldviews and a movement toward a global society on the issues and ideas that drive Modern art. Prerequisite(s): None

#### **HVA 100 BLUEPRINT READING (3 Credits)**

This course provides an introduction to reading and interpreting blueprint drawings used in the trades and crafts, including basic techniques for reading and interpreting construction plans and specifications, both residential and commercial. The blueprint lab experiences focus on location of HVAC-R components in a building as well as, dimensions, shape, fabrication and assembly of those components. Students will apply basic mathematics to the solution of print and performance problems. OSHA safety training and assessment is incorporated into this class. Prerequisite(s): and/or concurrently CSC 123

### HVA 101 INTRODUCTION TO HVAC-R SYSTEMS- (4 Credits)

This course covers basic concepts and theories of heating, ventilation, air conditioning and refrigeration systems and the physical and chemical laws governing these systems. Students will learn basic instrumentation utilized to measure temperature, humidity, airflow, and pressure of refrigerants. Safety training and EPA certification preparation for HVAC-R technicians complete the course. Prerequisite(s): and/or concurrent HVA 100

#### **HVA 115 PRINCIPLES OF REFRIGERATION (4 Credits)**

This course covers the proper use of tools, test equipment, and materials. Environmental issues such as the proper handling of refrigerants make up a significant component of the course. Students will also work on the design and application of refrigeration systems, including the refrigeration cycle, cycle analysis, and equipment sizing. Students will determine refrigerant flow through equipment, know applications of equipment to the refrigeration cycle, study heat transfer fundamentals, and prepare for and take the EPA refrigerant handler's certification exam. Prerequisite(s): HVA 101

## **HVA 125 HEATING SYSTEMS (3 Credits)**

This course includes the study of combustion in conventional and high-efficiency heating units. Students will experience a comprehensive overview of heating systems, including electric, gas, oil, hot water, and steam. Students will learn to troubleshoot these various systems. Prerequisite(s): HVA 115

## **HVA 135 AIR CONDITIONING (3 Credits)**

This course covers the applications of cooling principles with residential and commercial equipment. Students apply the physical and chemical laws governing the principles of HVAC. Topics include refrigeration applied to air cooling, comfort, air distribution and balance, installation, controls, operating conditions and troubleshooting. Prerequisite(s): HVA 115, HVA 205

# **HVA 205 HVAC-R ELECTRICAL APPLICATIONS (3 Credits)**

In this course, students will learn the fundamentals of Alternating Current electricity and how it is used in HVAC-R equipment. Students will become familiar with test instruments used in measuring electrical current and troubleshooting HVAC-R equipment. They will learn to apply safe practices while installing and troubleshooting HVAC-R circuits. Prerequisite(s): and/or concurrent with HVA 101

#### **HVA 215 COMMERCIAL REFRIGERATION (3 Credits)**

In this course, students will define and utilize various metering devices. They will learn the different principles involved in commercial refrigeration and apply those principles to equipment such as evaporators, condensers, and compressors. The course will focus on troubleshooting motors used in commercial systems and teach students when and how to evacuate and charge a system. Prerequisite(s): HVA 115

#### **HVA 220 BUILDING AUTOMATION I (4 Credits)**

This course focuses on how computers and microprocessor controls are used to manage HVAC systems in both residential and commercial buildings. Prerequisite(s): HVA 115

#### **HVA 225 COMMERCIAL HVAC SYSTEMS (3 Credits)**

In this course, students will study large HVAC systems used in commercial, institutional and industrial applications. Students will apply theory and content covered in HVA 125 and HVA 135 to commercial equipment such as boilers, chillers, steam traps, and more. Energy efficiency and safety will be class themes. Prerequisite(s): and/or concurrent HVA 125, HVA 135

### HVA 255 AIR & WATER DISTRIBUTION SYSTEMS (4 Credits)

This course covers the theory and practice of fluid and air flow in HVAC distribution systems, including water system design and analysis, duct design and analysis, fan and pump selection, valve and damper selection, and evaluation of overall air and water system performance. Students will develop their skills with hand calculations as well as the use of computer-based design and analysis software. Prerequisite(s): HVA 125, HVA 135

# HVA 260 HVAC-R LOADS & HUMIDITY (4 Credits)

This course includes the theory and practice of analyzing HVAC systems. Students will learn how to perform detailed heating and cooling load calculations for residential and commercial facilities. Students will also learn more about the use of psychrometric graphs and how to calculate loads both by hand and with computer-based tools. Prerequisite(s): HVA 125, HVA 135

### HVA 265 TROUBLESHOOTING/SYSTEMS REPAIR (3 Credits)

In this course, students will synthesize material learned in all HVAC-R and related classes to determine problems with relays, switches, electrical controls, digital controls, motors, and all other components of HVAC-R systems. Learning from areas such as electromechanical devices and from specific HVAC-R courses will provide troubleshooting scenarios for students to practice identifying and repairing system problems as well as to design and implement preventive maintenance that corrects potential problems that curtail optimal system functions. Prerequisite(s): HVA 225

#### **HVA 272 BUILDING APPLICATIONS II (4 Credits)**

This course covers the factors that affect heating, cooling and refrigeration systems. Students will learn how load information is used to select heating and cooling equipment. They will cover installation procedures and learn the appropriate procedures for the start-up of a variety of automated systems after installation or following an extended period of shut-down. Students will understand in more depth how microprocessors control and integrate such automated systems. Prerequisite(s): HVA 215, HVA 220, HVA 225

## **HVA 275 HVAC-R APPLICATIONS (3 Credits)**

This course provides laboratory experiences for students that allow them to apply the learning from other courses. Students will install, maintain, troubleshoot and plan repair of HVAC-R equipment. Prerequisite(s): HVA 225

#### HVA 280 ENERGY AUDIT PROCEDURES & PRACTICES (3 Credits)

This course includes a survey of utility rate structures, billing energy consumption, and energy profiling of commercial, institutional and industrial buildings and projects. Learners will recommend improvements in HVAC systems, control systems, and building structures. Students will use established formats for putting findings in writing. They will also practice presenting findings orally. Prerequisite(s): HVA 225 or industry experience

#### HVA 290 EXTERNSHIP (3 Credits)

The externship requires the student to work a minimum of 90 hours in an HVAC-R position under the supervision of a journeyman HVAC-R technician. Externships can be paid or non-paid. The externship allows students to practice skills they have learned in the HVAC-R program with assistance and guidance. Hours worked count toward state licensure requirements. Prerequisite(s): Must be taken within final quarter or department chair approval

# HVA 295 CAPSTONE-JOURNEYMAN PREP (4 Credits)

In this course, students will demonstrate their knowledge of HVAC-R principles and systems. The students will learn the skills needed to navigate through mechanical code books and prepare for the Kentucky State HVAC-R Journeyman Exam. They will learn how to apply basic thermodynamic principles to green technologies. Students will exercise their soft skills in and out of the classroom. Prerequisite(s): taken in the student's final quarter.

# **IDB 101 FUNDAMENTALS OF INTERIOR DESIGN (4 Credits)**

Initial exploration of interior design contributions to contemporary society and interaction of human beings within built space. Emphasis is placed on knowledge and application of the design principles and elements allowing identification and exploration of the creative problem-solving process. Prerequisite(s): None

# IDB 111 ARCHITECTURAL DRAFTING (3 Credits)

A foundation studio course providing basic manual skills of architectural drawing and interpretation of construction documents. Focus is placed on industry specific graphic communication across a range of appropriate media. Prerequisite(s): None

#### IDB 121 VISUAL COMMUNICATIONS I (3 Credits)

A foundation studio course exploring sketching, perspective drawing and rendering to acquire understanding of 3-dimentional space. Presentation concepts through a variety of media are introduced. Prerequisite(s): None

#### IDB 131 DESIGN HISTORY AND THEORY I (4 Credits)

A chronological study of the architecture, furniture styles, design theory, and artistic contributions from antiquity through the Industrial Revolution. Comprehension of design characteristics and motifs, the socio-economic, political, and environmental influences affecting the design of the built environment as they relate to each period or style, providing a base for critical analysis. Prerequisite(s): None

# IDB 141 HUMAN FACTORS (4 Credits)

A study of how proxemics, ergonomics, anthropometrics, universal design, and needs of special populations establish the criteria for the design of safe and productive interior space. Environmental conditions such as lighting, air quality, and acoustics are addressed. Appropriate design decisions influenced by human diversity, culture, behavioral patterns and gender are applied through course exercises. Prerequisite(s): IDB 111

### IDB 151 MATERIALS AND PRODUCTS (4 Credits)

A study of a broad range of finish materials and textiles. Emphasis is placed on health and safety factors. Benefits to the client and built environment are analyzed in regard to performance attributes, code compliance, fabrication processes, installation, and maintenance criteria. Prerequisite(s): IDB 101

# IDB 161 COLOR THEORY AND APPLICATION (3 Credits)

This course will emphasize the theory and application of color in interior space along with exploration of the psychological, physiological, and functional elements of color. Emphasis will be placed on how color, light, and texture interact to produce legibility within the built environment. Prerequisite(s): IDB 101, IDB 121

#### IDB 171 SPACE AND FORM (3 Credits)

This course is intended to initiate awareness of the impact of two-dimensional design concepts and their translation to three-dimensional execution within the built environment. Conceptual sketching evolving into model building will be explored with emphasis on developing understanding the concepts of spatial organization. Prerequisite(s): IDB 101, IDB 121

#### IDB 181 DESIGN PROGRAMMING (3 Credits)

This course will incorporate the concepts and methods of evidence-based design for an understanding of how designers shape interior environments through identifying and defining relevant aspects of a design problem, establishing goals, objectives, and performance criteria, interpreting information, associating initial ideations with requirements, and exploring spatial relationships and functionality. Emphasis will be placed on generating multiple design concepts, diagramming, initial space planning through sketching, and written communication methods. Prerequisite(s): IDB 101

#### IDB 200 DESIGN HISTORY AND THEORY II (4 Credits)

A chronological study of the architecture, furniture styles, design theory, and artistic contributions from the Industrial Revolution to the 21st century. Comprehension of design characteristics and motifs, the socio-economic, political, and environmental influences affecting the design of the built environment as they relate to each period or style, provide the student with a knowledge base for critical analysis and awareness of the global impact design has and has had throughout history. Prerequisite(s): IDB 131

## IDB 201 STUDIO I (3 Credits)

This introductory studio explores the factors involved in information gathering, the programming process and the concepts of spatial organization through creative problem solving. Students will learn how to manipulate the Principles and Elements of Design in developing concepts, ideation, diagramming, and design analysis in both two-and-three-dimensional representations to create interior spaces which adhere to programmatic requirements. Both written and verbal communication techniques as well as presentation development will be stressed. Prerequisite(s): IDB 101, IDB 111, IDB 121, DRF 135

#### IDB 211 VISUAL COMMUNICATIONS II (3 Credits)

This course will introduce the student to a variety of technologies to execute design solutions and graphic presentation imagery related to the visual communication of interior concepts. Prerequisite(s): IDB 101, IDB 121, IDB 161

# IDB 221 DIGITAL MODELING (3 Credits)

This course focuses on the demonstration of three-dimensional space using various software programs that cover three-dimensional modeling, rendering, and presentation techniques in the communication of interior space. Students will explore ways to manipulate and integrate text and images into a presentation that meets programmatic needs and requirements. Focus will be placed on ability to convey comprehension of the final solution using appropriate visual media. Prerequisite(s): IDB 101, IDB 111

### IDB 231 RESIDENTIAL DESIGN STUDIO (3 Credits)

Studio course incorporating the design process into a residential project solution considering applications to people of various age groups, familial structures, economic levels, and/or physical and emotional conditions. Students are required to develop a comprehensive design solution based on research of current literature concerning product information and specification of FF&E based on appropriate programmatic criteria. Prerequisite(s): IDB 101, IDB 111, IDB 121

#### IDB 241 LIGHTING DESIGN (4 Credits)

A study of the specification of light sources, light measurement and lighting systems exploring the functional and aesthetic impact of illumination as a design element in interior environments through application. Reflected ceiling plans, wiring plans, and lighting documentation, and energy efficiency will be studied, along with issues relating to public health, safety, and welfare. Prerequisite(s): IDB 201

# IDB 251 INTERIOR SYSTEMS AND CONSTRUCTION (4 Credits)

A study of architectural building systems and construction methods including wall systems, mechanical and electrical systems, acoustics, and building materials and their impact on the design of interior spaces. Issues enhancing public health, safety, and welfare will be emphasized as these systems are integrated into the built environment. Indoor air quality, structural systems, plumbing, energy efficiency, security, building controls, thermal systems, data/voice, and telecommunication will be studied. Prerequisite: IDB 201

### IDB 261 CODES, STANDARDS AND COMPLIANCE (4 Credits)

A study of codes as they relate to the built environment is provided as a foundation in understanding of zoning restrictions and the application of federal, state, and local building codes. This course addresses issues such as egress, materials, planning, accessibility, and other factors related to public health, safety, and welfare. Sustainability guidelines, industry specific life safety codes, egress plans, detection and suppression, standards and accessibility guidelines as a part of regulatory process included in an interdisciplinary design process will also be studied. Prerequisite(s): IDB 201, IDB 251

#### IDB 271 CONTRACT DOCUMENTATION AND DETAILING (3 Credits)

A survey of interior construction and building systems with emphasis on production of integrated contract documents including drawings, schedules and specifications appropriate to project size and scope. Communication, management and delivery, vertical circulation systems, reading and preparation of construction documents as they relate to plans, elevations, details, specifications, furniture layouts, custom cabinetry for non-structural partition layouts. Students will analyze the influence of other disciplines on the built environment. Prerequisite(s): IDB 201, IDB 261

#### IDB 281 KITCHEN AND BATH STUDIO I (3 Credits)

This is a specialized study involving the understanding and application of the principles of design and renovation of the kitchen and bath. Efficient and functional layout in accordance with NKBA (National Kitchen and Bath Association) standards, plumbing, lighting, storage, specifications, product knowledge and cabinet construction are emphasized. Practice of the design process as it relates to finding design solutions in kitchens and baths are covered in class projects. Prerequisite(s): IDB 201

#### IDB 291 STUDIO II (3 Credits)

This course involves the application of the design process in the development of working environments. It emphasizes barrier free and universal design, adaptation of a design to varying programmatic requirements. Students will investigate complex issues and offer creative design solutions in two and-three-dimensional representations. Student work will include allocation and utilization of space, building and fire codes, lighting, contract furnishings and specification writing. Prerequisite(s): IDB 201

# IDB 301 SPECIAL TOPICS (3 Credits)

This course covers selected topics in areas of contemporary issues in architecture and interior design, allowing specialized or in-depth study of a subject supplementing the interior design curriculum. Student interest and instructor expertise help determine the topics. The introduction of special projects emphasizing emerging technology or a newly emerging area of the interior design field will allow students, either singly or in teams, to explore certain topics in greater depth. Prerequisite(s): IDB 201

## IDB 311 KITCHEN AND BATH STUDIO II (3 Credits)

This is an upper level studio/lecture elective course focusing on the design of kitchens and baths and the completion of a comprehensive set of drawings and specifications. An in depth understanding of NKBA (National Kitchen and Bath Association) standards will be included as preparation for NKBA certification. Prerequisite(s): IDB 281, IDB 291

# IDB 321 STUDIO III (3 Credits)

An exploration of the relationship between the built environment and people, with special emphasis on understanding how varying social and cultural norms are relevant to design decision-making. Concepts and principals of this interaction as it pertains to building methods, materials systems and occupants, properties of performance criteria, and environmental attributes with emphasis placed on student application of how design decisions made today affect future generations. Studio work is developed through design competitions or service learning studio projects. Prerequisite(s): IDB 291

# IDB 331 ENVIRONMENTALLY RESPONSIBLE DESIGN (4 Credits)

This course focuses on the role of the interior designer in the future of the built environment considering responsible urban development and incorporates the green design movement, energy efficiency, life-cycle cost analysis, population density, and governmental entities which promote sustainable design practice. Prerequisite(s): IDB 291

### IDB 341 STUDIO IV (3 Credits)

This intermediate studio builds upon work completed in pervious studios. Emphasis will be placed on the application of the design process as related to creating environments for a specific population segment. Students will have the opportunity to investigate current

interior design issues and then create a solution for a project which is large scale and comprehensive. Students will explore alternative methods of verbal and visual presentation and will create appropriate project documentation. Prerequisite(s): IDB 321

# IDB 351 BUSINESS PRACTICES AND ETHICAL DESIGN (4 Credits)

This course covers the study of the practice of interior design as a profession and business with an emphasis on organizational structures, elements of business practice, project management, project communication and project delivery methods. Legal and ethical issues, including the use of intellectual property will be addressed. Prerequisite(s): IDB 201

# IDB 361 FURNITURE DESIGN STUDIO (3 Credits)

An upper level studio applying materials and processes used in the building of custom millwork and furniture. An appreciation of the Principles and Elements of Design and craftsmanship techniques are explored. Design ideation and detailed construction drawings along with physical and digital model production will reinforce student understanding. Non-traditional material research and application will be required. Prerequisite(s): IDB 321

# IDB 371 GLOBAL DESIGN STUDIO (3 Credits)

An advanced studio course applying the principles of design practice within the global environment. Culture and responsibility of humankind will be explored. Students considering how variables such as religion, ethnicity, economical means, group norms and dynamics influence design outcomes. Multicultural research and study will be required for project completion. Prerequisite(s): None

#### IDB 401 STUDIO V (3 Credits)

An advanced studio course which integrates all previous studio courses and extends knowledge of materials, spatial organization, design methods, construction documentation, environmental factors, and specification in the development of large scale projects. Prerequisite(s): IDB 341

### IDB 421 GRADUATE STUDIO I (3 Credits)

The first of two studios designed as a capstone project. Students will determine an individual project of interest, focusing on contract, healthcare, hospitality or retail design and prepare a comprehensive written and visual programming package in preparation for the second studio. The student will present to a panel of the faculty project intent and scope for determination if sufficient complexity of research and information synthesis for project development has been completed. Prerequisite(s): IDB 341

# IDB 431 PORTFOLIO AND CRITIQUE (4 Credits)

In this course, students must compile a working, professional portfolio in an adaptable format based on industry needs and specialization. Faculty will offer guidance in selecting and preparing of work in a variety of formats and in further developing previous course work. At the end of the course students must have a resume, working web site, marketing materials, and a digital portfolio. Students must participate in required professional critiques and submit revisions as requested by the department. Prerequisite(s): IDB 401

#### IDB 441 CERTIFICATION PREPARATION (3 Credits)

This course develops student awareness of the importance of sitting for the National Council for the Interior Design Qualification exam, the CKD (Certified Kitchen Designer exam), the CBD (Certified Bath Designer exam), the LEED (Leadership in Energy and Environmental Design exam). Various certification tracks will be discussed. Legal recognition, professional organizations, life-long learning, and contemporary issues affecting interior design. Students will have the opportunity to take practice examinations and will explore additional areas of interest such as lighting specialization, aging in place, and evidence-based design certification. Prerequisite(s): IDB 401

## IDB 451 GRADUATE STUDIO II (3 Credits)

The second of a two-studio capstone project designed to be a comprehensive studio integrating research and analysis of existing or proposed structure prepared in IDB421. Information gained throughout the entire curriculum will be employed to prepare a complete set of contract documents that fully incorporates the programming scope of the project. Final project presentation will be presented to a panel of professionals for critique and creative analysis. Prerequisite(s): IDB 421

# IDB 461 INTERNSHIP/CO-OP (4 Credits)

This course provides students the opportunity to work in a professional business setting to gain professional experience in the field of interior design. The student is responsible for searching an appropriate internship location and the site of the internship must be approved by the department chair. Students are required to work a minimum of 120 hours of practical, on-the-job training. (For students wishing to obtain KBA certification, the minimum number of externship hours is 160, per NKBA standards.) Employers with industry-specific credentials are desired. Course work involves journaling, weekly assignments, and performance appraisals from employers. Prerequisite(s): Department Chair Approval

# MEC 140 INTRODUCTION TO MECHANICAL DRAFTING (3 Credits)

This course introduces students to the terminology and language of the mechanical drafting field. Students will learn practices and techniques for reading drawings and creating estimates. Prerequisite(s): DRF 105

### MEC 160 MECHANICAL DESIGN I (3 Credits)

This course is designed to refine the student's skills with Inventor software. The students will learn new advanced skills enabling them

to create complete 3D models and working drawings with dimensioning from those models. They will also be introduced to the design content center and other packages such as piping and hardware. Prerequisite(s): DRF 135, MEC 140

### MEC 165 MECHANICAL DESIGN II (3 Credits)

This course is designed to introduce drafting students to the technology and standard drafting practices as utilized by the mechanical design industry. The students will use both AutoCADD and Inventor 3D modeling software. Specific topics covered will include: screw threads, fasteners, wiring diagrams, schematics, isometrics and different control systems. The class is project orientated and assignments given will follow that process. Prerequisite(s): DRF 135, MEC 140

### MEC 170 ADVANCED MECHANICAL DRAFTING (3 Credits)

In this course the student will learn how to create detail drawings and working drawings that are standard use in the mechanical drafting field Prerequisite(s): DRF 165, MEC 160, MEC 165

### MTH 113 MATHEMATICAL CONCEPTS (4 Credits)

This class reviews the basic operations of addition, subtraction, multiplication and division of whole numbers, fractions and decimals. Skills in the application of fractions, decimals, percentages and units of measure are emphasized. Prerequisite(s): None

### MTH 123 ADVANCED MATHEMATICS (4 Credits)

This class emphasizes problem-solving skills as they relate to ratios and proportions, formula re-arranging and evaluation, and an introduction to geometry and trigonometry. Prerequisite(s): MTH 113

### MTH 243 APPLIED ALGEBRA (4 Credits)

This course is designed to serve as a beginning course for students with no prior algebra training and as a refresher course for students with an algebra background. The course begins with a review of basic algebra concepts, including teaching you to use the order of operations and the laws of exponents. Other basic concepts taught include scientific notation, roots and radicals, and operations on algebraic expressions. The course teaches you the fundamentals of solving linear equations, literal equations and verbal application problems. Prerequisite(s): MTH 123.

### MTH 253 ANALYTICAL GEOMETRY & TRIGONOMETRY (4 Credits)

This course is designed to be a beginning course in trigonometry and geometry, and a refresher course for students with prior training in trigonometry and geometry. The course teaches the fundamental concepts of right angle trigonometry. You will learn to apply the basic trigonometric functions to both drill and practical application problems. You will be taught how to apply vectors to the solution of practical application problems, as well as the use of the law of sines and the law of cosines for solving oblique triangles. Radian measure, properties of circles, and properties of plane and solid geometric figures are explored and applied. Prerequisite(s): MTH 243

#### MTH 263 ADVANCED ALGEBRA (4 Credits)

Emphasis is placed on skills in graphing linear equations and inequalities; determining the length, midpoint, and slope of linear equations; factoring; simplifying algebraic fractions; use of factoring and the quadratic formula to determine the solutions of quadratic equations; solving systems of equations containing two and three unknowns using algebraic elimination and substitution; and an introduction to logarithms. Prerequisite(s): MTH 243

#### MTH 343 TECHNICAL CALCULUS (4 Credits)

This course is designed to cover calculus skills needed in engineering technology programs. You will receive instruction in both differential and integral calculus. Prerequisite(s): MTH 153, MTH 163

#### NET 130 COMPUTER ESSENTIALS & TROUBLESHOOTING (12 Credits)

This course is a user-level, entry-level introductory course to computer software and hardware. Students in this course will learn the theory and basic operations of computers. Students will be introduced to MS-DOS and the Windows operating system software. Loading and maintaining computer applications is also covered. Hardware will be covered, including keyboards, monitors, various drives, diskettes, CPUs, RAM, ROM/CMOS, busses, video cards, modems, printers, cables, and connectors. The students will gain practical experience in hardware and software. Students are exposed to the materials covered in the A+ certification examination. Prerequisite(s): None

# NET 147 OPERATING SYSTEMS (4 Credits)

This is a course in computer science focusing on the microcomputer's operating system. This course looks at what an operating system is and why everyone using Windows or compatible system needs to have a comprehensive understanding of what the operating system does and the correct way to use it. This course will expose you to problem solving and give a comprehensive understanding of the operating system commands and how to use them. Prerequisite(s): None

# NET 152 INTRODUCTION TO COMPUTER NETWORKING (12 Credits)

Networking fundamentals are introduced in this course as students prepare for the Network+ certification. Topics such as transmission media, hardware, topologies, and various other components are studied. Upon completion of this course, students will be able to implement and manage a computer network in a variety of platforms from different vendors. In addition, a thorough study of the Open Systems Interconnect model will be addressed, as well as available protocols, topologies, standards, and troubleshooting techniques as they pertain to modern computer networking technology. Prerequisite(s): NET 130

#### NET 181 NOVELL NETWORK ADMINISTRATION (12 Credits)

Upon completion of this course the student will be able to design, configure, manage, and administer a complex network. The student will be able to install and upgrade a network operating system environment, execute Java-based utilities, perform network backups, and configure a network for remote access. Students will create an e-Directory design strategy using implementation schedules and best practices. Students will use these strategies to complete a network implementation in a hands-on environment. Prerequisite(s): NET 152

### NET 231 MICROSOFT NETWORKING I (12 Credits)

This course focuses on the installation, configuration, and administration of a client and server operating system. Students will learn the tasks needed to successfully support such an environment. Topics covered will teach the students how to manage user and group access, work with disk management utilities, perform unattended installs, configure network services, and provide fault tolerance for the network. The student will also derive the necessary skills to administer the underlying network infrastructure, such as protocol selection and load balancing. Prerequisite(s): NET 152

# NET 241 MICROSOFT NETWORKING II (12 Credits)

In the second installment of the three-part Microsoft series, components of the security database infrastructure are studied to better understand the importance of effective and efficient placement of users in conjunction with the network resources. Also covered will be principles of effective network design, to include supporting electronic mail (e-mail) which will encompass the installation, configuration, traffic analysis, troubleshooting, and advanced configuration of networking communication media and methods. Prerequisite(s): NET 231

#### NET 251 MICROSOFT NETWORKING III (12 Credits)

This course is for support professionals who will be responsible for installing, configuring, managing, and supporting a network infrastructure that uses the Microsoft Network Operating System (NOS). Included in this course are system security requirements (including various aspects of design and implementation) name resolution, identification and setup of the various types, functionality, and implementation of both network services and servers needed to support a network infrastructure, fundamentals of IP addressing and distribution, infrastructure server placement and network load planning and routing are among the subjects covered in this course. Prerequisite(s): NET 241

## NET 261 BUILDING A NETWORK INFRASTRUCTURE (12 Credits)

This course focuses on Cisco technologies for WAN environments. Students will learn fundamentals of tr----ansport protocol selection and implementation, sub-netting and super netting as they pertain to enterprise-level TCP/IP designs, access lists, and routing protocols. Prerequisite(s): NET 181 or NET 231

# NET 400 IT PROJECT MANAGEMENT (4 Credits)

In today's work force, an IT professional is challenged with providing the business community with computer-related solutions for productivity and security. This course is designed to provide a structured approach to the implementation of IT designs and to guide the project management to mitigate the effect of these systems on the production environment. It will present the student with critical strategies for executing a project on time and within budget. Prerequisite(s): None

### NET 450 CURRENT TRENDS IN NETWORK SECURITY (4 Credits)

This course looks at current technology trends and how they affect the security of a corporation, good and bad, and how risks may be mitigated. Because productivity demands to be advanced, more technology solutions to provide ease of use and connectivity are constantly being introduced as fast as the market will allow. Typically, this need to speed product to the impatient consumer bypasses a thorough security assessment, and only after the technologies have been indelibly integrated into the home and office do security concerns emerge where they can be addressed. Prerequisite(s): CNS 320

# PHY 162 PHYSICS I (4 Credits)

This course introduces mechanics through the examination of force-motion relationships. The concepts of velocity, energy, power and torque are emphasized. Prerequisite(s): MTH 253

### PHY 212 PHYSICS II (4 Credits)

Structure and properties of matter are examined with emphasis on the strength of materials, fluid mechanics and gas laws. An introduction is given to thermal physics with temperature and effects of heat, change of state, heat transfer, and the laws of thermodynamics. The fundamentals of heating, ventilation and air-conditioning are introduced. Prerequisite(s): PHY 162

### PHY 232 PHYSICS III (4 Credits)

This course focuses on electromagnetic phenomena. Topics include electrostatics, potential, current, resistance, capacitance, inductance, and magnetism. The characteristics of electric motors and transformers are studied. Prerequisite(s): PHY 212