

940 second street, portsmouth, ohio 45662 614/354-3205

# 1985-1986



A State of Ohio Assisted Two-Year Community College Offering Both Academic and Technical Programs Through an

Associate of Arts Degree
Associate of Science Degree
Associate of Applied Business Degree
Associate of Applied Science Degree
Associate of Individualized Studies Degree
Selected One Year Programs

# SHAWNEE STATE COMMUNITY COLLEGE

940 Second Street Portsmouth, Ohio 45662 Phone 614-354-3205

"In compliance with section 504 of the rehabilitation act of 1973, Shawnee State Community College does not discriminate against handicapped persons, in employment or in admission or access to any of its programs or activities." This institution does not discriminate with regard to race, sex, religion, or national origin. (Richard R. Howard, Coordinator of Services for the Handicapped)

# MAJORS OFFERED AT SHAWNEE STATE COMMUNITY COLLEGE

## **ASSOCIATE OF APPLIED BUSINESS DEGREE**

Accounting
Business Management
Retail Management
Banking/Finance
Business Management
Real Estate
Data Processing
Secretarial
General
Executive
Medical

Legal

## ASSOCIATE OF APPLIED SCIENCE DEGREE

Automotive Technology
Civil Engineering
Diesel Technology
Electro-Mechanical Engineering
Instrumentation Technology
Major in Robotic Technology
Plastics/Chemical Engineering
Welding Technology

Dental Hygiene Associate Degree Nursing Medical Laboratory Occupational Therapy Assistant Radiologic Technology Respiratory Therapy Technology

# CERTIFICATE OF ALLIED HEALTH

(one year programs)

Practical Nursing
Respiratory Therapy Technician
Emergency Medical Technician — Paramedic

# ASSOCIATE OF ARTS DEGREE/ ASSOCIATE OF SCIENCE DEGREE — University

Parallel or Transfer Programs

## **Teacher Education/Social Sciences**

Elementary Education
Special Education
Secondary Education
Biology — General Science
Chemistry — General Science
Communications — English Emphasis
Communications — Speech Emphasis
English — Comprehensive
General Speech — Speech Emphasis
General Speech — Theater Emphasis
Health

Physical Education
Physics — General Science
Social Studies

**Business Administration** 

Government History Pre-Law Psychology Social Work Sociology

#### **Humanities/Fine Arts**

Art
Communications (General)
Comparative Arts
English
Journalism
Theater

#### Mathematics/Sciences

Botany
Chemistry
Dentistry
Engineering
Forestry
Medical Technology
Medicine
Microbiology or Public Health and Sanitation
Optometry
Pharmacy
Physical Therapy
Recreation Studies
Veterinary
Zoology

# ASSOCIATE OF INDIVIDUALIZED STUDIES DEGREE

A degree designed for the purpose of meeting the specialized career needs of the individual.

# **TABLE OF CONTENTS**

Academic Information	8	Inter-Institutional Advanced Study	
Academic Requirements for Students Enrolled in		(Ohio University Courses)	
Allied Health Programs	40	Mathematics/Science: Pre-Botany Major	24
Approditations	4	Pre-Chemistry Major	24
Administrative Officers of the College	91	Pre-Dentistry Major	24
Admissions Procedures	1	Pre-Engineering Major	24
Application for Admission	01	Pre-Forestry Major	24
Board of Trustees	91	Pre-Medical Technology Major	25
Calendar for 1984-85 Academic Year	90	Pre-Medicine Maior	20
Calendar for 1985-86 Academic Year	90	Pre-Microbiology or Public Health & Sanitation Major	25
Concentration Areas:		Pre-Ontometry Major	25
Allied Health Technologies		Pre-Pharmacy Major	25
(Associate of Applied Science Degree and Certificate Programs):	37	Pre-Physical Therapy Major	25
Admissions Procedures	39	Pre-Veterinary Major	26
Associate Degree Nursing	46	Pre-Zoology Major	20
Dental Hygiene	40	Recreation Studies	26
Emergency Medical Technician-Paramedic	48	Social Sciences:	00
Medical Laboratory Technology	41	Pre-Business Administration Major	20
Occupational Therapy	42	Government	20
Practical Nursing	. 47	Pre-History Major	20
Radiologic Technology	. 43	Pre-Law Major	20
Respiratory Therapy Technician/Technology	. 44	Pre-Psychology Major	29
Associate of Individualized Studies Degree		Pre-Sociology Major	29
Business Technologies		Continuing Education Staff	88
	•	Continuing Education Stall	•
Accounting Technology	. 31	Course Descriptions: Accounting	62
Rusiness Management Technology:		Anthropology	63
Banking/Finance	. 32	Art	63
Business Management	. 32	Automotive	64
Real Estate	. 32	Biological Sciences	64
Retail Management	. 3Z	Business I aw	. 00
Data Processing and Computer Technology	. 57	Business Management	. 65
Secretarial Technology: Executive	35	Chemistry	. 6/
General	. 35	Civil Engineering	. D <i>i</i>
General Legal	. 36	Comparative Arts	. 00
Legal Medical	. 36	Corrections	. 00
Education:		Data Processing	. 68
Elementary Education	. 17	Dontal Hygiene	. 09
Special Education	. 17	Diesel	. 70 70
Secondary Education:		Economics	70
Biology—General Science	. 17	Education	70
Chamistry General Science	17	Electro-Mechanical Engineering	71
Communications (English Emphasis)	17	Emergency Medical Technician-Paramedic	. 72
Communications (Speech Emphasis)	18	Engineering Engineering Drawing	. 72
English—Comprehensive	18	English	. 72
General Speech (Speech Emphasis)	18	French	. 73
General Speech (Theater Emphasis)	18	Geography	. 73
Health	19	Geology	. 74
Physical Education	19 10	Government	. 14
Physics—General Science	10	Health Physical Education, and Recreation	. 74
Social Studies	13	Listony	/5
Engineering and Industrial Technologies		Humanities	13
(Associate of Applied Science Degree):	50	Instrumentation Technology	79
Automotive Technology	51	lournalism	/5
Civil Engineering Technology  Diesel Technology	52	Linguistics	10
Electro-Mechanical Engineering Technology	53	Mathematics	/0
Instrumentation Technology	55	Modical Laboratory	/0
Plastics/Chemical Engineering	56	Music	// 78
Pohotics Technology	ეა	Nulsing — Associate Dog. 00	70 70
Welding Technology	58	Nursing — Practical	78
Humanities/Fine Arts:		Occupational Morapy	. 79
Comparative Arts Concentration	21	Philosophy	79
Pre-Art Major		Filliosophy	79
Pre-Communications (General) Major	21	Pilysical Science	79
Pre-English Major		Plastics/Chemical	00
Pre- Journalism Major	22	Plastics/Offerfical	81
Pro-Theater Maior	22	rayonology	

Quantitative Methods	Library Ot #	
Radiological (X-ray)	Library Staff	87
Recreation Studies	Majors Offered at Shawnee State	-
Respiratory Therapy	wap of Officially Portsmouth Area	0.0
Respiratory Therapy	wap of Shawnee State Campus	~
Robotics	Mission of the College	94
Secretarial	OTTO Staff	פ
Social Work	Public Relations Staff	87
Sociology	S.O.C.F. Staff	87
Opanishor	Special Programs Staff	87
Operationor	Sports Facilities Staff	87
ineater	Student Activities	87
weiding	Student Services Courses	11
Developmental Courses	Student Services Courses	12
acuity	Student Services and Facilities	12
rees and expenses	Student Services Staff	07
Graduate Realtors Institute Designation	reciffical Advisory Committees	88
33	Transfer or University Parallel Programs	
	(Associate of Arts and Associate of Science Degrees)	4.4

# **ACCREDITATIONS**

Shawnee State Community College is fully accredited by: NORTH CENTRAL ASSOCIATION OF COLLEGES AND SECONDARY SCHOOLS In addition, the institution is aproved by the following agencies:

U.S. Office of Education

American Association of Collegiate Registrars and Admissions

Counselors

American Association of Junior Colleges

Ohio Board of Regents

Ohio State Department of Education—Division of Vocational Education

Ohio College Association

American Dental Association

American Medical Association — Committee on

Allied Health Education & Accreditation

State of Ohio Board of Nursing Education and Nurse Registration

Bureau of Vocational Rehabilitation

Social Security Department

College Entrance Examination Board

# TECHNICAL ADVISORY COMMITTEES

A technical Advisory Committee has been named for each technical area or cluster of technical areas. These committees, like the general committee, are advisory only, not policy-making. These committees, made up of professional and technical people competent in their fields of specialty, work directly with administration and staff on curriculum needs, employers' viewpoints, up-to-date changes in industry, new equipment and process trends, recruitment ideas, and many more pertinent subjects. This committee insures the college of the latest in industrial and business developments by meeting several times a year for discussions and evaluations.

MISSION OF THE COLLEGE

**ADMISSIONS PROCEDURES** 

**ACADEMIC INFORMATION** 

**FEES AND EXPENSES** 

STUDENT ACTIVITIES

STUDENT SERVICES AND FACILITIES

# MISSION OF THE COLLEGE

As a comprehensive community college, Shawnee State Community College responds to individual and collective needs of the community and areas which it serves and encourages individuals to be dedicated to learning and to make this dedication a lifelong commitment.

Shawnee State Community College strives for a realistic balance among its three major functions: (1) to offer transfer or university parallel programs; (2) to offer occupational programs; and (3) to offer continuing education/community service. To assure the successful completion of these functions, Shawnee State Community College provides a variety of vital student services such as advising and counseling, developmental education, and financial assistance. Also, educational resources in the form of qualified and conscientious faculty and staff, library and media services, well-equipped and modern physical facilities, and a sound financial management assure quality educational and learning experiences. Off-campus classes and learning experiences are provided when feasible. All of these programs, services, and resources must be provided at reasonable cost to the students and clientele.

As a necessary ingredient for continued effectiveness, the College must provide leadership which will ensure that educational and learning experiences accurately reflect the needs of the individual. Whether these educational and learning experiences fall under developmental, general education, occupational, avocational, or social/recreational, the College must provide quality educational opportunities to persons of all ages. Of special consideration are the opportunities which must be provided for older citizens, single parents, and individuals with full-time employment. Flexibility and quality are key terms. The College must be flexible enough to meet the various needs of individuals, but at the same time there must be an adherence to realistic standards. The judgment as to which standards are realistic is essential and one of the daily and on-going tasks of the College.

As strongly implied, the mission of the College is predicated on a strong belief in the dignity and worth of the individual, who is the most important component of the College. The development of the individual for a useful and productive life must be the basis by which goals and objectives are established and by which decisions

regarding the operation of the College are made.

To realize the full potential of the College mission, the College operates with an open-admission policy which allows any individual to attend college who may not have qualified for admission by traditional standards. This open-admission policy with the resulting diverse student body and potential student body necessitates that the College find effective, quality educational activities to help each student determine realistic educational goals, discover individual abilities and interests, and develop his or her potential to its fullest.

# **ADMISSIONS PROCEDURES**

#### **Entrance Requirements**

Shawnee State Community College will provide access to the college through an open-admissions policy which:

- A. Admits high school graduates as enrollment ceilings permit.
- B. Admits students that have successfully completed the General Education Development Test for high school equivalency as enrollment ceilings permit.
- C. Admits students over 18 years of age without a high school diploma or a GED as part-time students (less than 12 hours credit) as enrollment ceilings permit. The student may be fulltime with the Dean of Student Services approval. Upon successful passing of one quarter of part-time course work, the student will be eligible for full-time enrollment.
- D. Admits high school students on a part-time basis with written recommendation from the student's high school principal or counselor and written consent from the student's parent or guardian. Letters of permission and recommendation are required for each quarter of enrollment. Enrollment will be limited to less than 12 hours of credit per quarter.
- E. Admits students that have attended other colleges or universitites as enrollment ceilings permit. Evidence of honorable dismissal is required of transfer students.
- F. Admits senior citizens on a non-credit, no-fee basis as enrollment ceilings permit.
- G. Admits foreign students with F-1 visas, satisfactory language test scores, and sufficient available funds for two years of maintenance and fees.

#### **Application for Admission**

Students may submit applications for Fall admissions during the senior year of high school. (Students applying for Dental Hygiene, Medical Laboratory Technology, Respiratory Therapy, Radiology, Practical Nursing, EMT-Paramedic or Associate Degree Nursing are advised to apply for admissions to these programs before March 15. Students are also advised to review the specific admissions requirements for these programs. This information can be found in the program section of this bulletin.)

It is suggested that students file applications for specific quarter enrollment prior to published registration dates for that quarter. (see College Calendar)

Admissions to Freshman studies is possible in the Fall, Winter, Spring, or Summer quarters, excepting programs in the Medical areas outlined above which are available only in the Fall quarter or by special permission of the Program Director.

It is suggested that students applying for financial aid make application for admissions and financial aid before April 15. Applications for admissions and financial aid are accepted after that date, however, financial aid is awarded on a first-come-first-serve basis.

A non-refundable fee of \$15 must accompany the application for admission.

All completed application forms must be directed to:

Shawnee State Community College Admissions Office 940 Second Street Portsmouth, Ohio 45662

#### **High School Transcript**

The two-part High School Transcript Request must be submitted to the high school counselor or principal. One part is to be returned with the student's transcript, the other may be retained by the high school as a release form. Students will be notified of admission status when both application and high school transcript are on file.

Students that did not complete high school must have a record of high school work completed, a copy of the General Education Development Certificate on file, or enroll as a part-time student for one quarter.

#### **Admissions Test**

Admissions tests are required as part of the admissions procedures to selected programs (Medical Laboratory Technology, Dental Hygiene, Radiology, Respiratory Therapy, Practical Nursing, Emergency Medical Technician-Paramedic, and Associate Degree Nursing) but are not required as a part of college admissons to other educational programs.

#### **Transfer Students**

Students that have attended other colleges or universities are welcome to apply for admissions at Shawnee State. Admissions procedures for transfer students are the same as above (application and high school transcript) and the additional requirement of an **official** college transcript and evidence of honorable dismissal.\*

See the section Academics Concerning Transfer Credit.

# Admissions Procedures For Foreign Students

The applicant files (1) an admissions application, (2) complete official transcripts and pertinent certificates for all secondary and post-secondary work (an official translation must accompany transcripts and certificates which are not in English — do not submit documents for which there is only one copy. Documents submitted in support of an application cannot be returned to owner) (3) results of the test of English as a foreign language (TOEFL) if the applicant's native language is not English. Applicants must score a total of 500 to be admitted without restriction. Applicants scoring 450-499 will be reviewed by the Director of Admissions with possible admission under a restricted course load and specific courses. Students with scores of less than 450 and without additional supporting evidence will not be admitted. (4) such evidence as may be required by the college concerning the applicant's ability to meet the financial obligations of a student in the United States.

The Shawnee State Community College budget for a self supporting single student is \$4,740.00 for the 1982-83 academic year. The applicant must present a statement from a U.S. bank indicating that the applicant has resources equal to the amount required for two years of education or \$10,000.00 and that these resources will be available to the applicant.

Immigration regulations prevent applicants from earning any substantial portion of this amount. There are virtually no scholarships available to students from abroad.

Due to the special problems which may be encountered by a student from abroad, upon arrival the student will be assigned a counselor by the Vice-President of Student Services.

Payment of the \$15.00 non-refundable application fee may be deferred until registration.

Further information concerning the TOEFL can be obtained by writing the Educational Testing Service, Box 592, Princeton, New Jersey, 08540.

Once the student receives an acceptance letter, he will also receive an I-20 form to be used in securing a student visa. Questions pertaining to your visa should be directed to the nearest immigration office.

Students must show evidence of a non-immigrant "F-1" student status visa to be eligible to register.

#### **Senior Citizens**

Shawnee State encourages senior citizens (60 or older) to audit any course of interest to them. Admissions to a course will be granted if space is available. Formal admission and registration is required but no fees will be charged, however, senior citizens can receive credit by paying tuition and fees.

<sup>\*</sup>Students will be admitted as "provisional students" until such time the official transcripts have been received from the previous colleges.

# **ACADEMIC INFORMATION**

#### **Academic Integrity**

Students at Shawnee State College are required to do their own work on all tests and assignments. Any form of cheating may result in the student's being withdrawn from a particular course or courses, as well as possible dismissal from the college. (See Student Handbook)

#### **Faculty Role**

Faculty expect regular and punctual attendance at all classes. Attendance policy for individual classes is made by the faculty members resonsible for the class.

Grades are controlled by the faculty member responsible for the class.

In the event that a faculty member is not present at the normal time class begins, students are to remain in the classroom an additional 15 minutes. If the class meets once a week for 3-5 hours, the students must remain in the classroom for 45 minutes. If the faculty member has not arrived or no special instructions have been received, students may leave class without penalty.

Each faculty member posts office hours during which they are available to discuss individual problems relating to a student's academic progress. Students are encouraged to take full advantage of the advisory assistance of the faculty.

Final grades are mailed at the end of each quarter by the Recorder's Office. Grades will not be issued orally.

## **Description of Grades**

escription of		Oweller Deinte
Grade	Description	Quality Points
	Excellent	4.00
A		3.67
A-		3.33
B+	Good	3.00
В	4004	2.67
B-		2.33
C+	Average	2.00
C	Attorage	1.67
C-		1.33
D+	Poor	1.00
D	1 00.	0.67
D-	Failing	0
F TO	Transfer Credit	0
TC	Credit by Exam	0
KE	No Credit	0
NC	Withdrawal	0
WD	Incomplete	0
l P	Pass	0
P	, 400	

A grade of "F" receives no credit. A student making this grade must repeat the course if credit is to be received.

#### **Transfer Credit**

Credit earned at regionally approved colleges and universities or regents approved Ohio colleges with a grade of "C" or better may be converted to "TC" on the student's academic record. Normally, a "D" is not transferable, however, if the "D" is part of a course sequence in which the student's average grade is "C" or better, a "D" may be transferred. The credit hours transferred do not become a part of the grade point ratio. To receive transfer credit, the student must file an official transcript of previous college work and a transfer of credit form with the Director of Records.

#### **Incomplete Grades**

Students unable to attend class for extended periods of time may contact the faculty member responsible for the class requesting an incomplete grade. Incompletes must be converted to a grade 30 class days into the next quarter or they will be recorded as "F's."

#### Pass/Fail Option

Students may take courses on a pass/fail option by completing the proper forms with a Student Services Counselor. Forms for pass/fail must be completed within the first 10 class days of a regular quarter and 5 class days for a 5-week summer quarter. The student's decision to take a class on a pass/fail basis is not subject to change. Students may not take over one class per quarter on a pass/fail basis without approval of the Vice President of Student Services.

## Course Credit by Examination

Students have the opportunity to fulfill requirements for selected courses offered at Shawnee State Community College by examination. Students interested in pursuing this educational option should first secure the advice of a college counselor (Academic courses) or program director (Technical courses) as to its appropriateness for the student's program of study. Since all courses are not available on a "by examination" basis, the student should then contact the appropriate college dean. The college dean, after consultation with appropriate faculty, will then make a determination as to the feasibility of the student's request.

A fee of \$30.00 is charged for Course Credit by Examination.

Approved proficiency will be recorded as "KE" on the student's transcript. Credit by examination is not included in the calculation of cumulative point ratio.

Students are not eligible to take a proficiency examination for a course in which he has been enrolled for 20 class days of more.

Credit given by examination does not apply toward the 30 hour residency requirement for graduation.

## College Level Examination Program

Students may be awarded credit for College Level Examinations taken under the College Entrance Examination Board. Students taking the general examinations in English composition, mathematics, natural sciences, and humanities with a score in the 45th percentile or above will be given "KE" credit for the first sequence course in the above

Subject Examinations may be used to earn "KE" credit for courses in subject areas of the Examinations. Students must achieve in the 45th percentile or above to receive credit.

Credit given through the College Level Examination Program does not apply toward the 30 hour residency requirement for graduation.

#### **Repeating Course Work**

Students may repeat courses which they have previously completed. In order for the final transcript to reflect only the highest grade earned, the student must complete a course deletion form in the records office.

#### Changing Grades

Students questioning course grades must work through the faculty member responsible for the class. If you question a grade received, contact the faculty member.

#### **Grade Point Ratio**

Quality points for a course are determined by multiplying the total credit hours by the numerical equivalent of the letter grade received in the course.

The formula for calculating grade point ratio is:

Total Quality Points = Grade Point Ratio **Total Hours Attempted** 

#### **Academic Probation**

Students achieving a grade point average of 1.5 or less for any quarter will be placed on academic probation for the following quarter provided their accumulative grade average does not fall below that required to remain enrolled (See academic dismissal section below.)

## **Academic Dismissal**

Students will be academically dismissed when their accumulative grade average falls below the following:

Credit Hours Attempted	Accumulative Grade Average
21-40	.75 or below
41-55	1.00 or below
56-65	1.25 or below
66-75	1.50 or below
76-85	1.75 or below
96-and above	1.90 or below

86-and above Students academically dismissed are eligible to re-enroll after one quarter.

#### Adding a Class

Students may add a class to their schedule during the first ten class days of the quarter (five days of a 5-week summer session) by completing a change order with a student services counselor.

#### Withdrawing from a Class

Students may withdraw from a class during the first 35 class days of the quarter (17 days of the 5-week summer sessions) by completing a change order form with a student services counselor. See refund of fees.

## Withdrawing from College

Students withdrawing from college when classes are in session must request the proper forms from a student services counselor. Grades for scheduled classes will be recorded as withdrawal (WD).

Students not following the withdrawal procedure are considered enrolled in the class and graded accordingly.

See fee schedule for refund policy.

#### Non Credit

Students may elect to take a course for non-credit curing the first 35 class days of a quarter (17 days of the 5-week summer sessions) by completing the proper forms in the Student Services Office.

#### **Course Credit By Arrangement**

Students have the opportunity to fulfill requirements for selected courses offered at Shawnee State Community College by arrangement. Students interested in pursuing this educational option should first secure the advice of a college counselor (Academic courses) or program director (Technical courses) as to its appropriateness for the student's program of study. Since all courses are not available on a "by arrangement", the student should then contact the appropriate college dean. The college dean, after consultation with appropriate faculty, will then make a determination as to the feasibility of the student's request.

Students may earn up to 18 credit hours toward graduation with all credit being considered resident credit. The student is limited to eight hours of credit by arrangement per quarter. Students enrolling in a course by arrangement have until the date grades are due the following quarter to have all work completed in the course.

See the fee schedule for course by arrangement fees.

#### Dean's List

Full-time students (12 or more hours per quarter) who achieve a 3.5 or above grade point ratio will be placed on the dean's list for that quarter.

#### **Residency Status**

A resident of Ohio for all education purposes shall be:

- A dependent student living with a parent who has lived in Ohio for 12 months.
- A person who has resided in Ohio for 12 months before enrolling in school.
- A person who is living and employed in Ohio and going to college part time.
- A person on active duty in the U.S. Military, who is stationed in Ohio.

#### Student Load

Students scheduled for 12-20 credit hours are considered full-time students. Students scheduled for less than 12 credit hours are considered part-time students. The permission of the Vice President of Student Services is required for students scheduling for students over 20 hours of credit. See fee schedule for extra hour fees.

#### **Graduation Requirements**

In order to graduate, a student must have successfully completed all course requirements and have achieved a 2.0 cumulative grade ratio in all course work and his major field of study. Students having outstanding institutional bills or notes will not be issued a degree. All students are required to earn 30 hours of credit at Shawnee State in order to be eligible for graduation.

**NOTE:** Allied Health and nursing major students must be in good standing in order to graduate.

## **Graduation with Honors**

Students with an accumulative grade point ratio of 3.5 or above prior to the quarter of graduation will be graduated with honors. Students with an accumulative grade point ratio of 3.7 or above prior to the quarter of graduation will be graduated with high honors.

#### **Transcripts**

Each quarter students will receive a grade report that includes grades achieved that quarter and all previous quarters.

Students having errors in grade reports should contact the Director of Records immediately.

Students may request transcripts from the Student Services Office. Transcripts are \$2.00 each.

Requests for official transcripts must be in writing and addressed to the Director of Records.

#### Visitors to Class

Students planning to bring a visitor to a class with them are requested to obtain permission of the faculty member responsible for the class in advance of the visit.

#### Internship Guidelines

Programs requiring internship as part of the graduation requirements have guidelines for internship established by student advisors and faculty. Students are urged to request a copy of these guidelines from faculty advisors.

# **FEES AND EXPENSES**

#### **Registration Fees**

Registration fees are payable at the Business Office prior to the opening of classes and in accordance with instructions issued with your quarterly bill. For students registering during late registration, fees are assessed as part of the registration process and are due at that time. Fees may be paid by cash, check, money order Visa, or Master Card. It is important that the student retain all fee receipts.

Payment of fees owed is a prerequisite to official enrollment and all students should have sufficient funds (cash and/or financial aid) to cover these expenses.

A review of students enrolled will be made the 14th day of each quarter and any student showing a balance due will be administratively dismissed.

#### Schedule of Fees\*

Scuednie oi Lees	Resident of Ohio	Nonresident
Instructional fee	\$280.00	\$310.00
Full Time Student (12-20 cr. hrs.) Part Time Student (1-11 cr. hrs.)	26.00 per cr. hr	28.00 per cr. hr.
General Fee Full Time Student	45.00	45.00
Activity Fee Full Time Student Part Time Student	5.00 5.00	5.00 5.00
Lab Fees	see below	
Extra fee for each quarter hour in excess of 20 hours Credit by Examination Course by Arrangement Graduation Fee	26.00 per cr. hr. 30.00 per course 40.00 per cr. hr. 30.00	28.00 per cr. hr. 30.00 per course 40.00 per cr. hr. 30.00
	-it. Callaga recent	se the right to make.

\*Shawnee State Community College reserves the right to make, without prior notice, any fee adjustments that may become necessary.

#### **Bad Check Policy**

Payment of fees owed is a prerequisite to official enrollment, and all students should have sufficient funds (cash and/or financial aid) to cover these expenses.

A check returned for insufficient funds is a federal offense and constitutes nonpayment of your obligation to Shawnee State Community

Therefore, any student that has a check returned for insufficient funds, and the same is not cleared by the fourteenth day of the quarter, shall be considered in noncompliance with institutional policy and will be administratively dismissed.

Any student administratively dismissed due to a bad check has no recourse for readmission for the current quarter.

#### Lab Fees

See the course description section for identification of classes with lab fee charges. The fee per class is available at any of the following offices:

Library **Business Office Admissions Office** 

#### Student Insurance

Shawnee is providing all full time students with the benefit of a very good comprehensive health insurance policy. You may pick up a Student Insurance Program Brochure at the Business Office. Questions concerning student health insurance should be referred to the Business Office.

#### **Refund of Fees**

Continuing students dropping hours by change order prior to or during the first fourteen (14) days of the quarter, when such changes result in a reduction of fees, are entitled to receive a 100 percent refund of the reduction. Changes made after the fourteenth (14th) day of the quarter will result in no refund.

Students that officially withdraw from Shawnee State will receive a refund, if due, based upon the following schedule. Students that do not officially withdraw are not eligible for any refund and fees assessed are due and payable.

Time of Withdrawal (Regular Term)	Refund
1 to 14 calendar days 15 to 20 calendar days	100% of Tuition 50% of Instructional fee
over 20 calendar days	No refund
Time of Withdrawal* (5 week session)	Refund
1 to 4 calendar days 5 to 8 calendar days	100% of Tuition 60% of Instructional fee
over 8 calendar days	No refund

\*This schedule for refunds will apply to students registered only in a five week session.

Please note: Students taking classes from both a regular quarter and a five week session will be issued refunds under the regular Term Policy.

Questions concerning the above information should be referred to the Business Office.

# Late Registration and Late Payment Policy

A late registration fee of \$25.00 will be assessed all students enrolled in the previous quarter that do not register during the announced early registration period.

A late payment fee would normally not be applicable since payment is a prerequisite to registration. However, should exceptions be made to the Registration Fee section a late payment fee of \$20.00 will be assessed by the Business Office.

#### Miscellaneous Fees

#### **Activity Fee**

All students will be assessed a \$5.00 activity fee for each quarter. This fee is to support all student activities. No activity fees are assessed for the Summer Quarter.

#### **Application Fee**

A \$15.00 application fee, non-refundable, must accompany all admission applications.

#### Transcript Fee

The College will produce one official transcript upon written request from the student at no cost. Additional transcripts will be reproduced at a cost of \$2.00 per copy.

A \$30.00 graduation fee is required prior to the issuance of an official college diploma.

## STUDENT ACTIVITIES

#### **Music and Drama**

The music and theatre departments at Shawnee State Community College actively plan performances the year round. During the regular school year the music department presents at least three concerts by the performing choral group, the Shawnee Choir. These performances feature both classical and popular music. The Choir is made up of both college students and community members whose common interest is singing good music. The Choir frequently performs for civic and service organizations outside the college community, as well. Shawnee Choir is open to any Shawnee State student.

The drama department presents several dramatic productions during the year. These shows tour area high schools and are also presented on campus. Each spring the music and theatre departments combine to present a musical at Bonneyfiddle. The Bonneyfiddle productions are open not only to Shawnee State performers, but to community and area performers as well

In addition to the large-scale productions, the Shawnee State Players stage at least one children's theatre production during the year.

#### **Student Complaints**

Guidelines are available to assist in the maintenance of legitimate rights and obligations of both students and institutional representatives, and to assist in the maintenance of academic integrity. The climate of the institution is one of the services to the student and in assisting him/her in reaching his/her established goals. Guidelines can be found in the Shawnee Student Handbook located in the library and in each counselor's office. The institution seeks to establish an atmosphere of openness and it is in this spirit that these guidelines are offered.

#### **College Rules and Regulations General Student Conduct**

A student community can function effectively only if the rights and obligations of all its members are recognized. At Shawnee State Community College, students are expected to observe the standards of propriety at all times. This implies thoughtful consideration of the welfare of the students and the college. Of particular concern to the college are the following areas of improper conduct which may result in disciplinary action, including suspension from the college.

#### **Unacceptable Conduct**

Unacceptable conduct is concerned with the following areas:

Consumption or possession of alcoholic beverages

Possession and Use of Narcotics

Harmful or Dangerous items (possession or use of firearms, etc.) Gambling

Dishonesty

Forgery

Hazing

Interfering with Safety Procedures

Further information on this area can be found in the library or in the counselors office - Shawnee Student Handbook

Information can be found in the Shawnee Student Handbook on Ohio House Bill No. 1219, College Policy to Review Student's Records and the Grievance Procedure for Student Senate Affairs. Handbooks are available in the Library and Counselors office.

#### **Cultural Affairs**

A committee composed of both faculty and students direct a program of cultural affairs. This committee arranges for speakers, musical groups, and other activities of a cultural nature to appear on campus.

#### **Intramural Athletics**

The Department of Physical Education is striving to provide an intramural program that offers a wide variety of athletic and recreational activities. It is felt that the students at Shawnee State College should have an opportunity to participate in a program that gives them the freedom to choose leisure time activities that will best meet their individual needs. Our goal is to have every student participating in intramural activities. To accomplish this goal there must be close cooperation between the student body, the Intramural Department and College officials. Students are asked to participate in planning and supervising various aspects of the program.

## **Tentative Intramural Events 1984-85**

#### **Team Events**

- Touch Football
- 2. Basketball
- 3. Volleyball
- 4. Bowling Softball

#### Individual Events & Dual Events

- Badminton
- Golf
- 3. **Tennis**
- Table Tennis
- 5. Archery
- 6. Bridge 7.
- Chess
- 8. Swimming
- g Handball

#### Interscholastic Athletics

Shawnee State College's philosophy holds that there is more to learning than just academics. Besides attending classes, every student has an opportunity to participate in a recreational or athletic area

Varsity athletics supplement the classroom experience by emphasizing cooperation, leadership, courage, sacrifice and discipline.

Athletic policies at Shawnee State conform to the policies and regulations of the National Junior College Athletic Association of which they are a member. Presently within the NJCAA framework, Shawnee State teams participate on an intercollegiate level in basketball, golf, and tennis. The college plans to expand with additional programs in the near future.

# STUDENT SERVICES AND FACILITIES

## **Student Services Counseling**

The College provides a wide variety of counseling services through the different offices of Student Services. Admissions, placement, financial aid, veterans, educational, vocational, marriage and family, and personal-social counseling are available to students.

Counseling services are available to students, alumni, and their families at no cost upon request at the Student Services offices.

## Professional Counselors and Building Location:

**Commons Building Dotty Welch Commons Building** Richard R. Howard Commons Building **Eugene Wilson** Commons Building Tom Davidson Commons Building Fred Chrisman Commons Building Dr. Paul D. Crabtree

Counseling sessions are confidential.

Student Services Offices are open from 8:00 a.m. to 6:00 p.m., Monday thru Thursday and 8:00 a.m. to 4:00 p.m. on Friday.

#### **Faculty Advising**

Academic advising is provided by faculty advisors. The purpose of faculty advisement is to assist students with their immediate academic concerns. Faculty members meet with students by appointment and each faculty member will have available hours posted near his/her office.

#### **Developmental Education**

Developmental education consists of three areas:

- Pre-college courses in mathemetics, biology chemistry, physics, English, reading development, and vocabulary development are offered to students who have completed the admissions process. Students take these courses to qualify for certain programs, or to increase their chances for success in college.
- A peer tutoring program is also available to students upon faculty or counselor recommendation. A student may receive academic tutoring of up to three hours per week for a course in which he is experiencing academic difficulty. If he is interested in receiving the service, he should contact the instructor of the course, the Director of Developmental Education, or a student services counselor. If he is interested in being a tutor, he should see the Director of Developmental Education. Tutors are reimbursed for their tutoring time.
- 3. The Learning Center allows for individualized learning with various instructional programs such as videocassettes, audiocassettes, slide programs, filmstrips, and computer-assisted instruction.

#### Financial Aid

An extensive Financial Aid Program is available to assist students in meeting some of the expenses of a college education. The Financial Aid Program is administered by the Financial Aid Office, and the program includes four categories: scholarships, grants, loans, and employment.

Scholarships: The college administers a limited number of special scholarships for students demonstrating a high degree of academic ability or special talents. Students interested in scholarships should contact the Financial Aid Office.

Grants: The college administers three types of grant programs: the Ohio Instructional Grant (O.I.G.), the PELL Grant, and the Supplemental Educational Opportunity Grant (SEOG). Grants are not repaid. Interested students should contact the Financial Aid Office.

Loans: Questions regarding state or federal guaranteed loans should be addressed to the student's local bank or lending agencies.

Emergency Loans are available on a limited basis to students needing short-term assistance with direct or related educational expenses. Amounts of these loans are not to exceed \$50.00.

College Work Study: The College Work-Study Program is available to students who can demonstrate financial need through the completion of the FAF.

Part-time Student Employment: Part-time student employment is available on a limited basis through the Placement Office of the Student Services Office. This is not part of the Financial Aid program, therefore, evidence of financial need is not necessary.

To be considered for these programs, a student must complete the Financial Aid Form (FAF), and submit it to the College Scholarship Service (CSS). Ohio residents must complete the Ohio Instructional Grant Application and submit it to the Ohio Board of Regents. Once Shawnee State has this information, the student's file is complete and an award notice will be sent.

## Veteran's Administration Benefits

The programs at Shawnee State are approved by the State Approving Agency for the education of veterans and their eligible dependents. Students interested in V.A. benefits should contact the Veterans Affairs Office located in the Office of Student Services.

#### **Placement Services**

The nature of the programs offered at Shawnee State College makes two types of placement necessary: Occupational and Transfer Place-

Occupational Placement: Students interested in employment after graduation should contact the Placement Office in advance of the quarter they plan to graduate. Companies and business establishments conduct annual recruiting campaigns for two-year graduates. The Office for Occupational Placement is located in the Commons Building.

Transfer Placement: Students interested in continuing their education at a four-year college or university should contact the Placement Office two quarters before they plan to graduate. Recruiters from fouryear institutions will be invited on campus. The Office of Transfer Placement is located in the Commons Building.

Placement services are available to graduating students and alumni of the college at no cost.

#### Housing

There are approximately 100 spaces available in college approved housing in close proximity to the College. These housing units are managed by a developer who is totally responsible for their operation.

#### **Student Parking**

Parking for students is available behind and to the east of Massie Hall. Parking is available on a first-come first-serve basis unless otherwise posted.

## **Handicapped Parking**

Students of Shawnee State Community College that are subject to a physiological defect or deficiency which restricts or limits their mobility may apply to the Vice-President of Student Services for a sentinel key card to the restricted parking lot.

The College operates a bookstore for student convenience. Bookstore hours will be posted on the door.

#### Closing the College

If an emergency would exist because of mechanical failure that would necessitate the closing of the college, the announcement would be carried over WPAY, WIOI, WIRO and WNXT radio and Teleprompter Cable TV.

#### **Library Media Services**

The library's holdings reflect the dual aspect of Shawnee State's curriculum. The collection has a high concentration of books and journals in technology, business, and allied health as well as a broad base of liberal arts and sciences materials to support an active college transfer program. Shawnee State's library now houses approximately 70,000 books and 600 currently received periodicals. Should the material you need not be available in our collection, the library can borrow using a computer linkup with 4,000 other libraries nationwide. The library is open 6 days a week for a total of 70 hours, including evenings and Saturdays.

Media Services offers viewing facilities for various forms of media (filmstrips, audio tapes, slides, and videotapes) within the library. Various projectors are also available for classroom use by faculty and students (with faculty approval). Basic media production facilities are also available to faculty and students for producing slides, transparencies and videotapes.

#### **Identification Cards**

I.D. cards will be issued to Shawnee State College students. An I.D. card is a necessary source of campus identification in utilizing the library and student activities. Students must present evidence of registration certification at the time the I.D. card is received.

# SHAWNEE STATE COMMUNITY COLLEGE

# ASSOCIATE OF ARTS DEGREE ASSOCIATE OF SCIENCE DEGREE UNIVERSITY PARALLEL/TRANSFER CURRICULA

# TRANSFER OR UNIVERSITY PARALLEL PROGRAMS

# **Transfer or University Parallel Programs**

The various transfer curricula developed at Shawnee State College are designed with the major objective of enabling students to complete the first two years of study toward a baccalaureate degree. In awarding the Associate of Arts and Associate of Science Degrees, Shawnee State verifies that the student has successfully completed the first two years of a four-year program and is ready for upper division work in baccalaureate college or university. Students can pursue transfer programs in the fields of social and behavioral sciences, natural sciences, humanities, fine arts, teacher education, and several other preprofessional programs.

Because curricula of the first two years in various colleges and universities may differ, students who plan to transfer to a baccalaureate institution should follow the procedure outlined below:

- Secure a catalog of the institution to which he wishes to transfer and become familiar with its admission requirements and suggested freshmen and sophomore courses in his major field of interest.
- Consult with a counselor or academic advisor at Shawnee State about fulfilling these requirements.
- Confer with an admissions officer at the senior institution for further information about transfer regulations and applicability of credit.

## **Associate of Arts**

## I. Core Requirements

Designed primarily for those desiring two years of general education with an emphasis in the arts, social sciences, or humanities.

A. Communications (11 qtr. hrs.)

Two courses from: Eng. 111, Eng. 112, Eng. 115, Eng. 140A, B, C, or D (topics in English Language and Literature), and Speech 101 (Speech I) or Speech 102 (Speech II)

B. Natural Sciences (12 hrs. min.)

At least two courses from one area:

- A. Biological Sciences (Bio. 111 or above)
- B. Chemistry (Chem. 121, 122, or Chem. 141, 142, 143)
- C. Geology
- D. Physics
- E. Physical Sciences
- F. Mathematics (Math. 120, 121, 130-32, 150, 201-203)
- C. Social Sciences (12-15 hrs.)

Courses covering two areas:

- A. Economics (Econ. 101, 102)
- B. Psychology
- C. Geography
- D. Government
- E. History
- F. Sociology
- G. Anthropology
- D. Humanities (20 hrs. min.)

Courses covering two areas:

- A. Philosophy
- B. Comparative Arts
- C. Humanities
- D. Art
- E. Modern Language
- F. Music
- G. Theater
- H. Literature/English
- E. Health/Physical Education (2-4 qtr. hrs.)

Two activity courses or Health 202.

#### II. Concentration Area.

Selected Specialized Courses

The transfer programs which are outlined are intended to indicate typical requirements in various programs. The student assumes responsibility for course selections necessary to satisfy the requirements of the senior institution to which he intends to transfer.

# Associate of Arts/Associate of Science

(College or University Parallel Programs)

Courses offered under the A.A. or A.S. Degrees at Shawnee State resemble those courses typically offered during the first two years at a baccalaureate institutuion. Students may enroll in courses for personal enhancement, or enroll in a program developed specifically for transfer to a four-year college or university. The A.A. & A.S. Degrees have been specifically designed to permit a broad curricula sampling in the areas of communications, social sciences, natural sciences and humanities, thus preparing the student for more advanced study at the receiving institution.

# Requirements for the Associate of Arts/Associate of Science

A total of 90 qtr. hours of credit (minimum) — 30 qtr. hours of which must be in courses numbered 200.

2.00 cumulative average required for graduation.

## **Associate of Science**

# I. Core Requirements

Designed primarily for those desiring two years of general education with an emphasis in the sciences and mathematics.

A. Communications (11 qtr. hrs.)

Two courses from: Eng. 111, Eng. 112, Eng. 115, Eng. 140A, B, C, or D (topics in English Language and Literature), and Speech 101 (Speech I) or Speech 102 (Speech II)

B. Natural Sciences/Mathematics (20 hrs. min.)

At least two courses from one area:

- A. Biological Sciences (Bio. 111 or above)
- B. Chemistry (Chem. 121, 122, or Chem. 141, 142, 143)
- C. Geology
- D. Physics
- E. Physical Sciences
- F. Mathematics (Math 120, 121, 130-32, 150, 201-203)
- C. Humanities and Social Sciences (24-30 qtr. hrs.)
  - (Social Sciences) (12-15 qtr. hrs.)
     Three courses covering two areas:

A. Economics (Econ. 101, 102)

- B. Psychology
- C. Geography
- D. Government
- E. History
- F. Sociology
- G. Anthropology
- 2. (Humanities) (12-15 qtr. hrs.)
  - A. Philosophy
  - B. Comparative Arts
  - C. Humanities
  - D. Art
  - E. Modern Language
  - F. Music
  - G. Theater
  - H. Literature
- D. Health/Physical Education (2-4 qtr. hrs.)

Two activity courses or Health 202.

#### II. Concentration

Selected Specialized Courses

# SHAWNEE STATE COMMUNITY COLLEGE

# **University Parallel/Transfer Curricula**

The suggested transfer curricula which follow have been based upon various baccalaureate degree requirements using Ohio University as a guide. It is important to note that they are suggestions only, and that the personal preference and the college or university to which the student may transfer will ultimately determine appropriate course selections and program.

# **CONCENTRATION AREAS**

#### **Education/Social Science**

Elementary Education Special Education Secondary Education: Biology — Gen. Sci. Chemistry — Gen. Sci. Communications — English Emphasis Communications — Speech Emphasis English — Comprehensive General Speech — Speech Emphasis General Speech — Theater Emphasis Health Physical Education Physics — Gen. Sci. Social Studies **Business Administration** Government History Pre-Law **Psychology** Social Work Sociology

#### **Humanities/Fine Arts**

Art
Communication (General)
Comparative Arts
English
Journalism
Theater

#### Mathematics/Sciences

Botany
Chemistry
Dentistry
Engineering
Forestry
Medical Technology
Medicine
Microbiology or Public Health and Sanitation
Optometry
Pharmacy
Physical Therapy
Recreation Studies
Veterinary
Zoology

# **CONCENTRATION AREAS**

#### **Education**

Elementary Education
Special Education
Secondary Education:
Biology — Gen. Sci.
Chemistry — Gen. Sci.
Communications — English Emphasis
Communications — Speech Emphasis
English — Comprehensive
General Speech — Speech Emphasis
General Speech — Theater Emphasis
Health
Physical Education
Physics — Gen. Sci.
Social Studies

# **ELEMENTARY EDUCATION\***

Freshman  1Science (Core Requirements — See Page 14)  Modern Math (Math 120 & 121 — Elem. Topics in Math)  2Speech 101 or 102  Psy. 101, General  English (Eng. 111, 112, 115, 140 A, B, C, D)  3Social Sciences (Electives) (Core Requirements—See Page 14)  Physical Education	Hours 12 10 3 4 8 8 1
Total	46
Sophomore	Hours
3Science (Electives) (Core Requirements—Sec Page 14)	
Ling. 270	12 5
Wasic 100, 101	-
"" Ln 202 re(SOna) and Community Health	6
"" E'' E'' C'' I'I'Y, EU, IUI INE FIEM Teacher	4
The Lit (Activity Courses)	3
Aut for the Elem. Teacher I. II	1
Education Psy. (275)	6
Humanities Electives (Core Requirements—See Page 14).	5
(14),	4
Total	16

- 1. Three courses required—must include at least one course in Biology and one in the Physical Science. (All courses must include lab.)
- Speech 101 for high school deficiency. Speech 102 if you have HS speech credit.
- 3. Social Science Electives must include one course in Am. Hist. or Am. Govt. and Geog. 121 Cultural Geog.

\*A 20 qtr. hr. concentration is required for a Baccalaureate Degree for the College of Education at Ohio University. This concentration may be in any department outside the College of Education, but may be taken in the School of Health, Physical Education and Recreation or School of Home Economics.

# **EDUCATION — SPECIAL EDUCATION**

Freshman	
English (111 112 115 140 A D C D)	Hours
English (111, 112, 115, 140 A, B, C, D)	. 8
Social Sciences (Core Requirements — See Page 14)	4
Natural Sciences ( Core Requirements — See Page 14)	8
Humanities ( Core Requirements—See Page 14)	8
Physical Education	8
Electives (Math 150, Psy. 131, Psy. 241	1
(	8
Total	45
Sophomore	
	Hours
Speech 101 or 102	Hours
Speech 101 or 102	3
Speech 101 or 102  HPER 202 ( Per., and Comm. Health)  HPER 250 (Recreational Leadership)	3 4
Speech 101 or 102  HPER 202 ( Per., and Comm. Health)  HPER 250 (Recreational Leadership)  Art 201, 202 (Art for the Elem. School I. II)	3 4 3
Speech 101 or 102  HPER 202 ( Per,. and Comm. Health)  HPER 250 (Recreational Leadership)  Art 201, 202 (Art for the Elem. School I, II)  Math (Math 120 or higher)	3 4 3 6
Speech 101 or 102  HPER 202 ( Per,. and Comm. Health)  HPER 250 (Recreational Leadership)  Art 201, 202 (Art for the Elem. School I, II)  Math (Math 120 or higher)  Music 160, 161	3 4 3 6 5
Speech 101 or 102  HPER 202 ( Per,. and Comm. Health)  HPER 250 (Recreational Leadership)  Art 201, 202 (Art for the Elem. School I, II)  Math (Math 120 or higher)  Music 160, 161  Physical Education	3 4 3 6 5 6
Speech 101 or 102  HPER 202 ( Per,. and Comm. Health)  HPER 250 (Recreational Leadership)  Art 201, 202 (Art for the Elem. School I, II)  Math (Math 120 or higher)  Music 160, 161  Physical Education  Electives	3 4 3 6 5 6 1
Speech 101 or 102  HPER 202 ( Per,. and Comm. Health)  HPER 250 (Recreational Leadership)  Art 201, 202 (Art for the Elem. School I, II)  Math (Math 120 or higher)  Music 160, 161  Physical Education  Electives	3 4 3 6 5 6 1
Speech 101 or 102  HPER 202 ( Per,. and Comm. Health)  HPER 250 (Recreational Leadership)  Art 201, 202 (Art for the Elem. School I, II)  Math (Math 120 or higher)  Music 160, 161  Physical Education	3 4 3 6 5 6 1
Speech 101 or 102  HPER 202 ( Per,. and Comm. Health)  HPER 250 (Recreational Leadership)  Art 201, 202 (Art for the Elem. School I, II)  Math (Math 120 or higher)  Music 160, 161  Physical Education  Electives	3 4 3 6 5 6 1

NOTE: 30 hours required at 200 level for graduation

# **EDUCATION (BIOLOGY—GENERAL SCIENCE)**

	/
Freshman English (111, 112, 115, 140 A, B, C, D)	Hours 8
Chemistry 141, 142, 143	12
Biology 111, 112, 113 *Math 201, 202 Physical Education	16
Physical Education	10
Total	48
Sophomore	Hours
Speech 101 or 102	3
Physics 201, 202, 203 Humanities (Core Requirements—See Page 14) Social Sciences (Core Regulation Processes (Core Regulation Proc	12
Social Sciences (Core Requirements—Psy. 101 required)	12
1 Sychology 2/3 (Educ. Psv.)	12
Electives (Sciences)	5
,	4
*Math 120 common Total	48
*Math 130 sequence may be elected in preparation for calcula	us.

# EDUCATION (CHEMISTRY-GENERAL SCIENCE)

Freshman	ENCE
1	Hours
English (111, 112, 115, 140 A, B, C, D)	8
Chemistry 141, 142, 143	12
*Math 201, 202, 203  Humanities (Core Requirements—See Page 14)  Social Sciences (Core Requirements—See Page 14)	15
Social Sciences (Core Requirements—See Page 14)	8
Physical EducationPsy. 101 required)	4
,	1
Total	48
Sophomore	Hours
Chemistry 205, 206 207	12
11/3/03/201, 202, 203	12
Social Sciences Elective	4
SVCDOLOGY 2/5 /Edua Dav.\	5
Chamieta Cor . Land	10
offernistry 225 and 224	10
Physical Education	- 1
Psychology 275 (Educ. Psy.) Chemistry 225 and 224 Physical Education Speech 101 or 102	1 3
Physical Education	1 3 ———

may be elected in preparation for calculus.

## **EDUCATION — COMMUNICATIONS** (ENGLISH EMPHASIS)

Freshman  English (111, 112, 115, 140 A, B, C, D)  Natural Sciences/Math (Core Requirements—1 science, 1 math) (Math 120 or higher)  Social Sciences (Core Requirements—Psy. 101 required)  Humanities (Core Requirements—See Page 14)  Physical Education	Hours 8 12 12 12 12
Total	45
Sophomore	Hours
Psychology 275	5
Operation of 102	3
Speech 105 (Intro. to Mass. Comm.)	4
opeoch 220 or than 220 (Oral Inter of Lit )	4
opecon 213 (Discussion)	4
Thysical Education	1
English 201, 202, or 203	4
English 204, 205, or 206	4
English 225 or 226	4
Electives (English)	4
English (General)	8

# COMMUNICATIONS — SPEECH EMPHASIS

	Hours
Freshman	8
English 111, 112, 115, 140 A, B, C, D	3
Natural Sciences/Math (At least 1 course in each) (Math 120 or higher)	12
in each) (Math 120 or higher) Social Sciences (Core Requirements—Psy. 101 required)	12
Humanities (Core Requirements—See Page 14)	12
Total	47
	Hours
Sophomore	5
Psychology 275 (Educ. Psy.)	3
Journalism 231 (News Reporting)	4 4 2
English 201, 202, or 203	4
Physical Ed	2
Total	18
Mana Comm)	4
Speech 105 (Intro. to Mass. Comm.)	4
Speech 215 (Group Discussion)	4
Speech 220 of Than 220 (Grammary)	20
	32
Total	50

# EDUCATION — GENERAL SPEECH (SPEECH EMPHASIS)

Freshman	Hours
Speech 101, 102	6
Speech 101, 102	4
English 111, 112, 115, 140 A, B, C, D	8
Natural Sciences/Math (At least 1 course in each) (Math 120 or higher)	12
Psychology 101	4
Humanities (Core Requirements—See Page 14)	12
Total	46
Sophomore	Hours
Psychology 275 (Educ. Psy.)	5
Social Sciences (Core Requirements—See Page 14)	8
	2
Discipal Ed	
Physical Ed	
Physical Ed. Thar. 220 or Speech 220 (Oral Inter.)	4
Physical Ed. Thar. 220 or Speech 220 (Oral Inter.) Speech 215 (Group Discussion)	4 Min. 5
Physical Ed	4 Min. 5

# ENGLISH—ENGLISH COMPREHENSIVE

#### Hours Freshman English 111, 112, 115, 140 A, B, C, D ..... 8 Speech 101 or 102 ..... Sciences/Math (At least 1 science and 1 math) (Math 120 or higher) ..... 12 Social Sciences (Core Requirements—Psy. 101 required) ... 8 Humanities (Core Requirements—See Page 14) ..... Physical Education ..... Electives ..... 45 Total **Hours** Sophomore Social Science (Core Requirements—See Page 14) ...... Humanities (Core Requirements—See Page 14) ..... Psychology 275 (Educ. Psy.) 5 English 201, 202, or 203 .... English 204, 205, 206 English 225 and 226 ..... Electives (Must include 1 English course above freshman level) ..... 12 Total 45

# EDUCATION — GENERAL SPEECH (THEATER EMPHASIS)

Freshman  Speech 101, 102	Hours 6 8 12 8 12
Total	46
Sophomore Psychology 275 (Educ. Psy.) Social Sciences (Core Requirements—See Page 14) Physical Ed. Thar. (Electives) Electives Total	5 4 2 27 6

## **EDUCATION — HEALTH**

Freshman  English 111, 112, 115, 140 A, B, C, D  Speech (101, 102) one course  HPER 261 (Introduction to P.E. & Health)  Psychology 101  Sociology 101  Biology 111  Math (1 course) (Math 120 or higher)  Comparative Arts and/or Philosophy  HPER 227 (First Aid)  HPER 234 (Laboratory Experience in Phys. Ed.)  HPER 110 (3 Activity Classes)  HPER 295 (Independent Study)  Natural Sciences (Core Requirements—See Page 14)	3
Total	49-50
Sophomore  English (111, 112, 115, 140 A. B. C. D) Psychology 275 (Educ. Psy.) Comparative Arts and/or Philosophy Biology 290B, 291B (Anatomy & Psysiology I, II) HPER 202 (Personal and Community Health) HPER 110 (3 Activity Classes) HPER 204 (Drugs, Alcohol and Tobacco) HPER Electives	Hours 4 5 4 10 4 3 4

# EDUCATION — (PHYSICS - GENERAL SCIENCE)

Freshman	Hour
English 111, 112, 115, 140 A, B, C, D	8
Onemistry 141, 142, 143	12
Mati 201, 202, 203	15
Figure 14)	4
OUGIAI SUICICES ICOTA REGILITAMENTA Day 404	4
rivsical Education	2
Speech 101 or 102	3
Total	48
Sophomore	
Physics 201, 202, 202	Hours
Physics 201, 202, 203	12
Humanities (Core Requirements—See Page 14)	8
Psychology 275 (Educ. Psy.)	5
Social Sciences (Core Requirements—See Page 14)	8
Electives (Sciences)	12
Total	45

\*Math 130 sequence may be elected in preparation for calculus.

# **EDUCATION — PHYSICAL EDUCATION\***

Freshman

Freshman	Hours
English 111, 112, 115, 140 A, B, C, D	4
Speech (101, 102) one course	•
THER 201 (Introduction to P.E. & Health)	2
Psychology 101	4
Social Science (Elective)	4
Biology 111	5
Math (1 course) (Math 120 or higher)	4-5
Comparative Arts and/or Philosophy	8
UFSD 22/ IFIRST AID)	4
HPER 234 (Laboratory Experience in Phys. Ed.)	2
THE HO (3 ACTIVITY Classes)	3
HPER 295 (Independent Study)	2
Natural Sciences (Core Requirements—See Page 14)	4
Total	49-50
Sophomore	Hours
English (111, 112, 115, 140 A, B, C, D)	
Psychology 275 (Educ. Psy.)	4
Comporative Ante and the print	5
Comparative Arts and/or Philosophy	4
Biology 290B, 291B (Anatomy & Physiology J. II)	
HPER 202 (Personal and Community Health)	10
HPER 202 (Personal and Community Health)	10 4
HPER 202 (Personal and Community Health) HPER 110 (3 Activity Classes) HPER 250 (Recreation)	10 4 3
HPER 202 (Personal and Community Health) HPER 110 (3 Activity Classes) HPER 250 (Recreation) HPER 204 (Drugs, Alcohol and Tobacco)	10 4 3 4
HPER 202 (Personal and Community Health) HPER 110 (3 Activity Classes) HPER 250 (Recreation) HPER 204 (Drugs, Alcohol and Tobacco) HPER 239 Athletic Officiating Football	10 4 3 4 4
HPER 202 (Personal and Community Health) HPER 110 (3 Activity Classes) HPER 250 (Recreation) HPER 204 (Drugs, Alcohol and Tobacco) HPER 239 Athletic Officiating Football 240 Athletic Officiating Basketball	10 4 3 4
HPER 204 (Drugs, Alcohol and Tobacco)  HPER 239 Athletic Officiating Football  240 Athletic Officiating Basketball  241 Athletic Officiating Basketball	10 4 3 4 4
HPER 204 (Drugs, Alcohol and Tobacco)  HPER 209 (Recreation)  HPER 204 (Drugs, Alcohol and Tobacco)  HPER 239 Athletic Officiating Basketball	10 4 3 4 4 6

# **EDUCATION — SOCIAL STUDIES\***

Freshman  English 111, 112, 115, 140 A, B, C, D  Laboratory Sciences (two quarter sequence)  Mathematics (Math 120 or higher)  Humanities (Core Requirements—See Page 14)  History 101, 102, and 103  Psychology	8 8-10 4-5 12 12 4
Total	48-51
Sophomore	Hours
History 201, 202, and 203	12
Government 101 and 102	8
numanities elective (200 level)	8
Geography 101	4
Psychology 275 (Educ. Psy.)	5
Sociology 101	4
Speech 101 or 102	5
Physical Education	3
Total	2 —— 51

\*For preparation leading to state teacher certification in a historygovernment comprehensive, students consult faculty in the Social Science Division and the appropriate catalog of the college to which they plan to transfer.

additionally by the College of Health & Human Services.

# **CONCENTRATION AREAS**

# **Humanities/Fine Arts**

Art
Communication (General)
Comparative Arts
\*English
Journalism
Theater

\*Students interested in transferring to Ohio University should consult with the Director of the O.U. Resident Credit Center for specific foreign language requirements.

## PRE-ART MAJOR

Freshman	Hours
English 111, 112, 115, 140 A, B, C, D	
Natural Sciences (Core Requirements—See Page 14)	8
Social Sciences (Core Requirements—See Page 14)	12
Art 101, 102, 103 (Studio Foundations)	12
Physical Education	15
2000000	1
Total	48
Sophomore	Hours
Speech 101 or 102	
and/or (Painting I, II, III)	3
Art 231, 232, 233 (Ceramics I, II, & III)	12
71(27), 272, 273 (Life Drawing         )	12
Comparative Arts (101, 102, 103)	9
All Liectives	8
Physical Education	8 1
Total	45

# COMPARATIVE ARTS CONCENTRATION

	14
Freshman	Hours
Speech I or Speech II	
English (111, 112, 115 140 A. B. C. D)	3
Natural Sciences (Core Requirements—See Dago 14)	8
Social Sciences (Core Requirements—See Page 14)	12
Comparative Arts 101, 102, 103	12
Physical Education	9 2
Total	46
Sophomore	Hours
Music (choose 15 hours)	
Theater (Choose 15 hours)	15 15
rnar. 100 level	15
Thar. 200 level	
Art (choose 15 hours)	15
Art 101 (Studio Foundations) 5	15
Art 102 (Studio Foundations) 5	
Art 103 (Studio Foundations)	
Electives	3
Total	48

Students who enroll in this program should do so with the prior knowledge that when they transfer to a four-year institution they will in most circumstances be required to enroll in only one of the three areas (Theater, Art or Music). The courses taken in the other areas will be electives.

# PRE-ART MAJOR (GRAPHIC DESIGN EMPHASIS)

Freshman		Hours
English 111, 112, 115, 140, A, B, C, D		8
Natural Sciences (Core Requirements - See Do.	ao 14\	12
Social Sciences (Core Requirements - See Page	0 141	12
Art 104 (Terminology, Tools & Materials		15
for the Graphic Designer)	• • • • • • • • • • • • • • • • • • • •	4
	Total	51
Sophomore Space 191		Hours
Speech 101 or 102		3
Typography for the Graphic Designer) Art 252 (Techniques in Illustration & Design II:		4
Basic Illustration) Art 253 (Techniques in Illustration & Design III:		4
Basic Illustration) Art 271, 272, 273 (Life Drawing I & II)	• • • • • • • • • • • • • • • • • • • •	4
Art 221, 222, 223 (Painting I, II, III)		8
Art 205 Graphic Design Production Techniques	• • • • • • • • • • • • • • • • • • • •	12
Art 215 Photography for the Graphic D	• • • • • • • • • • • • • • • • • • • •	4
Art 215 Photography for the Graphic Designer .	• • • • • • • • • • •	4
Comparative Arts 101, 102, 103	•••••	9

# -COMMUNICATIONS (GENERAL) MAJOR

PRE—COMMUNICATIONS (GENERAL) MA	JOR
Freshman	Hours
English 111, 112, 115, 140 A, B, C, D	
Natural Sciences (Core Requirements—See Page 14)	8
Social Science (Core Requirements—See Page 14)	12
Humanities (Core Requirements—See Page 14)	12
Physical Education	12
	2
Total	46
Sophomore	Hours
Speech 101 or 101	3
Jour. 105, or Speech 105 (Intro. to Mass Comm.)	4
Thar. 210 or 215 (Acting), or	4
Sp. 220/Thar. 220 (Oral Interp.)	3
rsychology 101 (Principles of Psychology	4
Electives	27
Total	45
PRE-ENGLISH MAJOR	
Freshman	Hours
English 111 112 115 140 A B C D	
English 111, 112, 115, 140 A, B, C, D	8
See Page 14)	12

#### Humanities (Core Requirements—See Page 14) ..... Language 111, 112, 113 ..... 12\* Natural Sciences (Core Requirements—See Page 14) ..... 12 P. E. or Health .....

2 Total 46 Sophomore Hours Speech 102 .... 3 English (201, 202, 203) ..... English (204, 205, 206)
English 225, 226
Language 211, 212, 213 4 8 12\* Social Science (Core Requirements—See Page 14) ...... English Elective ..... 4

Total \*Dependent upon previous language experience and college to which the student transfers.

# PRE-JOURNALISM

Punkan	Hours
Freshman	8
English 111, 112, 115, 140 A, B, C, D	4
Government 102 (Logic)	12
Natural Sciences (Core Requirements—See Page 14)	12
Philosophy 101, 102, 103 or Lang. 111, 112, 113	4
Journalism 105 (Intro. to Mass Comm.)	4
one and (Current Social Problems)	1
Physical Education	1
Total	45
As who weeks	Hours
Sophomore	3
Speech 102	8
Economics 101, 102	12
History 201, 202, 203 or History 111, 112, 113	4
Psychology 101	4
Journalism 231 (News Reporting)	. 1
Physical Education	13
Electron (Consult Consult)	
Total	45

# PRE-THEATER MAJOR

Freshman	Hours
English (111, 112, 115 140 A, B, C, D)	8
Netural Sciences (Core Requirements—See Page 14) ·····	12
Cosial Sciences (Core Requirements—See Page 14)	12
Lumanities (Core Requirements—See Page 14)	12
Physical Education	1
Total	45
Conhomoro	Hours
Speech 101 or 102	. 3
3 English Classes at 200 level or above	. 12
Thar. Electives	. 29
Total	45

# **CONCENTRATION AREAS**

## Mathematics/Sciences

\*Botany
\*Chemistry
Dentistry
Engineering
Forestry
\*Medical Technology
Medicine
Microbiology or Public Health and Sanitation
Optometry
Pharmacy
Physical Therapy
Recreation Studies
Veterinary
\*Zoology

\*Students interested in transferring to Ohio University should consult with the Director of the O.U. Resident Credit Center for specific foreign language requirements.

## **PRE-BOTONY MAJOR**

•		
Freshman	Н	urs
rresnman	8	3
English 111, 112, 115, 140 A, B, C, D		3
Speech 102		-
Chemistry 141, 142, 143		
Biology 111, 112, 113		-
** * - * L 001 002		2
Physical Education		_
,		<del></del>
	Total 5	1
O a who make	н	ours
Sophomore	1	2
Chemistry 205, 206, 207		5
Biology 211		5
Biology 225		5
m:	, , , , , , , , , , , , , , , , , , , ,	12
Social Sciences (Core Requirements—Se	Se rage (7) ·····	12
D	age (4)	-
Humanities (Core Requirements—See Pa		
Humanities (Core Requirements—See F	_	51

<sup>\*</sup>Math 130 sequence may be elected in preparation for calculus.

## PRE-DENTISTRY MAJOR

Freshman	Hours
	8
English 111, 112, 115, 140 A, B, C, D	3
Speech 102	12
Chemistry 141, 142, 143	10
*Math 201, 202	11
Biology 111, 113	5
Biology 225 Physical Education	2
Trysloar Eddon.	
Total	51
• .th.amana	Hours
Sophomore	17
Chemistry 205, 206, 207 224	12
Physics 201, 202, 203	12
Social Sciences (Core Requirements—See Page 14)	12
Humanities Electives (Core Requirements—See Page 14)	
Total	53

<sup>\*</sup>Math 130 sequence may be elected in preparation for calculus.

# PRE-CHEMISTRY MAJOR

<b></b>	Hours
Freshman	8
English 111, 112, 115, 140 A, B, C, D	3
Speech 102	12
Chemistry 141, 142, 143	15
*Math Calculus 201, 202, 203	4
Humanities Elective (Core Requirements—See Page 14)	4
Social Sciences (Core Requirements—See Page 14) Physical Education	1
Total	47
- 1	Hours
Sophomore	12
Chemistry 205, 206, 207	12
	8
Elective /Core Redilirements—See 1490 17/	8
Ocasial Calabase (Core Requirements—See Fage 17)	10
Chemistry 224 & 225	1
1 Hydrodi wasan	
Total	51

<sup>\*</sup>Math 130 sequence may be elected in preparation for calculus.

# PRE-ENGINEERING MAJOR

Freshman	Hours
A student may obtain one full year in the freshman schedule should be built a of the college or university to which yo	LORUG (He Hestillien carriogram)

## PRE—FORESTRY MAJOR

- 1	Hours
Freshman	8
English 111, 112, 115, 140 A, B, C, D	3
Speech 102	12
Chemistry 141, 142, 143	10
*Math 201, 202	16
Biology 111, 112, 113	2
Physical Education	
Total	51

#### Sophomore

See counselor for additional information regarding the Forestry School Transfer.

<sup>\*</sup>Math 130 sequence may be elected in preparation for calculus.

## PRE-MEDICAL TECHNOLOGY MAJOR

Freshman	Hours
Chemistry 141, 142, 143	12
*Math 201, 202	
Speech 102	10
Biology 111, 113	3
English /111 112 115 140 A D O	11
English (111, 112, 115, 140 A, B, C)	8
Physical Education	2
Total	46
Sophomore	Hours
Chemistry 205, 206, 207	12
Chemistry 224 & 225	10
General Genetics (Biology 225)	5
Social Sciences (Core Requirements—See Page 14)	12
Humanities Elective (Core Requirements—See Page 14)	12
Total	51

<sup>\*</sup>Math 130 sequence may be elected in preparation for calculus.

#### PRE-OPTOMETRY MAJOR

Freshman	Hours
English 111, 112, 115, 140 A, B, C, D	8
Speech 102	3
Chemistry 141, 142, 143	12
Biology 111, 113	11
"Math 201, 202	10
Psychology 101	4
Physical Education	2
Total	50
Sophomore	Hours
Chemistry 205, 206, 207 224	17
Physics 201, 202, 203	12
Social Sciences (Core Requirements—See Page 14)	12
Humanities Elective (Core Requirements—See Page 14)	12
Total	53

<sup>\*</sup>Math 130 sequence may be elected in preparation for calculus.

# PRE-MEDICINE MAJOR

Freshman	Hours
English 111, 112, 115, 140 A, B, C, D)	8
Speech 102	3
Chemistry 141, 142, 143	12
Biology 111, 113	11
*Math 201, 202	10
Social Sciences (Core Requirements—See Page 14)	4
Physical Education	2
Total	50
Sophomore	Hours
Chemistry 205, 206, 207, 224	17
Biology 225	5
Physics 201, 202, 203	12
Social Sciences (Core Requirements—See Page 14)	8
Humanities Elective (Core Requirements—See Page 14)	12
(14)	12
Total	54

<sup>\*</sup>Math 130 sequence may be elected in preparation for calculus.

# PRE-PHARMACY MAJOR

Freshman	Hours
English 111, 112, 115, 140 A, B, C, D)	8
Speech 102	3
Chemistry 141, 142, 143	12
Biology 111, 113	11
Math 201, 202	10
Economics 101	4
Total	48
Sophomore	Hours
Chemistry 205, 206, 207, 224	17
Physics 201, 202, 203	12
Social Sciences (Core Requirements—See Page 14)	8
Physical Education	2
Humanities (Core Requirements—See Page 14)	12
Total *Math 130 sequence may be elected in preparation for calculu	<del></del>

## PRE-MICROBIOLOGY or **PUBLIC HEALTH & SANITATION MAJOR**

Freshman	Hours
English 111, 112, 115, 140 A, B, C, D)	
Speech 102	8 3
Chemistry 141, 142, 143	-
Biology 111, 112, 113	12
*Math 201	16
Biology 225	5
Social Science	5
Total	53
Sophomore	Hours
Chemistry 205, 206, 207	17
Physics 201, 202, 203	12
Social Sciences (Core Requirements—See Page 14)	8
Humanities Elective (Core Requirements—See Page 14)	12
Physical Education	2
Total	51

<sup>\*</sup>Math 130 sequence may be elected in preparation for calculus.

Note: 30 hours required at 200 level for graduation.

#### PRE-PHYSICAL THERAPY MAJOR

Freshman	Hours
English 111, 112, 115, 140 A, B, C, D)	8
Chemistry 141, 142, 143	12
Biology 111, 113	
Biology 225	11
Physical Education 202	5
Psychology 172	4
Psychology 173	5
Math 150 or Psychology 261	5
Total	50
Sophomore	Hours
Biology 290B, 291B (Anatomy & Physiology I, II)	10
Speech 102	3
Sociology 101	-
Physics 201, 202	4
Psychology 275	8
Psychology 270	5
Psychology 270	5
Humanities Elective (Core Requirements—See Page 14)	12
Social Sciences	4
Total	51

## PRE-VETERINARY MAJOR

Freshman	Hours
English 111, 112, 115, 140 A, B, C, D	8
English (11, 112, 113, 140 A, B, O, D	3
Speech 102	10
*Math 201, 202	12
Chemistry 141, 142, 143	11
Biology 111, 113	
Zoology 225	5 2
Physical Education	2
Total	51
Sophomore	Hours
	17
Chemistry 205, 206, 207, 224	12
Physics 201, 202, 203	12
Social Sciences (Core Requirements—See Page 14)	12
Humanities (Core Requirements—See Page 14)	12
Total	53
	_

<sup>\*</sup>Math 130 sequence may be elected in preparation for calculus.

#### **PRE-ZOOLOGY MAJOR**

Freshman	Hours
English (111, 112, 115 140 A, B, C, D)	8
Speech 102	3
Speech 102	12
Chemistry 141, 142, 143	16
Biology 111, 112, 113	10
*Math 201, 202	2
Physical Education	4
Social Science	55
Sophomore  Chemistry 205, 206, 207, 224	Hours 17 12 8 5
Total	54

<sup>\*</sup>Math 130 sequence may be elected in preparation for calculus.

# **RECREATION STUDIES**

Freshman	Hours
English 111, 112, 115, 140 A, B, C, D	8
Speech 101	3
Math 130	4
Biol 111, 215, 271	12
Social Science (Core Requirements — See Page 14)	4
LIDED 200 (Introduction to Recreation)	4
HPER 227 (First Aid)	4
LIDED 110 (3 Activity Classes)	3
Humanities (Core Requirements — See Page 14)	8
Total	50
Sophomore	Hours
HPER 260 (Outdoor Recreation)	4
HPER 237 (Orientation to Recreation Employment)	1
HPER 250 (Recreation Leadership)	4
HPER Electives	10
HPER 110 (3 Activity Classes)	3
PIOL Electives	10
Social Science (Core Requirements — See Page 14)	8
Humanities (Core Requirements — See Page 14)	4
Total	44

# **CONCENTRATION AREAS**

#### **Social Sciences**

Business Administration \*Government

\*History
\*Pre-Law

\*Psychology Social Work

\*Sociology

\*Students interested in transferring to Ohio University should consult with the Director of the O.U. Resident Credit Center for specific foreign language requirements.

# PRE-BUSINESS ADMINISTRATION MAJOR

#### **PRE-HISTORY MAJOR**

Freshman English 111, 112, 115, 140 A, B, C, D  ¹Social Sciences  *Math 155, 201 Economics 101, 102 Natural Sciences Physical Education  Total	8 8 10 8 12 2	Freshman  English 111, 112, 115, 140 A, B, C, D  Philosophy 101 (Fundamentals)  History 111, 112, 113 (United States)  Foreign Language or Humanities/Arts  Natural Science (2 courses in the same area)  Physical Education  Total	8 4 12 12 12 8 2
Sophomore  Humanities (Core Requirements—See Page 14)  Social Sciences  Business Law 250  Accounting 101, 102, 103  Speech 102 (Public Speaking)  QM 200, 201 (Quantitative Methods)  Electives [ RMMT 0102 RMMT 0301 Suggested ]	Hours 12 4 4 12 3 8	Sophomore  Speech 102  History 201, 202, 203 (West Civ)  Philosophy 102 (Logic)  Humanities  Natural Science  History Electives  Electives	3 12 4 4 6 12
Total	51	Total	45

<sup>&</sup>lt;sup>1</sup>Recommended: Government 101, 102 Sociology 101, Psychology 101, 131

## **PRE-LAW MAJOR**

GOVERNMENT MAJOR		LUE-EVA INVOCA	
Freshman  English 111, 112, 115, 140 A, B, C, D  Natural Science (Core Requirements—See Page 14)  Physical Education  Language or Humanities/Arts 200 level  Government 101, 102  Philosophy (102 or 103)	8 12 2 12 8 4	Freshman  English 111, 112, 113, 115, 140 A, B, C, D  Philosophy 102 (Logic), 103 (Moral)  Business Law 250, 260  Lab Science (2 quarter sequence)  Government 101, 102  Speech 102 (Public Speaking)  Electives (200 level)	8 8 8 8 8 3
Total	46	Total	47
Sophomore  Speech 102  History (111, 112, 113)  Any three courses from the following:  Govt. 201 (Urban Politics)  Govt. 203 (Pol. in the American States)  Govt. 205 (Appalachian Politics)	<b>Hours</b> 3 12 15	Sophomore History 111, 112, 113	Hours 12 8 42
Govt. 204 (Intro. to World Politics) Govt. 229 (Current Pol. Topics) Soc. Sci. 210 (Introduction to Urban Politics) Electives Math 150 (Elem. Stat. for Soc. & Behavioral Sciences)	12 4 ————	Total *Total 20 hrs. needed in Humanities.	45
Total	46		

<sup>\*</sup>Total 20 hrs. needed in Humanities.

<sup>\*</sup>Math 130 sequence may be elected in preparation for calculus.

## PRE-PSYCHOLOGY MAJOR

## PRE-SOCIOLOGY MAJOR

Freshman  English 111, 112, 115, 140 A, B, C, D  Humanities  Natural Sciences (Core Requirements—Biology 111, 112 recommended  Language or Humanities/Arts  Psychology 101  Math 150 (Elem. Stat. for Soc. & Behav. Science)	8 12 12	Freshman  English 111, 112, 115, 140 A, B, C, D  Humanities (Core Requirements—See Page 14)  Natural Sciences (Core Requirements—Biology 111, 112 recommended  Language or Humanities/Arts  Sociology 101 (Principles of Sociology)  Physical Education	Hours 8 8 12 12 4 2
Total	48	Total	46
Sophomore Speech 100	Hours	Sophomore	Hours
Speech 102 Philosophy Sociology 101 (Prin. of Sociology) Sociology 210 (Current Social Problems) P.E. or Health Psychology (Electives) Electives	4 4 4 2-4	Speech 102 Humanities (Core Requirements—See Page 14) Math 150 (Elem. Stat. for Soc. & Behav. Sciences Psychology 101 Anthropology 201 Sociology Electives Electives	3 4 4 4 5 13
Total	45	Total	45

# PRE—SOCIAL WORK MAJOR

Freshman	Hours
English 111, 112, 115, 140 A, B, C, D	8
Psychology 101 (General Psychology)	A
Psychology 173 (Child and Adolescent)	1
Sociology 101 (Principles of Sociology)	4
recommended)	12
Social Sciences	4
Philosophy 102 (Moral Philosophy)	4
Physical Education	2
Electives	4
Total	46
Sophomore	Hours
Speech 102	3
Math 150 (Elem. Stat. for Soc. & Behav, Sciences)	4
Economics 101, 102	8
Social Sciences	8
Sociology 202 (Intro. to Family Sociology)	4
Humanities (Core Requirements—See Page 14)	8
Flectives (Humanitios)	
Electives (Humanities)	<del>9</del> -10
Total	9-10 

<sup>1</sup>Recommended: Minorities

Erochmon

Sociology of Education Sociology of Aging Urban Society Social Deviance

Introduction to Family Sociology SOCI 0202
\*\*Introduction to Social Welfare and Social Work
SOWR 0101

<sup>\*\*</sup> Offered on demand only

# **BUSINESS TECHNOLOGIES**

# (ASSOCIATE OF APPLIED BUSINESS DEGREE)

## **ACCOUNTING**

## **Business Management**

Retail Management

**Business Management** 

Banking/Finance

Real Estate

# DATA PROCESSING AND COMPUTER TECHNOLOGY

#### **Secretarial**

General

Executive

Medical

Legal

## **ACCOUNTING TECHNOLOGY**

#### **CAREERS IN ACCOUNTING**

## Management (Industrial) Accounting

The management accountant is trained to determine the financial consequences of management decisions. The reports and analyses of the management accountant are essential ingredients of most management decisions about the finance investments and pricing policies. More than anyone else on the management team, the management accountant participates in virtually every phase of the business problem solving and decision making process. Because of the accountant's role in this process, he or she has many times advanced to a top management position within the company.

#### **Governmental Accounting**

All organizations need accounting information. Government and other non-profit organizations are no exception. The federal government hires accountants in most of its agencies. Three prominent agencies are the Internal Revenue Service, the General Accounting Office and the Defense Contract Audit Agency. State and local government units hire accountants in their tax divisions and in general accounting function. Schools and hospitals are major users of accounting services. Many opportunities exist for those interested in governmental accounting.

#### Public Accounting and the CPA

For the protection of the public the CPA is expected to possess certain professional qualifications. The Uniform CPA Examination is designed to measure the technical competency, the exercise of good judgment, and the understanding of professional responsibility of each man or woman who chooses this career in accounting. The public accountant is a true independent professional person with the stature as that of a doctor or lawyer. In public accounting many opportunities exist for professional growth whether you practice as a sole practitioner or as part of a larger firm.

# FIRST YEAR CURRICULUM ACCOUNTING

	ACCOUNTING		•						20	14	22
Cour No.		Code	Class Hrs.		Cr.		SECOND YEAR CURR				- <del>-</del>
	FIRST QUARTER	Code	П(\$.	mrs.	Hrs.	40					
Acct 0101	Accounting		_			ACC	COUNTING/MANAGEME	NT EN	IPHA	SIS	j
Engl 0111	Contemporary Writing Skills I	T	3 5	4	4	Cour			Class	Lab	Cr.
ExST0120	Business Machines I	G	3	0	4	No	. Course	Code	Hrs.		
	or approved elective	'	3	U	3		FOURTH QUARTER				• • • • • • • • • • • • • • • • • • • •
*Math	Math (See Advisor)	В	5	0	4	Acct 0221	Cost Accounting I	_	2		
BMNT0101	Introduction to Business	В	4	ŏ	3	Acct 0205	Principles of Finance	,	3 3	4	4
				_		BusL 0250	Business Law I	В	4	0	3 4
			20	4	18	Psyc 0101	Principles of Psychology	Ğ	5	Ö	4
						Acct 0211	Intermediate Accounting I	Ť	3	4	4
	SECOND QUARTER						· ·		_		
Acct 0102	Accounting II	т	3	4					18	8	19
Engl 0112	Contemporary Writing Skills II	Ġ	3 5	Ō	4 4						
Econ 0101	Principles of Economics I	B	5	ő	4		FIFTH QUARTER				
*Math	Math (See Advisor)	В	5 5	ŏ	4	Acct 0222	Cost Accounting II	т	3	4	
BMNT0201	Principles of Management	В	4	ŏ	4	BusL 0260	Business Law II	в	4	ō	4 4
				_		EDPT 0102	BASIC Language I	Ť	2	3	3
			22	4	20	Spch 0101	Speech I	G	3	ñ	3
							Business Elective**		_	•	4
	THIRD QUARTER										
Acct 0103	Accounting III	Т	3	4	4				12	7	18
Acct 0104	Tax Accounting	Ť	3	3	4						
Engl 0115	Comp. and Mass Comm.	G	3 5	Ŏ	4		SIXTH QUARTER				
Econ 0100	Business Elective**	T	3	3	4	Acct 0110	Payroll Records/Accounting	T	2	3	3
Econ 0102	Principles of Economics II	В	5	0	4	EDPT	Elective**	Ť	3	4	4
						Soci 0101	Principles of Sociology	G	2 3 5	Ö	4
				10	20	BMNT0202	Personnel Management	G	3	Ŏ	3
*Students wit	h adequate high school mathem	atice ch	- امارات		8 - AI-		Business Elective**			-	4-5
O 100 II III EII GI	III U DUISUE AGVANCEA AEARASE										
*Students may	y take any math sequence from t	he list b	elow a	is lone	1 20				13	7	18-19

<sup>\*</sup>Students may take any math sequence from the list below as long as they have 8 credit hours and 10 contact hours for the two-year degree.

Acct 0161 Acct 0175 Acct 0231 Acct 0261 BMNT 0102 BMNT 0240 BMNT 0241 EDPT 0103 EDPT 0104 EDPT 0105	- Financial Statement Analysis (3) - Governmental Accounting (4) - Accounting W/D P Application II (4)	EXST 0101 - Typir ExST 0121 - Intro Math 0155 - Busir Math 0131 - Colle Math 0201 - Calcu RMMT 0235 - Adver QMet 0200 - Quan	ems Analysis & Design (4)
--	--	--	---------------------------

#### SECOND YEAR CURRICULUM ACCOUNTING/PROFESSIONAL EMPHASIS

0					
Cour No	Course	Code	Class Hrs.		Cr Hrs
	FOURTH QUARTER				
Acct 0211 Acct 0221	Intermediate Accounting I Cost Accounting I	T T	3	4	4
Acct 0205	Principles of Finance	ť	3	4	-
BusL 0250	Business Law I	B·	3 4	0	3
Psyc 0101	Principles of Psychology	G	<del>4</del> 5	0	4
,	· ····oipido di i ayendiogy	G	5	0	4
			18	8	19
	FIFTH QUARTER				
Acct 0212	Intermediate Accounting II	T	3	4	4
Acct 0222	Cost Accounting II	Ť		4	4
BMNT0242	Business Communications	Ġ	3 3 2	2	
EDPT 0102	BASIC Language I	Ť	2	3	3 3
Spch 0101	Speech I	Ġ	3	Õ	3
		_			3
			14	13	. 17
	SIXTH QUARTER				
Acct 0213	Intermediate Accounting II	Т	3	4	4
Acct 0241	Auditing	Ť	3	3	3
	Elective**	Ť	3	4	4
Soci 0101	Principles of Sociology	Ġ	5	ò	4
BMNT0202	Personnel Management	Ť	3	Õ	3
*Acct 0261	Accounting with D.P.		Ē	-	,
	Application II	G	3	3	4
			20	14	22

# **BUSINESS MANAGEMENT TECHNOLOGY**

#### With Majors in:

Retail Management Banking/Finance Business Management Real Estate

# The Associate Degree in Business Management

The Associate degree in Business Management is designed to provide the student with the knowledge, understanding, and skills required for entry-level management positions. The successful student is provided access to a career path leading to a variety of challenging and rewarding middle-management positions in business, service organization, industry, and financial institutions.

#### The Core Curriculum

Flexibility is a key feature of the Business Management curriculum. Students will choose 18-24 credit hours within one of the four specialized areas, shown on the following page, as their area of emphasis. The remainder of the required 45 technical elective hours may be chosen from the remaining three areas of specialization or any other approved business courses offered at Shawnee State. This provides the student the opportunity to design a program compatible to their individualized interest and career goals.

# **BUSINESS MANAGEMENT CURRICULUM**

500			Class	Lab	Cr.
Course No.	course	Code	Hrs.		Hrs.
	FIRST QUARTER				
Engi 0111	Contemporary Writing Skills I	G	5	0	4
Math 0125	Business Math	В	5	0 4	4 4
Acct 0101	Accounting I	B T	3 4-6	4	4 4-6
	Technical Elective	ŀ	<del>4-0</del>	_	
			19-21	8	16-18
	ATOMIN CHARTER				
•	SECOND QUARTER	G	5	0	4
Engl 0112	Contemporary Writing Skills II Accounting II	T	3	4	4
Acct 0102 Econ 0101	Principles of Economics I	В	5	0	4
ECON ONO	Technical Elective	T	4-6	4	4-6
			17-19	8	16-18
	THIRD QUARTER		_	_	
Engl 0115	Composition and Mass Comm	ı. G. B	5 5	0	4 4
Econ 0102	Principles of Economics II Technical Elective	T	8-10	-	8-10
			8-20	8	16-18
	FOURTH QUARTER	,	5	0	4
Psyc 0101	Principles of Psychology	G	3	0	3
Engl 0121	Technical Writing Business Law I	В	4	0	4
BusL 0250	Technical Elective	T	4-8	8	6-8
			16-2	20 8	17-19
	FIFTH QUARTER				
Soci 0101	Principles of Sociology	G		0	
BusL 0251	Business Law II	B		_	
	Technical Elective	ļ	0-1		
			17-	19 (	16-18
	SIXTH QUARTER				
Spch 010		G			) 3
Psyc 013	1 Human Adjustment	9			) 3 10-12
. , 0,2 0.2	Technical Elective	1	10-	12 (	) 10-12
			16-	-18	16-18

#### **Retail Management**

Retailing involves all those activities related to the sale of consumer goods to consumers. The retailing segment of our economy provides jobs for about 17% of all employed people. These jobs are in small "mom and pop" stores and giant corporate chains in nearly every part of the U.S.

Successful management trainees in retailing can move into a number of challenging jobs. Department managers, assistant buyer or buyer, sales manager, merchandise manager, assistant store manager, and store manager are but a few of the possibilities.

If you would like an emphasis in Retailing in the Business Management program, you should take the following courses as part of your technical electives:

~-
Cr. Hrs.
4
3
4
4
4
4
3

## Banking/Finance

The specialization in Banking and Finance is designed to provide individuals interested in a career in banking, savings and loan, credit unions, or credit departments of retail companies with the basic knowledge and skills required to gain employment and to advance to managerial level occupations. There are a large number of lower and middle level management positions in most financial institutions that a student would be qualified to fill with this specialty and the requested experience. Some of the managerial positions available in banks are loan officer, trust officer, collections officer, branch manager, and cashier.

The Banking and Finance curriculum parallels those required by the American Institute of Banking.

If your area of emphasis is Banking and Finance, you should plan to take the following courses as a part of technical electives required in the Business Management program:

Course No.	Course	Class Hrs.	Lab Hrs.	Cr. Hrs.
NO.	Outro			
BAFT 0101	Banking and Finance I	2	3	3
BAFT 0102	Intro. to Commercial Lending	4	0	4
	Installment Credit	4	0	4
BAFT 0105	Principles of Bank Operations	4	Ō	4
BAFT 0106	Home Mortgage Lending	3	3	4
BAFT 0202 BAFT 0204	Investments I	4	0	4

#### **Business Management**

32

The Business Management option is a general business curriculum appropriate for three types of students.

First, the option provides a general business background for those who want to work in business but haven't decided on a specific career area. With some experience and, perhaps, additional specialized courses, this option can lead into management trainee programs in most types of business and industry.

Second, this option is appropriate for those with a technical degree or background who want to move into managerial positions.

Third, the curriculum provides an excellent business background for individuals who want to operate their own small business.

If you fit one of the above three categories, you should choose from the following courses for your technical electives:

the following	courses for your technical electives	5.	Class	Lab
Course No.	e Course	Code	Hrs.	Hrs.
BMNT 0101	Introduction to Business	4	0	3
BMNT 0102	Marketing	5	0	4
<b>D</b> 111111	Installment Credit	4	0	4
D,	Industrial Relations	4	0	4
D	Labor Relations	4	0	4
BMNT 0241	Business Communications	3	2	3
BMNT 0242		4	0	4
BMNT 0201	Principles of Management	3	ō	3
BMNT 0202	Personnel Management	3	ő	3
ACCT 0205	Principles of Finance	. 3	2	3
RMMT 0235	Advertising	-	_	4
RMMT 0225	Marketing Case Studies	4	0	4

#### **Real Estate**

If you have an interest in becoming a real estate agent, real estate broker, appraiser, or manager of a real estate firm, the real estate specialization of the Business Management program is for you.

Successful completion of specific courses in the curriculum meets the requirements of Ohio law and qualifies the student to sit for the Real Estate Salesman's and Real Estate Broker's examination. The curriculum also prepares the student for the Graduate Real Estate Institute examination.

If your area of emphasis is Real Estate, you should choose from the following courses for your technical electives:

Course	Course	Class	Lab	Cr.
No.		Hrs.	Hrs.	Hrs.
REST 0210 REST 0211 REST 0212 REST 0213 REST 0214 REST 0215	Real Estate Principles & Practices Real Estate Brokerage Real Estate Law Real Estate Finance Real Estate Appraisal Special Topics in Real Estate	4 4 4 4 4	0 0 0 0 0	4 4 4 4 4 4

# Real Estate Salesman's Program

Persons wishing to take the Ohio examination for real estate salesmen must first successfully complete Real Estate Principles and Practices and Real Estate Law. Both of these courses are offered at Shawnee State.

# GRADUATE REALTORS INSTITUTE DESIGNATION

#### **Purpose**

- A. To fill the need for a more comprehensive and better instruction program in all facets of the real estate profession through courses of instruction in institutions of higher learning.
- B. To provide licensed real estate brokers and salesmen an opportunity for enhancement of professional competence and financial success through participation in the Graduate, Realtors' Institute (GRI).
- C. To enhance the community status of the real estate profession through a formal education program.
- D. To provide individuals not in the profession an opportunity to become knowledgeable about particular facets of the real estate industry.
- E. To recognize those who have successfully qualified for the GRI designation by awarding them a certificate and pin that identifies them as a Graduate, Realtors' Institute (GRI).

#### **Enrollment**

Enrollment in the Real Estate program is not limited to candidates for the GRI certificate.

Individuals seeking information about specific facets of the real estate industry may enroll in any course; however, program curriculum is oriented to the educational needs of the professional.

## **GRI Certificate Program**

The GRI designation is available to those who hold membership in the Ohio Association of Real Estate Boards and have completed the program requirements.

A certificate in recognition of achievement and a GRI lapel pin will be awarded to those individuals successfully completing the program requirements upon application to the Ohio Association of Real Estate Boards, payment of required fees and successful completion of a comprehensive examination.

Please refer to page 69 for the Real Estate Courses and their course description offered at Shawnee State.

# DATA PROCESSING AND COMPUTER TECHNOLOGY

The Data Processing and Computer Technology Associate Degree Program at Shawnee State Community College is designed to meet the manpower demand of industries, government, and educational institutions. In addition to theoretical fundamentals, practical aspects of data processing are emphasized. Hands-on opportunity is provided and encouraged. Graduates of this program will be fully prepared to enter employment as staff members (computer programmers or operators) in computer installations and application departments or enroll in a fouryear program as a fully accredited junior. Graduates of this technology receive an associate degree in Applied Business.

## **Job Opportunities**

PROGRAMMER — Works closely with systems analysts to define problems, analyze the input data and output report requirements, and prepare a program of instructions which the computer can follow to solve the problem.

SYSTEMS ANALYST — Develops ordered methods for data collection, processing, and reporting.

DATA PROCESSING MANAGER — Plans, coordinates and directs all data processing activities for organization; supervises computer center and punched card installations.

Other positions are available to the graduate technician after several years of experience.

# DATA PROCESSING AND COMPUTER TECHNOLOGY CURRICULUM

COMPOSER SECURIORS			01	Lab	Cr.
Course No.	Course FIRST QUARTER	Code	Class Hrs.		Hrs.
Engl 0111 Acct 0101 *Math *EDPT0102 EXST0101	Contemporary Writing Skills I Accounting I Math Basic & Assembler Programmer Typing I**	G B T T	5 3 5 2 2	0 4 0 3 3	4 4 3 3 
Engl 0112 Acct 0102 *Math EDPT0103 EDPT0107	SECOND QUARTER Contemporary Writing Skills II Accounting II Math BASIC Language I RPG II Language	G B T T	5 3 5 2 3	0 4 0 3 4	4 4 4 3 4

Engl 0115 Acct 0103 Math 0155 EDPT 0104 EDPT 0206	THIRD QUARTER Composition and Mass Comm. Accounting III Business Statistics BASIC Language II FORTRAN IV	G T B T T	5 3 4 2 3	0 4 0 3 4	4 4 4 3 4
Engl 0121 Soci 0101 BusL 0250 EDPT 0201 EDPT 0105	FOURTH QUARTER Technical Writing Principles of Sociology Business Law I Systems Analysis & Design COBOL Programming I	G G B T T	3 5 4 3 3	0 0 0 3 4	3 4 4 4 4 7
BMNT0201 Econ 0101 EDPT 0202 EDPT 0203 EDPT 0106		В В Т Т	4 5 3 3 3 3	0 0 0 4 4 4	4 4 3 4 4
Spch 0101 Psyc 0101 *EDPT		G G T		0 0 4 10-18 - - 22 10-18	3 4 12 ——————————————————————————————————

\*Math sequence for Data Processing: Basic Algebra, College Algebra I, College Algebra II, Trigonometry, and Analytic Geometry or Calculus I. Advisor to determine math sequence. Students may take any math sequence from the above list as long as they have 8 credit hours and 10 contact hours for the two-year degree with advisor's approval.

\*\*Typing — Students are to have a high school equivalent or 1 quarter of college typing

\*\*Typing I — Students may take Typing I and Basic Assembler first quarter concurrently.

\*EDPT 204, 205, 207, 208 - Students may take any 3 of 4 classes.

\*Required courses for Data majors only.

\*EDPT 0101 - Intro. to Data Processing for non-data majors only. Data Processing majors may not use EDPT 0101 Introduction to Data Processing as credit toward their degree.

# DATA PROCESSING ELECTIVE COURSES

0202 - Comp. Operations (3) **EDPT** 0204 - Business Computer Projects II (4) **EDPT** 0205 - Business Data Syst. & Comm. (3) **EDPT EDPT** 0207 - Pascal (4) 0208 - Data Base Management (4) **EDPT** 0205 - Data Systems & Comm. (3) Acct

See prerequisites on page 68 under Data Processing.

### SECRETARIAL TECHNOLOGY

With Majors In Executive Secretarial (Shorthand Required) General Secretarial (Non-Shorthand Program)

### **Job Opportunities**

Positions available after completion of one of the Secretarial Majors are:

GENERAL SECRETARY — Is qualified to fill a broad range of office positions which require technical skills. She will not be trained for shorthand dictation but will be qualified as a machine transcriptionist.

EXECUTIVE SECRETARY — Has a high degree of stenographic speed and accuracy. Responsible for supervision of other clerical personnel. Usually handles all types of correspondence and handles private and confidential reports.

MEDICAL SECRETARY — Prepares medical charts and reports for doctors or hospital personnel, utilizing knowledge of medical terminology. Takes dictation in medical terminology.

LEGAL SECRETARY — Prepares legal papers and correspondence of legal nature, such as summonses, complaints, motions, and subpoenas. Takes dictation in legal terminology.

# FIRST YEAR CURRICULUM GENERAL AND EXECUTIVE SECRETARIAL MAJORS

Course No.	e Course	Code	Class Hrs.		Cr. Hrs.
	FIRST QUARTER				
Engl 0111 Math 0105 ExST 0101 *ExST 0111	Contemporary Writing Skills I Business Mathematics Typng I Shorthand I	G B T T	5 5 2 3	0 0 3 2	4 4 3 3
			19	5	17
	SECOND QUARTER				
ExST0102 *ExST0112 ****Acct 0101	Shorthand II	G T T G	5 2 3 3 5	0 3 2 4 0	4 3 3 4 4 —————————————————————————————

### \*\*\*Accounting Substitution

Basic Accounting (Acct 0100), which is for CAREER ORIENTED STUDENTS ONLY, may be substituted for Acct 0101 (Accounting I). This substitution must be approved by the secretarial advisor.

### THIRD QUARTER

ExST	0231	Records Management	Т	3	0	3
Engl	0115	Composition & Mass Comm.	G	5	Ō	4
ExST	0221	Dictation & Transcription I	Т	3	2	3
		Typing III	Т	2	3	3
`ExST	0113	Shorthand III	Τ	3	2	3
EDPT	0101	Intro to Data	T	2	3	3
				18	10	19

### **Previous Typing and Shorthand Training**

Students who have had prior instruction at the high school level in typing and shorthand before coming to Shawnee State Community College may receive transfer credit for their work if they meet the following criteria.

- If you have successfully completed at least 180 hours (one school year) of typing and/or shorthand and received full credit; you may substitute this credit for our Typing I and Typing II and/or Shorthand I and Shorthand II.
- If you have completed at least 360 hours (two school years) of typing an/or shorthand and received a final grade of A or B in the second year, you may substitute this credit for our Typing III and/or Shorthand III.

However, if you are not trained on the IBM Electronic 85 typewriter, you must take our Typing III in order to be trained on this machine. You will be required to use the Electronic 85 in Typing IV.

If you are not proficient in typing from your shorthand notes into mailable copy under the pressure of being timed, then you should take our Shorthand III in order to be ready for Shorthand IV which requires you to be proficient in doing mailable copy work.

# SECOND YEAR CURRICULUM GENERAL AND EXECUTIVE SECRETARIAL MAJORS

				VIAU.	JNJ
Cours No.		Code	Class Hrs.		Cr. Hrs.
BusL 0250 ExST 0222 *ExST 0214 ExST 0104 ExST 0241 ExST 0121	FOURTH QUARTER Business Law Dictation & Transcription II Shorthand IV Typing IV Secretarial Practices I Intro. to Word Processing	B T T T T	4 3 3 2 3 5 —	0 2 2 3 2 0	4 3 3 3 4 —
ExST 0242 Spch 0101 Psyc 0101 *ExST 0215 Econ 0101 ExST 0105	FIFTH QUARTER Secretarial Practices II Speech I Principles of Psychology Shorthand V Principles of Econ I Typing V	T G T B T	3 3 5 3 5 2 21	2 0 0 2 0 3	3 4 3 4 3 ————
Psyc 0173  BMNT 0202  Acct 0110  *ExST 0216  ExST 0243	SIXTH QUARTER Human Growth and Development Personnel Management Payroll Records & Accounting Shorthand VI Secretarial Practices III	В В Т Т	3 3 2 0 0	0 0 3 3 15	4 3 3 2 5 ———————————————————————————————

\*GENERAL SECRETARIAL MAJORS MUST ELECT BASIC BUSINESS COURSES INSTEAD OF SHORTHAND.

# MEDICAL AND LEGAL SPECIALIZATION

If enough of the EXECUTIVE SECRETARIAL MAJORS want to specialize in legal and medical to warrant the formation of these classes, their last three quarters would adhere to the following format:

### **MEDICAL SPECIALIZATION**

### **LEGAL SPECIALIZATION**

									Class	Lob	Cr.
Course No.	e Course	Code	Class Hrs.		Cr. Hrs.	Course No.	Course	Code			
	FOURTH QUARTER						FOURTH QUARTER				
		-	2	3	3	LgST 0241 Le	egal Secretarial Practices I	Т	2	3	3
MDST 0241	Medical Secretarial Practices 1	T	2 4	0	4		Business Law I	T	4	0	4
BusL 0250	Business Law I	B T	2	3	3	LaST 0111 L	egal Shorthand I	T	2	3 3	3
MDST0111	Medical Shorthand I	'	2	٠	·	LaST 0221 L	egal Dictation & Trans. I	Т	2	3	3
MDST0221	Medical Dictation &	т	3	2	3	LğST 0223 L	egal Terminology & Judicial	_	_	_	
	Transcription I Medical Terminology I	Ť	3	ō	3		Procedures I	T	2 3	3	3 3
MDST0223	Basic Business Elective	Ġ	3	Ō	3	E	Basic Business Elective	G	3	U	3
	Basic Business Electro	_							15	12	19
			17	8	19				13	12	10
MDST0242 Spch 0101 Psyc 0101 MDST0224 MDST0112	FIFTH QUARTER  Medical Secretarial Practices II Speech I Principles of Psychology Medical Terminology II Medical Shorthand II	I T G G T T	2 3 5 2 2 7	3 0 0 3 3	3 3 4 3 3 —	BusL 0260 E Spch 0101 S Psyc 0101 F LgST 0224 L	FIFTH QUARTER Business Law II Speech I Principles of Psychology Legal Terminology & Judicial Procedures II Legal Shorthand II	B G T T	4 3 5 2 2 16	0 0 0 3 3	4 3 4 3 3 
MDST0222 BMNT0202 ExST 0243 ExST 0121	SIXTH QUARTER Medical Dictation & Trans. II Personnel Management Secretarial Practices III Intro. to Word Processing	Т В Т Т	5 3 0 5	0 0 15 0	4 3 5 4	LgST 0222   BMNT0202   ExST 0243	SIXTH QUARTER Legal Dictation & Trans. II Personnel Management Secretarial Practices III Intro. to Word Processing	T B T T	5 3 0 5	0 0 15 0	4 3 5 4

# ALLIED HEALTH TECHNOLOGIES (ASSOCIATE OF APPLIED SCIENCE DEGREE)

Associate Degree Nursing
Dental Hygiene
Medical Laboratory
Occupational Therapy Assistant
Radiologic Technology
Respiratory Therapy Technology

### **CERTIFICATE PROGRAMS**

(One Year)

Emergency Medical Technician — Paramedic Respiratory Therapy Technician Practical Nursing

# ALLIED HEALTH TECHNOLOGIES ACADEMIC REQUIREMENTS FOR STUDENTS ENROLLED IN ALLIED HEALTH PROGRAMS AT SHAWNEE STATE COMMUNITY COLLEGE

In order to remain in good standing in an Allied Health Program at Shawnee State Community College a student must:

- Maintain an overall grade point average of 2.000 for all course work needed to meet degree requirements. This applies to required courses taken before as well as after admission.
- Maintain an overall Allied Health major grade point average of 2.000 in all courses with the MLTC, DTHY, ADNR, LPNR, RPTT, RDLT prefix.
- Not receive a grade of F, D-, D, D+ in any Allied Health major course (MLTC, DTHY, RDLT, ADNR, LPNR, or RPTT prefix) and academic courses required for graduation.

The following schedule of events shall apply once the student has failed to achieve any **one of the three** requirements listed above.

- A. The Allied Health Program Director may dismiss a student from his major program. The student may appeal the decision of the Allied Health Program Director in the appeal process as outlined.
  - Student submits a letter of appeal to the Director of Allied Health Program.
  - 2. The Program Director will arrange re-admissions interview with the student, the Director, and the Vice-President of Student Services or his/her designee. A decision will be made regarding the student's dismissal status after evaluating the student's past academic achievement, the student's rational for current grade status, and the prediction of future performance in the program. A decision must be reached on or before three working days after the Director receives the student's appeal notice.
  - 3. Students that wish to appeal the decision of the Director and the Vice-President of Student Services (or his/her designee) may appeal the decision to the Vice-President of Technical Programs. The student's appeal must be in writing and must be received within three working days of the receipt of notice from the appeal interview. The Vice-President of Technical Programs shall elect to support or reject the decision of the interview within three working days from receipt of the student's appeal. The Vice-President of Technical Programs will promptly notify the Program and the student of his/her decision.
  - The student may also have recourse to the President if he/she is dissatisfied with decisions made at lower levels.
- B. The Allied Health Program Director may allow the student to
  - If the student is permitted to continue in the program, he/she
    will have one quarter to raise the overall and Allied Health
    G.P.A. to at least 2.000. The decision to readmit the student will
    be based on the student's past academic performance, the
    reasons for the current low G.P.A. and the director's prediction
    of future performance in the program by the student.
  - 2. If the decision is made to allow the student to continue in the program and if a grade of D+, D, or D- was received in an Allied Health subject (MLTC, DTHY, RDLT, ADNR, LPNR, OR RPTT) or academic courses required for graduation, a decision will be made in an interview informing the student if the course must be repeated and by which method (Course by Arrangement, Credit by Exam, or repeat the course with next year's class.)
  - 3. If the decision is made to allow the student to continue in the program and if a grade of F was received in an Allied Health or academic subject, a decision will be made in an interview informing the student how this course will be repeated.
- C. Dismissal from a major program is not the same as dismissal from the College. College dismissal policies are outlined in the College bulletin under the section on academics.

# ALLIED HEALTH TECHNOLOGIES ADMISSION PROCEDURES

All Applicants to Allied Health Programs must submit:

- 1. Application and non-refundable \$15 Application Fee
- 2. High School Transcript by the school or copy of GED with scores forwarded to the Director of Admissions.
- 3. Letters of recommendation from two (2) persons who are not relatives forwarded to the Director of Admissions.

Applicants to Allied Health programs who are currently enrolled at Shawnee State Community College must obtain a grade point average of 2.0 in

Additional requirements by program are:

### **DENTAL HYGIENE:**

- Complete the Autobiography Sheet and return to the Director of Records.
- 2. High school average of at least 2.5 on a 4.0 scale.
- Complete algebra, biology, and chemistry on high school or college level.
- A natural science score of at least 16 on ACT (results forwarded to the Director of Records.)
- Conference with program director when file is complete and criteria is met.
- After the conference, the student may be required to do a threeday observation in a dentist's office and send a summary of the observation to the Director of Dental Hygiene. The Director may also request that an acknowledgment be submitted by the dental office involved.
- Applicants will be accepted on the condition that the required physical examination is satisfactory. This is to be done by the applicant's physician prior to August 1 with the results forwarded to the Director of Dental Hygiene.

### MEDICAL LABORATORY:

- Complete the Autobiography Sheet and return to the Director of Records.
- 2. High school average of at least 2.5 on a 4.0 scale.
- Complete algebra, biology, and chemistry on a high school or college level.
- A natural science score of at least 16 on the ACT (results forwarded to the Director of Records.)
- Conference with program director when file is complete and criteria is met.
- Applicants will be accepted on the condition that the required
  physical examination is satisfactory. This is to be done by the
  applicant's physician prior to August 1 with the results forwarded
  to the Director of Medical Lab.

# OCCUPATIONAL THERAPY ASSISTANT TECHNOLOGY:

- Write a brief description of abilities and background, including outstanding accomplishments, and explain why you want to take the program. This should not exceed three typewritten pages. Forward this to the Director of Records.
- 2. High school average of at least 2.5 on a 4.0 scale.
- Complete algebra, biology, and chemistry on a high school or college level.
- A natural science score of at least 16 on the ACT (results forwarded to the Director of Records.)
- Conference with program director when file is complete and criteria is met.
- Applicants will be accepted on the condition that the required physical examination is satisfactory. This is to be done by the applicant's physician prior to August 1 with the results forwarded to the Director of Occupational Therapy.

### RADIOLOGIC TECHNOLOGY OR RESPIRATORY THERAPY TECHNICIAN:

- Complete the Autobiography Sheet and return to the Director of Records.
- 2. High school average of at least 2.5 on a 4.0 scale.
- Complete algebra, biology, and chemistry on high school or college level with a C average or better.
- A natural science score of at least 16 on ACT (results forwarded to the Director of Records.)
- Conference with program director when file is complete and criteria is met.

 Applicants will be accepted on the condition that the required physical examination is satisfactory. This is to be done by the applicant's physician prior to August 1 with the results forwarded to the Director of the appropriate program (Radiologic or Respiratory.)

### **ASSOCIATE DEGREE NURSING:**

- 1. High school average of at least 2.5 on a 4.0 scale.
- High school level algebra, biology, and chemistry with a grade of "C" or better.
- Complete the Autobiography Sheet and return to the Director of Records.
- ACT scores of 16 or better in English, math, social studies, and natural sciences with a composite of 16 or better (results forwarded to the Director of Records.)
- Conference with program director when file is complete and criteria is met.
- Applicants will be accepted into the program pending the results of a physical examination.

### PRACTICAL NURSING:

- 1. High school average of at least 2.0 on a 4.0 scale.
- Scores above the 40th percentile in all areas of the Entrance Examination.
- Complete the Autobiography Sheet and return to the Director of Records.
- Applications will be accepted on the condition that the required physical examination is satisfactory. This is to be done by the applicant's physician during the month preceding the starting date. An appropriate form will be provided.
- 5. Applicants should have strong background in science and math.
- Conference with program director when file is complete and criteria is met.

### **EMERGENCY MEDICAL TECHNICIAN-PARAMEDIC**

- Send a copy of current driver's license and copy of EMT-A license to the Director of Records.
- 2. If applicant is a certified EMT-A, one letter of recommendation should be from the applicant's squad chief.
- Applicant must take a proficiency exam offered by the College and receive a 70% or better to be eligible for the Advanced EMT-A class
  - a. If applicant is a state certified EMT-A, he may begin the second quarter after taking a proficiency exam offered by the college and receiving a score of 80% or above.
  - b. If applicant is not a state certified EMT-A, he must begin the first quarter, taking and passing the EMT-A course and EMT-A orientation course offered by the College. Before entering the second quarter, he must take a proficiency exam offered by the College and receive a score of 80% or above.
     c. If applicant is a certified Advanced EMT-A who has passed
  - c. If applicant is a certified Advanced EMT-A who has passed the Advanced EMT-A courses with an 80% or above, he must take a proficiency exam offered by the College and receive a score of 80% or above. He may then begin the second quarter by taking Paramedic Skills II.
  - d. If applicant is a certified Advanced EMT-A who has passed the Advanced EMT-A course with a 79% or below, he must take a proficiency exam offered by the College and receive a score of 80% or above. He may then begin the second quarter by taking Paramedic Skills I and II.
- Complete the Autobiography Sheet and return to the Director of Records.
- Applicant must sign an agreement for a Bureau of Criminal Investigation check.
- Conference with program director when file is complete and criteria is met.
- 7. Completion of physical examination.
- 8. After completion of the program, must take and pass an Advanced Cardiac Life Support Examination.
- A grade of "C" or better in high school biology or 2.0 or better in a developmental biology course is necessary.

Please Note: It is important to understand that fulfilling the above criteria does not automatically guarantee the applicant acceptance into the particular program. All interviewed applicants are subsequently ranked. Since the number of qualified applicants exceeds the number of vacancies, the director and admissions committee reserves and exercises the right to select only those applicants that exhibit the most promise of academic and professional success.

### **DENTAL HYGIENE**

Course

Dental hygiene is a vital health service component of dentistry which emphasizes oral health and the prevention of oral diseases.

Most dental hygienists are employed in private dental offices or clinics and work under the supervision of the dentist. The hygienist's main function is performing oral prophylaxis — the scaling and polishing of the patient's teeth to remove soft and hard deposits. They also perform other procedures: dental charting and oral examination, exposing and processing dental radiographs, fluoride treatments, and preliminary impressions for study models. The hygienist also places a great deal of emphasis on dental health education — home care, brushing/flossing, and diet/nutritional counseling.

### **Accreditation**

The Dental Hygiene Program is accredited by the American Dental Association and the Ohio Dental Board.

### **Job Opportunities**

Dental hygienists practice in the following areas:

### FOR DENTISTS IN PRIVATE PRACTICES

SCHOOL SYSTEMS — Primarily concerned with the proper care of children's teeth. Inspect student's teeth and reporting findings to a supervising dentist. May also instruct students in proper care of teeth, give demonstrations of the proper use of a toothbrush, and present talks on nutrition and its effects on dental health.

HOSPITALS AND CLINICS — Concerned primarily with the special oral health problems of the bedridden and chronically ill.

Hygienists with advanced degrees may be employed in research or may teach in dental hygiene educational programs that help students to prepare for the profession.

Course No.	Course	Code	Class Hrs.		Cr. Hrs.
Chem0121 DtHy 0121 *BioI 0290 DtHy 0111	FIRST QUARTER Inorganic Chemistry Clinical Dental Hygiene I Anatomy & Physiology I Oral Anatomy I	В Т В Т	3 2 4 3	3 6 3 0	4 4 5 3 —
Chem0122 DtHy 0122 *Biol 0291 DtHY 0101A DtHy 0112	SECOND QUARTER Organic Chemistry Clinical Dental Hygiene II Anatomy & Physiology II Radiology I Oral Anatomy II	В Т В Т	3 2 4 1 3	3 6 3 0 0	4 4 5 1 3 —
DtHy 0202 DtHy 0101B DtHy 0102 DtHy 0123 Biol 0235	THIRD QUARTER Periodontics Radiology II Gen & Oral Histology and Embryology Clinical Dental Hygiene III Microbiology	T T T	3 1 3 1 4	0 3 0 8 3 14	3 2 3 4 5

<sup>\*</sup>Biol 0111 and Biol 0200 may be substituted for Biol 0290 and Biol 0291 if approval is obtained from Dental Hygiene Program Director.

DtHy 0124 DtHy 0103 DtHy 0205	SUMMER QUARTER CInical Dental Hygiene IV Dental Materials Dental Health Education Contemp. Writing Skills I	T T T G	2 3 3 5	12 6 0 0	6 5 3 4 —————————————————————————————————
DtHy 0201 DtHy 0203 Soci 0101 DtHy 0125 Engl 0112	FOURTH QUARTER General & Oral Pathology Nutrition Sociology Clinical Dental Hygiene V Contemp, Writing Skills II	T T G T G	3 3 5 1 5	0 0 0 12 0	3 3 4 5 4
DtHy 0204 DtHy 0206 DtHy 0126 Spch 0101	FIFTH QUARTER Pharmacology and Anesthesiology Public Health Clinical Dental Hygiene VI Speech	B T T G	4 3 1 3 11	0 0 12 0	4 3 5 3 ————————————————————————————————
DtHy 0250*	Expanded Functions I (Laboratory fee required)	т	2	6	4
DtHy 0127 Psyc 0101 Engl 0115	SIXTH QUARTER Clinical Dental Hygiene VII Principles of Psychology Electives Comp. & Mass. Comm.	T G G	1 5 5 11	12 0 0	5 4 3 4 ————————————————————————————————
DtHy 0251*	Expanded Functions II (Laboratory fee required)	Т	0	8	2

Cr.

Class Lab

Hrs. Hrs. Hrs.

After the first quarter courses, all subsequent basic and technical courses are closely related and, therefore, must be taken in sequential order.

Please Note: Only those students that have been officially accepted into the program or received program director approval may take the courses beginning with the DTHY prefix.

### \*Expanded Functions Program

The Expanded Functions Program is a two-quarter elective program consisting of DtHy 0250 and DtHy 0251. This program prepares the dental auxiliary to perform placement of restorations, rubber dam, dental bases, and to utilize four-handed dentistry techniques under a dentist's supervision. The student must also file for admission into this program. (See Program Director.) This program series will be offered each winter and spring quarter to a limited class enrollment.

### **MEDICAL LABORATORY TECHNOLOGY**

### **Associate Degree Program**

Medical Laboratory Technology, a medically oriented discipline, occupies an essential and responsible position in laboratory medicine. Physicians rely on the laboratory staff and the results of their analyses to aid them in determining the presence and extent of disease, as well as implications pertaining to the cause of disease. They also provide data needed to evaluate the effectiveness of treatment and patient management. Researchers in the medical sciences also depend on the special skills of medically oriented laboratory workers for analyses and observations which are essential to the progress of their research.

The Associate degree Medical Laboratory Technician works under the supervision of a pathologist or technologist and is qualified to perform a wide variety of analytical works on patient specimens in the areas of hematology, chemistry, microbiology, immunoserology, immunohematology, and urinalysis. Individuals must be accurate and conscientious, with manual dexterity and an interest in science, have an inquiring mind, and a recognition of their responsibility for human lives.

The Associate degree Medical Laboratory Technology program is designed to provide basic educational background and the clinical environment in which students can acquire knowledge, skills, and competence to properly perform routine and selected specialized analyses in a clinical laboratory.

The curriculum consists of eight academic quarters, which includes six quarters of general education; general sciences, including clinical laboratory and related subjects; and two quarters of internship in one of the affiliated hospitals.

### Certification

Upon successful completion of this program, the student will receive the Associate of Applied Science degree and is eligible to take the American Society of Clinical Pathologist's Board of Registry Examination to obtain certification as a Medical Laboratory Technician MLT (ASCP) or to take the National Certification Agency for Clinical Laboratory Personnel Examination to obtain certification as a Clinical Laboratory Technician CLT (NCA).

### Accreditation

The MLT-AD program is fully accredited by the Committee on Allied Health Education and Accreditation of the American Medical Association, in collaboration with the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

### **Employment Opportunities**

Positions for certified Medical Laboratory Technicians are available in hospitals laboratories, independent laboratories, public health facilities, the armed forces, physicians' offices and clinics, pharmaceutical and industrial firms, research and educational institutions, and as technical and sales representatives for biomedical supplies and instruments.

### **Scholarships**

A Medical Laboratory Scholarship covering two-year tuitions is awarded each year to a high school graduate who demonstrates academic excellence and has been accepted into the Medical Laboratory Technology program.

### MEDICAL LABORATORY CURRICULUM

Cours No.	*	Class Code			Hrs.
Engl 0111 *Math **Chem0121 ***Biol 0290 MLTC0111	Contemporary Writing Skills I Math Inorganic Chemistry Anatomy & Physiology I Med. Tech. Orientation II	G B B T	5 5 3 4 1	0 0 3 3	4 4 4 5 1
			1Ω	7	10

Engl 0112 *Math Chem0122 ***Biol 0291 MLTC 0112	Math Organic Chemistry Anatomy & Physiology II	G B B T	5 5 3 4 1	0 0 3 3 1	4 4 4 5 1
	TIUDD OLLARDO		10	,	10
Chem 0123 Biol 0235 MLTC 0209 MLTC 0201	THIRD QUARTER Physiological Chemistry Microbiology Hematology I Urinalysis	B B T T	3 4 2 2	3 3 6 3	4 5 4 3
			11	15	16
	FOURTH QUARTER				
Engl 0121 MLTC 0211 Spch 0101 MLTC 0207	Technical Writing Instrumentation Speech I Clinical Bacteriology	G T G T	4 2 3 3 	0 6 0 6	3 4 3 5
			12	12	15
MLTC 0212 MLTC 0210 MLTC 0204 MLTC 0202	FIFTH QUARTER Clinical Chemistry I Hematology II Parasitology Immunoserology Principles of Psychology	T T T G	2 2 1 3 5	6 6 2 3 0	4 4 1 4 4
			13	17	17
MLTC 0213 Soci 0101 MLTC 0203	SIXTH QUARTER Clinical Chemistry II Principles of Sociology Blood Banking Mycology	T G T T	2 4 2 1	6 0 6 2	4 4 4 1 13
	SEVENTH & EIGHTH QUARTERS				

MLTC 0220 Clinical Practicum \*Math 101, 155, 108, 109, 130, 131, 201, and 202.

Refer to course descriptions and prerequisites on Page 80. Math sequence is determined by proficiency testing and by approval of program director.

40

13

### NOTE:

1. Only those students who have been officially accepted into the program or received program director approval may take the courses beginning with the MLTC prefixes. Eligibility for clinical practicum, as well as to continue in the Medical Laboratory Technology program, requires that students must maintain a 2.000 accumulative G.P.A. and a minimum of a "C" in all MLTC courses.

<sup>\*</sup>Students who are planning to continue their education toward a Baccalaureate degree are advised to register for Chem 141, 142.

<sup>\*\*\*</sup>Students may select the Biol 0111 and Biol 0200 series with the approval of the program director.

# OCCUPATIONAL THERAPY ASSISTANT TECHNOLOGY

Certified occupational therapy assistants work in hospitals, nursing homes and intermediate care facilities and public and private schools. Others work in community mental health center, rehabilitation hospitals, residential care facilities, and community agencies. Assistants treat patients of all ages who have a variety of health problems, both physical and mental. The most common ailments among patients seen by occupational therapists include stroke and its related problems, developmental disabilities, cerebral palsy, mental retardation, and other mental health problems.

### **Accreditation**

Application pending for accreditation with the American Occupational Therapy Association.

### OCCUPATIONAL THERAPY CURRICULUM

OCCUPATIONAL ITIENAL I COMMODES									
Course No.	Course	Code	Class Hrs.		Cr. Hrs.				
OTAT 0101 OTAT 0102 OTAT 0104 OTAT 0105 Engl 0111	FIRST QUARTER Intro. to Occupational Therapy Therapeutic Media I Life Span Development Survey of Medical Terminology Contemporary Writing Skills I	T T T G	4 1 4 2 5	3 6 0 0 0	4 3 4 2 4 17				
OTAT 0107 OTAT 0108 Engl 0112 Biol 0290 Psyc 0101	SECOND QUARTER  Occupational Therapy in Development Disabilities Practicum in Devel. Disabilities Contemporary Writing Skills II Prin. of Anat. and Physiology Prin. of Physiology	T T G B G	3 1 5 4 4 7	4 6 0 3 0	4 2 4 5 4				
OTAT 0110 OTAT 0112 Spch 0101 Biol 0291	THIRD QUARTER Occupational Therapy in Mental Health Therapeutic Media II Speech I Prin. of Anatomy & Physiology	T T G B	4 1 3 4 12	3 6 0 3	5 3 3 5 ———————————————————————————————				
OTAT 0201 OTAT 0202 Soci 0101 Psyc 0173	FOURTH QUARTER Occup. Therapy in Geriatrics Disease Pathology Principles of Sociology Human Growth and Develop. Math/Science Elective	T T G B	3 3 4 4 3		4 4 4 3 19				
OTAT 0210 OTAT 0211 OTAT 0212 Psyc 0270	Practicum in Phys. Dysfunc. Occup. Ther. Asst. Seminar	c. T T G B	1 2 5 4-	6 0	4 2 2 5 4-8 17-21				
OTAT 0213 OTAT 0214		s) T :s) T		0 40 0 40 40	3				

### **RADIOLOGIC TECHNOLOGY**

The Radiologic Technology curriculum will prepare the graduate as a Radiographer. The Radiographer works under the supervision of a medical radiologist or physician in hospital radiology departments, clinics, commercial x-ray laboratories, or doctor's offices. The responsibility of the radiographer is to produce radiographic (x-ray) film of the highest diagnostic quality of any designated area of the human body. It is from this film that the radiologist makes his interpretations.

Curriculum for this program covers eight academic quarters. The first four academic quarters are designed to provide the students with mathematics, basic science, general education courses, supporting technical courses, supporting technical courses, and specialized courses in radiography. The second year of the program consists of participation in clinical education scheduled in the affiliated hospitals along with advanced radiologic technology courses.

Experience in the radiology departments of the affiliated hospitals provides the opportunities for the practical application of knowledge learned in the college classroom. This experience in the hospital is a vital part of the program, since it enables the student to assist in the handling of sick and injured patients as they undergo a wide variety of radiographic examinations.

Upon satisfactory completion of the course requirements, the graduate will receive the Associate in Applied Science Degree and is eligible to apply for examination by the American Registry of Radiologic Technology.

### Accreditation

Accredited by the Joint Review Committee on Education.

### RADIOLOGIC TECHNOLOGY CURRICULUM

Course			Class Lab Cr. Course								
No	· Course	Code			Hrs.	No		Code	Class		Cr. Hrs.
	FIRST QUARTER						SIXTH QUARTER	Jouc		1113.	1113.
RDLT 0101	Radiologic Technology I	T	3	6	3	Psyc 0101	Principles of Psychology	_			
Math 0108	Allied Health Math I	В	5	ō	4	RDLT 0106	Radiologic Technology IV	G	5	0	4
Biol 0290	in all in the second of the se	В	4	3	5	RDLT 0112	Radiol. & Radiation Protection	T T	3	0	3
RDLT 0200	Basic Patient Care	Т	3	2	3	Engl 0121	Technical Writing	Ġ	2 3	0	2
						RDLT 0214	Clinical Experience IV	Ť	0	24	3 3
			15	11	15		, , , , , , , , , , , , , , , , , , , ,	'			
	SECOND OUADER								13	24	15
RDLT 0102	SECOND QUARTER										
Psci 0102	Radiologic Technology II	Ţ	2	10	3		SEVENTH QUARTER				
Engl 0111	Physical Science Cont. Writing Skills I	В	4	3	5	Soci 0101	Principles of Sociology	G	5	0	4
Biol 0291	Antatomy & Physiology II	G B	5	0	4	RDLT 0107	Radiologic Tech. VII	Ť	3	ő	3
	Antatomy & Physiology II	В	4	3	4	RDLT 0113	Radiographic Processing	Т	2	ō	2
			15	16	17	RDLT 0215	Clinical Experience V	Т	0	24	3
			13	10	17		Elective	G	3-4	0	3-4
	THIRD QUARTER								13-14	24	 15-16
Engl 0112	Cont. Writing Skills I	G	5	0							.0 .0
RDLT 0103	Radiologic Technology III	T	3	0 2	4 3		EIGHTH QUARTER				
RDLT 0110	Radiologic Electricity	Ť	3	1	3	RDLT 0108		_			
RDLT 0201	Radiographic Exposure	Ť	3	2	4	RDLT 0108	Radiologic Technology VIII Clinical Experience VI	T	2	0	2
RDLT 0211	Clinical Experience I	T	0	16	2	11021 0210	Cirrical Experience VI	Т	0	32	4
			14	21					2	32	<del></del>
			14	21	16						
	FOURTH QUARTER						ELECTIVES				
<b>RDLT 0104</b>	Radiologic Technology IV	Т	3	2	•	Psyc 0131	Human Adjustment				
<b>RDLT 0212</b>	Clinical Experience II	÷	0	2 24	3 3	Psyc 0173	Human Growth & Development				
			U	24	3	BMNT0101	Intro. to Business				
			3	26	6	BMNT0201 BMNT0202	Principles of Management				
			•		Ū	BMNT0202	Personnel Management Labor Relations				
	FIFTH QUARTER										
<b>RDLT 0111</b>	Radiologic Physics	Т	3	2	4						
RDLT 0105	Radiologic Technology V	Ť	3	ō	3						
RDLT 0213	Clinical Experience III	Ť		24	3						
Spch 0101	Speech I	G	3	0	3						
			9	 26	13						
			9	٠.0	13						

### RESPIRATORY THERAPY TECHNICIAN/TECHNOLOGY PROGRAMS

Respiratory Therapy is an allied health specialty employed under medical direction in the treatment, management, control, diagnostic evaluation, and care of patients with deficiencies and abnormalities associated with the process of breathing. At present the field of respiratory therapy has two levels of practitioners, the therapist and technician levels. The respiratory therapist is a graduate of a two-year educational program, the respiratory therapy technician is a graduate of a one-year program. Respiratory therapists and technicians are respected members of the medical community involved in a wide variety of life-saving and life-supporting situations. Working side by side with physicians, nurses, and others on the health care team they are called upon to treat patients ranging in age from newborns to senior citizens. Their duties range from the daily administration of such therapies as oxygen administration, humidification and nebulization, and postural drainage of lung secretions to the use of highly sophisticated equipment, monitoring devices, and techniques in around-the-clock care to individuals who otherwise would not be able to survive such life-threatening conditions as head injuries and chest wounds. Other practitioners spend all or part of their time working in laboratories where they help evaluate the type and extent of a patients' illness and the effectiveness of the patient's current treatment. Other practitioners work in specialized areas of health care including education, management, home care, sales, research, and specialized areas of patient care such as care of the newborn infant.

### **Respiratory Therapy Technician Program Description**

The one-year (four-quarter) curriculum of the Respiratory Therapy Technician Program is designed to prepare selected individuals to qualify as contributing members of the health care team. Individuals enrolled in the program participate in classroom and laboratory learning experiences at the college in order to gain the conceptual understanding of the practice of respiratory therapy. Students also participate in clinical learning experiences at hospitals in this area to develop their clinical skills through application of these concepts.

After successful completion of the program, graduates are eligible to take the entry-level certification examination administered by the National Board for Respiratory Care. Successful completion of that examination entitles the individual to the Certified Respiratory Therapy Technician (C.R.T.T.) credential.

### **Respiratory Therapist Program Description**

In 1980 the Ohio Board of Regents approved the creation of a second year of formal education in respiratory therapy at Shawnee State Community College to further the educational opportunities for the qualified respiratory therapy technician. To be considered for admission into the second year of study the applicant must have successfully completed the first four-quarter sequence of study, received the Certificate of Achievement, and completed one year of full-time profession-related employment. The graduate of the two-year (eight quarter) program will receive the Associate of Applied Science degree and become eligible for the registry examinations administered by the National Board for Respiratory Care. Successful completion of these examinations (two) and the entry-level certification examination entitles the individual to the Registered Respiratory Therapist (R.R.T.) credential. Further educational opportunities are also available to the graduate from the Bachelor of Science or Masters degree from Ohio University.

### **Accreditation**

The Respiratory Therapy Technician Program is fully accredited by the American Medical Association. As of January, 1983, accreditation by the American Medical Association was pending for the two-year Respiratory Therapist Program.

### **Employment Opportunities**

Regardless of which level of education or credentialing you choose to pursue, you will find many employment opportunities in the field. The profession has grown so quickly since its inception in the late 1940s that demand for manpower has exceeded supply, making the respiratory care practitioner's talents a precious commodity in most medical institutions. In addition, many clinics, nursing homes, and home care programs are beginning to realize the potential benefits of having a trained respiratory therapist or technician on staff. Coupled with the everincreasing number of cardiopulmonary disorders being diagnosed, these demands ensure that individuals who enter the profession will enjoy good career opportunities.

# RESPIRATORY THERAPY TECHNICIAN/TECHNOLOGY CURRICULUMS

# RESPIRATORY THERAPY TECHNICIAN CURRICULUM

# RESPIRATORY THERAPY TECHNOLOGY CURRICULUM

(Pending J.R.C.R.T.E.)

	Cours	e		Class	Class Lab Cr.								
	No.	Course	Code										
		FIRST QUARTER — Summer						Cours			Class		Cr.
RpTT	0100		_	_	_			No.	Course	Code	Hrs.	Hrs.	Hrs.
RpTT		Medical Terminology Basic Patient Care	T T	1	0	1			FOURTH QUARTER				
RpTT		Fund. of Respiatory Care I		2	0	2			Spring (Degree)				
_ :	0200	Anatomy and Physiology	T	3	3	4	RnTT	0143	Clinical Practice 3-B		_		_
Math		Basic Algebra	B B	4 4	3 0	5		0114	Pulmon. Rehab./Home Care	T	0	24	5
Or		zacio / ligopia	Ь	4	U	4	Biol	0290	Anatomy & Physiology	В	2 4	0	2
Math	0108	Allied Health Math I	В	4	0	4	2.07	0200	Anatomy & Physiology	ь	4	3	5
		,	U	7	U	4					6	27	12
				14	6	16					U	21	12
									FIFTH QUARTER — Summer				
		SECOND QUARTER - Fall					Biol	0291	Anatomy & Physiology	В	4	3	5
RpTT		Clinical Practice I	Т	0	16	3	RpTT	0201	Pulm. Func. Testing &	_	•	Ū	J
Psci		Physical Science	В	4	3	5			Cardio-Vasc. Eval. & Testing	Т	3	0	3
RpTT		Fund. of Respiratory Care II	Т	2	3	3	RpTT		Ped./Neonatal Resp. Care	Ť	3	Ö	3
RpTT	0121	Pulm./CardVasc. Anat. & Phys.	В	3	0	3	RpTT	0203	Pharmacology	Т	3	0	3
				9	21	14					13	3	14
		THIRD QUARTER — Winter							SIXTH QUARTER — Fall				
RpTT	0141	Clinical Practice II	_	•		_	RpTT	0240		_	_		
RpTT		Airway Management	T T	0 1	24	5	Biol		Clinical Practice IV Microbiology	Ţ	0	24	5
RpTT	0113	Continuous Mech. Ventilation	, T	2	0	1	RpTT		Resp./Renal Anat. & Pathophys.	В	4	3	5
RpTT	0122	Pathophysiology	÷	3	3 0	3 3	RpTT		Cardio-Vasc. Anat. & Pathophys.	T T	2	0	2
·		, march of the same of the sam	•		U	3	.,,,,,,	0212	Cardio-vasc. Ariat. & Fathophys.	1	2	0	2
				6	27	12					8	27	14
		FOURTH QUARTER - Spring							SEVENTH QUARTER - Winter				
		(Certificate)					RpTT	0001		_			
RpTT (		Clinical Practice 3-A	_	•		_	Engl		Topics in Clinical Medicine	Ţ	2	0	2
RpTT (		Pulmon. Rehab./Home Care	T T	0	32	6	Liigi	0111	Contemporary Writing Skills I General Studies Electives	G	4	0	4
RpTT (	0115	Ped./Neonatal Resp. Care	† T	2 2	0 0	2			General Studies Electives	G	8-10	8-10	8-10
RpTT (	0116	Pulmonary Function Testing	†	2	3	2 3					14.10	0 1	4-40
,		and the state of t	•								14-16	U	4-16
				6	35	13			EIGHTH QUARTER - Spring				
							RpTT		*Clinical Practice V	-			
							Spch		Speech I	T	0	8	1
							RpTT (		Departmental Management	G T	3	0	3
							Econ (		Principles of Economics I	Ġ	2 4	0	2
							Engl (		Technical Writing	G	3	0	4 3
							RpŤT (		Registry Review	T	3	0	3
							• •		J /	•	J	U	3

<sup>\*</sup>Not required if the student has previously completed RpTT 0142.

### **ASSOCIATE DEGREE NURSING**

Associate degree nurses graduating from Shawnee State Community College are qualified to take the Ohio State Board examination for registered nurses, and after successfully passing this examination are capable of providing nursing care at a beginning level in hospitals, nursing homes, doctors' offices and clinics, and selected public health agencies.

### Accreditation

The Associate Degree Nursing Program has been approved by the Ohio State Board of Nursing Education and Nurse Registration.

### ASSOCIATE DEGREE NURSING CURRICULUM

Course No.	Course	Code	Class Hrs.		Cr. Hrs.
ADNr0101 Biol 0290B *Engl 0111	FIRST QUARTER  Nursing I  Prin. of Anat. & Physiology I  Contemp. Writing Skills I	T B G	5 4 5 14	9 3 0 	8 5 4 17
ADNr 0102 Biol 0291B Psyc 0101	SECOND QUARTER  Nursing II  Prin. of Anat. & Physiology II  Prin. of Psychology	T B G	5 4 4 13	9 3 0 12	8 5 4 ——————————————————————————————————
ADNr 0103 Psci 0105 Psyc 0173	THIRD QUARTER Nursing III Physical Science Human Growth & Devel.	T B G	5 4 4 —————————————————————————————————	9 3 0 15	8 5 4 —

**SUMMER QUARTER—Optional:** The following courses may be taken summer or during second year as designated.

n: -I	000EB	Microbiology I				
		or Fourth Quarter	В	3	4	5
Soci		Prin. of Sociology or Fifth Quarter	G	4	0	4
*Engl	0112	Contemp. Writing Skills II or Fifth Quarter	G	5	0	4
				12	4	13

Course No.	Course	Code	Class Hrs.		Cr. Hrs.
ADNr 0201 ADNr 0202 ADNr 0203 Biol 0235	FOURTH QUARTER Nursing IV (5 weeks) Nursing V (5 weeks) Nursing VI Microbiology I	T T B	6 6 2 4 —	12 12 0 3 	5 5 2 4 ————————————————————————————————
ADNr0204 Soci 0101 *Engl 0112	FIFTH QUARTER  Nursing VII  Prin. of Sociology  Contemp. Writing Skills II	T G G	6 4 5	12 0 0 	10 4 4 7 18
ADNr0205 ADNr0206 **Required E	SIXTH QUARTER  Nursing VIII  Nursing IX Elective	T. T G	4 3 4/5 — 11/12	15 0 2 15	9 3 4/5 16/17

\*English sequence for Associate Degree Nursing: English 111, 112, 115, 140 A, B, C, or D; advisor will determine English sequence. Two (2) courses required.

\*\*ONE of the following electives: Psych 0270 HPER 0202 or HPER 0227 Soci 0201 or Soci 0202 or Soci 0203 or Soci 0205 or Soci 0210 or approval of Program Director.

Please Note: Only those students that have been officially accepted into the program or received program director approval may take the courses beginning with the ADNr prefix.

All suggested or equivalent courses listed for the first three quarters must be completed prior to continuing into the second year.

Prerequisites for each quarter identified on page 78 under course descriptions.

Students requesting readmission must do so in writing within one quarter of leaving the program in order to obtain the requirements and forms from the nursing department.

### PRACTICAL NURSING

Nursing is considered a personal service to a patient, planned to consider the individual personality as well as the health problem. The focus of practical nursing is to recognize the individual as a unique personality, to maintain body functions and to protect the patient from illness or accidents. In complex nursing situations, the practical nurse functions as an assistant to a physician or registered nurse.

### **Accreditation**

The Practical Nursing Program has full approval by the State of Ohio Board of Nursing Education and Nurse Registration and is accredited by the North Central Association of Colleges and Secondary Schools.

### PRACTICAL NURSING CURRICULUM

Cours No.	e Course	Code	Class Hrs.			
	FIRST QUARTER					
LPNr 0101 LPNr 0111 Psyc 0101	Body Struc. & Function Practical Nursing 1 Prin. of Psychology	B T G	4 6 5	2 4 0	0 12 0	4 10 4
			15	6	12	18
	SECOND QUARTER					
LPNr 0110 *LPNr 0112 *LPNr 0115 Soci 0101	Nutrition Practical Nursing II Practical Nursing V Prin. of Sociology	B T T G	2 8 9 5	0 5 5 0	0 14 14 0	2 6 6 4
			24	10	28	18
	THIRD QUARTER					
*LPNr 0113 *LPNr 0116	Practical Nursing III Practical Nursing VI	T T	12 12	2 2	14 14	8 8
			24	4	28	16
	FOURTH QUARTER					
*LPNr 0114	Practical Nursing IV	Т	12	2	21	9
			12	2	21	9

<sup>\*</sup>Half-quarter courses

Please Note: Only those students who have been officially accepted into the program or received program director approval may take the courses beginning with the LPNr prefix.

### **EMT — PARAMEDIC PROGRAM**

The Paramedic program is designed to prepare persons who can provide life support at the scene of any emergency. The program includes both classroom and hospital experience. In addition to performing functions of an EMT-A, under the revised code of Ohio, the paramedic is further certified to perform the following life support or intensive care techniques: cardiac monitoring, defibrilation, intubation, and adminstration of appropriate drugs and intravenous fluids. These functions are performed in conjunction with a cooperating licensed medical doctor, doctor of ostepathic medicine and surgery, or a physician advisory board.

### **Accreditation**

The EMT-A program has received full accreditation from Trade and Industry Education, the organization responsible for certification of Ohio's EMT-A's. 052480

The Paramedic program has received full accreditation from the Ohio Board of Regents, the organization responsible for certification of Ohio EMT-P's. OBR Cert. No. 5-3-005.

# EMERGENCY MEDICAL TECHNICIAN — PARAMEDIC CURRICULUM

Course No.	Course		Class   Hrs. i			
Engl 0111 EMTA 0101 EMTA 0102 Biol 0290B	FIRST QUARTER Contemp. Writing Skills EMT Orientation Emergency Victim Care Anatomy & Physiology	G T T B	5 2 8 4	0 0 0 3	0 0 0 0	4 2 8 5 19
Engl 0112 Biol 0291B EMTP 0101 EMTP 0102	SECOND QUARTER Contemp. Writing Skills II Anatomy & Physiology II Paramedic Skills I Paramedic Skills II	G B T T	5 4 3 2	0 3 3 3	0 0 3 0	4 5 5 3 ————————————————————————————————
RMMT0201 *EMTP 0103	THIRD QUARTER Prin. of Management Paramedic Skills III	B T	4 8 12	0 3 3	0 3 3	4 11 15
*EMTP 0104	FOURTH QUARTER Elective ** Paramedic Skills IV	G T	3-4 8 11-12	0 0	6	3-4 10  13-14

\*Includes on squad experience by arrangement. Paramedic Skills III includes 30 hours on squad. Paramedic Skills IV includes 60 hours on squad.

EMTA 0105 Advanced EMT-A Course T 3 2 3 4

<sup>\*\*</sup>Should be either Speech, Sociology, or Psychology.

# ENGINEERING AND INDUSTRIAL TECHNOLOGIES

(ASSOCIATE OF APPLIED SCIENCE DEGREE)

Automotive Technology
Civil Engineering
Diesel Technology
Electro-Mechanical Engineering
Instrumentation Technology
Plastics/Chemical Engineering
Welding Technology

### **AUTOMOTIVE TECHNOLOGY**

Automotive technicians in research and development prepare engines or related equipment for certain tests and evaluation. This often involves calibration and installation of various devices, operation of test equipment and recording of data. Technicians in service and sales advise customers on products best suited for their needs. They instruct owners and dealers in new product changes and maintenance developments, and might diagnose product malfunction and make necessary adjustments. Technicians in related areas work in positions such as servicesales engineers for oil companies, insurance claims adjusters, or other jobs where their understanding of automotive, diesel and gas turbines would be useful. Technicians in service and operation work for dealers, wholesale distributors, or other fleet operations, planning facilities and equipment, organizing shop management, and training personnel. Technicians in manufacturing maintain or operate machines, do quality control work, or supervise production. Prospective automotive technicians must be patient and reliable and keenly interested in engines and why and how each part works.

### **Job Opportunities**

AUTOMOTIVE FIELD TEST TECHNICIAN (manufacturer-field research & development) — Prepares automotive vehicles for road tests in field proving grounds. Installs various test instruments, operates the vehicle according to the test procedure and records data.

ASSOCIATE RESEARCH TECHNICIAN — Prepares automotive and diesel test engines and related instruments for conducting fuel and fuel additive tests in the fuel laboratory section of a petroleum company.

SERVICE MANAGER (dealership) — Plans the automotive service department, selects equipment, organizes and manages shop, selects and trains personnel, assists in diagnosing customer problems and develops an effective service department.

SERVICE TECHNICIAN (dealership) — Utilizes modern test equipment to diagnose and correct malfunctions on the new family of sophisticated automobiles.

MANAGER/TECHNICIAN (self-employed) — Establishes and manages a specialty shop or general service facility.

### **AUTOMOTIVE CURRICULUM**

	Course No.	e Course	Code	Class Hrs.		Cr. Hrs.	
		FIRST QUARTER					
AuDI	0101	Fuels and Lubricants	Т	2	3	3	
AuDi	0102	Basic Electricity	Т	2	5	4	
AuDI	0121	Principles of Internal					
		Combustion Engines	Т	3	9	6	
Math	0101	Basic Algebra	В	5	0	4	
		_					
				12	17	17	

Course No.	e Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
AuDI 0111 Engl 0111 Math 0130 BMNT0101 Weld 0201	SECOND QUARTER Electrical and Fuel Systems I Contemporary Writing Skills I College Algebra I Introduction to Business Combined Welding I	T G B G T	3 5 5 1 19	6 0 0 0 6	5 4 4 4 3 —
AuDI 0112 Engl 0112 Engl 0115 Econ 0101	THIRD QUARTER Electrical and Fuel Systems II Contemporary Writing Skills II Composition and Mass Comm. Principles of Economics I	T G B	3 5 5 5 7	6 0 0 0	5 4 4 4 ———————————————————————————————
Auto 0201 Auto 0223 EnDr 0101 RMMT0223 Phys 0201	FOURTH QUARTER Power Drive Train Air Conditioning & Brake Syst. Engineering Drawing I Sales Promotion Physics (Mechanics)	T T G B	3 2 1 4 3	4 4 5 2 3	5 3 3 4 4
Psyc 0101 Auto 0211 Auto 0212 Engl 0121	FIFTH QUARTER Principles of Psychology Testing and Repair Chassis Technical Writing	G T T G	5 4 3 3 15	0 9 6 0	4 6 6 3
Auto 0221 Auto 0224 Auto 0225 Spch 0101 EMng 0206	SIXTH QUARTER Service Area Automatic Transmissions Service Management Practices Speech I Hydraulics & Pneumatics	T T G T	0 3 4 3 3 	6 6 0 0 2	2 5 4 3 3 

Students may elect a different sequence of Math with advisor approval.

### **CIVIL ENGINEERING TECHNOLOGY**

The Civil Engineering Technology program prepares a student to become a technician in a field which concerns itself with the planning, design, and construction of both fixed structures and ground facilities for land, sea, or air transportation. It is concerned with the flow and uses of water. It is concerned with protection, in war and peace, against the destructive forces of man or nature. In other words, civil engineers and technicians build airports, bridges, dams, highways, powerhouses, pipelines, and railroads.

Thus, the engineering technician must possess skills, in such a variety of areas as: hydraulics, flood control, irrigation, steel and concrete structural work, field surveying, traffic studies, computations, and the fundamentals of construction. And he is specifically trained to draw up plans and specifications; estimate costs and materials; use the transit, level and other surveying instruments; prepare maps; inspect jobs; and supervise construction.

### **Job Opportunities**

Positions available to the civil engineering technician are:

CONTRACTOR'S AIDE — He prepares plans and detail drawings for elements of construction projects. He is capable of running small areas of larger projects.

ESTIMATOR — He estimates costs, quantities of materials and supplies, and labor for construction projects and bidding.

INSPECTOR — He inspects line and grade references, forms, materials, and construction methods and steel and concrete structures.

SURVEYOR — Surveys earth's surface, oversees engineering survey, partly engaged in determining exact location and measurements of points, elevations, lines, areas, and contours of earth's surface to secure data used for construction map making, land valuation, mining or other purposes. Calculates information needed to conduct survey from notes, maps, deeds, or other records. Determines coordinates for geographic position, land lines, and land monuments in addition to computing quantities.

DESIGNER — He is capable of aiding in the design of small wood, concrete and steel structures or components.

Other positions are available to the graduate engineering technician after several years of experience. These include: construction supervisor, highway engineering supervisor, photogrammetrist, and specifications writer and analyst.

### **CIVIL ENGINEERING CURRICULUM**

	Course No.	e Course	Code	Class Hrs.		Cr. Hrs.
		FIRST QUARTER				
Engl	0111	Contemp. Writing Skills I	G	5	0	4
Math	0130	College Algebra I	В	5	0	4
Econ	0101	Economics I	В	5	0	4
CEng	0101	Intro. to Surveying	Т	2	4	3
EnDR	0101	Engineering Drawing I	Т	1	5	3
				18	9	18

Cours No.	e Course	Code	Class	Lab Hrs.	Cr. Hrs.
110.		Code	1113.	1113.	1113.
Engl 0112 Math 0131 Phys 0201 CEng 0111 EnDR 0102	SECOND QUARTER Contemp. Writing Skills II College Algebra II Physics I (Mechanics) Surveying I Engineering Drawing II	G B B T T	5 5 3 3 1	0 0 3 0 5	4 4 3 3 ———————————————————————————————
Engl 0115 Math 0132 Phys 0202 CEng 0112 EnDr 0103	THIRD QUARTER Comp. & Mass. Comm. Trig. & Anal. Geometry Physics II (Electricity) Surveying II Engineering Drawing III	G B B T	5 5 3 2 1	0 0 3 5 5	4 4 4 3 3
			16	13	18
Engl 0121 Phys 0203 CEng 0211 CEng 0113 CEng 0203 CEng 0208	FOURTH QUARTER Technical Writing Physics III (Heat, Light & Sound) Highway Construction Route Surveying Statics Soils Materials & Testing	G G T T T	3 5 2 4 2	0 3 0 6 0 2	3 4 4 3 3 2 19
CEng 0202 CEng 0207 ENGR0101 Psyc 0101 CEng 0205 CEng 0115	FIFTH QUARTER  Construction Estimating I Strength of Materials I First Aid & Safety Prin. of Psychology Hydraulics for Civil Engr. Surveying for Civil Engineers	T T T G T T	2 4 1 5 2 4	0 2 1 0 2 2	2 4 1 4 2 4 —
CEng 0206 CEng 0204 CEng 0201 Soci 0101 CEng 0212	SIXTH QUARTER Construction Estimating II Construction Supervision Concrete Materials & Design Prin. of Sociology Structural Steel Design	T T G T	2 3 5 5 4	3 0 2 0 2 	3 5 4 4 —

Students may elect a different sequence of Math with advisor approval.

### **DIESEL TECHNOLOGY**

Diesel technicians repair and maintain diesel engines that power transportation equipment, such as heavy trucks, buses, boats, and locomotives; and construction equipment, such as bulldozers and cranes. They also service diesel farm tractors and a variety of other diesel-powered equipment, such as compressors and pumps used in oil well drilling and in irrigation.

Before making repairs, diesel technicians inspect and test engine components to determine why an engine is not operating properly. After locating the trouble, they repair or replace defective parts and make adjustments. Preventive maintenance — avoiding trouble before it starts — is another major responsibility. For example, they may periodically inspect, test, and adjust engine components.

Many technicians make all types of diesel engine repairs. Others specialize, for example, in rebuilding engines or in repairing fuel injection systems, turbochargers, cylinder heads, or starting systems. Some also repair large natural gas engines used to power generators and other industrial equipment.

### **Job Opportunities**

SERVICE TECHNICIANS — Many technicians work for distributors and dealers that sell engines, farm and construction equipment, and trucks. Others work for bus lines, construction firms, and government agencies such as State highway departments. Some technicians work for diesel engine manufacturers and independent repair shops that specialize in diesels. They utilize modern equipment to service and repair a variety of malfunctions on diesel engines and heavy-duty drive components.

ENGINEERING TESTER (diesel engine manufacturing firm) — Assists test engineers in recording data obtained from diesel engines running with different fuels and lubricating oils to determine performance and wear characteristics. Learns to operate electric dynamometers and related instrumentation.

LABORATORY TECHNICIAN — Compares fuels by ratings on laboratory test (CFR) engines. Determines knock characteristics of motor fuels and compares diesel fuel on the basis of ignition delay. Also assists in tests to determine characteristics of lubricant deposits on engine parts.

LUBRICATION TECHNICIAN — Prepares lubricant and maintenance procedures and schedules for truck fleet operators, heavy construction equipment, road building concerns, and manufacturing companies. Evaluates failures in equipment due to wear, improper lubrication, corrosion, and other problems. Tests oils and greases and recommends changes in types of lubricants and maintenance procedures.

### **DIESEL CURRICULUM**

	DILOLL COMMODE	<b>U</b>			
Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
	FIRST QUARTER				
AuDi 0101 AuDi 0102 AuDi 0121	Fuels and Lubricants Basic Electricity Prin. of Internal Combustion	T T	2 2	3 5	3 4
Math 0101	Engines Basic Algebra	T B	3 5	9 0	6 4
			12	17	17
	SECOND QUARTER				
AuDi 0111	Electrical and Fuel Systems I	T G	3 5	6 0	5 4
Engl 0111 Math 0130	Contemp. Writing Skills I College Algebra I	В	5	0	4
BMNT0101	Introduction to Business	Ğ	5	0	4
			18	6	17
	THIRD QUARTER		10	0	17
AuDi 0112	Electrical and Fuel Systems II	Т	3	6	5
Engl 0112	Contemp. Writing Skills II	G	5	0	4
EnDr 0101 Econ 0101	Engineering Drawing I Principles of Economics I	T B	1 5	5 0	3 4
20011 0101	Timospies of Economics (	_			
			14	11	16
	FOURTH QUARTER				_
DSEL 0202 DSEL 0211	Diesel Engines I Diesel Fuel Injection	T T	4 4	6 6	6 6
Phys 0201	Physics (Mechanics)	В	3	3	4
•			11	15	16
DOE: 0000	FIFTH QUARTER	_	4	6	6
DSEL 0203 DSEL 0222	Diesel Engines II Heavy Duty Automatic Trans.	T T	2	4	6 3
Weld 0201	Combined Welding I	T	1	6	3
Engl 0121	Technical Writing	G G	3 5	0	3
Psyc 0101	Principles of Psychology	G			
			15	16	19
	SIXTH QUARTER	_		_	
DSEL 0201	Heavy Duty Drives	T	4 4	6 0	6 4
DSEL 0221 DSEL 0223	Service & Maintenance Manag. Heavy Duty Chassis &			-	
	Brake Systems	T	2	5	4
EMng 0206 Spch 0101	Hydraulics & Pneumatics Speech I	T G	3 3	2 0	3 3
Spo., 0101	-F	-		_	
			16	13	20

Students may elect a different sequence of math with advisor approval.

# ELECTRO-MECHANICAL ENGINEERING TECHNOLOGY

An electro-mechanical engineering technician is a para-professional educated for positions which encompass both electrical and mechanical engineering technologies but which demand more than just a simple combination of the two fields. The electro-mechanical engineering technician, for example, may work in the computer industry in positions which could not be handled by the electrical or mechanical engineering technician.

This field is somewhat new to business and industry; therefore, its potential has merely been scratched. Many of the electro-mechanical graduates are working in business and industry at the present time which indicates the demand for their services is great.

### **Job Opportunities**

Positions available in electro-mechanical technology are almost unlimited. Listed below are some of those positions.

ELECTRO-MECHANICAL INSPECTOR — Inspects and tests electrical components, housings, and finished assemblies of electrical sensing devices.

ELECTRO-MECHANICAL TECHNICIAN — Fabricates, tests, analyzes, and adjusts precision electro-mechanical instruments.

ELECTRO-MECHANICAL ASSEMBLER — Tests assembled electronic scale components with oscilloscope and voltmeter to detect missing parts, loose wires and defective solder joints.

ELECTRIC AND ELECTRONIC TECHNICIAN — Applies electronic theory, principles of electrical circuits, electrical testing procedures, engineering mathematics, physics, and related subjects to layout, building, testing, trouble-shooting, etc.

ELECTRO-MECHANICAL DESIGN & DEVELOPMENT TECHNICIAN — Develops detailed design drawings and related specifications of mechanical equipment, according to engineering sketches and design proposal specifications.

Other positions are available to the graduate technician after several years of experience, such as: contractor, designer, estimator, and sales representative.

# ELECTRO-MECHANICAL ENGINEERING CURRICULUM

C	ourse No.	Course	Code	Class Hrs.		Cr. Hrs.	
		FIRST QUARTER					
	111	Contemp. Writing Skills I	G	5	0	4	
Math 0		College Algebra I	В	5	Ō	4	
Econ 0		Economics I	В	5	0	4	
EMng 0		Electrical Fundamentals I	Т	3	3	4	
EnDr 0	101	Engineering Drawing I	T	1	5	3	
				19	8	19	

Cour			Class	Lab	Cr.
No	. Course	Code	Hrs.	Hrs.	Hrs.
F==1 0440	SECOND QUARTER				
Engl 0112 Math 0131	Contemp. Writing Skills II	G	5	0	4
Phys 0201	College Algebra II Physics I (Mechanics)	В	5	0	4
EMng 0101	Electro-Mechanical Devices	B T	3	3	4
EMng 0112	Elect. Fundamentals II	÷	2 3	3 3	3 4
<b>5</b> –		•	J	J	4
			18	9	18
	THIRD QUARTER				
Engl 0115	Comp. & Mass Comm.	G	5	0	4
Math 0132	Trig. & Anal. Geometry	B	5	Ö	4
Phys 0202	Physics (Electricity)	B	3	3	4
EMng 0121	Electronics I	Ŧ	2	5	4
EMng 0103	Electro-Mechanical Drawing	T	1	3	2
			16	11	18
	FOURTH QUARTER				
Engl 0121	Technical Writing I	G	3	0	3
Phys 0203	Phys. (Heat, Light & Sound)	G	3	3	4
EMng 0201	Intro. Electro-Mech. Syst.	Т	2	3	3
EMng 0202	Mechanical Systems	T	2	4	3
EMng 0204 EMng 0122	Control Devices	T	2	3	3
Elving 0122	Electronics II	Т	2	4	3
			14	17	19
•	FIFTH QUARTER				
Soci 0101	Prin. of Sociology	G	5	0	4
EMng 0211 EMng 0209	Electronics Logic Circuits I	T	2	5	3
EMng 0209	Robotics	T	2	3	3
EMng 0206	Automatic Control Systems Hydraulics & Pneumatics	T T	3	3	4
Engr 0101	First Aid and Safety	Ť	3 1	2 1	3 1
			16	14	19
	SIXTH QUARTER				
Psyc 0101	Prin. of Psychology	G	5	0	,
EMng 0212	Electronic Logic Circuits II	T	2	0 5	4 3
EMng 0207	Electro-Mechanical Design	÷	1	6	3
EMng 0208	Electro-Mechanical Systems	Ť	2	4	3
Engr 0209	Industrial Supervision	Ť	3	ō	3
		-	13	15	16
Students may	elect a different sequence of mat	h with ac	dvisor	appro	val.

\*Students enrolled in Electro-Mechanical Engineering Technology and Instrumentation Technology may earn a major in Robotics Technology. Students must complete 20 credit hours of the following courses:

### A MAJOR IN ROBOTICS TECHNOLOGY

Robo	0210	Introduction to Robotics (4)
Robo	0211	Robotic Interfacing (4)
Robo	0212	Robotic Applications (4)
Robo	0213	Advanced Robotic Applications (4)
Robo	0214	Robotic Maintenance-Servicing (4)
		The same manifestation design (4)

# NOTES

### INSTRUMENTATION TECHNOLOGY

Instrumentation technicians may find themselves employed in any of many major industrial groups including aeronautics, chemistry, petroleum, foods, metals, ceramics, pulp and paper, power, textile, instrument and control manufacturing, or in the emerging fields of space, oceanography, air and water pollution, biomedical instrumentation, and national defense systems.

Depending on ability, and drive, the technician can advance to repair, troubleshooting, and assisting in design. Each of these goals is achieved by combining the technician's general background with specific knowledge about the system apparatus, as follows.

The instrumentation technician's work consists principally of mechanical functions, but also requires the ability to visualize functions or malfunctions of various mechanisms. The work consists of checking out equipment prior to operation, calibrating equipment in operation, rebuilding equipment using standard replacement parts, mounting, interconnecting equipment from blueprints, and the performance of mechanical functions requiring the use of tools (screwdriver, wrench, pliers, electrical drill, soldering iron). Ability to read both instrumentation and electronic schematic diagams is necessary.

As for the repair instrumentation technician, his primary functions are determining the causes of malfunctioning and instituting necessary repairs. Such repairs usually involve individual pieces of equipment variables such as pressure, flow, temperature, motion, force, and chemical composition, using hand-tools, and precision instruments. Disassembles malfunctioning instruments, and examines and tests mechanism and circuitry for defects. Troubleshooting equipment in or out of control system and replaces or repairs defective parts. Reassembles instrument and tests assembly for conformance with specifications, using instruments such as potentiometer, resistance bridge, manometer, and pressure gauge. Inspects instruments periodically and makes minor calibrations to insure functioning within specified standards. May adjust and repair final control mechanisms such as automatically controlled valves or positioners.

### **Job Opportunities**

MAINTENANCE INSTRUMENTATION TECHNICIAN — Performs standard calibrations for production purposes; checks results. May be employed to work on pneumatic, hydraulic, or electrical and/or electronic equipment. Works with hand tools and soldering iron.

INSTRUMENT SALES TECHNICIAN — Works for equipment manufacturing company, analyzing customer needs for specific control instruments; outlines specifications for cost and function of equipment; needs to be capable of doing emergency, goodwill troubleshooting.

PLANT MAINTENANCE ENGINEER — A term applied to one who designs and supervises operation and maintenance of electrical, mechanical, and thermal instruments and control equipment necessary for safe and efficient operation of industrial plant. Studies plant layout and process requirements to determine type and number of items needed. Writes specifications for selection of stock or special instruments from suppliers. Directs installation, calibration, and testing of equipment. Supervises application, inspection, and maintenance of instruments in operation.

INSTRUMENTATION TECHNICIAN — Devises, sets up, and operates electronic instrumentation and related electromechanical or electrohydraulic apparatus involved in operational and environmental testing of machines and electrical equipment, and translates test data for subsequent use by engineering personnel in making engineering design and evaluation decision.

# INSTRUMENTATION TECHNOLOGY CURRICULUM

	Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
Engl Math IMST EnDr	0111 0101 0101	FIRST QUARTER Contemp. Writing Skills I Basic Algebra DC Circuits and Machines Engineering Drawing I Technical Elective	G B T T	5 5 2 1	0 0 5 5	4 4 4 3 1-3 16-18
Engl Math IMST Phys EnDr	0130 0102 0201	SECOND QUARTER Contemp. Writing Skills II College Algebra I AC Circuits and Machines Physics (Mechanics) Blueprint Reading	G B T B T	5 5 2 3 2	0 0 5 3 0	4 4 4 2
Engl Math IMST Chem IMST	0111 0202	THIRD QUARTER Comp. and Mass Comm. College Algebra II Industrial Electronics Process Instrumentation Industrial Electricity	G B T T	5 5 2 3 2	0 0 5 3 5	4 4 4 3 19
IMST Psyc IMST	0121 0201 0101 0211 0101	FOURTH QUARTER Technical Writing I Instrumentation Electronics Principles of Psychology Fluid Mechanics I First Aid and Safety Hydraulics and Pnuematics	G T G T T	3 3 5 3 1 3	0 6 0 3 1 2	3 5 4 4 1 3
IMST IMST Econ IMST	0224 0212 0101	FIFTH QUARTER Industrial Control I Fluid Mechanics II Principles of Economics I Instrument Fundamentals I	T T G T	3 3 5 3	3 3 0 4 10	4 4 4 4 16
Engr IMST IMST	0209 0222 0223	SIXTH QUARTER Industrial Supervision Instrument Fundamentals II Measurement Principles Industrial Control II	T T T	3 3 3 3	0 4 4 3	3 4 4 4 15

Students may elect a different sequence of math with advisor approval.

### PLASTICS/CHEMICAL ENGINEERING

Due to the close relationship between Plastics engineering and the Chemical Technology Program, it has become desirable to combine them into one program but still allowing students to choose technical electives from either the plastics or chemical field.

Today, plastics is one of the fastest growing industries in the United States. The plastics industry is expanding both in volume and variety of products. Manufacturers are doing extensive research to see how plastics can improve their products, reduce costs, and simplify production.

Plastics led all other industries in projected growth through 1980 in a recent forecast. The percentage of growth of output for plastics over the next fifteen years was set at 722 percent. By comparison, the electric utilities industry was forecast to grow 166 percent; rubber, 154 precent; paper, 102 percent; iron and steel, 156 percent; stone, clay and glass, 75 percent.

The chemical industry is one of the most dynamic in terms of growth. The Ohio River Valley from Pittsburgh to Louisville is perhaps one of the largest chemical producing areas in America, and provides a great employment opportunity for graduates.

The role of the technician in the chemical industry will constantly change as job content, responsibilities, opportunity, and initiative increase. This signifies that technicians' contributors will become an ever stronger part of the very fabric of the industry, building upon the strong base that exists today.

### **Job Opportunities**

Positions available for the Plastics/Chemical graduate might be:

CHEMICAL PRODUCTION TECHNICIAN — Controls operation of chemical production facilities, and is responsible for maintaining high production levels.

CHEMICAL RESEARCH TECHNICIAN — Assists chemists and engineers in the development of new products and processes by designing, constructing, and operating experimental chemical plants or by performing laboratory experiments.

CHEMICAL QUALITY CONTROL TECHNICIAN — Assures a high quality level in products manufactured by performing chemical tests in the laboratory.

POLLUTION CONTROL TECHNICIAN — Takes samples of air and water and analyzes them to assure low pollution levels. Assists in the development of pollution control methods.

CHEMICAL SALES OR TECHNICAL SERVICE REPRESENTATIVE — Aids customers in the choice of the correct product to purchase and assists in solving customer problems.

QUALITY CONTROL TECHNICIAN — Samples raw materials and finished products and performs tests to assure compliance with quality specifications.

PILOT PLANT TECHNICIAN — Assistant to an engineer operates experimental plants. Responsible for taking data and making observations.

APPLICATION RESEARCH TECHNICIAN — Blends and compounds plastics with additives, filters, colors, etc. Assists in selecting proper plastics for specific products and applications.

PLASTIC ARTICLE PRODUCTION TECHNICIAN — Operates and supervises the operation of commercial equipment used in the production of plastic items, such as extruder, injection molding machine, thermoformer, etc.

SENIOR TECHNICIAN — Supervises other technicians in all operations and takes part in new projects or process evaluation.

TECHNICIAN SERVICE REPRESENTATIVE — As an employee of a plastics resin or equipment manufacturer, aids customers in the proper selection and use of such products, and in solving customer problems.

Other positions would be available upon the attainment of several years of experience. Supervisory level positions are open to the experienced technician with a good technical background as well as the ability and desire to assume responsibility.

# PLASTICS/CHEMICAL ENGINEERING CURRICULUM

Cou No		Code	Class Hrs.	Lab Hrs.	Cr. Hrs.	Cou			Class		Cr.
	FIRST QUARTER				• • • • •	ı,	o. Course	Code	Hrs.	Hrs.	Hrs.
Engl 0111 Chem 0141 Math 0130 PEng 0102 PEng 0101	Contemp. Writing Skills I Chemistry I	G B B T	5 3 5 2	0 3 0 4	4 4 4 3	Engl 012 PEng 020 Phys 020	6 Intro. to Chemical Engineering	G	3 3 3 5-6	0 2 3 5-6	3 3 4 7
		•		2	3				14-15	10-11	17
Engl 0112 Math 0131 EnDr 0101 Chem 0142 Engr 0209	SECOND QUARTER Contemp. Writing Skills II College Algebra II Engineering Drawing I Chemistry II Industrial Supervision	G B T B T	18 5 5 1 3 3	0 0 5 3 0	18 4 4 3 4 3	Econ 0101 Engr 0101 Phys 0202	First Aid and Safety	В Т В Т	5 1 3 6-7 15-16	0 1 3 5-8	4 1 4 7-9
Engl 0115 Chem 0143 Math 0132	THIRD QUARTER Comp. and Mass Comm. Chemistry III: Quantitative Analysis Trigonometry & Analytic Geometry Technical Elective	G B B	5 3	8 0 3	18	Phys 0203 PEng 0202 PEng 0207	Production Control & Planning Fundamentals of Process Equip. and Maintenance Technical Elective		14-16 1		4 4 2 8 ————————————————————————————————
		-	6-8  9-21	3 6 18	6-8  3-20	aradonito ii	ay elect a different sequence of mat ho choose plastics courses as elect 122 in place of Chemistry 0143 wit	ilvon ma			

### **Chemical Electives**

### **Plastics Electives**

PEng 0103 PEng 0104 PEng 0105 PEng 0201 PEng 0203 PEng 0205 PEng 0209	- Extrusion Molding (3) - Thermo-Forming (3) - Injection Molding (3) - Thermal Molding Machine Control (4) - Testing of Plastics Materials (3) - Plant Layout & Materials Handling (3) - Fabrication and Manufacturing of Plastics
-	Fabrication and Manufacturing of Plastic     Products (4)     Properties of Materials (4)

### WELDING TECHNOLOGY

Persons planning careers as welders or cutters need manual dexterity, good eyesight, and good eye-hand coordination. They should be able to concentrate on detailed work for long periods, and should be free of any physical disabilities that would prevent them from bending, stooping, and working in awkward positions. Courses in mathematics, mechanical drawing, blueprint reading, and physics are also helpful.

New developments are requiring new skills of welders. This is particularly true in fields such as atomic energy or missile manufacturing, which have high standards for the reliability of welds. Before being assigned to work on buildings, bridges, or other jobs where the strength of the weld is highly critical, welders may be required to pass an examination of their welding skills given by an employer or government agency. Welders who pass such examinations are generally referred to as "certified welders."

Promotion opportunities for welders are good. Welding machine tenders may learn skilled welding jobs; skilled welders may be promoted to welding inspectors, technicians, or supervisors. Experienced workers who have obtained **college training on the properties** of metal are in great demand to develop new applications for welding.

### **Job Opportunities**

Employment opportunities should be especially good for skilled welders in nuclear powerplant, pipeline, and ship construction jobs.

## WELDING TECHNOLOGY CURRICULUM

	Course No.	Course	Code	Class Hrs.	Lab Hrs.	Cr. Hrs.
Econ Math	0111 0101 0125 0101 0111	FIRST QUARTER Contemp. Writing Skills I Principles of Economics I Business Math Welding Symbols and Prints Basic Oxy-Acetylene Welding	G B T T	5 5 4 1	0 0 0 0 8	4 4 4 4 20
Engl Math BMN <sup>1</sup> Weld Weld	0111 0101 0101 0101 0201 0113	SECOND QUARTER Contemp. Writing Skills II Basic Algebra Introduction to Business Combined Welding I Basic Arc Welding	G B G T T	5 5 5 1 1	0 0 0 8 10	4 4 4 4 4 20
Engl Math Weld Weld	0102 0112	THIRD QUARTER  Comp. and Mass Comm.  College Algebra I  Template Layout and  Construction  Basic Inert Gas Welding  Advanced Arc Welding	G B T T	5 5 4 1 1	0 0 0 5 8	4 4 3 4 19

Course No.	Course	Code	Class Hrs.		Cr. Hrs.
Spch 0101 Engr 0209 Weld 0202 Weld 0211 Weld 0122	FOURTH QUARTER Speech I Industrial Supervision Combined Welding II Advanced Structural Welding Welding Metallurgy	G T T T	3 3 1 1 4 	0 0 8 8 0	3 3 4 4 3
Engl 0121 Psyc 0101 Weld 0203 Weld 0212	FIFTH QUARTER Technical Writing Psychology Combined Welding III Pipe Welding	G G T T	3 5 1 1	0 0 8 15	3 4 4 6 ————————————————————————————————
Soci 0101 Weld 0213 Weld 0216 Weld 0214	SIXTH QUARTER Sociology Advanced Pipe Welding Welding Certification and Testing Advanced Inert Gas Welding	G T T	5 1 1 1 8	0 8 15 6 - 29	4 4 6 3

Students may elect a different sequence of math with advisor approval.

# **ADDENDUM**

to the

1985-86

# SHAWNEE STATE COMMUNITY COLLEGE CATALOG

### FEES and EXPENSES

### Registration Fees

Registration fees are payable at the Business Office prior to the opening of classes and in accordance with instructions issued with your quarterly bill. For students registering during late registration, fees are assessed as part of the registration process and are due at that time. Fees may be paid by cash, check, money order, Visa, or MasterCard. It is important that the student retain all fee receipts.

Payment of fees owed is a prerequisite to official enrollment and all students should have sufficient funds (cash and/or financial aid) to cover these expenses.

A review of students enrolled will be made the 14th day of each quarter and any student showing a balance due will be administratively dismissed.

### Schedule of Fees\*

<del>-</del>		
	Resident of Ohio	Nonresident
Instructional fee	\$290.00	\$345.00
Full Time Student (12-20 cr.hrs.) Part Time Student (1-11 cr.hrs.)	27.00 per cr.hr.	31.00 per cr.hr.
General Fee Full Time Student	55.00	55.00
Activity Fee Full Time Student	10.00	10.00
Part Time Student Lab Fees	10.00 See below	10.00
Extra fee for each quarter hour in excess of 20 hours Credit by Examination Course by Arrangement Graduation Fee	27.00 per cr.hr. 30.00 per course 40.00 per cr. hr. 30.00	
Graduation rec		

\*Shawnee State Community College reserves the right to make, without prior notice, any fee adjustments that may become necessary.

### **Bad Check Policy**

Payment of fees owed is a prerequisite to official enrollment, and all students should have sufficient funds (cash and/or financial aid) to cover these expenses.

A check returned for insufficient funds is a federal offense and constitutes nonpayment of your obligation to Shawnee State Community College.

Therefore, any student that has a check returned for insufficient funds, and the same is not cleared by the fourteenth day of the quarter, shall be considered in noncompliance with institutional policy and will be administratively dismissed.

Any student administratively dismissed due to a bad check has no recourse for readmission for the current quarter.

### Lab Fees

See the course description section for identification of classes with lab fee charges. The fee per class is available at any of the following offices:

Business Office Admissions Office Library

### Student Insurance

Shawnee is providing all full time students with the benefit of a very good comprehensive health insurance policy. You may pick up a Student Insurance Program Brochure at the Business Office. Questions concerning student health insurance should be referred to the Business Office.

### Refund of Fees

Continuing students dropping hours by change order prior to or during the first fourteen (14) days of the quarter, when such changes result in a reduction of fees, are entitled to receive a 100 percent refund of the reduction. Changes made after the fourteenth (14th) day of the quarter will result in no refund.

Students that officially withdraw from Shawnee State will receive a refund, if due, based upon the following schedule. Students that do not officially withdraw are not eligible for any refund and fees assessed are due and payable.

Time of Withdrawal (Regular Term)	Refund
1 to 14 calendar days 15 to 20 calendar days	100% of Tuition 50% of Instructional fee
over 20 calendars days	No refund
	Refund
Time of Withdrawal* (5 week session)	Itelana
	100% of Tuition 60% of Instructional fee

\*This schedule for refunds will apply to students registered only in a five week session.

Please note: Students taking classes from both a regular quarter and a five week session will be issued refunds under the regular Term Policy.

Questions concerning the above information should be referred to the Business Office.

### Late Registration and Late Payment Policy

A late registration fee of \$25.00 will be assessed all students enrolled in the previous quarter that do not register during the announced early registration period.

A late payment fee would normally not be applicable since payment is a prerequisite to registration. However, should exceptions be made to the Registration Fee section a late payment fee of \$20.00 will be assessed by the Business Office.

### Miscellaneous Fees

### **Activity Fee**

All students will be assessed a \$10.00 activity fee for each quarter. This fee is to support all student activities.

### Application Fee

A \$15.00 application fee, non-refundable, must accompany all admission applications.

### Transcript Fee

The College will produce an official transcript upon written request from the student at a cost of \$2.00 per copy.

### **Graduation Fee**

A \$30.00 graduation fee is required prior to the issuance of an official college diploma.

Student eligibility to graduate is determined by the records office after the student petitions for graduation.

### CATALOG REVISIONS:

### Academic:

### Additions:

### ARTS

- Page 63
- ARTS 241 Sculpture I
  This course is designed to develop the student's ability to conceive and build various medium forms (plaster, clay, wood, metal, etc.) in three dimensions. The aim is to develop an understanding of shapes and mass, acquaintance with tools, techniques and materials for expression.
- ARTS 242 Sculpture II
  Intermediate sculpture is designed to further a student's skill in
  three dimensional work. Technical procedures will include advanced
  woodcarving, clay molding, stone carving, and various direct over
  armature methods.
- ARTS 243 Sculpture III

  This will involve studio problems based on concepts applied to various three dimensional materials. Advanced sculpture places special emphasis on the development of individual expression in the student's chosen medium.

### **ENGLISH**

- Page 73
- ENGL 0111 Contemporary Writing Skills I

  This course introduces students to the demands of and approaches to narration, description, exposition, and argumentation. Key concepts of unity, coherence, languages choice, and development are emphasized. Students are asked to write well-developed paragraphs and essays.
- SPECIAL REQUIREMENT: Before students can receive passing grades for English 0111, they must score 65 on the Essential Skills Test, a one-hundred item test covering basic grammatical and sentence structure concepts. Students scoring below 50 on the first Essential Skills Test will NOT be permitted to take English 0111. Students scoring between 50 and 64 will have two additional attempts to pass the test during the quarter. BECAUSE OF THE IMPORTANCE OF THIS TEST, THE ENGLISH DEPARTMENT STRONGLY RECOMMENDS THAT STUDENTS TAKE THE ESSENTIAL SKILLS TEST IN THE LEARNING CENTER PRIOR TO ENROLLING FOR ENGLISH 0111.
- Page 73

  ENGL 0112 Contemporary Writing Skills II

  Prerequisite: English 0111 or one course from the English 140 series.
- Page 73

  ENGL 0115 Composition and Mass Communications
  Prerequisite: English 0111 or one course from the English 140 series.

CATALOG REVISIONS:

Page 3

Academic:

(continued)

Page 73

ENGLISH (continued)

ENGL 0140

O Topics in English Language and Literature

SPECIAL REQUIREMENT:

Before students can receive passing grades for their first 140 course, they must score 65 on the Essential Skills Test, a one-hundred item test covering basic grammatical and sentence structure concepts. Students scoring below 50 on the first Essential Skills Test will NOT be permitted to take English 0140. Students scoring between 50 and 64 will have two additional attempts to pass the test during the quarter. BECAUSE OF THE IMPORTANCE OF THIS TEST, THE ENGLISH DEPARTMENT STRONGLY RECOMMENDS THAT STUDENTS TAKE THE ESSENTIAL SKILLS TEST IN THE LEARNING, CENTER PRIOR TO ENROLLING FOR ENGLISH 0140.

MUSIC

Page 77

MUSI 270C Advanced Voice (1)

MUSI 280C Advanced Voice (2)

**SPEECH** 

Page 85

SPCH 0103

Fundamentals of Public Speaking and Human Communications (3)
Principles of public speaking, practice in presenting informative and
persuasive speeches with emphasis on the human communication process.

(Speech 0103 replaces Speech 0101 and Speech 0102)

Title revisions:

**ARTS** 

Page 63

ARTS 0231 Ceramics I Hand/Built

ARTS 0232 Ceramics II Wheel/Throwing

ARTS 0233 Ceramics III Wheel/Throwing

Deletions:

**SPEECH** 

Page 85

SPCH 0101 Speech I (The Fundamentals of Human Communication) (3)

SPCH 0102 Speech II (Fundamentals of Public Speaking) (3)

### CATALOG REVISIONS:

### Technical:

### SECRETARIAL TECHNOLOGY

Page 35

lst Quarter Add BMNT 0101 Intro to Bus.
4th Quarter Delete EXST 0200 Add BMNT 0242 Bus. Comm.
5th Quarter Delete EXST 0105 Add EXST 0222 Word Proc. II

Add:

EXST 0105 Keyboarding (3 Hrs. Lab; 1 Hr. Cr.)
A course designed to familiarize students with the keyboard before taking any data processing course. This course will enable a student to learn to key by touch the alphabetic and numeric keys on a

# ALLIED HEALTH TECHNOLOGIES

Pick up new curriculums for Occupational Therapy Assistant Program and Physical Therapy in the Student Services Office in the Commons Building.

EMT - Paramedic Program (Page 71 & 72)

The program now begins in the summer and runs through the spring. In other words, the 1st quarter is summer, the 2nd quarter is fall, the 3rd quarter is winter and the 4th quarter is spring.

RESPIRATORY - Omit (Pending J.R.C.R.T.C.)

# ENGINEERING AND INDUSTRIAL TECHNOLOGIES

Electro Mechanical: Page 53

The (\*) at the bottom of the page should read:

\*Students enrolled in Electro-Mechanical Engineering Technology
or Instrumentation Technology may earn a major in Robotics
Technology. Students must have advisor approval and must complete 20 credit hours of the following courses:

A MAJOR IN ROBOTICS TECHNOLOGY

\*Robotics course must be taken in numerical sequence beginning with ROBO 0210.

The following one-year certificated programs have been developed to allow students to choose courses that will benefit them in seeking employment or upgrading their present position. Before pursuing these programs students should contact a counselor to discuss the ramifications of each certificate and how it might best be applied.

# SECRETARIAL SCIENCE CERTIFICATE Shawnee State Community College

COURSE NO.	COURSE	CODE	CLASS HRS.	LAB HRS.	CR. HRS.
	FIRST QUARTER				
EXST 0101 *ACCT 0100 *EDPT 0101 *MATH 0125 EXST 0120	Typing I Basic Accounting Intro. to Data Processing Business Math Business Machines	T T T B T	3 3 5 3 14	2 3 2 0 0	3 4 3 4 3 77
	SECOND QUARTER				
EXST 0102 EXST 0121 *ACCT 0110 *BMNT 0242 *PSYC 0101	Typing II Word Processing Payroll Record/Accounting Business Communications Prin. of Psychology	T T T G	3 2 2 3 <u>5</u> 15	2 3 3 2 0 10	3 3 3 4 16
	THIRD QUARTER				
EXST 0103 EXST 0222 EXST 0231 EXST 0221 *SOCI 0101	Typing III Word Processing II Records Management Dictation & Transcription Prin. of Sociology	T T T G	3 2 3 3 5	2 3 0 2 0 7	3 3 3 4 16

<sup>\*</sup>These courses are recommended however, other courses may be substituted upon approval by the appropriate advisor.

# AUTOMOTIVE TECHNICIAN CERTIFICATE Shawnee State Community College

COURSE NO.	COURSE	CODE	CLASS HRS.	LAB HRS.	CR. HRS.
	FIRST QUARTER				
AUDI 0101 AUDI 0102 AUDI 0121	Fuels & Lubricants Basic Electricity Principles of Internal Combustion Engine	T T T	2 2 3	3 5 9	3 4 6
* MATH 0125	Business Mathematics	В	$\frac{5}{12}$	$\frac{0}{17}$	<del>4</del> 17
AUDI 0111 AUTO 0212 AUTO 0223 * PSYC 0101	SECOND QUARTER  Electrical & Fuel Systems I Chassis Air Cond. & Brake Systems Prin. of Psychology	T T T G	3 3 2 5 13	6 6 4 0 16	5 6 3 4 18
	THIRD QUARTER				
AUDI 0112 AUTO 0224 AUTO 0225 * SOCI 0101	Electrical & Fuel Systems II Automatic Transmissions Service management Practices Prin. of Sociology	T T T G	3 3 4 5 15	6 6 0 0 12	5 5 4 4 18

<sup>\*</sup>These courses are recommended; however, other courses may be substituted upon approval by the appropriate advisor.

# WELDING FABRICATION TECHNICIAN CERTIFICATE Shawnee State Community College

COURSE NO.	COURSE	CODE	CLASS HRS.	LAB HRS.	CR. HRS.
	FIRST QUARTER				
WELD 0101 WELD 0111 WELD 0113 * MATH 0125	Welding Symbols & Prints Basic Oxy-Acetylene Welding Basic Arc Welding Business Math	T T T B	5 1 1 5 12	0 10 10 0 20	4 4 4 4 16
	SECOND QUARTER				
WELD 0112 WELD 0114 WELD 0201 * PSYC 0101	Basic Inert Gas Welding Advanced Arc Welding Combined Welding I Prin. of Psychology	T T G	1 1 1 5 8	6 8 8 0 22	3 4 4 4 15
	THIRD QUARTER				
WELD 0214 WELD 0202 WELD 0211 * SOCI 0101	Advanced Inert Gas Welding Combined Welding II Advanced Structural Welding Prin. of Sociology	T T G	1 1 1 5 8	6 8 8 0 22	3 4 4 4 15

<sup>\*</sup>These courses are recommended; however, other courses may be substituted upon approval by the appropriate advisor.

# ELECTRONIC REPAIR TECHNICIAN CERTIFICATE Shawnee State Community College

COURSE NO.	COURSE	CODE	CLASS HRS.	LAB HRS.	CR. HRS.
	FIRST QUARTER				
IMST 0101 *MATH 0125 *ENGL 0111 ERTT 0111	D.C. Circuits & Machines Business Math Cont. Writing Skills I Electronic Repair I	T B B T	3 4 4 3 14	4 0 0 10 14	4 4 4 5 17
	SECOND QUARTER				
ACCT 0100 IMST 0102 ERTT 0102 *SPCH 0102	Basic Accounting A.C. Circuits & Machines Electronic Repair II Speech I	T T G	4 3 2 3 12	0 4 14 0 18	4 4 5 3 16
	THIRD QUARTER				
ERTT 0103	Electronic Repair III	T	3	10	5
ERTT 0104	(Trouble-Shooting/Disassemble) Electronic Repair IV	T	3	10	5
ERTT 0105	(Reassembly of Major Appliances) Field Experience	Т	<u>0</u>	12 32	4/14

<sup>\*</sup>These courses are recommended; however, other courses may be substituted upon approval by the appropriate advisor.

# FOREMAN/INDUSTRIAL MANAGEMENT CERTIFICATE Shawnee State Community College

COURSE NO.	COURSE	CODE	CLASS HRS.	LAB HRS.	CR. HRS.
	FIRST QUARTER				
BMNT 0240 BMNT 0201 * PSYC 0101 ENGR	Industrial Relations Prin. of Management Prin. of Psychology Elective	T T G T	4 4 5 3-4 16-17	0 0 0 0	4 4 3-4 11-12
	SECOND QUARTER				
BMNT 0241 BMNT 0202 BMNT 0242 * PSYC 0131	Labor Relations Personnel Management Business Communications Human Adjustment	T T T G	4 4 3 3 14	0 0 2 0 2	4 4 3 3 14
	THIRD QUARTER				
ENGR 0209 * PSYC 0261 SOCI 0101 ENGR	Industrial Supervision Industrial Psychology Prin. of Sociology Elective	T G G T	3 5 5 6-7 19-20	0 0 0 0 0	3 5 4 6-7 9-10

<sup>\*</sup>These courses are recommended; however, other courses may be substituted upon approval by the appropriate advisor.

# DRAFTING/DESIGN TECHNICIAN CERTIFICATE Shawnee State Community College

COURSE NO.	COURSE	CODE	CLASS HRS.	LAB HRS.	CR. HRS.
	FIRST QUARTER				
ENDR 0101 CADD 0101 * MATH 0101 * ENGL 0111	Engineering Drawing I Introduction to CADD Basic Algebra Cont. Writing Skills I	T T B G	1 2 5 5 13	5 6 0 0 11	3 4 4 4 15
	SECOND QUARTER				
ENDR 0102 CADD 0102 CADD 0103	Engineering Drawing II Mechanical Drawing w/3D Electronic Schematics & Wiring Diagrams	T T T	1 2 1	5 6 3	3 4 2
* PSYC 0101	Prin. of Psychology	G	<u>5</u>	0 14	$\frac{4}{13}$
	THIRD QUARTER				
ENDR 0103 CADD 0104 CADD 0105 *SOCI 0101	Engineering Drawing III Advanced Technical Drawing Mapping w/CADD Prin. of Sociology	T T T G	1 2 1 5	5 3 5 0 13	3 3 4 13
	FOURTH QUARTER				
CADD 0106 CADD 0107 CADD 0108 CADD 0109	Structural Design-Floor Plan Piping Drawings Welding Drawings Castings & Mold Design	T T T	1 1 2 2 -6	5 5 6 4 20	3 3 4 3 13

<sup>\*</sup>These courses are recommended; however, other courses may be substituted upon approval by the appropriate advisor.

# INTER-INSTITUTIONAL ADVANCED STUDY (OHIO UNIVERSITY COURSES)

Shawnee State has entered into an agreement with Ohio University for the purpose of offering junior, senior, and graduate courses on the Shawnee State campus. Under the agreement, students may take Ohio University courses on the Shawnee State campus during or following their course work at Shawnee State. For additional information about opportunities in Ohio University baccalaureate and graduate programs, a student should see his Shawnee State counselor or the Ohio University counselor, whose office is on the Shawnee State Campus.

## SIX DEGREES

Through the combined efforts of Shawnee State Community College and Ohio University, students can complete six degree programs at the Shawnee State Campus. These programs are:

- 1 Elementary Education
- 2 General Business
- 3 Nursing
- 4 Accounting
- 5 General Studies
- 6 Computer Systems in Business

The first two years of these programs are offered by Shawnee State Community College. The last two years will be offered by Ohio University. (Courses are available as long as student registration is great enough to justify offering them.)

# ASSOCIATE OF INDIVIDUALIZED STUDIES DEGREE

The Associate of Individualized Studies Degree (AIS) at Shawnee State Community College has been designed for the primary purpose of allowing students the option of formulating his/her own individualized program of study. The philosophical basis of the degree is predicated upon the assumption that the student may be unable to achieve his/her personal educational goals through one of the more formalized two-year degree structures offered at Shawnee State. This is especially true for those students interested in concentrating or combining a selected mixture of courses encompassing both academic as well as technical offerings in a manner which may not meet the degree requirements of Shawnee State's Associate of Arts, Associate of Applied Science, or Associate of Applied Business Degrees. With the awarding of the AIS, students thus have an opportunity to formulate their own program of study relevant to personal educational goals.

A demand exists among students for certification of two years of post secondary education. With approval, students may formulate a curriculum designed for transfer into a four-year program at a baccalaureate institution or formulate a program designed for immediate employment. There are those students who may also pursue the degree for general or personal enrichment.

## **Organizational Structure**

The AIS Degree will be organized and administered through the Office of the Dean of Student Services. The Vice-President of Student Services has at his disposal a staff of full-time counselors familiar with the academic and technical course options available at Shawnee State. The Student Services Staff also has access and strong working relationships with faculty in all academic and technical divisions and programs. Thus, because of its wide range of functions and familiarity with program offerings at Shawnee State, it was the feeling of the AIS Degree Committee that the Office of the V.P. of Student Services might appropriately be responsible for curricular and procedural matters as well as AIS program evaluations.

#### **Admissions Requirements**

The AIS Degree is available to any student admitted to Shawnee State whose educational objectives and interests cannot be met through one of the more structured degree programs. The student must make formal application by completing the AIS application. The application outlines the student's course of study and intended area of concentration. The student must also explain his reason for pursuing the degree. Two resource faculty or staff members must be consulted in preparation of the program, one of whom must be from the student's stated area of concentration. Both resource members must sign the application before submission for approval to the V.P. of Student Services.

The student may submit his application at anytime; however, the student must complete 30 quarter hours of credit after admission into the AIS program. If an application is submitted within the first 10 class days of the quarter, the credits earned that quarter will be included in the 30 credits required after admission to the program.

Once the program receives approval, it should represent a firm contract between the student and faculty/staff involved. Some flexibility and minor alterations should be written into it, but if the major emphasis of the program is changed by the student, it must have written consent of the advisors and approval of the V.P. of Student Services.

#### **Graduation Requirements**

Upon completion of 90 quarter hours of credit with a cumulative grade point average of 2.00, the student may be awarded the AIS Degree. Thirty hours must be completed after admission to the program. The Office of the V.P. of Student Services will handle individual graduation checks.

## **Counseling Procedure**

Given the individualistic nature of the degree, it is understood that extensive academic counseling is necessary for each student pursuing this particular program. Each admitted student will be consulting with two resource personnel, particularly the advisor representing the proposed area of concentration. Although the degree is awarded based upon a program of study designed by the student along with consultation and advice from faculty or administrative advisors, the student has ultimate responsibility for his/her program. Each student will be encouraged to discuss their program with prospective employers or other relevant nonacademic personnel.

Since the AIS Degree is an individually designed program geared to meet specific educational objectives, it would not be recommended to those students whose interests and/or goals can be better met through one of the more conventional degree offerings at Shawnee State.

## **Curricular Structure**

The AIS program is not expected to have any particular impact on the curricular offerings at Shawnee State as it does not require the development of new courses. The program does, however, allow the student greater flexibility in designing a program that would meet his/her educational needs. The student will be able to design both specialized and interdisciplinary programs with no restrictions on the number of academic or technical courses included in the student's planned program. The only limitations on the amount of credit granted for Advanced Placement, College Level Examination Programs, Course Credit by Examination, Independent Study, Correspondence Study, etc., are those normally applied to the Associate Degree Programs at Shawnee State and the agreement made in the original AIS contract (application).

Grading policies applicable to all other programs at Shawnee State are also applicable to the AIS Degree. To the extent that policies and procedures are developed for examining accomplishments and competencies of life or other creditable experience for all degree students at Shawnee State, they will also be available to AIS Degree students.

Students may modify their programs so long as the major emphasis and direction of the program is not changed. If the major emphasis of the program is altered, it must have the written consent of the advisors. Subject to all requirements of the program to which they transfer, students may transfer to any other degree program at Shawnee State when they choose.

## Interinstitutional Cooperation

Relative to interinstitutional cooperation, the AIS Degree can be awarded to students who transfer credits from other institutions. Shawnee State Community College adheres to state articulation guidelines recently adopted by the Ohio Board of Regents.

## **DEVELOPMENTAL COURSES**

The developmental courses have been designed to assist students with inadequate preparation for college and to stimulate the progress of other students. Students with little preparation or a history of academic difficulty may want to consider these courses before taking other college courses. All developmental courses carry college credit, but they do not count toward fulfilling degree requirements for graduation.

#### Math 100A — Fundamental Math (4)

A brief review of the fundamentals used in arithmetic including addition, subtraction, multiplication, and division as applied to integers and rational numbers. An introduction to the elementary concepts of basic algebra with emphasis on manipulations of algebra expressions, solutions to all types of equations, graphs and formula rearrangements.

#### Chem 100A — Fundamental Chemistry (4)

This course is designed for those students with an inadequate background in chemistry. It should be taken by students planning to enter one of the allied health fields or plastics engineering that have not had high school chemistry. Topics and material presented are intended to increase student's familiarity with terms and chemical process.

#### Biol 100A — Fundamental Biology (4)

This course is designed for those students with an inadequate background in biological science. The course should be taken by those students planning to enter one of the allied health fields that have not had biology on the high school level.. Topics and material presented are intended to increase student's familiarity with terms and chemical process.

## Phys 100A — Fundamental Physics (4)

This course is designed for those students with an inadequate background in math or physics. This course should be taken by those students before taking Physics 0201. Several physics topics and the mathematical methods to study these topics are covered. Topics include metric system, unit conversion, and vector analysis of forces and motion. An introduction to laboratory procedures and report writing is included.

## Engl 100A — Fundamental Writing (4)

This is a transitional course for the student who feels he has a basic weakness in reading or writing skills or one who has been away from classroom work for a number of years and recognizes the need for a better foundation for more advanced classroom work. Areas of concentration are (1) reading comprehension, (2) vocabulary development, (3) sentence and paragraph structure.

#### Engl 0090 - Vocabulary Development (2)

Emphasis is placed on development of skills necessary for building vocabulary.

#### Engl 0004 — Reading Development (2)

Emphasis is placed on improving reading speed and comprehension. Reading problems are identified and attacked: single word fixation, involuntary regression, subvocalization, and inability to concentrate. (2 hr. lec. per wk. for 5 wks.)

Please note that developmental courses do not apply toward an associate degree.

## STUDENT SERVICES COURSES

The following rationing courses have been developed as special interest courses for students attending Shawnee State Community College. While Credit may be awarded at Shawnee State for each of the listed courses, it is *important* to note that students may experience difficulty in transferring credit earned in *Student Service Courses* to another college or university. This difficulty arises primarily because of the nature and type of material covered in each of the various courses.

The primary purpose of the Student Service Courses is to aid students in the development of skill and knowledge applicable to their educational pursuits while attending Shawnee State Community College.

#### SSCr 0002 — New Approaches to Learning (1)

Various approaches to learning are explored. Mnemonic and associative techniques are investigated. (2 hrs. lec. per week for 5 wks.)

#### SSCr 0008 — Memory Development (1)

Associative learning skills are explored and developed.

#### SSCr 0010 — TA/Self Concept (1)

Transactional analysis and value clarification are used to assist student in gaining self knowledge.

#### SSCr 0012 — Parenting/Parents (1)

Family life, structure, development and support are investigated with regard to family relationships.

## SSCr 0013 — College Orientation (1)

This course has been developed to assist students in gaining and understanding of opportunities, majors, and procedures at Shawnee State Community College.

## **COURSE DESCRIPTIONS**

## **ACCOUNTING**

## Acct 0100 — Basic Accounting (4)

An introduction to fundamental accounting concepts and procedures as required by small businesses. For individuals desiring one course in accounting only. NOT FOR ACCOUNTING MAJORS.

#### \*Acct 0101 — Accounting I (4)

Introduction to fundamental accounting concepts and the procedures. The accounting cycle: nature of accounts and techniques of recording, classifying, summarizing and analyzing basic financial data. Application of fundamental accounting techniques to partnerships and corporations. Accounting for the formation, operation, and dissolution of business enterprises

## \*Acct 0102 — Accounting II (4)

Prereq. Acct 0101.

Application of fundamental accounting techniques for cash, long term investments, notes and accounts, inventory methods, plant and equipment, and liabilities. Introduction to manufacturing operations, cost methods and management's need of cost data.

#### \*Acct 0103 — Accounting III (4)

Prereq. Acct 0102.

Reporting and analysis of financial data. Financial statement introduction, analysis and interpretation to meet the needs of modern management. Introduction to accounting techniques applicable to parent and subsidiary companies and departmental and branch operations. Budgeting as an aid to management, and the importance of income tax considerations in financial decisions.

## Acct 0104 — Tax Accounting (4)

Prereq. Acct 0102.

Current income tax law and regulations related to business and individual income tax reporting. Practice in preparation of tax returns of businesses and individuals.

## Acct 0110 — Payroll Records/Accounting (3)

Prereq. Acct 0101 or 0100.

A basic course in the maintenance of personnel and payroll records as required by the Fair Labor Standards Act and the various federal and state laws covering the withholding and payment of payroll related taxes.

## Acct 0161 — Accounting with D.P. Application I (4)

Prereg. Acct. 0100 or with Acct. 0101.

Application of basic accounting procedures to the microcomputer. Emphasizes applications to the IBM microcomputer system.

#### Acct 0175 — Financial Statement Analysis (3)

An introduction to the analysis and intrepretation of data contained in financial statements prepared in accordance with promulgated accounting principles. Measurement of the firms profit ability, solvency and degree of safety.

#### Acct 0205 — Principles of Finance (3)

Prereq. Acct 0102.

Forms of business organization; corporate securities, financing through securities, sources and management of working capital, administration of income, expansion and combination, reorganization, receivership, and dissolution.

## \*Acct 0211 — Intermediate Accounting I (4)

Prereq. Acct 0103.

A more advanced treatment of accounting theory; determination of income realization and cost expiration. Primary emphasis is on asset accounts in order listed on the balance sheet.

## \*Acct 0212 — Intermediate Accounting II (4)

Prereq. Acct 0211.

Continuation of Intermediate Accounting I with emphasis on the balance sheet sections dealing with investments, fixed assets and liabilities.

#### \*Acct 0213 — Intermediate Accounting III (4)

Prereq. Acct 0212.

Continuation of Intermediate Accounting II with a detailed study of the owner's equity section of the balance sheet and the financial statements presentation and analysis.

## \*Denotes classes with Lab fees.

#### \*Acct 0221 — Cost Accounting I (4)

Prereg. Acct 0103

Introduction to cost accounting systems and methods. Cost concepts, classifications, and measurement techniques in relation to their importance in determination, planning, and control. Job order and process cost accounting methods.

#### \*Acct 0222 — Cost Accounting II (4)

Prereq. Acct 0221.

Estimating, planning, and controlling the costs of processes and projects. Standard cost accounting procedures and the analysis of variances. Cost and profit responsibility reporting to management. Uses of cost and profit data in project selection, product pricing, and other functions of management.

#### Acct 0203 — Accounting Projects I (3)

Prereq. Departmental Permission (See Accounting Advisor). A special course designed to permit the accounting student to work on special projects under the supervision of an instructor with expertise in the area of the student's project. The special projects course will enable the accounting student to apply the accounting theory as covered in other courses.

#### Acct 0231 — Governmental Accounting (4)

Prereq. Acct 0211.

Governmental Accounting is a basic introduction to the accumlation and use of accounting information in non-profit organizations. General principles applying to budgets and funds are examined rather than specific application. The course should be especially useful for non-accounting (and accounting) students who will be employed in governmental units where budgeting and accounting are required.

## Acct 0240 — Accounting Projects II (3)

Prereq. Departmental Permission (See Accounting Advisor). A special course designed to permit the accounting student to work on special projects under the supervision of an instructor with expertise in the area of the student's project. The special projects course will enable the accounting student to apply the accounting theory as covered in other courses.

#### Acct 0241 — Auditing (3)

Prereq. Acct 0212 and 0222.

Independent audits, professional ethics, legal liability, internal control, auditing standards, work sheet applications and procedures. Concern will be given for audit evidence, the auditor's approach and techniques, summary reports, statistical sampling, and role of advisory services to management.

#### Acct 0291 — Advanced Accounting I (4)

Prereq. Acct 0213.

The course is a continuation of financial accounting theory as applied to special corporation problems including parent-subsidiary structures requiring consolidated reporting.

## Acct 0261 —Accounting with D.P. Applications II (4)

To have the students understand the need for accounting and how it relates to Data Processing. To show how a computer can be used to aid the accountant. To have the students understand that the computer is a tool to be used in accounting and to point out ways it can be used to aid accounting

## Acct 0292 — Advanced Accounting II (4)

Prereq. Acct 0291

A continuation of financial accounting theory as applied to special situations such as partnerships, estates and trusts, and special sales contracts.

#### Acct 0310 — Field Experience (3)

Prereq. AICPA Level II Achievement Test with equivalent of college senior or Accreditation Council of Accountancy Examination (see accounting advisor).

Provides qualified students with professional business training and experience in an actual job environment.

## Acct 0311 — Field Experience II (3)

Prereq. Acct 0310 and AICPA Level II Achievement Test with equivalent of college senior or Accreditation Council of Accountancy Examination (see accounting advisor).

Provides qualified students with professional business training and experience in an actual job environment.

#### **ANTHROPOLOGY**

#### Anth 0201 — Introduction to Anthropology (5)

Origin of Man. Survey of evidence and interpretation structures of human biological evolution. Emphasis on fossil, record, comparative primate behavior studies, and selected archaeological culture sequences.

## Anth 0250 — Principles of Cultural Anthropology (4)

Preq. 0201

Varieties and range of human behavior as revealed through comparative study of cultures in all parts of the world. Included consideration of kinship, ideology, politics, economics, and ecological adaptations.

# \*\*Anth 0290A — Topics in Anthropology (3) \*\*Anth 0290B — Topics in Anthropology (4)

Prereq. Permission of instructor is required.

Topics of special interest to students are investigated under the direction of the anthropology staff. This course may be repeated but not exceed a total of eight hours.

#### ART

## Arts 0101 — Studio Foundations I (5)

No Prereg.

This course is required of all freshmen with an art concentration. The focus of the course will be on the basics of drawing and two-dimensional design.

#### Arts 0102 — Studio Foundations II (5)

No Prereq.

This course is required of all freshmen with an art concentration. The focus of this course will be color and color theory.

#### Arts 0103 — Studio Foundations III (5)

No Prereq.

This course is required of all freshmen with an art concentration. The focus of this course will be three-dimensional design, introduction of materials and techniques of sculpture.

#### Arts 0104 — Terminology, Tools & Materials for the Graphic Designer (5)

The goal of this course is to become familiar with the "building blocks" used by graphic designers. Hands-on experience with many of the tools used in this profession is important. We will learn the basics of using T-squares, triangles, technical pens, and demonstrate modern graphic computers. We will also learn about the many types of materials involved such as: rubber cement, acetate, papers, etc. Much of the terminology of graphic design is visual and we will examine these through books, slides and field trips.

#### Arts 0201 — Art for the Elementary School I (3)

This course will be concerned with presenting art methods and ideas specifically geared to those teachers in elementary education.

#### Arts 0202 — Art for the Elementary School II (3)

Continuation of modern art approaches in the elementary

#### Arts 0205 — Graphic Design Production Techniques (4)

The purpose of this course is to familiarize the graphic design student with the various methods of reproducing the finished art work. We will discuss various methods of printing, color separation, and electronic media. Lectures, demonstrations, field trips, and studio work will be involved.

## Arts 0210 - Photography I (4)

Introduction to Art and techniques of Photography.

## Arts 0211 — Photography II (4)

Prereq. Arts 0210.

Continuation of Arts 0210 (offered on demand only).

## Arts 0212 — Photography III (4)

Prereq. Arts 0211.

Continuation of Arts 0211 (offered on demand only).

#### Arts 0215 — Photography for the Graphic Designer (4)

The purpose of this class is to provide a basic knowledge of photography for the graphic designer. It will cover the basics of setting up, lighting, designing photo compositions.

#### Arts 0221 — Painting I (4)

Prereq. Art 101, 102.

The main concern of this course will be concentrated on the use of oils and synthetic painting media.

#### \*Denotes classes with Lab fees.

## Arts 0222 — Painting II (4)

Prereq. Art 202

A continuation and expansion of ideas and conceptualizations gained through Art 202.

#### Arts 0223 — Painting III (4)

Prereg. Art 203.

A further expansion of ideas and conceptualization combined with technical insights through the previous two courses.

## \*\*Arts 0224 — Watercolor I (4)

The focus of this course wil be on the use of watercolor as an expressive media.

#### \*\*Arts 0225 — Watercolor II (4)

Prereq., Arts 0224

A continuation and expansion of ideas and conceptualizations gained through Arts 0224.

## \*Arts 0231 — Ceramics I (4)

The focus of this course will be clay as the craftsman conceptualizes it. Work in all types of handbuilt pottery, raku pottery, clays and glazes.

## \*Arts 0232 — Ceramics II (4)

Prereq. Art 231.

This course will be a continuation of Art 231 but introducing the potter's wheel as a means of utilizing clay. Glaze formulation and usage will be covered briefly.

#### \*Arts 0233 — Ceramics III (4)

Prereg. Art 232.

This course will be a more in-depth continuation of the previous ceramics courses with more stress being placed on the craftsmanlike development and conceptualization of clay as a medium.

## \*\*Arts 0245 — Printmaking I (4)

Prereg. Art 101, 102, 103.

An introduction to basic intaglio techniques. Emphasis will be on mastering techniques so that they can be used to develop personal imagery.

#### \*\*Arts 0246 — Printmaking II (4)

Prereq. Arts 245.

An introduction to basic lithographic technique and printing. Emphasis is placed on mastering techniques so that they can be used to further personal aesthetic goals.

## \*\*Arts 0247 — Printmaking III (4)

Prereq. Arts 246.

An introduction to the basic silk screen techniques. Emphasis will be on mastering techniques so they may be used to develop personal imagery.

#### \*\*Arts 0248 — Relief Printing (4)

Prereq. Arts 0247.

An introductory course emploring the range of graphic possibilities in the relief printing process.

#### \*\*Arts 0251 — Techniques in Illustration & Design I: Typography for the Graphic Designer (4)

This studio course will start with some basic background in type design and theory and will work through its use in modern graphic design. We will cover the use of transfer lettering, type sizing and specification in graphic design.

## \*\*Arts 0252 — Techniques in Illustration & Design II: Basic Illustration (4)

This studio course will start with design basics and integrate these basics into illustration techniques for the graphic designer. This class will start with black and white graphics and work through color techniques.

#### \*\*Arts 0253 — Techniques in Illustration & Design III: Illustration and Specialty Design (4)

This studio course will integrate the knowledge gained in the two previous techniques courses (I & II). We will study basics of package design, fashion design, and industrial design. The last few weeks of this course will be reserved for developing a portfolio of the students work for use in admission to various junior year programs in those schools offering a Bachelor of Fine Arts in graphic design.

<sup>\*\*</sup>Offered on demand only.

#### \*\*Art 0261 - Art History I (4)

The Art History courses are designed to acquaint the student with a knowledge of the contexts of work of art and the continual discarding and rediscovery of values in that art. Course I covers ancient through 14th century.

#### Arts 0271 — Life Drawing I (4)

Prereq. Art 101.

Drawing the human figure in various media.

## Arts 0272 — Life Drawing II (4)

Prereq. Art 271.

A continuation of Art 271.

#### Arts 0273 — Life Drawing III (4)

Prereg. Art 272.

A continuation of Art 272.

#### \*\*Arts 0280A — Topics in Art (2)

#### \*\*Arts 0280B — Topics in Art (3)

Study of the various art topics otherwise not available to students.

#### \*\*Arts 0290 — Weaving I (4)

Prereq. Arts 101, 102, 103.

Introduction to weaving techniques through the construction and use of a simple loom and the use of the table or floor loom.

## \*\*Arts 0291 — Weaving II (4)

Prereq. Arts 290.

Further examination and use of the 4-harness loom (2 credits). Off-loom fibre techniques and the design, construction and use of hand looms (2-4 credit).

## \*\*Arts 0292 — Fabric Design (4)

Prereg, Arts 0291.

Exploration of methods of printing and dyeing fabric as well as other methods of design application with cloth. Students will be encouraged to then use the fabric to make functional and nonfunctional objects.

## **AUTOMOTIVE TECHNOLOGY**

#### \*AuDi 0101 Fuels and Lubricants (3)

A Lecture-Laboratory course involving a study of the chemical structure of petroleum based fuels and lubricants and how they meet the operational demands of diesel and gasoline engines and power transmission components. Failures caused by fuel and lubricant breakdown are given special attention along with exhaust emission problems.

## \*AuDi 0102 — Basic Electricity (4)

A Lecture-Laboratory course designed to familiarize the student with the fundamentals of electrical theory, circuits, motors, generators, and alternators. The laboratory will provide an opportunity to construct several automotive electrical circuits and use electrical measuring instruments. This course is an introductory experience designed to provide a foundation for advanced work. Basic hand tools are required.

#### \*AuDi 0111 — Electrical and Fuel Systems I (5)

Prereq. AuDi 0102.

A Lecture-Laboratory course designed to provide the student with an opportunity to apply electrical and electronic fundamentals to the operation of automotive-diesel charging systems, starting systems, lighting and accessory circuits. Carburetion fundamentals are explored in depth and emission control systems are introduced. Basic hand tools are required.

#### \*AuDi 0112 - Electrical and Fuel Systems II (5)

Prereq. AuDi 0111.

A Lecture-Laboratory course emphasizing the theory and testing of breaker point and electronic ignition systems. Electronic fuel injection and turbocharging are introduced. Basic hand tools are required.

## \*AuDi 0121 — Principles of Internal Combustion Engines (6)

A Lecture-Laboratory course emphasizing the design, construction and operation of modern internal combustion engines. Four stroke cycle, two stroke cycle, diesel, rotary and turbine engines will be included. Basic hand tools are required.

## \*Denotes classes with Lab fees.

#### \*AUTO 0201 — Power Drive Train (5)

A Lecture-Laboratory Course covering the theory, disassembly, inspection, reassembly and adjustment of differentials, three and four speed manual transmissions and four speed manual transaxles. Related drive train components are also discussed. Basic hand tools are required.

#### \*AUTO 0211 -- Testing and Repair (6)

Prereq. AuDi 0101, AuDi 0102, AuDi 0111, AuDi 0112, AuDi 0121. A Lecture-Laboratory experience designed for the advanced student. Correct diagnosis of difficult electrical and fuel system malfunctions are practiced utilizing all laboratory resources. Basic hand tools are required.

#### \*AUTO 0212 — Chassis (6)

A Lecture-Laboratory course including contemporary front and rear suspension systems. Steering system geometry is discussed and front end alignments are performed. Basic hand tools are required.

#### \*AUTO 0221 -- Service Area (2)

Prereq. AuDi 0101, AuDi 0102, AuDi 0111, AuDi 0112, AuDi 0121, AUTO 0201, AUTO 0212, AUTO 0223.

A service area program designed to provide the student with field-type service work in a controlled instructional setting. The student is given the opportunity to make practical application of the technical material presented in previous courses. Special emphasis is placed on the vehicle service needs which are most frequently requested in modern commercial service centers. Basic hand tools are required.

## \*AUTO 0223 — Air Conditioning and Brake Systems (3)

A Lecture-Laboratory course including heating and air conditioning theory as applied to modern passenger car systems. Diagnostic procedures are emphasized and common service operations are performed. The course also includes a study of the design, theory of operation, and service procedure on passenger-car disc and drum brake systems. Basic hand tools are required.

#### \*AUTO 0224 — Automatic Transmissions (5)

A Lecture-Laboratory course emphasizing the design, construction and operation of passenger-car automatic transmissions and transaxle assemblies. Students disassemble, inspect, and reassemble selected General Motors, Chrysler, and Ford units demonstrating correct troubleshooting and service procedures. Basic hand tools are required.

#### **AUTO 0225 — Service Management Practices (4)**

A Lecture-Discussion course covering the principles involved in management of automotive service facilities. Content includes establishing objectives, organizational problems, personnel management, merchandising, pricing, warranty claims, and customer relations.

#### **BIOLOGICAL SCIENCES**

## Biol 100A — Fundamental Biology (4)

This course is designed for those students with an inadequate background in biological science. The course should be taken by those students planning to enter one of the allied health fields that have not had biology on the high school level. Topics and material presented are intended to increase the student's familiarity with terms and chemical process.

#### \*Biol 0105 - Field Biology (3)

An introduction to basic life processes including the structure and function of plants and animals. Laboratory work emphasis is on the identification and natural history of local flora and fauna, with special attention to trees and shrubs. 2 lec. 4 lab.

## \*Biol 0111 — Principles of Biology (5)

Introduction to principles and concepts of life; emphasis on inter-relationships of structural, functional, reproductive, evolutionary and ecological principles related to cells and organisms. 4 lec. 2 labs.

## \*Biol 0112 — Plant Biology (5)

Prereq. Biol 111

Morphology and anatomy of seed plants as related to function. Survey of plant kingdom with emphasis on evolutionary relationships and life histories of selected plant groups. 4 lec. 2 labs.

<sup>\*\*</sup>Offered on demand only.

#### \*Biol 0113 — Animal Biology (6)

Prereq. Biol. 111.

Principles of development, anatomy, physiology, behavior and laboratory survey of major phyla. Designed primarily for majors in the sciences and preprofessional students. 4 lec. 4 labs.

## \*Biol 0200 — Human Anatomy and Physiology (5)

A general survey of the structure and function of the human body. Not applicable for students requiring Biol 0290 and 0291, 4 lec. 2 labs.

#### \*\*Biol 0210 — Trees and Shrubs (5)

Prereq. Biol 112. Fall Quarter. (Offered on demand only). Collection, identification, nomenclature, classification, ecological relationship of native, introduced and cultivated woody plants. 3 lec. 4 labs. 2 Saturday field trips.

#### \*\*Biol 0211 — Spring Flora (5)

Prereq. Biol 112. Spring Quarter. (Offered on demand only). Identification, nomenclature, classification of spring flowering plants. Origin and evolution of flora of Ohio. 3 lec. 4 labs.

#### Biol 0212 — Forestry Management and Practices (4)

This course investigates the development and the existing practices of modern forestry in the United States. Basic management practices are discussed with laboratory exercises designed to improve forest management skills. 3 lec. 3 lab.

#### \*Biol 0215 — Ecology (3)

A study of the interrelationships among the many elements in an environment. A historical approach looks at the concept of evolution, man's impact upon the environment, and common ecological problems faced by parks. Labs introduce common and basic ecological techniques. 2 lec. 3 lab.

#### Biol 0220 — Wildlife Management (4)

Prereq. or concurrent: Field Ornithology

A study of the ecological principles of the management of wild animals, both game and non-game species. The economic importance of wildlife and the role of various wildlife agencies will also be considered. 3 lec. 3 lab.

## Biol 0225 — General Genetics (5)

Prereq. Biol 111. (Offered on demand only.)
Principles and concepts of genetics as revealed by classical and modern investigation. 5 lec.

## \*Biol 0235 — Microbiology 5 hrs cr. (4 Lec. 3 Lab.)

Prereq. Biol 111 or permission.

A survey of representative types of micro-organisms. Emphasis is placed on cellular structure and physiology, nutritional and environmental requirements and methods of reproduction. Introduction to the role of pathogenic organisms in carrying diseases and infections. Principles of immunity and resistance to disease. Laboratory includes methods of sterilization, culture, staining and identification. 4 lec. 4 labs.

## Biol 0271 — Field Ornithology (4)

Prereq. or concurrent or permission of instructor. Ecology or Fundamentals of Biology.

A study of the classification, adaptations, and habitat requirements of the higher animals with particular emphasis on Ohio species. Field identification of mammals, birds, reptiles, amphibians, and fish will be done in lab with emphasis on the birds. 3 lec. 3 lab. Spring quarter only.

## \*Biol 0290 — Principles of Anatomy and Physiology I 5 hrs. cr. (4 lec 3 lab.)

Prereq. Biol 111 or permission.

Morphological and physiological aspects of cells and tissues and of the dermal, neurosensory, skeletal, and muscular systems of the human body. 4 lec. 3 lab.

## \*Biol 0291 — Principles of Anatomy and Physiology II 5 hrs. cr. (4 lec 3 lab)

Prereq. Biol 290

Continuation of Biol 290. Morphological and physiological aspects of the circulatory, respiratory, digestive, urinary, reproductive, and endocrine systems. 4 lec. 3 lab.

#### \*Denotes classes with lab fees.

\*\*Biol 0299A — Special Topics in Biology (2)

\*\*Biol 0299B — Special Topics in Biology (3)

Prereq. Biol 111 or permission of instructor. Individual or small-group study, under supervision of instructor, of topics not otherwise available to students.

#### **BUSINESS MANAGEMENT**

## BAFT 0101 — Principles of Banking and Finance I (3)

Monetary standards, commercial and central banking. Federal Reserve functions and statements, monetary and income theory, problems of monetary and fiscal stabilization, international payments, and the International Bank and Monetary Fund.

## BAFT 0102 — Introduction to Commercial Lending (4)

An overview of the commercial lending function. Four sections cover commercial lending overview, the lending process, portfolio management, and regulation and business development. Specific contents include the commercial loan customer, types of commercial loans, the loan decision process, cost analysis, control and profitability, and the regulatory and legal environment.

## BAFT 0105 — Installment Credit (4)

Procedures, forms, government regulations, delinquency and collections, interest rates, background of installment credit.

## BAFT 0106 — Principles of Bank Operations (4)

Basic course stating a history of banking, developing of Federal Reserve System; three main duties, safekeeping, transfer of funds, lending. Examination and governmental examination. Field work and problems concerning the operation of commercial bank and savings and loan institutions. On the job visitation to various banks.

#### BAFT 0202 — Home Mortgage Lending (4)

A course covering the basic principles of home mortgage lending. A study of the procedures used from the opening to closing of mortgages. A complete study of all necessary forms, rules, and regulations the buyer should know in obtaining a loan.

#### BAFT 0204 — Investments I (4)

A course consisting of assignments dealing with the various investment alternatives, as well as general and specific information that must be considered before thought is directed toward particular industries and companies. Also included are the tools and sources that are needed for analysis necessary before making wise investment decisions.

## BMNT 0101 — Introduction to Business (3)

A survey course of the basic functions of American business, with an emphasis upon the responsibility of businesses as a vital segment of society. The course introduces the American economic system and the role of profits as the motivating force behind U.S. business activity. Case problems and supplementary readings provide exposure to divergent opinion about the subject of business.

#### BMNT 0102 - Marketing (4)

A study of marketing fundamentals, consumption and consumer behavior, retailing and wholesaling structures; and the functions performed in marketing, marketing policies and a critical appraisal of the field of marketing.

## BMNT 0201 — Principles of Management (4)

An introductory course into management concepts, organization and principles with a detailed analysis of the management functions of planning, organizing, staffing, directing and controlling. Communications, decision making and motivation are emphasized as intrical concepts in performing the management functions.

## BMNT 0202 — Personnel Management (3)

The philosophy, principles, and methods of personnel management; organizational structure, areas of responsibility and authority, policy making, procurement and placement, training, evaluation, wage and salary administration and benefit programs.

<sup>\*\*</sup>Offered on demand only.

## BMNT 0240 — Industrial Relations (4)

The methods of employer-employee relations, emphasizing the position of the employer; personnel policies and practices, compliances with law and regulations with labor unions.

#### BMNT 0241 — Labor Relations (4)

This course is concerned with collective bargaining, contract or labor agreements, workmen's compensation laws, apprentice training, and jurisdictional disputes.

## BMNT 0242 — Business Communications (3)

Principles and techniques of effective letter writing; letter mechanics; writing of personal business letters including application letters; methods of writing business reports and letters — internal and external report as means of communication.

## REST 0210 — Real Estate Principles and Practices (4)

A basic course designed as an introduction to real estate economics and administration to develop professional real estate business to obtain basic knowledge about real estate for their own benefit in handling real estate problems.

The course covers the elementary physical, legal, locational and economical characteristics of real estate; real estate markets; and national, regional and local economic influences on real estate values. It also provides a foundation for further study and serves as a preparation for securing a license.

## REST 0211 — Real Estate Brokerage (4)

A basic course in real estate economics, brokerage and administration, designed for the professional development of real estate personnel and to serve those who are not in the real estate business but desire to learn about real estate for their general knowledge and private business arrangements.

This course covers property ownership and rights, real estate brokerage and construction, marketing and production, land development and construction of buildings, and effects of marketing and production systems in our economy.

#### REST 0212 — Real Estate Law (4)

Real Estate Law includes all of the areas of law commonly concerned with the typical real estate practitioner and investoryconsumer.

Among topics covered in this course is the law of agency as applied to real estate brokers and salesmen, law of fixtures, estates (including leases), conveyancing of real estate, real estate managers, license laws of Ohio, zoning, cooperatives and condominiums.

## REST 0213 — Real Estate Finance (4)

Real Estate Finance includes information concerning the institutions, methods, instruments and procedures involved in the financing of real estate.

It includes the nature and characteristics of the mortgage loans, government influence on real estate finance, and the nature of the mortgage market. Effects of monetary and fiscal policies on real estate financing are considered.

## REST 0214 — Real Estate Appraisal (4)

The course in Real Estate Appraisal stresses the methodology of appraising urban real property and the theory underlying appraisal techniques.

The three basic techniques of appraising ... market comparison, penalized cost of replacement, and income capitalization, are covered in depth.

A term project is assigned to give the student practical experience in applying these techniques.

#### REST 0215 — Special Topics in Real Estate (4)

Special Topics or Seminar in Real Estate (title may vary from institution to institution) includes areas requiring specialized knowledge such as taxation, investment analysis, industrial real estate, commercial real estate, and other types of income producing property. Current issues and problems facing the real estate business are also considered.

This course should be offered to those persons who have previously completed the necessary basic courses.

This course is designed to cover specialized material not covered in the other five courses as well as the current real estate market, legislative activities, and long-range planning for the future of real estate.

Recommended prerequisites for this course are: Principles and Practices I, Real Estate Law, Real Estate Finance, Real Estate Appraisal, Real Estate Brokerage.

## \*Denotes classes with Lab fees.

## \*\*Offered on demand only.

#### RMMN 0103 — Introduction to Retailing (4)

Principles and methods of retail management, including organization, policy making, location, operation, selling services, records, inventory, expense control, insurance and the coordination of a store.

## RMMT 0104 — Salesmanship (3)

A course structured to acquaint the student with the basic concepts of personal selling at both the industrial and retail level including preparation for selling, sales processes, and an introduction to sales management. Emphasis on retail selling. Students are made aware of the wide variety of careers open to them in retail selling.

#### RMMT 0223 — Retail Buying (4)

Prereq. Marketing or permission from instructor.

This course will provide a basic understanding of the retail buyer's responsibilities and functions and create an awareness of the complexity of the buyer's job. In addition, the course will provide the student with actual opportunity to acquire some of the basic skills that are used by the retail buyer in determining demand, purchasing, choosing sources and negotiating, and pricing.

## RMMT 0225 — Marketing Case Studies (4)

To give the student an opportunity to report and discuss marketing problems in a group situation. Problems discussed are concerned with areas of marketing management, production planning and development, marketing research, industrial buying behavior, market segmentation, price objectives, advertising, and international marketing environment.

#### \*RMMT 0233 — Sales Promotion (4)

Prereg. Marketing or permission.

A course designed to provide the student with a basic background, which will enable him to effectively create, transmit and manage product information and messages from the seller to the buyer, resulting in the desired response by the buyer. Emphasis is placed on defining the potential consumer and his behavior, selecting the proper promotional methods, and managing the promotional program.

## \*RMMT 0235 — Advertising (3)

Prereq. Marketing or permission of instructor.

A study of the principles of advertising stressing the history and development of advertising; its relation to the marketing effort of the firm; its relation to consumers and society in general; the major groups of media used by the advertiser; the creation; planning and management of advertising.

## RMMT 0236 — Special Topics in Retailing (3)

An independent research study of a particular area of the retailing industry which interests the student.

Prereq. Sophomore standing, permission of full-time retail instructor and Introduction to Retailing.

#### **BUSINESS LAW**

## BusL 0250 — Business Law I (4)

Introduction to major points of business law, based principally on Uniform Commercial Code; consideration of Uniform Acts relating to specific legal areas. Contracts, agency and employment, negotiable instruments, personal property, and bailments.

## BusL 0260 — Business Law II (4)

A second quarter of the study of Business Law in which the subject matter covered includes partnerships, corporations, real property and leases, nature of insurance, mortgages, nature of bankruptcy, trusts and estates, and basic business regulations by government.

#### **CHEMISTRY**

## Chem 100A — Fundamental Chemistry (4)

This course is designed for those students with an inadequate background in chemistry. It should be taken by students planning to enter one of the allied health fields or plastics engineering that have not had high school chemistry. Topics and material presented are intended to increase student's familiarity with terms and chemical process.

#### \*Chem 0121 — Introduction to Inorganic Chemistry (4)

An introductory course in fundamental chemical concepts and laboratory techniques. Atomic structure, periodic classification of elements, chemical equations, chemical calculations, solutions, acids and bases, oxidation, reduction, reactions, and the gas laws. 3 lec. 3 lab.

Recommended for students in allied health technologies and university parallel programs requiring general chemistry or physical science elective(s).

#### \*Chem 0122 — Introduction to Organic Chemistry (4)

Prereq. Chem 0121.

A course in fundamental organic chemistry. The study of carbon compounds; aliphatic hydrocarbons, alcohols, ethers, aldehydes, keytones, organic acids, esters, amines, and aromatic compounds. 3 lec. 3 lab.

#### \*Chem 0123 — Physiological Chemistry (4)

Prereg. 0122.

This course is an introduction to physiological chemistry. Organic chemistry and metabolism of carbohydrates, lipids, and proteins is discussed with emphasis on metabolic pathways, enzymes, hormonal control of metabolism, metabolic energy for muscular work, composition of body fluids, and metabolic relationships among major organs. Pathological conditions related to metabolism are discussed. Recommended for students in technical programs in allied health fields (except nursing). 3 lec. 3 lab.

#### \*Chem 0141 — Chemistry I: General (4)

Prereq. H.S. algebra and H.S. chemistry recommended. Designed to provide an introduction to chemistry through the study of fundamental chemical concepts, stoichiometry, gas state, atomic theory, periodic classification, atomic structure, and nuclear chemistry. 3 lec. 3 lab.

Recommended for students in plastics technology, chemical technology, and transfer programs requiring three quarters of freshman chemistry (medicine, optometry, microbiology, dentistry, forestry, pharmacy, veterinary, engineering, medical technology, botany, zoology, physics, science education, etc.).

#### \*Chem 0142 — Chemistry II: Chemical Energetics (4)

Prereq. Chem 141.

Designed as an introduction to chemical bonding, coordination chemistry, condensed states, chemical thermodynamics, chemical kinetics and chemical equilibrium. 3 lec. 3 lab.

## \*Chem 0143 — Chemistry III: Quantitive Analysis (4)

Prereq. Chem 0142

An introduction to ionic equilibrium and principles of quantitative analysis. Emphasis placed upon classical gravimetric and volumetric analysis. 3 lec. 3 lab.

## \*Chem 0202 — Process Instrumentation (4)

Introduction to measurement and control systems for temperature pressure, and fluid flow. Dynamic response characteristics of instruments and calibration methods.

## \*Chem 0205 — Organic Chemistry (4)

Prereg. Chem 0143

A course for students wishing to acquire a sound knowledge of classical and modern organic chemistry. 3 lec. 3 lab.

## \*Chem 0206 — Organic Chemistry (4)

Prereq. Chem 0205.

Continuation of 205. See 205 course description. 3 lec. 3 lab.

## \*Chem 0207 — Organic Chemistry (4)

Prereq. Chem 0206

Continuation of 205-206. See 205 description. 3 lec. 3 lab.

#### \*Chem 0211 — Unit Operations I (4)

Prereg. Math 131 and PEng 0206.

Fundamentals of distillation, filtration, drying extraction, mixing, absorption, etc. Related laboratory.

#### \*Chem 0224 — Instrumental Analysis I (5)

Prereq. Chem 0143.

An introduction to methods of chemical analysis by spectophotometry. The topics include U.V./visible, infrared, atomic absorption, flame emission, and X-ray methods. 3 lec. 3 lab.

#### \*Chem 0225 — Instrumental Analysis II (5)

Prereq. Chem 0224.

An introduction to methods of chemical analysis by chromatography and electroanalytical chemistry. Topics include solvent extraction; various types of chromatography including gas, liquid, ion exchange, thin layer, and paper; potentiometric, coulometric, and amperometric titrations; electrodeposition; and polarography. 3 lec. 6 lab.

## **CIVIL ENGINEERING**

#### CEng 0101 — Introduction to Surveying (3)

History and background of surveying; the acceptable surveying method. Introductory topics in plane geometry, trigonometry and computations necessary for surveying. The preparation of proper field notes, hands-on use of surveying equipment together with its proper care, adjustment and cleaning. The running of simple traverses, curves, level circuits and turning of angles will be practiced as an introduction to higher levels of calculation and field practices.

#### \*CEng 0111 — Surveying I (3)

Prereq. CEng 0101 or advisor approval.

Using simple traverses and other field exercises conducted in CEng 0101, closed traverses will be calculated, errors adjusted and areas of surveys calculated by DMD and coordinates. Four types of angles used in surveying will be studied and their interrelationship developed. Latitudes and departures will be computed and adjusted according to normal procedures. Circular curves will be developed in three ways, as will parabolic or vertical curves and the introduction to compound curves and spirals will begin.

#### \*CEng 0112 — Surveying II (3)

Prereq. CEng 0111 or advisor approval.

Field exercises will include the layout of curves, spirals and open and closed traverses. Simulations of property surveys will be practiced, with property descriptions by metes and bounds. Line and grade will be established for construction surveys, including batter-board erection and level controls. Introduction will be made to more sophisticated equipment; theodolites and self-leveling levels. Topographic surveying (stadia) providing data for map plotting and various calculations, such as, mass excavation.

## \*CEng 0113 — Route Surveying (3)

Prereq. CEng 0112 or advisor approval.

The refinement of all previous surveying field methods, techniques and applications together with mathematical techniques for high level controls and adjustment. The study of route considerations for highways, power transmission lines, railroads, pipelines, etc., based on topographic maps and photogrammetric maps. Use of the EDM and one second theodolite and demonstration of computer solutions to previous problems. Discussions will be held on Deed and Title searches.

## CEng 0115 — Surveying for Civil Engineers (4)

Prereq. CEng 0113 or advisor approval.

Advanced surveying applications. Boundary surveys, United States Public Land Surveys, fundamental survey control and the state coordinate systems, celestial observations, mine surveys and city surveys. Riparian rights and other legal aspects will be discussed, as they regard the surveyor or engineer.

#### CEng 0201 - Concrete Materials & Design (5)

Prereq. CEng 0207 or advisor approval.

The theory of modern concrete. Practices of making, placing, forming and curing Portland Cement concrete. Design of batches and testing of concrete specimens. Designs of concrete members, such as footings, columns, beams, slabs and retaining walls. Inspection practices prior to placing, after stripping forms and on older concrete in regard to needed repair. Finishing of concrete surfaces and various types of finish

#### CEng 0202 — Construction Estimating I (2)

Introduction to estimating. Familiarization with project plans and specifications. Extraction of biddable quantities from plans and specifications. Units of measure consistent with estimating. Category outlines and detailed outlines. Introduction to the quantity take-off, construction sequences and terminology. Mechanical and Electrical estimates are considered briefly.

#### CEng 0203 — Statics (3)

Prereq. Math 0132.

Statics in the study of external forces acting on rigid bodies in equilibrium. The study includes types of forces, reactions, vectors, moments. The laws governing the actions and resolutions of these forces.

#### CEng 0204 — Construction Supervision (3)

Provide a basically brief but comprehensive understanding of setting up and controlling a construction project. Introduce contract documents and discuss their legal aspects. Review construction project organizations, both simple and complex, and duties of each individual or department. Develop the role of the Engineer in construction projects. The practical aspects of forming, concrete placement, steel erection, coordinating subcontractors, etc., — or — how to run a construction project at various levels.

## \*CEng 0205 — Hydraulics for Civil Engineering (2)

Prereq. Math 0131 and Phys 0201.

This course is oriented toward water supply and distribution. Topics include Pascal's Law, Bernoulli's Theorem and weir flow. Run-off, collection, flow of water in pipes, distribution systems and pumps will be covered.

## CEng 0206 — Construction Estimating II (3)

Prereq. CEng 0202 or advisor approval.

Actual hands-on estimating for persons more familiar with construction, its terminology and approach. Estimates from square footage and building types to line-item estimates based on detailed quantity take-offs. Breakdowns of T & I, Overhead and Profit and the final estimate and project cost. Mechanical and Electrical estimates will be considered in the overall project cost as lump sums or percentages. Legal aspects of bidding will be covered.

## CEng 0207 — Strength of Materials (4)

Prereq. Math 0132 and CEng 0203.

Location of the centroids or areas and their moments of inertia. The study of tension, compression, shear and torsion in engineering materials. Resultant stress and strain from internal and external forces.

## \*CEng 0208 — Soil Materials and Testing (2)

Engineering tests of soils for design and control to meet ASTM Standards. Testing for moisture content, standard compaction, proctor penetration, sieve analysis, hydrometer analysis, and unconfined compression.

## CEng 0211 — Highway Construction (4)

Prereq. CEng 0112. Coreq. CEng 0113.

Highway economics and finance, planning, geometric design, drainage and drainage structures. Traffic survey, driver and vehicle characteristics together with traffic routing and safety. Earthwork operations and equipment; thickness design of flexible pavements and bases; soil aggregate roads and stabilization; bituminous surface treatments and highway maintenance.

#### CEng 0212 — Structural Steel Design (4)

Prereq. CEng 0207 or advisor approval.

The design of structural steel. Design will include bridges, towers and buildings. Forces acting on these structures, resultant stresses and their affect. Beams, columns, bracing and connections will be studied. Bolted, riveted and welded connections as well as stiffening will be considered. Working stresses will be applied and ultimate stress design will be considered. Inspection of steel structures will be covered.

## \*Denotes classes with Lab fees.

#### **COMPARATIVE ARTS**

#### ComA 0101 — Survey of the Arts (4)

Analysis of form, media, and content of major arts stressing interrelationships of architecture, dramatic art, music, literature and painting through recognition of common art factors. Use of tapes, slides, and recordings. Three quarter sequence.

## ComA 0102 — Survey of the Arts (4)

Analysis of form, media, and content of major arts stressing interrelationships of architecture, dramatic art, music, literature and painting through recognition of common art factors. Use of tapes, slides, and recordings.

#### ComA 0103 — Survey of the Arts (4)

Analysis of form, media, and content of major arts stressing interrelationships of architecture, dramatic art, music, literature and painting through recognition of common art factors. Use of tapes, slides and recordings.

#### **CORRECTIONS**

#### CorT 0203 — Criminology (3)

This course will allow the student an opportunity to have a comprehensive understanding of criminal activity in America and how various controls affect the criminal behavior of our society.

#### CorT 0103 — Juvenile Delinquency (3)

This course will cover an in-depth study of juvenile delinquency, prevention of delinquency, interpretation of the role of society, and the administration of juvenile justice.

#### **DATA PROCESSING**

#### \*EDPT 0101 — Introduction to Data Processing (3)

Historical background, computer applications, social implications, data representation numbering systems, file organization, flow charting, and a survey of programming languages. Data Processing major may not use this course as credit toward their degree.

## \*EDPT 0102 — BASIC and Assembler Programmer (3)

The assembly language instructions and coding techniques are introduced with programs written using auxiliary storage, interrupt processing, and table processing. All programs are tested and thoroughly documented.

## \*EDPT 0103—BASIC Language I (3)

Prereq. EDPT 0102 for DP majors or EDPT 0101 for non DP majors. This course provides an introduction to data processing and the programming language BASIC. No prior experience either programming or using computers is required. Some knowledge of basic algebra is necessary to understand the use of mathematical expressions in the BASIC language. Practical examples and exercises will teach the student the capabilities of BASIC and how to write functional BASIC program.

#### \*EDPT 0104 — BASIC Language II (3)

Prereq. EDPT 0103.

This course teaches advanced BASIC programming techniques under the RSTS/E system. Students will learn how to use system function calls and how to optimize file creation and access. Students will be trained to write programs using terminal Input/Output features and to perform interjob communication.

#### \*EDPT 0105 — COBOL Programming I (4)

Prereq. EDPT 0104.

The student will study in depth the COBOL language. Use of files on disks, print routines, use of terminals, and documentation will be stressed. Many problems will be assigned to move theory into practice.

#### \*EDPT 0106 — COBOL Programming II (4)

Prereq. EDPT 0105.

A deeper study of COBOL. More complex problems will be assigned using tables and various utility programs available from the manufacturer. New instructions and different ways of using them will be examined.

#### \*EDPT 0107 - RPG II Language (4)

Prereq. EDPT 0102 for DP majors or EDPT 0101 for non DP majors.

This is another computer language. It is a fast way to program. Normally used to produce reports for management. All rules of programming apply, but various forms are required to produce output and care must be used to fill in exact details.

## \*EDPT 0201 — Systems Analysis & Design (4)

Prereg. EDTP 0104, 0107, 0206.

Basic concepts and standard conventions concerning system design and analysis including problem definition, information requirements, system flow charting, system study, and various documentation techniques. Structured systems and centralized-decentralized approaches.

## EDPT 0202 — Computer Operations Management (3)

Prereq. Two programming languages and sophomore status. Personnel policies, computer management procedures, equipment acquisition, and management of resources as it relates to data processing problem. Instruction of basic management principles to effectively manage a computer system, computer personnel, and resources.

## \*EDPT 0203—Business Computer Projects I (4)

Prereq. Two programming languages or department permission.

Students will work in groups to do a complete systems proposal, design testing debugging, and implementation.

#### \*EDPT 0204 — Business Computer Projects II (4)

Prereg. EDPT 0203.

Programs will be assigned on an individual basis. Certain commands will be required within the program. Students will be told to look in manuals how to use these commands and what their limitations are.

## \*EDPT 0205 — Business Data Systems & Communications (3)

Prereq. one computer language or department permission. A study of man-machine interactions through teleprocessing and telecommunication systems. Emphasis of current time-sharing languages and data base, and management information systems (MIS). Problem solving techniques requiring the use of terminals will be learned. Laboratory project included.

## \*EDPT 0206 - FORTRAN IV (4)

Prereq. DEPT 0103 and EDPT 0107.

A basic course in FORTRAN. FORTRAN arithmetic, formats, do loops, arrays, program flow charting, testing, debugging, and documentation will be discussed and implemented using the computer. The student will write several programs to solve statistical math and business problems.

## \*EDPT 0207 — PASCAL Language (4)

Prereq. EDPT 0101 - 0108

This course provides an introduction to the programming language PASCAL. Some knowledge of basic algebra is helpful in understanding the rules that govern the formation and use of mathematical expressions in the PASCAL language. Use of Input/Output statements, loops, subprograms, arrays and files are covered.

## \*EDPT 0208 — DATA BASE Management (4)

Prereg, EDPT 0107, 0104, 0206, 0106.

A study of data base design, implementation and access using fourth generation programming languages and relational data base.

## **DENTAL HYGIENE**

## DtHy 0101A — Radiology I (1)

Didactic instruction in the history and development of the dental x-ray. Emphasis on the nature and properties of the x-ray, ma, Kvp, exposure time, target film distance, film speed, shortcone, longcone, SCP instrumentation, etc. Theory of the fundamentals of oral radiographic techniques. Regulations and safety precautions, as well as the uses of x-ray in dentistry.

## DtHy 0101B — Radiology II (2)

Continuation of Radiology I. Emphasis on technique, film placement, tube angulation, exposure, "bisect the angle" and XCP techniques. Darkroom instruction — processing and

#### \*Denotes classes with Lab fees.

duplication, adverse factors affecting darkroom procedures. Mounting of films, examining radiographs and recognizing normal landmarks, as well as abnormalities. Laboratory instruction will be in depth as to technique. Throughout the second year, specific minimum numbers and types of radiographs will be required clinically.

## DtHy 0102 — General and Oral Histology and Embryology (3)

Study of the development of tissues and structures from a histological and embryological basis. Emphasis is on development of tissues of the teeth and the periodontal supporting structures.

## \*DtHy 0103 — Dental Materials (5)

Physical properties of materials used in dentistry and basic principles of their preparation and use. Techniques for using restorative materials, impression materials, and laboratory procedures. In a laboratory setting, students learn techniques in working with the various types of dental materials.

## DtHy 0111 — Oral Anatomy I (3)

A study of tooth form, function and occlusion including the supporting tissues of the teeth and oral environment, emphasis on dental vocabulary, terminology, and the relationship of the permanent and deciouous dentition to Clinical Dental Hygiene.

#### DtHy 0112 — Oral Anatomy II (3)

Detailed study of the anatomy of the head and neck. Special emphasis is made toward the face and jaws. Cranial skeleton with emphasis on facial bones. Muscles of the head and neck: functions, nerve supply and blood supply. Detailed study of the topographical and functional anatomy of the oral cavity and pharynx.

## \*DtHy 0121 — Clinical Dental Hygiene I (4)

The introduction to the profession including history and development of Dental Hygiene; medicodental terminology; principles of preventive dentistry, the roles of plaque, nutrition, and fluoride in relationship to dental caries and gingival inflammation; principles and methods of patient education, plaque removal and control; the prevention of disease transmission; etiology of plaque, calculus, and stains; the importance of complete patient records and screening techniques; guidelines for professional appearance; patient records and screening techniques; guidelines for professional appearance; patient/operator positioning, basic instrumentation, design and construction of instruments, lab practice on typodonts for manual dexterity in the control and use of instruments, and the transferring of acquired skills to a living object.

## \*DtHy 0122 — Clinical Dental Hygiene II (4)

The hygienist's role in dental hygiene patient care which includes the objectives for the practice of dental hygiene care, the introduction to general clinic routines and diagnostic data collection. Skill practices included are detection of hard and soft deposits, scaling and polishing techniques. Study of occlusion, periodontal evaluation and probing, techniques for fluoride application, oral hygiene assessment, patient education, and management techniques.

## \*DtHy 0123 — Clinical Dental Hygiene III (4)

A continuation and application of previously learned techniques and procedures of dental hygiene care and services performed in the clinic atmosphere as they would be in practice. Advanced skills include desensitization and principles and technique for instrument sharpening, and sequencing treatment planning for individual patients.

## \*DtHy 0124 — Clinical Dental Hyginee IV (6)

A continuation of Clinic III techniques and procedures. An indepth study of medical emergencies in the dental office, their treatment and prevention.

## \*DtHy 0125 — Clinical Dental Hygiene V (5)

A continuation of clinic procedure and practices with emphasis on nutritional counseling and practical patients. Advanced skills include the use of radiographs in evaluation and charting, use of ultrasonic scaling device, amalgam polishing, and fabrication of study models. Further study in root planning; curettage; periodontal packs; suture removal, as well as care for the special needs patient.

## \*DtHy 0126 — Clinical Dental Hygiene VI (5)

The continuation of clinical procedures with emphasis on nutritional counseling, trial state board patient, and dental specialty office rotations. Ethics and legal factors involved with the profession are discussed. Career placement through resumes and interviews are also considered.

#### \*DtHy 0127 — Clinical Dental Hygiene VII (5)

Complete dental hygiene care involving the use of advanced technical skills. Seminars are included.

#### DtHy 0201 — General and Oral Pathology (3)

An introduction to pathology. Process of inflammation, necrosis, retrograde changes, and wound healing are discussed. Etiologies, diagnosis, treatment, and prognosis of oral lesions are discussed. Clinical pathology of diseases affecting teeth and their supporting structures. Visual aids are used to study oral lesions and their clinical manifestations.

#### DtHy 0202 — Periodontics (3)

A study of the periodontal supporting structures of the teeth. Etiologies and classifications of periodontal disease are discussed. The treatment of periodontal disease is discussed in relation to the etiologies.

#### DtHy 0203 - Nutrition (3)

A study of general nutrition and its role in promoting health. Includes composition and functions of nutrients and their digestion and metabolism. The student is also exposed to select topics such as nutrition labeling, "health" foods, food preparation, breast feeding, and current concerns in world nutrition. Emphasis is placed on planning nutritious diets.

#### DtHy 0204 — Pharmacology and Anesthesiology (4)

Drugs and anesthetics used and encountered in dentistry. Discussion of the origin, physical and chemical properties, effects on body systems, indications and contraindications for use, and methods of administration and elimination.

#### DtHy 0205 — Dental Health Education (3)

Analysis of concepts, techniques of presentation, and goals of Dental Health Education. Major emphasis is placed on preparation and use of lesson plans and instructional materials for teaching dental education. Classroom instructions of dental health in Elementary and Secondary Schools.

#### DtHy 0206 - Public Health (3)

An introduction to the broad field of public health with emphasis on the development of dental public health programs. A simplified approach to the knowledge of those public health tools needed by the dental professional to assist in designing and operating a dental public health program. Participation in a dental public health project is included in this course.

## DtHy 0250 — Expanded Functions I (4)

To introduce the student to the restoration of cavity preparations with amalgam and tooth-colored materials in a simulated clinical environment. The student will be evaluated on performance immediately following the completion of the clinical procedure.

## DtHy 0251 — Expanded Functions II (2)

To give the student practice in the restoration of cavity preparation in a real clinical environment. The student will complete a sufficient number of restorations to qualify them for expanded functions in the dental office under the supervision of a dentist.

## DIESEL

## \*DSEL 0201 — Heavy Duty Drives (6)

A comprehensive study of typical heavy-duty power transmission units used in trucks, tractors, and crawlers. Units include clutches, transmissions, differentials, drive axles, track drives, propeller shafts, universal joints, power take-offs, and winches. Basic hand tools are required.

## \*DSEL 0202 — Diesel Engines I (6)

A Lecture-Laboratory course emphasizing the design, construction, and operation of two and four stroke cycle diesel engines. A turbo-charged engine is completely disassembled, inspected, reassembled, and adjusted to satisfactory running condition. Basic hand tools required.

#### \*DSEL 0203 — Diesel Engines II (6)

Prereq. DSEL 0202.

A Lecture-Laboratory course with special emphasis on fuel injection systems. A supercharged diesel engine is disassembled, inspected, reassembled, and adjusted to satisfactory running condition. Basic hand tools are required.

#### \*Denotes classes with Lab fees.

#### \*DSEL 0211 - Diesel Fuel Injection (6)

This course is a lecture and laboratory combination including a study of diesel fuels, primary and secondary fuel distribution, and injection systems. Instruction is provided on common rail systems, unit injectors, and primary pump systems as used on trucks and heavy equipment applications. Basic hand tools are required.

## DSEL 0221 — Service and Maintenance Management (4)

A Lecture-Discussion course designed to provide practical orientation to the management functions of heavy equipment and trucking service centers. Accent is placed on the following topics: preventive maintenance records, equipment control records, inventory control, vehicle operational costs, part procurement procedures and shop supervision. Information is presented on the rules and regulations pertaining to equipment maintenance as prescribed by the Department of Transportation.

#### \*DSEL 0222 — Heavy Duty Automatic Transmission (3)

A Lecture-Laboratory course including the theory of torque convertors, power transmission, planetary systems and hydraulic controls. Students participate in the disassembly, inspection adjustment, and reassembly of modern heavy duty automatic transmissions. Basic hand tools are required.

#### \*DSEL 0223 — Heavy Duty Chassis and Brake Systems (4)

A Lecture-Laboratory course including the study of suspension systems, tires, wheels, rims, and axles. Several brake systems such as engine, air, power assist, cam and wedge, and disc are discussed. Basic hand tools are required.

#### **ECONOMICS**

#### Econ 0101 — Principles of Economics I (4)

Introduction to basic economic issues, terminology, and theory. Macro economics: including national income analysis, business cycles, role of institutions, and economic growth.

#### Econ 0102 — Principles of Economics II (4)

Prereg. Econ 101.

Micro economics: the study of the development and application of basic tools of analysis, applied to the different forms of competition, income distribution trade, and international payments.

## Econ 0206 — Consumer Economics (4)

The purpose of this is to help social services technology students become informed about buying, money management, and issues so that they can individually or collectively make changes which will strengthen the American market place.

## **EDUCATION**

#### Educ 0101 — Introduction to Education (4)

An introductory study of the broad and complex field of education. Emphasis on professional and personal requirements for successful teaching.

## **ELECTRO-MECHANICAL ENGINEERING**

## EMng 0096 — Electro Concepts (4)

A survey course in the basic concepts of electricity and electronics. Basic DC circuits are studied as the concepts of Ohm's Law, resistance, capacitance, inductance, power, and energy are introduced. AC circuits involving reactance, impedance, phasors, and power factors are studied. DC and AC rotating machines are surveyed. A superficial study of elementary solid state electronics is offered. This course is not for Electro-Mechanical majors and is not applicable toward an Associate degree.

## \*EMng 0101 — Electro-Mechanical Devices (3)

Prereq. EMng 0112 concurrently or advisor approval. An introduction to devices where both electrical and mechnical principles are utilized. The course content includes DC motors and generators, 3-phase circuits, transformers, induction motors, alternators, and synchronous motors.

#### \*EMng 0103 — Electro-Mechanical Drawing (2)

Prereg. EnDr 0101 or advisor approval.

The study of mechanical drawing of both electrical and electronic circuits and components using electrical and electronic symbols. Drawing assignments include power distribution, logic diagrams, printed circuits, and schematics and pictorial views.

#### \*EMng 0111 — Electrical Fundamentals I (4)

Prereq. Math 0130 concurrently or advisor approval. An introductory course in the study of electricity. Basic definitions of energy and electricity are introduced which lead to studies of resistance. Ohm's law, series and parallel circuits, magnetism, simple meters, inductance, and capacitance. Direct

#### \*EMng 0112 — Electrical Fundamentals II (4)

Prereg. EMng 0111 or advisor approval.

current effects only are studied.

Simple inductance-resistance and capacitance-resistance transient circuits are initially studied. Studies of alternating current fundamentals, phasor algebra. AC circuit analysis, power factor, and resonance complete the course.

#### \*EMing 0121 — Electronics I (4)

Prereq. EMng 0112 or advisor approval.

A modern introduction to discrete, bipolar solid state electronic devices and basic electronic circuits including small signal amplifiers, transistors biasing, equivalent circuits, electronic unregulated DC power supplies, and special solid state devices.

## \*EMing 0122 — Electronics II (3)

Prereq. EMng 0121 or advisor approval.

Continuation of Electronics I. Frequency response, decibels, cascaded amplifiers, feedback amplifiers, power amplifiers, field effect amplifiers, unijunction transistors, control circuits, regulated DC power supplies, and solid state oscillators.

## \*EMng 0201 — Introductory Electro-Mechanical Systems (3)

Prereq. EMng 0112, 0101, 0121.

An introduction to systems which use both electrical and mechanical principles. Thermal, hydraulic, pneumatic, vacuum, magnetic and optic systems are utilized to stress the coordinated combination of previously learned concepts. A key course in the program.

## EMng 0202 — Mechanical Systems (3)

Prereq. Math 0131 and Phys 0201.

Analysis of forces or loads acting upon a body or structure and how the body is enabled to resist these external forces. A study of statics and strengths of materials of many common industrial structures and machine elements such as beams, riveted, bolted, and welded joints, thin walled pressure vessels, linkages and gears. This study includes equilibrium of forces, tension, compression, and shear stress, deformation, torsion, centroids, and movements of inertia.

## EMng 0204 — Control Devices (3)

Prereq. EMng 0122 or advisor approval.

A study of control devices responding to a variety of inputs. These include temperature changes, pressure variations, rates of flow, potentials generated by light energy, moisture conditions, or any one of a number of physical conditions.

## \*EMng 0205 — Automatic Control Devices (4)

Prereq. EMng 0204, Math 0132, EMng 0121 or concurrent with EMng 0121 or advisor approval.

Automatic Control Systems, along with Control Devices, describes complete electro-mechanical systems. Emphasis is given to closed loop analog systems. The micro-computer is programmed and interfaced with input and output transducers to build complete automatic control systems.

## \*EMng 0206 — Hydraulics and Pneumatics (3)

A study is made of the function of various basic components of hydraulic and pneumatic sub-systems and methods of combining them to build various systems. The emphasis is on the use of hydraulic and pneumatics for power transmission and for control purposes.

#### \*Denotes classes with Lab fees.

## \*EMng 0207 — Electro-Mechanical Design (3)

Prereq. EMng 0101, 0122, 0201, 0203, 0211, 0204 or advisor approval.

A course to exercise the student's knowledge of electromechanical technology. It provides the time and opportunity for students to work on the design, fabrication, assembly and testing of electro-mechanical devices or systems. The purpose is to promote independent study, initiative, and creativity by requiring the student to develop the design with minimal staff supervision.

## EMng 0208 — Electro-Mechanical Systems (3)

Prereq. EMng 0101, 0122, 0201, 0204, 0205, 0206, 0211, or advisor approval.

Electro-Mechanical systems are analyzed in detail to show how few are the principles involved in even extremely complex devices. This course embodies all of the principles which have been considered previously in the program. Thorough understanding of the applied principles is the aim of the course.

#### EMng 0209 — Robotics (3)

Prereq. EMng 0122, EMng 0202, EMng 0204, and EMng 0205, EMng 0206 concurrently or advisor approval.

A survey course in Robotics. The course studies the types of industrial robots, control schemes, and applications.

## \*EMng 0211 — Electronics Logic Circuits I (3)

Prereq. EMng 0121 or advisor approval.

An introduction to solid state, integrated electronic logic. Practical applications of Boolean algebra, logic gates, binary pulse circuits, number systems, and computer arithmetic.

## \*EMng 0212 — Electronic Logic Circuits II (3)

Prereq. EMng 0211 or advisor approval.

Continuation of Logic Circuits I. Integrated circuit applications which includes combinational and sequential logic. Printed circuits, counters, registers, decoders, signal converters, and microprocessor based microcomputers.

## **ROBOTICS TECHNOLOGY (Major)**

## Robo 0210 —Introduction to Robotics (4)

Introduction to applications in industry; emphasis on types, classifications, types of motion.

## Robo 0211 - Robotic Interfacing (4)

Study of hardware and software necessary for connecting a microprocessor to a robotic arm and interfacing to peripheral machines and equipment.

#### Robo 0212 — Basic Robotic Applications

In-depth study of low and medium-technology robot concepts, principles functions, design parameters, and applications with emphasis on developing the technical skills required to specify, install, program, operate, and troubleshoot point-to-point and continuous path robot systems.

## Robo 0213 — Advanced Robotic Applications (4)

Advanced study and training in high-technology robot operations and applications with emphasis on controlled path robots, programmable logic control systems, and production welding systems and operations. Extended practice in off-line programmable set-up, adjustment, and operation of robot welding and materials handling systems.

## Robo 0214 — Robotic Maintenance-Servicing

Instruction in servicing robotic and peripheral automated systems; emphasis on mechanics, hydraulics and associated electrical and electronics.

## **EMERGENCY MEDICAL TECHNICIAN — PARAMEDIC**

## EMT-A 0101 — EMT Orientation (2)

Introduction to the roles and responsibilities of the EMT. This course includes relations to victims, other medical personnel, and other officials. Emphasis is also on medical terminology.

#### EMT-A 0102 — Emergency Victim Care (8)

Instruction involves patient problems relating to life threatening and environmental emergency conditions and the application of principles and practice of techniques utilized to cope with same. Includes such problems as cardiopulmonary, bleeding, shock, stroke, fractures, and exposure to hazardous and extreme environmental situations such as exposure to heat, cold, radiation, and electrical injuries. Will also include observation of vital signs and triage. This is the state of Ohio EMT-A course.

## \*EMT-A 0105 — Advanced EMT-A Course (4)

This course is designed to take the basic skills and knowledge gained in the basic EMT-A course and build on them in the areas of patient assessment, respiratory distress, and shock. At the same time, the student will be introduced to advanced skills such as MAST, esophageal obturator airways and IV therapy.

#### \*EMT-P 0101 — Paramedic Skills I (5)

This course is designed to take the basic skills and knowledge gained in the basic EMT-A course and expand them in the areas of shock and fluid therapy, body systems and patient assessment, and respiratory emergencies. Advanced skills taught in this course include IV therapy, itubation both esophageal and endotracheal, and MAST. This course includes DOT Paramedic Program Modules I, II, III AND VII.

Module I Role of EMT

II Human Systems & Pt. Assessment

III Shock & Fluid Therapy

VII Respiratory System.

#### \*EMT-P 0102 — Paramedic Skills II (3)

This course emphasizes gaining access to rescuing and transporting a patient. The recognition and control of certain hazards, such as explosive material, downed electrical wires, toxic gases, and radiation, are included. This course also deals with the use of radio communications equipment, including the transmission of voice communications and EKG transmission. This class also deals with FCC regulations with respect to the use of radio equipment, protocols, and procedures for the transfer of information to the supervising physician. This course includes DOT Paramedic Program Modules XV and XIV.

Module XV Telemetry & Communication
XVI Extrication & Rescue Techniques

#### \*EMT-P 0103 -- Paramedic Skills III (11)

This course has an intensive emergency coronary care emphasis. Although much of the emphasis is placed on rhythm interpretation, this course also deals with pathophysiology, symptomalogy, and emergency treatment of coronary artery disease, MI, angina pectoris, congestive heart failure, and any other cardiac emergency. This course is also designed to introduce the student to the general groups of drugs and the classification of each. Therapeutic effect, indications, contraindications, correct dosage, and side effects of specific drugs used in emergency situations is taught with emphasis placed on those drugs used in cardiac emergencies. This course includes DOT Paramedic Program Modules VI and IV.

Module VI Cardiovascular System IV General Pharmacology

## \*EMT-P 0104 — Paramedic Skills IV (10)

This course is designed to take basic skills and knowledge already acquired by the student and build on them in the areas of Medical Emergencies, Obstetric/Gyn Emergencies, Musculoskeletal and Soft Tissue Injuries, and Pediatrics and Neonatal Transport. More emphasis is placed on clinical and on squad experience where the student will be able to inner-relate all he has learned. This course includes DOT Paramedic Program Modules VII, VIII, IX, X, XI, XII, and XIII.

Module VII Central Nervous System

VIII Soft Tissue Injuries

IX Musculoskeletal System

X Medical Emergencies

XI Obstetric/Gyn Emergencies

XII Pediatrics & Neonatal Transport

XII Emergency Care of Emotionally Disturbed

## \*Denotes classes with Lab fees.

#### **ENGINEERING**

#### \*Engr 0101 — First Aid & Safety (1)

The Standard and Personal Safety American Red Cross first aid course, involving CPR, bleeding control, poisoning treatment, proper methods of transportation, bandaging and splinting. The course involves lectures, practical work and group work. The standard certificate is granted if at least 20 hours of classwork is completed and all requirements met.

#### Engr 0209 — Industrial Supervision (3)

Prereq. Second year course only or advisor approval. Training in the methods of handling management problems, setting policies, personnel problems, etc. To equip the student for possible supervisory positions.

#### **ENGINEERING DRAWING**

#### EnDr 0100 — Blueprint Reading (2)

This course is designed to provide the student with fundamental knowledge of blueprints and engineering drawings and some skill in the reading and interpretation of drawings. It includes engineering drawings and blueprints; mechanical drawings; lines used on drawings; scales; dimensions; fits and finish marks; surface roughness and lay, threads; rivets; tapers; and examples of blueprint reading.

#### \*EnDr 0101 — Engineering Drawing I (3)

This is a basic course for students who have had little or no experience in engineering drawing. The principal objective is to acquire a basic understanding of fundamental principles of engineering drawing through actual experience in both free-hand sketching and scaled machine drawings. Subject areas relating to this include orthographic, multiview drawings, geometric constructions, dimensioning practice, sectional views, and auxiliary views.

#### \*EnDr 0102 — Engineering Drawing II (3)

Prereg. EnDr 0101 or advisor approval.

The student is introduced to the techniques and principles employed in structural drawing, including structural-steel, timber construction, quantity takeoff, topographic work with emphasis on contour platting. The course is intended to train the student in the drafting methods used in civil engineering.

## \*EnDr 0103 — Engineering Drawing III (3)

Prereg. EnDr 0101 and 0102 advisor approval.

The purpose of this course is to enable the student to apply basic principles of engineering drawing, which were learned in prior courses to solve practical problems encountered in civil engineering. Applied descriptive geometry is used to determine the relationship between points, lines and surfaces in space. Study areas also include revolutions, vector geometry, and intersections of lines and surfaces.

#### **ENGLISH**

Students enrolled in programs leading to the Associate Degree of applied Business or the Associate Degree of Applied Science must take 3 courses (12 credit hours) from the following courses:

English 0111, 0112, 0115, 0140A, 140B, 140C, and 140D. In addition, Technical Writing and Speech may be required in some technical programs.

Students enrolled in programs leading to the Associate Degree of Arts or the Associate Degree of Individualized Studies must complete 2 courses (8 credit hours) from the following courses:

English 0111, 0112, 0115, 140A, 140B, 140C, and 140D In addition, 3 hours of speech from Speech 0101 or Speech 0102 is required for students completing the Associate of Arts Degree or the Associate of Science Degree.

Students with serious deficiencies in reading and composition should take Engl 0100A before taking English 0111, 0112, 0115, 140A, 140B, 140C, and 140D.

#### Engl 0004 — Reading Development (2)

Emphasis is placed on improving reading speed and comprehension. Reading problems are identified and attacked: single word fixation, involuntary regression, subvocalization, and inability to concentrate. (2 hr. lec. per wk. for 5 wks.)

#### Engl 0090 — Vocabulary Development (2)

Emphasis is placed upon development of skills necessary for building vocabulary.

## Engl 0100A — Fundamental Writing (4)

This is a transitional course for the student who feels he has a basic weakness in reading or writing skills or one who has been away from classroom work for a number of years and recognizes the need for a better foundation for more advanced classroom work. Areas of concentration are (1) reading comprehension, (2) vocabulary development, (3) sentence and paragraph structure.

## Engl 0111 — Contemporary Writing Skills I (4)

This course reviews (1) syntax, grammar, and punctuation, (2) studies techniques of good writing style, and (3) introduces the student to coherent writing. The student becomes aware of different demands of purpose, topic, and audience when writing a paper. 4 lec. 1 lab.

## Engl 0112 — Contemporary Writing Skills II (4)

This course continues the emphasis on basic skills for writing clearly and effectively. This course assists the student in understanding the rhetorical devices which contribute to good writing. Fundamentals of writing research papers are included. 4 lec. 1 lab.

## Engl 0115 — Composition and Mass Communications (4)

This course covers the nature and function of all forms of mass communication — newspapers, television, radio, film, and the related topics of advertising and public relations. Basically, the student is instructed how to become a more aware consumer of media. The writing assignments are structured to help the student critically judge various media. 4 lec. 1 lab.

## Engl 0121 — Technical Writing (3)

Prereq. Sophomore Standing in a Technical Program.

Technical Writing stresses clarity in technical communications with emphasis on the improvement of writing style and the mastery of exact organization. Types of writing include reports (formal and informal), proposals, resume, and specifications. BECAUSE OF THE TEXTBOOK AND SPECIFIC WRITING ASSIGNMENTS, THIS COURSE IS NOT OPENED TO LIBERAL ARTS STUDENTS.

## Engl 0140 — Topics in English Language and Literature

Fr. and Soph. Each course focuses on literature, mostly literature of the 20th century considering humanistic problems, themes or issues important today. Each course includes several literary genres (novels, short stories, poems, plays, and essays). The aims are to improve the students abilities in appreciative and analytical reading, clear thinking, discussion, careful persuasive and imaginative writing. 4 lec. 1 lab.

140-A Literature of Initiation and Experience	4 hrs.
140-B Feminine Images of Literature	4 hrs.
140-C Literature of Imagination	4 hrs.
140-D Literature of Black Authors	4 hrs.

#### \*\*Engl 0200 — Introduction to Literature (4)

This course introduces the student to the three genres of literature: fiction, poetry, and drama. It emphasizes skills, techniques, and the language of interpretation of literature. It provides students with information which will help them in further literature courses or in other purposeful or pleasurable reading.

## Engl 0201 — Introduction to Fiction (4)

Prereq. 4 hrs. above 100.

This course provides a study of the forms and techniques of the novel, novella, and the short story.

## \*\*Engl 0202 — Introduction to Poetry (4)

Prereq. 4 hrs. above 100.

The course requires an intensive reading of selected poems from all periods of English and American literature and the study of poetic forms and techniques.

202-A Survey of British Poetry:	Part I 4 hrs.
202-B Survey of British Poetry:	Part II 4 hrs.
202-C Survey of American Poetry:	Part I 4 hrs.
202-D Survey of American Poetry:	Part II 4 hrs

## Engl 0203 — Introduction to Drama (4)

Prereq. 4 hrs. above 100.

Modern dramatic forms are analyzed. Selctions include translations of world masterpieces as well as English and American drama.

#### \*Denotes classes with Lab fees.

## Engl 0204 — Comparative Literature I (4)

Prereq. 4 hrs. above 100.

Selected classical texts as well as modern writings in the classical style are used. The purpose is to recognize and define classical sensibility in western literature.

## Engl 0205 — Comparative Literature II (4)

Prereq. 4 hrs. above 100.

This course deals with the aesthetic and philosophical concepts that distinguish the Romantic tradition in western literature. Primarily the works of German, English and French authors are studied.

#### Engl 0206 — Comparative Literature III (4)

Prereq. 4 hrs. above 100.

Selected literary works are used which provide background for and examples of modern writing in today's world.

## Engl 0225 — Introduction to American Literature (4)

Prereq. 8 hrs. above 100.

Themes and ideas in 19th and 20th centuries of American literature are studied.

## Engl 0226 — Introduction to English Literature (4)

Prereq. 8 hrs. above 100.

Themes and ideas in 19th and 20th centuries of American literature are studied.

## \*\*Engl 0232 — Creative Writing — Poetry (3 hrs.)

Prereq. 8 hrs. above 100.

Creative writing — Poetry is a course for students interested in learning the techniques of poetic expression. Students will have experiences writing conventional blank, and free verse forms. (Not offered Winter Qtr.)

## \*\*Engl 0288 — Poetry Workshop (3)

Prereq. Engl 0232.

Poetry Workshop is an advanced course in the writing of poetry. The emphasis will be placed on critiquing the writing of students in the class and on marketing for publication. (Offered winter and summer quarters.)

## \*\*Engl 0290A — Topics in English (2)

Study of various topics in English otherwise not available to students

## \*\*Engl 0290B — Topics in English (3)

Study of various topics in English otherwise not available to students.

#### **FRENCH**

## \*\*Fren 0111 — Elementary French I (4)

Beginning course of a three quarter, first year sequence. Basic grammatical concepts and patterns. Emphasis on development of reading, listening, comprehension, speaking, and writing skills. Basic text and workbook used.

## \*\*Fren 0112 — Elementary French II (4)

Prereq. Fren 0111.

Continuation of Fren 0111. Basic text, workbook, and readings used.

## \*\*Fren 0113 — Elementary French III (4)

Prereq. Fren 0112.

Continuation of Fren 0112. Basic text, workbook, and readings used.

## **GEOGRAPHY**

## Geog 0101 — Physical Geography (5)

Systematic survey of earth-sun relationships, land forms, climate, soils and natural vegetation. 4 lec. 2 labs.

## Geog 0121 — Cultural Geography (4)

Systematic survey of settlement, population, and economic activities that are significant to man.

#### Geog 0125 — World Geography (4)

Systematic regional survey of world geographical conditions. Emphasis on physical, cultural, and economic activities.

## Geog 0130 — Economic Geography (4)

Systematic survey of locational economic patterns and their interrelationships.

<sup>\*\*</sup>Offered on demand only.

## Geog 0201 — Environmental and Man (4)

Geographic survey of environmental changes caused by man's activities. Focus on pollution of air and water and destruction of plant and animals communities.

#### \*\*Geog 0230 — Urban Geography (4)

Study of city function, patterns, past and current problems confronting the city including planning, zoning, housing, and urban renewal.

## \*\*Geog 0240 — Geography of Eastern United States (3)

Systematic and regional survey of eastern United States. Emphasis on cultural and economic development.

## \*\*Geog 0241 — Geography of Western United States

Systematic and regional survey of western United States. Emphasis on cultural and economic development.

## Geog 0242 — Geography of Ohio (4)

Detailed regional study of physical background, settlement and economic development.

## Geog 0243 — Geography of Appalachia (4)

A study of Appalachia from a geographical approach including a detailed examination of physical aspects (climate, soil, vegetation, minerals, and water resources), historical development both past and present, settlement patterns, and economic patterns of the region.

#### **GEOLOGY**

#### \*Geol 0101 — Physical I (4)

A study of the Earth's basic materials and their formation. Volcanism, Metamorphism, and sedimentation, with the rocks evolving from each of these processes and the natural resource minerals associated with each process. 3 lec. 3 labs.

#### \*Geol 0102 - Physical II (4)

Continuation of 101 as a study of the process affecting each of the above including crystallization, mapping, weathering, erosion, transportation of materials, glaciation, and mountain building. 3 lec. 2 labs.

## \*Geol 0103 — Historical I (4)

Basic study of the Earth's history of formation. Paleo studies of plants, animals and landforms associated with each Geologic age. 3 lec. 2 labs.

## \*Geol 0201 — Common Rocks, Minerals, and Fossils (4)

Identification of rocks, minerals and fossils can only be encountered on field trips, vacations, and in the immediate area of Scioto County. Not open to students with credit in 101 or 102, 4 lec.

#### GOVERNMENT

## Govt 0100 — Introduction to the American Political System (4)

An elementary course in the basic fundamentals of the American political system at the national, state and local levels. Not recommended for those planning to transfer to another college or to a university.

## Govt 0101 - National Government (4)

Constitutional basis and development; political processes, structures, and functions of the national government.

## Govt 0102 — National Policy Issues (4)

Study of the administration and policy-making processes of the American national government in selected areas, i.e., foreign policy, welfare, environment, etc.

## Govt 0201 — Urban Politics (5)

Prereq. 101 or permission.

Impact of urbanization on structure and functions of municipalities; emphasis on utilization of the political processes to resolve community conflict.

#### \*\*Govt 0203 — Politics in the American States (5)

Prereq. 101 or permission.

Comparative analysis of state political systems; emphasis on structure and process of policy making of the states within the federal context.

## \*Denotes classes with Lab fees.

#### \*\*Govt 0204 — Introduction to World Politics (4)

Political relations among states; methods and goals of diplomacy; sources of international tensions and conflicts; international organizations and conflict resolution.

#### Govt 0205 — Politics of Appalachia (4)

Prereg. 101 or permission.

Analysis of political processes in Appalachia; emphasis on the relationship between politics and economic development of the region. Major policies considered: mining and its regulation; War on Poverty in Appalachia; politics of taxation in the region.

## \*\*Govt 0290 — Pro Seminar in Practical Politics (4)

Structure and operations of American political organizations; techniques of political campaigning.

#### \*\*Govt 0299A — Current Political Topics (3)

Prereq. 12-15 hrs. govt. or permission. Special topics in selected policy areas, to be announced.

## \*\*Govt 0299B — Current Political Topics (4)

Prereq. 12-15 hrs. govt. or permission. Special topics in selected policy areas, to be announced.

## HEALTH, PHYSICAL EDUCATION, AND RECREATION

## HPER 0110 — Physical Education Activities (1)

Basic rules and fundamentals for each activity are stressed. Special emphasis on strategies, team, and individual play. An appreciation of each of the activities is developed to carry over

	ciation of each of the activities is de iter life.
110-A	Archery
110-B	Badminton
110-C	Basketball
110-D	Bowling
110-E	Condit. & Wt. Train.
110-F	Begin. Golf
110-G	Intermed. Golf
110-H	Caving
110-l	Karate
110-J	Billiard
110-K	Dance
110-L	Canoeing

Begin. Tennis 110-M Intermed. Tennis 110-N 110-O Volleyball

110-P Backpacking

**Advanced Tennis** 110-Q Cycling 0111 **Rock Climbing** 111-A Begin, Racquetball 110-R Intermed. Racquetball Softball 111-B 110-S Orienteering Adv. Racquetball 111-C 110-T 111-E Cond./Wt. Train. (Naut) 110-U Skiing Water Volleyball 110-V Swimming 111-0 110-W Intermed. Swimming 111-W Swimmercize Water Safety Inst. Life Saving 111-X 110-X 110-Y 111-Y Adv. Swim. Joaaina

## Diving HPER 0200 — Introduction to Recreation

110-Z

A study of the general concepts of recreation including definitions, history, legal basis, current development, and present importance of recreation in our society. Management and Administration of Parks and Recreation organizations is also examined. Laboratory work introduces the students to a number of recreation experiences. 3 lec. 3 lab.

111-Z

Scuba Diving

## HPER 0202 — Personal and Community Health (4)

Fundamentals, practices and appreciation of healthful living. Designed to incorporate the principles of scientific health information and promote desirable attitudes and practices for individuals, parents, and teachers.

## HPER 0204 — Drugs, Alcohol, and Tobacco (4)

In-depth study of contemporary issues — drugs, alcohol, and tobacco. The nature of the action and motivational forces that influence their use and procedures to provide effective education in the school and the home.

<sup>\*\*</sup>Offered on demand only.

#### HPER 0227 — First Aid (4)

The Standard and Personal Safety American Red Cross first aid course, involving CPR, bleeding control, poisoning treatment. proper methods of transportation, bandaging and splinting. The course involves lectures, practical work and group work. The standard certificate is granted if at least 20 hours of classwork are completed and all requirements are met.

## HPER 0234 — Laboratory Experience in Physical Education (2)

Prereg. P.E. Majors.

Observation and research in physical education at the elementary and secondary levels.

#### HPER 0235 — Orientation to Recreation Employment (1)

Job application, resume writing, interviewing, and contact follow-up are techniques for securing employment that this course presents. Other elements presented include letter writing, job hunting strategies, and potential employers. 1 lec. 1 lab.

## HPER 0236 — Field Experience in Recreation (2-6)

Designed to provide the recreation student with a supervised work experience while gaining skills and knowledge in the field of recreation.

## HPER 0239 — Athletic Officiating - Football (3) (Fall Qtr. Only)

Rules, mechanics, and procedures in officiating. Practice under actual game conditions. State certification upon successful completion of state examination. OHSAA fee for certification and books.

## HPER 0240 — Athletic Officiating - Basketball (3) (Fall/Wtr. Qrt. Only)

Rules, mechanics, and procedures in officiating. Practice under actual game conditions. State certification upon successful completion of state examination. OHSSA fee for certification and books.

## HPER 0241 — Athletic Officiating — Baseball (3) (Sp. Qtr. Only)

Rules, mechanics, and procedures in officiating. Practice under actual game conditions. State certification upon successful completion of state examination. OHSAA fee for certification and books.

## HPER 0250 — Recreation Leadership (4)

Lectures, discussion and group dynamics in social recreation. Dynamics involved include games, sports skills, dance, arts and crafts, nature studies, setting up various types of tournaments and practical work in community organizations.

## HPER 0255 — Aquatic Recreation Leadership (4)

Study of water-related recreational facilities such as marinas, swimming areas, and fishing. Consideration will be given to boating laws, operation, and safety and all forms of water recreation, 2 lec. 6 lab.

## HPER 0260 — Outdoor Recreation (4)

Prereq. or concurrent or permission of instructor. Intro. to Recreation.

This course presents several aspects of outdoor recreation. Included in lecture material are concepts of feasibility, interpretation, and personal recreation equipment use and care. Laboratory exercises introduce the student and improve his skills, in each of the areas of study. 2 lec. 6 lab

## HPER 0261 — Introduction to Physical Education and Health (2)

Prereq. P.E. Majors/Minors

Lectures, discussion, and visual aids pertaining to scope and content of a professional physical educator.

## HPER 0270 — Physical Education for the Elementary Classroom (4)

Lab and lecture experiences for teaching physical education in the elementary schools. Lab experience revolves around methods of presenting movement education in the primary grades and the use of games, self-testing activities, rhythmics and innovative devices in helping to meet general and specific objectives in the intermediate grades. Designed for elementary education majors.

## HPER 0281 — Administration of Intramural Athletics (4)

Prereq. Ed. & P.E. Majors/Minors.

Organizing and administering a program of intramural sports of all age levels. Designed especially for elementary and secondary teachers.

## HPER 0295 — Independent Study (2)

Prereq. P.E. Majors.

Study, observation and research in selected physical education fields. Under the direction of HPER faculty member.

## **HISTORY**

## Hist 0111 — American History to 1828 (4)

Exploration and colonization; political, social and economic life of the English colonies to 1763; struggle for independence; constitutional development and the Federalist era; Jeffersonian democracy and the War of 1812; rise of Jackson.

## Hist 0112 — American History, 1828-1900 (4)

Jacksonian democracy; territorial expansion; growth of sectionalism; Civil War; reconstruction; impact of expanded Industrial Revolution.

#### Hist 0113 — American History Since 1900 (4)

Progressive movement, WW I: Republican prosperity: the Great Depression and the New Deal, WW II and problems of the cold war era; turmoil and reform in the 1960's.

#### Hist 0201 — Western Civilization from Antiquity to the Renaissance (4)

Birth of civilization in Near East; culture of Greece and Rome; establishment of Christianity; formation and evolution of medieval European society; Renaissance.

## Hist 0202 — Western Civilization from the Renaissance to the French Revolution (4)

Renaissance; rise of nation state system; Reformation; commercial and scientific revolutions; absolutism and constitutionalism; Enlightenment and the French Revolution.

## Hist 0203 — Western Civilization from 1815 to the Present (4)

Industrial Revolution; spread of liberalism, nationalism and socialism; rise and fall of German bid for power in two world wars; Russian and Chinese revolutions and international communism; collapse of European empires in Africa and Asia; Cold War and the new Europe.

- \*\*Hist 0290A Topics in History (2)
  \*\*Hist 0290B Topics in History (3)
- \*\*Hist 0290C Topics in History (4)

This course will provide students and the instructor the opportunity to explore topics of special interest to them. Depending on enrollment, the course may be conducted as a traditional lecture/discussion class, special projects, or directed readings.

#### **HUMANITIES**

## Humn 0101 — Tradition of Great Books (4)

Classics of ancient Greek, Roman and Hebrew are studied to give an understanding of western European cultural heritage. There is discussion, practice in critical thinking and in reading and writing about these great works.

#### Humn 0102 — Tradition of Great Books (4)

Classics studied are from the ancient world, the middle ages. the age of reason, and the Romantic period. See 101 for further description.

## Humn 0103 — Tradition of Great Books (4)

Classics of the ancient world, the middle ages and writings of more recent times including the present are studied. See 101 for further details.

## **JOURNALISM**

## \*\*Jour 0105 — Introduction to Mass Communications (4)

All the forms of mass communication including newspapers, magazines, radio-television, book publishing, public relations. advertising and photojournalism. Begins with an analysis of communication process and ends with media career opportunities.

<sup>\*</sup>Denotes classes with Lab fees.

<sup>\*\*</sup>Offered on demand only.

#### Jour 0231 - News Reporting (4)

Prereq. Typing proficiency, passage of English proficiency test. Methods of gathering and evaluating news and writing typical news stories. Practice work covering assignments and preparing copy.

#### LINGUISTICS

#### Ling 0270 — The Nature of Language (5)

Nontechnical investigation into basic nature of human language.

#### **MATHEMATICS**

Three Track System in Mathematics for Engineering Technology Students

The math sequence for engineering technology students who haven't had high school algebra or with a low ACT score in mathematics should take Math 100A to give him background for the required sequence of Math 0130, 0131, and 0132. A student with high school algebra and geometry and an average ACT score in mathematics should take Math 0130, 0131, and 0132. A student with three or four years of high school mathematics and an ACT score above the 75th percentile of the national norm may have prerequisites for Math 0130, 0131, 0132, or 0201 waived, with the approval of the math department, start at the level appropriate for him.

#### Math 0100A — Fundamental Math (4)

A brief review of the fundamentals used in arithmetic including addition, subtraction, multiplication, and division as applied to integers and rational numbers. An introduction to the elementary concepts of basic algebra with emphasis on manipulations of algebra expressions, solutions to all types of equations, graphs and formula rearrangements. (Does not count toward a degree.)

#### Math 0100B - Math Appreciation (4) (Offered on demand only)

A course for students who do not need mathematics as a tool. Its purpose is to foster an appreciation of mathematics through involvement in areas of mathematics not ordinarily covered in more rigorous courses. Brain teasers, probability, topology, mathematics in art and history are possible topics but topics may vary with the instructor.

\*Check transferability of credit.

#### Math 0101 — Basic Algebra (4)

This course is for students with a good background in arithmetic but little or no background in algebra. It includes operations with integers, numbers properties, scientific notation, solving and graphing linear equations and inequalities, operations with polynomials, laws of exponents, and laws of radicals.

## Math 0108 — Allied Health Math I(4)

Exponents and logarithms; use of the slide rule; basic algebra; linear equations in one unknown; graphing linear equations; right triangle trigonometry.

#### Math 0109 — Allied Health Math II (4)

Prereq. Allied Health Math I.

Ratios and proportions; progressional quadratic equations; graphing quadratic functions; use of programmable calculator; basic statistical concepts.

## Math 0120 — Elementary Topics in Math I (5)

Prereq. 2 yrs. h.s. math.

Sets; concepts of logic; mathematical systems; systems of numeration; basic ideas about integers, rational numbers and real numbers. (F, Sp., Sum.¹)

## Math 0121 — Elementary Topics in Math II (5)

Prereq. 2 yrs. h.s. math.

Basic algebraic work with equations and inequalities in one and two unknowns; nonmetric and metric geometry; coordinate geometry; introduction to statistics and probability. (Wtr. Sum.²)

## Math 0125 — Business Mathematics (4)

Brief review of arithmetic with emphasis on estimating answers. Simple algebra skills. Applications in the personal and business world including reconciliation of a checking account, markup, real estate taxes, depreciation, payroll, and payroll deductions, inventory valuation, and simple and compound interest on investments and loans. Use of calculators and microcomputers.

#### \*Denotes class with Lab fees.

#### Math 0130 - College Algebra I (4)

Prereq. Mastery of at least 1 year of h.s. algebra or Basic Algebra.

Integers; Powers of Ten; Scientific Notation; Review ofAlgeraic Expressions and Operations; Dimensional Analysis; Linear Equations in one and two variables, including graphing; Exponents and Radicals; Right Triangle Trigonometry; Law of Sines and Law of Cosines Applications; Basic Properties of Vector.

#### Math 0131 — College Algebra II (4)

Prereg. Mastery of Algebra I or equivalent.

Quadratic Equations, one unknown; Graphing Quadratic Equations, Identification and Approximation of Roots; Exponentials and Logarithms; Binomial Expressions and Progressions; The j-operator Vectors; Review Oblique Triangle Solutions.

#### Math 0132 — Trigonometry and Analytic Geometry (4)

Prereg. Mastery of Algebra II or h.s. equivalent.

Solving inequalities, linear and quadratic; Graphing Trigonometric Functions; Polar Coordinates; Trigonometric Identities; Trigonometric Equations; A study of the basic properties of the conic sections.

## Math 0150 — Elementary Statistics for the Social & Behavioral Sciences (4)

Prereq. 3 yrs. of h.s. math or Algebra I and either Govt. 101, Psy. 101, or Soc. 101. (Not for mathematics majors).

Treatment and presentation of quantitative social and behavioral data; measures of central tendency; data distribution; association and correlation; sampling, estimations; and simple tests of significance.

#### Math 0155 — Business Statistics (4)

Prereq. Math 0101 or permission.

An introduction to the vocabulary, concepts, presentation, and formulas of statistics as applied to business. Calculators and computers are incorporated into the course. Averages, measures of dispersion, understanding proper and improper uses of statistics, and probability and sampling theory, including tests of significance. (Offered Spring Qtr. only)

#### Math 0201 — Calculus I (5)

Prereq. 4 years of high school math (including trigonometry). or Math 130, Math 131, and Math 132.

Functions and graphs; simple sequences; limits; differentiation and integration of algebraic functions; mean-value theorem; maxima and minima.

#### Math 0202 — Calculus II (5)

Prereq. Calculus I.

Differentiation and integration of logarithmic, exponential, trigonometric and hyperbolic functions; techniques of integration; applications of the definite integral; L'Hospital's rule; improper integrals.

## Math 0203 — Calculus III (5)

Prereq. Calculus II.

Sequences and series; Taylor series; vectors; vector calculus; functions of several variables; partial derivatives; gradients; multiple integrals.

## MEDICAL LABORATORY TECHNICIAN

#### MLTC 0111 — Medical Laboratory Orientation I (1)

To introduce the student to the profession of medical laboratory technology and to the medical terminology associated with medical laboratory sciences. 1 lec. 1 lab.

## MLTC 0112 — Medical Laboratory Orientation II (1)

Prereq. MLTC 0111.

Introduction to basic laboratory procedures. Emphasis will be placed on laboratory safety, bookkeeping, blood collection, pipetting and the use of basic laboratory instruments, such as microscope, centrifuge, analytical balance, spectrophotometer, etc. 1 lec. 1 lab.

## \*MLTC 0201 — Urinalysis (3)

Physical, chemical and microscopic examination of urine. Theory and applications of various laboratory tests in relation to kidney function. Brief discussion of other important body fluids. 2 lec. 3 lab.

## \*MLTC 0202 — Immunoserology (4)

Prereg. Biol 0235A.

Introduction to basic immunology with emphasis on the principles and applications of serological techniques in diagnostic tests. 3 lec. 3 labs.

## \*MLTC 0203 — Blood Banking (4)

Prereg. MLTC 0202.

Lectures and laboratory procedures in blood banking. Principles of blood grouping and human blood groups inheritance. Routine procedures for pretransfusion testing, antibody screening and identification. Donor selection, blood collection and processing will be discussed. Hemolytic disesases of the newborn, preparations of blood components, their storage and utilization will also be introduced.

## \*MLTC 0204 — Parasitology (1)

Prereq. Biol 0235A.

Introduction to medically important human parasites. Emphasis will be placed on collection, preservation and laboratory identification. 1 lec. 2 lab.

## \*MLTC 0205 — Mycology (1)

Prereq. Biol 0235A

Introduction to medically important fungi, the diseases they cause, and their laboratory diagnosis. 1 lec. 2 lab.

## \*MLTC 0207 — Clinical Bacteriology (5)

Prereq. Biol 0235A.

Diagnostic procedures for identification of medically important bacteria. Emphasis will be placed upon staining, cultural, biochemical and serological characteristics of various pathogenic bacteria. 3 lec. 6 lab.

## \*MLTC 0209 — Hematology I (4)

Basic laboratory methods in hematology, including cell counting, hemoglobinometry, cell morphology, etc. Detailed studies of blood cell maturation and development, abnormalities in peripheral blood and in bone marrow with emphasis on red cells and anemias. 2 lec. 6 lab.

## \*MLTC 0210 — Hematology II (4)

Prereq. MLTC 0209.

Continuation of Hematology I with emphasis on white cells, leukemias and special procedures in the study of blood diseases. Detailed study of hemostatic mechanism and hemorrhagic disorders, as well as their laboratory evaluations, are included. 2 lec. 6 lab.

#### \*MLTC 0211 — Instrumentation (4)

Prereq. Chem 0123.

Introduction to instrumentation in the clinical laboratory. Emphasis is placed upon the theory of operation, essential components, mechanism of operation and applications of various laboratory instruments such as spectophotometer, fluorometer, atomic absorption spectrophotometer, flame emission photometer, coulometric titrator, automated analyzer, etc. 2 lec. 6 lab.

## \*MLTC 0212 — Clinical Chemistry I (4)

Prereq. MLTC 0211.

Principles, practices and techniques of analysis of chemical components in serum, as well as other body fluids are studied. Emphasis is placed on the specific chemical reactions and/or analytical principles, sources of error, quality control, practical application and theoretical aspects of the above procedures as related to normal and abnormal states. 2 lec. 6 lab.

## \*MLTC 0213 — Clinical Chemistry II (4)

Prereq. MLTC 0212.

Continuation of Clinical Chemistry I, MLTC 0212. 2 lec. 6 lab.

## \*MLTC 0220 -- Clinical Practicum (13)

Prereq. Completion of all required MLT courses with a minimum of "C' in each course and a minimum of 2.000 accumulative grade point average.

Two quarters (22 weeks) of internship providing a practical application of the skill and knowledge learned during the previous six quarters of the curriculum. Students are assigned to accredited hospital laboratories as trainees. The rotation schedule consists of four weeks in Hematology - Coagulation; six weeks of Chemistry; four weeks in Immunohematology-Immunoserology; four weeks in Microbiology; two weeks in Urinalysis; two weeks of electives.

## \*Denotes classes with Lab fees.

## \*\*Offered on demand only

#### MUSIC

## Musi 0120 — Introduction to Music Literature (3)

Development of listening skills for understanding elements of musical style in historical perspective and signifiance of music as a fine art.

## \*\*Musi 0121 — Introduction to Baroque Music (3)

Prereq. 120 or permission.

Study of selected works from Baroque style periods through readings, tapes and recordings.

## \*\*Musi 0122 — Introduction to Music of the Classical & Romantic Periods (3)

Prereq. 120 or permission.

Study of selected works from the Classical and Romantic style periods through readings, tapes and recordings.

## \*\*Musi 0123 — Introduction to 20th Century Music (3)

Prereq. 120 or permission.

Study of selected works of 20th Century, both traditional and electronic, through readings, scores, tapes, and recordings.

## Musi 0160 — Fundamentals of Music (3)

Principles of notation, meter, major and minor scales, rhythmic and melodic reading, singing and keyboard.

## Musi 0161 — Music for the Classroom Teacher (3)

Prereq. Music. Fund. with minimum grade of C. Methods of teaching elementary music, with emphasis on singing, playing instruments, and rhythmic body movements.

## Musi 0170A, B, C — Class Voice (3 qtrs., 1 cr. hr. per qt.)

Prereq. non-voice majors — Music Reading (must be taken in sequence or by permission)

Basic techniques of voice production; breathing, diction, projection, tone-color, and interpretation.

## Musi 0180A — College Chorus (2)

Prereq. Permission (audition) (4 lab. hours)

## Musi 0180B — College Ensemble (2)

Mixed ensemble, some touring. (Membership by audition) (4 lab. hours.)

#### \*\*Musi 0181 — College Band (2)

Prereq. Permission (audition) (4 lab hrs.)

## Musi 0230 - Music - Theater (3)

Participation in selected musical theater projects. Participation may be through production or performance.

## \*\*Musi 0290A — Topics in Music (2)

Study of various music topics otherwise not available to students; music and the emotions, folk and country music, rock forum, etc.

## \*\*Musi 0290B — Topics in Music (3)

Study of various music topics otherwise not available to students; music and the emotions, folk and country music, rock forum, etc.

## NURSING — ASSOCIATE DEGREE

Only students officially accepted into the program or those with approval of the Program Director may take the courses with the ADNr prefix. All ADNr courses must be taken in sequence.

## \*ADNr 0101 — Nursing I - Fundmentals I (8)

Prereq. Admission to the Associate Degree Nursing program. Introduction to the use of nursing process system to enable individuals to maintain or regain ability to meet daily living needs regardless of age. Emphasis will be placed on the assessment components of the nursing process. Fundamental skills and related scientific principles of nursing are presented. Laboratory practice provides the opportunity to develop beginning skills in both technical and interpersonal aspects of nursing. 5 lec. 9 lab.

## ADNr 0102 — Nursing II - Fundamentals II (8)

Prereq. 2.0 average or better in courses required for fall quarter of first year. Development of basic nursing skills will be continued. A beginning study of medical-surgical nursing concepts relevant to all age groups will be presented. Utilization of all components of the nursing process is introduced.

## ADNr 0103 — Nursing III - Nursing of Adults and Children I (8)

Prereq. 2.0 average or better in courses required in winter quarter of first year. Focuses on implementing the nursing process in meeting basic needs of the adult or child experiencing stressors related to safety and security, activity and rest, and sexual role satisfaction. Further development of technical skills will be included. 4 lec. 12 lab.

## ADNr 0201 — Nursing IV - OB Maternal-Newborn Nursing (5)

Applies the nursing process in the study of the normal aspects of the maternal cycle and the normal, newborn infant. Common recurring stressors related to the maternal-newborn cycle are presented. Skills needed to provide family-centered nursing in normal and stress situations will be introduced. 6 lec. 12 lab. (5 week course)

## ADNr 0202 — Nursing V - Mental Health and Illness (5)

Presents concepts of mental health and selected deviant emotional and mental responses to stress. Provides the student with the opportunity to increase self-awareness and develop beginning skills in the use of self. Application of the nursing process in providing nursing care for clients with specific behavior patterns is included. 6 lec. 12 lab. (5 week course)

## ADNr 0203 - Nursing VI - Trends (2)

Concerns of nursing, past, present, and future are explored. Relationships of technical nurse to health professions and community are considered. Future personal development of individual technical nurses is discussed. Legal and ethical implications for nursing practice are examined. 3 lec. 0 lab.

## ADNr 0204 — Nursing VII - Nursing of Adults and Children II (10)

Applies the nursing process in caring for adults and children experiencing stressors affecting oxygen transport and fluids and electrolytes balance 6 lec. 12 lab.

## ADNr 0205 - Nursing VIII - Nursing of Adults and Children III (9)

Prereg. ADNr 0201, 0202, 0203, 0204

Systematically apply the nursing process in caring for groups of patients. Synthesizes previous knowledge for utilization of the nursing process with adult and child clients experiencing stressors affecting nutrition and elimination. 4 lec. 15 lab.

## ADNr 0206 — Nursing IX - Nursing Seminar (3)

The knowledge base essential to the practice of nursing is enlarged to include the role of the technical nurse as a member of the health team. A theoretical and practical approach to assessment and setting nursing care priorities will be explored. Transition from student role to graduate role will be explored. 3 lec. 0 lab.

## **NURSING — PRACTICAL**

## LPNr 0101 — Body Structure and Function (4)

This course provides basic study of the structural organization and function of the body. Emphasis is on the interrelation of the systems. Anatomical charts and models are used.

## \*Denotes classes with Lab fees.

#### LPNr 0110 — Nutrition (2)

Prereq. LPNr 0101 & 0111.

Included are the sources and contribution of the various nutrients, the importance of nutrition in health, and the effects of cooking on the nutrients. Diet therapy is introduced by way of modifying a normal diet to meet specific dietary needs.

## \*LPNr 0111 — Practical Nursing I (10)

This course is concerned with the basic nursing principles and skills necessary for efficient patient care. Emphasis is on those needs common to man and on the maintenance of body functions

## LPNr 0112 — Practical Nursing II (6)

Prereq. LPNr 0101 & 0111.

This course is a continuation of Practical Nursing I with additional units included to provide the complete basic fundamentals of skilled practical nursing. Observing, reporting and charting signs and symptoms are included. Nursing care of specific medical-surgical conditions is provided by clinical experience in Mercy Hospital.

## LPNr 0113 — Practical Nursing III (8)

Prereq. LPNr 0110, 0112, & 0115.

Medical-surgical nursing is the focus. Emphasis is on learning experiences in assessing, developing care plans and care studies, and caring for short-term and long-term patient situations involving cardiovascular, gynecological, genito-urinary, digestive, and skin and allergy conditions. Related, supervised clinical experience is provided in Mercy Hospital and includes giving medications.

## LPNr 0114 — Practical Nursing IV (9)

Prereq. LPNr 0113 & 0116.

This course is a continuation of Practical Nursing III with emphasis on learning experiences in assessing, developing care plans and care studies, and caring for patient situations relating to conditions of the neurological system, eye and ear, endocrine and musculoskeletal disorders. There are additional learning experiences in career opportunities, independent study, and development of judgmental concepts under the supervision of a faculty member. Clinical experience is provided in Mercy Hospital.

## LPNr 0115 — Practical Nursing V (6)

Prereq. LPNr 0101 & 0111.

A study of the child in health and illness and the influence of the various factors contributing to growth and development. Experience is obtained at Mercy Hospital and by observation in the Pediatric Clinic, Happy Hearts School and Day Care Center.

## LPNr 0116 — Practical Nursing VI (8)

Prereq. LPNr 0110; 0112 & 0115.

This is a course in maternal and newborn nursing. It includes study and care of the mother during pregnancy, the delivery and post-partum, and study and care of the newborn. Concurrent learning experience is provided in Scioto Memorial Hospital and by observation in the Prenatal Clinic.

## OCCUPATIONAL THERAPY ASSISTANT TECHNOLOGY

## OTAT 0101 — Introduction to Occupational Therapy (5)

Introduces the student to the profession of occupational therapy, the roles and functions of occupational therapy personnel, the areas of occupational performance and the theoretical basis of using goal-directed activities. Observation in local occupational therapy clinics is scheduled.

## OTAT 0102 — Therapeutic Media I (4)

Introduces the student to therapeutic analysis of activities and applied kinesiology. Includes skill development in selected activities and instruction in care and maintenance of equipment and supplies.

## OTAT 0104 — Life Span Development (4)

The study of human growth and development from birth through middle adulthood. Covers all aspects of development (motor, perceptual, cognitive, language, social, emotional) and prepares the student to apply developmental principles in working with ill or disabled individuals.

## OTAT 0105 — Survey of Medical Terminology (2)

Introduction to the roles and responsibilities of the Occupational Therapy Assistant which includes a relationship with other medical personnel and officials with heavy emphasis on medical terminology.

## OTAT 0107 — Occupational Therapy in Developmental Disabilities (5)

Identification and description of handicapping conditions existing from birth to early childhood. Instruction in occupational therapy theories and treatment for individuals with developmental and learning impairments. Emphasis on therapeutic techniques to enhance occupational performance from birth to adulthood.

## OTAT 0108 — Practicum in Developmental Disabilities (2)

Supervised work experienced in a school, hospital or workshop servicing developmentally disabled clients.

## OTAT 0112 — Therapeutic Media II (3)

Skill development in selected activities with emphasis on work performance and use of therapeutic equipment.

## OTAT 0201 — Occupational Therapy in Geriatrics (4)

Instruction in occupational therapy theories and treatment for older adults. Emphasis on meeting the physical and social needs of the aged.

## OTAT 0210 — Occupational Therapy in Physical Dysfunction (5)

Instruction in occupational therapy theories and treatment for individuals with physical impairments and high-risk medical conditions. Emphasis on activities of daily living, work, simplificiation, fabrication and use of assistive devices and orthotics, and use of therapeutic activities to maintain and/or facilitate physical well-being and independence.

## OTAT 0211 — Practicum in Physical Dysfunction (2)

Supervised work experience in a hospital or clinic setting treating individuals with neurological, orthopedic and other medical conditions.

#### OTAT 0212 — Occupational Therapy Assistant Seminar (2)

Examination and discussion of the professional roles and responsibilities of the occupational therapy assistant. Includes orientation to licensure, certification, legal aspects of treatment and documentation.

## OTAT 0213 — Clinical Application I (3)

Supervised field work placement designed to provide in-depth experience in and responsibility for delivery of services to patients/clients. Emphasizes the application of academically acquired knowledge leading to the performance level expected of an entry-level occupational therapy assistant.

## OTAT 0214 — Clinical Application II (3)

Supervised field work placement designed to provide in-depth experience in and responsibility for delivery of services to patients/clients. Emphasizes the application of academically acquired knowledge leading to the performance level expected of an entry-level occupational therapy assistant.

## **PHARMACY**

## Phar 0101 — General Pharmacology (4)

Introduction to the General principles of pharmacology. Calculations, drug classification, and the sites and mechanisms of drug action.

#### **PHILOSOPHY**

## Phil 0101 — Fundamentals (4)

Survey of basic problems, concepts and methods in philosophy.

## Phil 0102 — Introduction to Logic (4)

Use of evidence in establishing reliable conclusions.

#### Phil 0103 - Moral Philosophy (4)

Discussion of classic and/or modern philosophical views of human values, ideas and morality. Provides an introductory survey of some of the main problems, concepts and results of ethics including selected philosophies of past and present.

## PHYSICAL SCIENCE

## \*PSci 0101 — Physical World (4)

Designed for nonscience majors. Fundamental ideas of meterology and geology. Topics in meterology include atmosphere, winds, clouds, storms and weather. Topics in geology include rocks and minerals, gradation, earthquakes, continental drift and the ocean, 3 lec. 3 labs.

## \*PSci 0102 — Physical World (4)

Designed for nonscience majors. Fundamental ideas of atomic physics and chemistry. Topics in chemistry include classification of elements, molecules, chemical reactions, solutions and large molecules, including plastics and DNA. 3 lec. 3 labs.

## \*PSci 0103 — Physical World (4)

Designed for nonscience majors. Fundamental ideas of energy. Topics include heat, light, sound, electricity, solar energy, and nuclear energy. 3 lec. 3 labs.

## \*PSci 0104 — Physical World (4)

Designed for nonscience majors. Fundamental ideas of astronomy. Topics include the solar system, stars, galazies, black holes and the history of ideas about the universe. 3 lec. 3 labs.

## PSci 0105 — Physical Science (5)

A course designed for students of nursing and other health technologies, stressing the principles of physics and chemistry relevant to the health sciences. Meaningful applications in common experiences also are noted, so that the course should be worthwhile for students in other fields who would like a health-science emphasis. 4 lec 3 lab.

- \*\*PSci 0290A Topics in Physical Science (1)
- \*\*PSci 0290B Topics in Physical Science (2)
- \*\*PSci 0290C Topics in Physical Science (3)
  \*\*PSci 0290D Topics in Physical Science (4)

Study of topics otherwise unavailable to students.

#### **PHYSICS**

## Phys 0100A — Fundamental Physics (4)

This course is designed for those students with an inadequate background in math or physics. This course should be taken by those students before taking Physics 0201. Several physics topics and the mathematical methods to study these topics are covered. Topics include metric system, unit conversion. and vector analysis of forces and motion. An introduction to laboratory procedures and report writing is included.

## \*Phys 0201 — Physics (Mechanics) (4)

Prereq. Math 0130 or Math 0108 or equiv.

Basic measuring systems, methods and conversions and calculations for physics. Properties of solids, liquids, and gases. Statics and motion. Friction. Work, power, and energy. Simple machines. Laboratory and demonstrations related to lecture. 3 lec. 3 labs.

## \*Phys 0202 — Physics (Electricity) (4)

Prereq. Physics 0201.

An introduction to electrical circuitry with emphasis on the concepts of electrical physics. The nature of magnetism and electrostatics, electrical units. Basic direct-current circuits. Ohm's law, electrical measurement. Sources and effects of electrical current. Electric power and energy. Electromagnetism and electromagnetic induction. Properties of alternating current, simple A-C circuits. Generators and motrs. 3 lec. 3 lab.

## \*Phys 0203 — Physics (Heat, Light, Sound) (4)

Prereg. Physics 0201.

Fundamental properties and basic principles of heat, light, and sound. 3 lec. 3 labs.

## INSTRUMENTATION

## \*IMST 0101 — DC Circuits and Machines (4)

An introduction to electricity. Course content includes resistance, voltage, current. Ohm's Law, series and parallel circuits, magnetism, meters, power, inductance, and capacitance. DC motors and generators are also studied.

<sup>\*</sup>Denotes classes with Lab fees.

<sup>\*\*</sup>Offered on demand only.

#### \*IMST 0102 - AC Circuits and Machines (4)

Prereg, DC Circuits and Machines

Basic R-L, R-C transient circuits are initially studied. Alternating current fundamentals, AC circuit analysis, power factor and AC power, and AC machines comprise the major content of the course.

#### \*IMST 0103 — Industrial Electricity (3)

Prereg. IMST 0101 and IMST 0102.

This course is designed to familiarize the student with the National Electrical Code, to familiarize the student with practice used in industry to installing conduit, conduit fittings, electrical conductors, switching equipment, overload protection, and equipment.

## IMST 0111 — Industrial Electronics (4)

Prereq. IMST 0101, 0102.

This course is designed to familiarize the student with industrial electronic circuits and includes bipolar electronic devices, amplifiers, DC power supplies, and integrated circuits.

## \*IMST 0201 — Instrumentation Electronics (5)

Prereg. IMST 0111.

This course is designed to familiarize the student with the electronic equipment and devices found in electronic instrumentation. It usually includes grid-controlled rectifiers, nuclear particles, radiation detectors, radiation detector characteristics, high voltage power supplies, commercial scalers, input and output transducers, recording devices, ultrasonics, mechanical linkages, synchros. positions detectors and controls, carrier current transmission, telemetering and remote control.

IMST 0211 — Fluid Mechanics I (4)
Prereq. Math 0101, Physics 0201.

This course acquaints the student with the physical properties of gases and liquids and their behavior under various conditions. It includes atmospheric pressure; intensity of pressure; energy of liquids; properties of gases and liquids; various laws and principles governing gases and liquids; and pneumatic and hydraulic machines and devices.

## IMST 0212 - Fluid Mechanics II (4)

Prerea. IMST 0211.

This is a continuation of Fluid Mechanics I and stresses the application of working formulas such as the Bernouli and momentum equations as they relate to the physical properties of gases and liquids; the flow of fluid in pipes; the measurement of fluid flow; the multiplication of fluid force; and the calculation of pipe sizes, pressures developed, and pump deliveries.

#### IMST 0221 — Instrument Fundamentais I (4)

This course is designed to provide the student with a basic knowledge of instruments. It includes an introduction to the field of work, shop and industrial safety practices; instrument cleaning and lubricating; care and use of small hand and power tools; soldering techniques; instrument charts; and types of instruments used in industry.

#### IMST 0222 — Instrument Fundamentals II (4)

Prereq. IMST 0221.

This is a continuation of Instrument Fundamentals I. It includes reading and interpreting instrumentation drawings; fundamentals of measurement and control devices; final control elements; and an introduction to standards and calibration.

#### IMST 0223 — Measurement Principles (4)

This course introduces the student to industrial methods of measuring pressure and temperature with various types of gauges and other devices. It includes the basic theory of operation, construction, installation, normal care and handling, operational checks and calibration of gauges, manometers, and nonelectric thermometers.

#### IMST 0224 — Industrial Control I (4)

Prereg. IMST 0221, 0211.

The student is introduced to basic industrial control circuits and schemes. This course includes pneumatic, hydraulic, electrical, and electronic control.

#### IMST 0225 - Industrial Control II (4)

Prereq. IMST 0224.

This course is to familiarize the student on the procedures of changing the PC10 process plant from analog to digital control, using a program controller as the digital control device.

## PLASTICS/CHEMICAL

## \*PEng 0101 — Introduction to Plastics/Chemicals (3)

Covers a description of the different plastics, beginning with a brief outline of polymer chemistry. Discussion will cover different types of plastic, identification tests, polymerization, molecular growth, and molecular weight. Laboratory experiences in extrusion, injection molding, thermoforming, compression molding, and other fabrication operations. Introduction to test methods.

#### \*PEng 0102 — Machine Tools I (3)

Safety, measuring tools, bench work, drill press, lathe, forge work, shaper, planer, milling machine, grinding machine, hydraulic power transmission, metal band saws, properties and uses of ferrous and non-ferrous alloys, cutting fluids, welding and foundry practices.

#### \*PEng 0103 — Extrusion Molding (3)

Prereg. PEng 0101 or advisor approval.

Techniques of plastics extrusion operations and blow molding; Pipe, sheet, film blowing, extrusion coating, wire and cable covering, thread (monofilaments), bottle blow molding. Laboratory involves operating extrusion equipment and blowing molding equipment.

#### \*PEng 0104 — Thermo-Forming (3)

Prereg, PEng 0101, 0102, EnDR 0101 or Advisor Approval. Discussion will cover thermo-forming processes and thermoforming equipment. Thermo-forming will be introduced with special emphasis on vacuum forming equipment and processes. Characteristics of common plastics used in thermoforming. Numerous laboratory projects.

#### \*PEng 0105 — Injection Molding (3)

Prereg. PEng 0101, 0102, EnDR 0101 or Advisor approval. Various types of injection molding processes will be studies: (Reciprocating Screw, Plunger, Cone, Preplasticizers, Screw Pot. RIM. etc.) Laboratory operations involves the actual operation of injection molders, field trips, and the designing and fabricating of an injection mold.

#### \*PEng 0201 — Thermal Molding Machine Control (4)

Prereg. PEng 0101, 0102, EnDr 0101 or advisor approval The student will study the industrial control mechcan, important to the molding machines and processes. This course includes; basic pneumatic, hydraulic electrical, electronic, and thermal control systems encountered in most plastics plants.

## PEng 0202 — Production Control and Planning (4)

Basic concepts of production planning and control methods. Inventory planning, facilities design, capacity considerations. Actual planning and scheduling exercises on an individual basis.

## \*PEng 0203 — Testing of Plastic Materials (3)

Prereq. Math 0131.

Study is made of the mechanical, electrical, optical, and environmental characteristics of different plastics, impact testing, chemical testing, heat stability testing, hardness testing, and electrical testing. Conducting experiments and writing of technical reports on the property changes of plastics under various conditions. Statistical quality control methods as related to testing.

#### PEng 0205 — Plant Layout and Materials Handling (3)

Prereg. EnDr 0101.

Principles of plant layout to obtain the most effective utilization of men, materials, and machines, as related to space and cost. Selection and use of modern equipment and methods for handling materials in industrial processes.

## \*PEng 0206 — Introduction to Chemical Engineering (3)

Prereg. Chem 0121 and Math 0131.

Introduction to the practices of chemical engineering. Stoichiometry, heat and material balances, heat, mass, and momentum transfer. Industrial problems and applications.

## \*PEng 0207 — Fundamentals of Processing Equipment & Maintenance (2)

Piping diagrams, heat exchangers, reactors, etc. commonly used in the chemical industry. Emphasis on maintenance problems and methods.

## \*PEng 0209 — Fabrication and Finishing of Plastics Products (4)

Prereg. PEng 0101, 0102, 0103, 0104, 0105,

Study of industrial manufacturing methods for plastics products not encountered in the previous courses. Areas covered will include: printing, cementing, electroplating, metallizing, hot stamping, polishing, welding, engraving, machining. Special emphasis will be placed on compression, transfer, SMC, BMC, TMC, and FRP processes.

#### \*PEng 0210 — Properties of Materials (4)

Prereq. Chem 0122 and Math 0131.

This course is designed to provide study of various materials that are competitors for the plastics industry. The study of different materials and plastics will emphasize fitting the proper plastic with the correct end use in a competitive manner. Laboratory problems will be introduced requiring the practical use of the theory developed in the lecture material.

#### **PSYCHOLOGY**

## Psyc 0100A — Learning Orientation (4)

Techniques for learning definitions, vocabulary, lists, etc. to assist in academic achievement. (The 4 hours of credit do not apply toward the associate degree, but do apply toward total hours accumulated at the college.

#### - Pre-Anatomy (4) Psyc 0100B -

Students are prepared for anatomy by learning medical roots, muscles, bones, body planes, and medical abbreviations. (The 4 hours of credit do not apply toward the associate degree, but do apply toward total hours accumulated at the college.) This is a special course developed primarily for allied health related programs.

#### Psyc 0101 — Principles of Psychology (4)

Introduction to psychology. A study of the individual in terms of maturational, learning, thinking, emotional, motivational, sensory and perceptual processes.

## Psyc 0105 — Career Planning (4)

An exploratory investigation of career planning.

## Psyc 0131 — Human Adjustment (3)

Prereq. Psyc 0101.

A consideration of conflicts and problems of adjustment in modern society.

#### Psyc 0173 — Human Growth and Development (4)

Prereq. Psyc 0101.

A study of the factors affecting human growth and development through the life cycle.

#### Psyc 0261 — Industrial Psychology (5)

Prereq. Psyc 0101 and Math 0150.

Applications of psychology in business and industry.

## Psyc 0270 — Abnormal Psychology (5)

Prereq. Psyc. 0101.

Behavior disorders, their cause and effects on person, family and society.

## Psyc 0275 — Educational Psychology (5)

Prereq. Psyc 0101.

Psychological foundations of education with emphasis upon learning, transfer, motivation, and evaluation.

- \*Psyc 0290A Topics in Psychology (1)
- \*Psyc 0290B Topics in Psychology (2) \*Psyc 0290C Topics in Psychology (3)

Prereq. Permission of instructor is required.

Topics of special interest to students are investigated under the direction of the psychology staff. This course may be repeated, but not to exceed a total of six credit hours.

## **QUANTITATIVE METHODS**

## QMet 0201 — Introduction to Probabilities & Statistics

Sample designs, sampling distribution of sample statistics, and estimation (point and interval) of parameters. Beayesian and classical (hypothesis testing) decision theory, contingency table analysis and analysis of variance. Regression and correlation analysis.

## **RADIOLOGIC TECHNOLOGY**

## \*RdIT 0101 — Radiologic Technology I (3)

Prereq. Admission to Radiologic Technology Program. This course is designed to acquaint the new student with the goals, philosophies, and organizations of the radiography program and Radiology Department. Medical ethics, medicalegal considerations, elementary radiation protection, fundamentals of radiographic exposure, and radiographic positioning of the chest and abdomen are covered. An orientation and tour of the clinical facility and department of radiology; selected clinical observations and experiences are included.

## \*RdIT 0102 — Radiologic Technology II (3)

Prereq. RdIT 0101, RdIT 0200.

This course concentrates on radiographic positioning of the appendicular skeleton with application of theory in the laboratory. Selected clinical experiences are planned to reinforce learning and provide the student with the opportunities to apply principles and techniques.

## RdIT 0103 — Radiologic Technology III (3)

Prereg. RdIT 0102.

This course concentrates on radiographic positioning of the axial skeleton with application of theory in the laboratory.

## RdIT 0104 — Radiologic Technology IV (3)

This course concentrates on radiographic procedures using contrast media, radiographic practices for surgery, pediatric radiography, and other specialized areas of radiography.

## RdIT 0105 - Radiologic Technology V (3)

Prereq. RdIT 0104

Continuation of 104 emphasizing vascular and neurological examinations with analysis of equipment used.

## RdiT 0106 — Radiologic Technology VI (3)

Prereq. RdIT 0105.

This course examines advanced radiographic techniques and imaging modalities, including technic charts, automatic exposure control, fluroscopy, image intensifiers, conventional tomography, steroscopy, xeroradiography, computer literacy, computed tomography and other specialized areas of imaging.

## RdiT 0107 — Radiologic Technology VII (3)

Prereq. RdIT 0106.

A series of lectures on pathologic conditions and their impact on the radiographic process. Includes student participation in film evaluation and discussion of related journal articles.

## RdiT 0108 — Radiologic Tehcnology VIII (2)

Prereq. RdIT 0107, 0113.

This course is designed as a self assessment of the independent cognitive areas utilized in the clinical situation.

## RdIT 0110 — Radiologic Electricity-electronics (3)

Prereq. Math 0108.

A study of the basic electrical-electronic principles associated with radiography. Topics include electrostatics, DC and AC currents, Ohm's Law, series and parallel circuits, magnetism, electromagnetic induction, transformers, and basic electronics.

## RdiT 0111 — Radiologic Physics (4)

Prereq. RdIT 0110.

A study of the fundamental methods of x-ray generators, basic x-ray circuits, interaction of radiation with matter, and units of measurement. Special attention will be given to related quality control testing.

## RdIT 0112 — Radiobiology and Radiation Protection (2)

Prereq. RdIT 0111.

A study of the radiobiological areas of radiation interactions, radiosensitivity, radiation dose/response relationships, early and late radiation effects, radiation protection and health physics.

## RdIT 0113 — Radiographic Processing (2)

Prereq. RdIT 0201.

Includes discussions of film characteristics, artifacts, film storage and handling, processing room design and function, methods, principles and chemistry of processing systems, and silver reclamation and quality control.

## RdIT 0200 — Basic Patient Care (3)

Prereq. Admission to Radiologic Technology Program. The content of this course provides the student with knowledge and basic skills necessary for care of the patient. Includes medical and professional ethics, medical terminology and interpersonal relationships.

<sup>\*</sup>Denotes classes with Lab fees.

<sup>\*\*</sup>Offered on demand only.

## \*RdIT 0201 — Radiographic Exposure (4)

Prereg. RdIT 0102.

Lectures on establishing and manipulating radiographic exposure factors and on the proper utilization of accessory devices such as grids, intensifying screens, and beam limitation devices. The concentration is on overall image quality, as well as factors affecting patient exposure. Special attention will be given to related quality control testing.

## RdIT 0211 — Clinical Experience I (2)

Prereq. RdIT 0102.

practical application of radiologic technology principles, positioning and techniques in the radiology departments of affiliate hospitals. Includes film critique sessions.

## RdIT 0212 — Clinical Experience II (3)

Prereq. RdIT 0212.

Practical application of radiologic technology principles, positioning and techniques in the radiology departments of affiliate hospitals. Includes film critique sessions.

## RdIT 0213 — Clinical Experience III (3)

Prereg. 0212.

Practical application of radiologic technology principles, positioning and techniques in the radiology departments of affiliate hospitals. Includes film critique sessions.

## RdIT 0214 — Clinical Experience IV (3)

Prereq. RdIT 0213.

Practical application of radiologic technology principles, positioning and techniques in the radiology departments of affiliate hospitals. Includes film critique sessions.

## RdIT 0215 — Clinical Experience V (3)

Prereg. RdIT 0214

Continuation of RdIT 0214 with practical application of radiologic technology principles, positioning and techniques in advanced imaging modalities. Includes film critique presentations

## RdIT 0216 — Clinical Experience VI (4)

Prereq. RdIT 0215.

Continuation of RdIT 0215 with practical application of radiologic technology principles, positioning and techniques in advanced imaging modalities. Includes film critique presentations.

## **RESPIRATORY THERAPY**

## RpTT 0100 — Medical Terminology (1)

An introductory level course designed to acquaint the student with the terminology commonly encountered in the medical, nursing, and allied health professions. Emphasis is placed, through programmed instruction, on Latin and Greek prefixes, suffixes, combining forms, and the art of building and analyzing medical terms.

## RpTT 0101 — Basic Patient Care (2)

An introductory level course in the common basic skills required of all health care practitioners involved in direct patient care. Included in this course is an introduction to the respiratory therapy profession and the health care system of the U.S.

## RpTT 0110 — Fundamentals of Respiratory Care I (4)

An introductory level course in the principles and practice of ambient pressure respiratory care procedures and the use, principle of operation, and care of respiratory care equipment associated with the administration of these procedures.

## RpTT 0111 — Fundamentals of Respiratory Care II (3)

An introductory level course in the classification, maintenance, principle of operation, and use of positive pressure ventilators and the principles and practice of I.P.P.B. therapy. This course shall include an overview of common pharmacologic agents with an emphasis on those agents directly administered by the respiratory therapy technician and the fundamental concepts of microbiology, sterilization, and disinfection.

## \*Denotes classes with Lab fees.

#### RpTT 0112— Airway Management (1)

This course is devoted to the establishment, care, and maintenance of the airway with emphasis on the artificial airway. Theoretical aspects of this course are designed to enhance related clinical practice in RpTT 0141.

## RpTT 0113 — Continuous Mechanical Ventilation (3)

An introductory level course in the role and responsibility of the respiratory care practitioner in the intensive/coronary care unit. Emphasis is placed on the technical aspects of continuous mechanical ventilation from initiation through termination.

## RpTT 0114 — Pulmonary Rehabilitation and Home Care (2)

This course is designed to provide the student with an understanding of the health care delivery system as it relates to the respiratory care of a patient in the home. The course will vary in emphasis and utilize several guest instructors to explore the multi-dimensional aspects of home health care delivery and the rehabilitation of the patient with pulmonary disease.

## RpTT 0115 — Pediatric and Neonatal Respiratory Care (2)

An introductory level course designed to provide a basic overview of the role of the respiratory therapy technician in the care of the child and newborn infant with respiratory disease. The scope of this course shall include embryology, pathophysiology, and respiratory care procedures for the newborn and child.

## RpTT 0116 — Pulmonary Function Testing (3)

This course is designed to provide the student with the fundamental concepts of pulmonary function testing. Emphasis is placed in the area of spirometry and the basic physiology of each diagnostic procedure.

# RpTT 0121 — Pulmonary and Cardio-Vascular Anatomy and Physiology (3)

This course consists of a series of lectures on the anatomical and physiological concepts and principles related to normal and abnormal lung function. Emphasis is placed on the application of these concepts to the clinical practice of respiratory care.

## RpTT 0122 — Pathophysiology (3)

This course consists of a series of lectures focused on the most commonly encountered cardio-pulmonary diseases. Emphasis is placed on the pathophysiology and clinical presentation of each disorder and the application of respiratory care.

## RpTT 0140 — Clinical Practice I (3)

This course serves as an introduction to the clinical practice of fundamental concepts of respiratory care. Emphasis is placed on application and practice of those concepts presented in RpTT 0110 and RpTT 0111.

## RpTT 0141 — Clinical Practice II (5)

This course serves as an introduction to the clinical practice of respiratory care procedures specific to the intensive/coronary care unit and the critically ill patient. Emphasis is placed on clinical practice in the areas of continuous mechanical ventilation and the establishment and care of the artificial airway.

## RpTT 0142 — Clinical Practices III-A (6)

An introduction to the practice of respiratory care in several specialty areas including the pulmonary function diagnostic laboratory, the pediatric and neonatal intensive care units, the EKG laboratory, and the bronchoscopy laboratory.

## RpTT 0143 — Clinical Practice III-B (5)

A continuation of RpTT 0141 for the student seeking the Associate degree. Emphasis is placed on advanced clinical practice in respiratory intensive care.

# RpTT 0201 — Pulmonary Function Testing and Cardio-Vas., Evaluation & Testing (3)

This course shall consist of a series of lectures focused on advanced concepts of pulmonary function testing and cardio-vascular evaluation and testing. Emphasis is placed on data interpretation, the clinical administration of advanced diagnostic procedures, and the relationship of the data to the pathophysiology of the disorder.

## RpTT 0202 — Pediatric and Neonatal Respiratory Care (3)

A sophomore level study of the pathophysiology of pediatric and neonatal cardio-pulmonary disorders and the principles and practice of respiratory care for the child and newborn infant.

## RpTT 0203 — Pharmacology (3)

A sophomore level study of the general principles of pharmacology including drug types, dispensing, dosage, and effects including contraindications and regulations. Drug groups related to respiratory therapy will be emphasized to include bronchodilators, wetting agents, detergents, mucolytics, proteolytics, antibiotics, muscle relaxants, and corticosteroids.

## RpTT 0211 — Respiratory and Renal Anatomy & Pathophysiology (2)

An advanced level study of the anatomy and pathophysiology of the respiratory and renal systems with clinical applications to the field of respiratory care.

## RpTT 0212 — Cardio-Vascular Anatomy and Pathophysiology (2)

An advanced level study of the anatomy, physiology, and pathophysiology of the cardio-vascular system with applications in the area of hemodynamic monitoring, EKG studies, and recognition of cardiac arrhythmias.

## RpTT 0220 — Clinical Practice VII (2)

This course will consist of a series of clinical practice sessions and hospital experience modules designed to sharpen the students' skills in the area of pulmonary function studies. Emphasis will be placed on the performance of advanced procedures, their interpretation, and their significance.

## RpTT 0221 — Topics in Clinical Medicine (2)

This advanced course of study is designed to prepare the student with an in-depth analysis of current trends in the field of pulmonary and cardio-vascular medicine. Emphasis will be on developing research skills and the preparation of abbreviated technical reports.

## RpTT 0222 — Departmental Management (2)

This is an introductory level course in the organization and management of a respiratory care department. Emphasis will vary in accordance with current events affecting the management of a respiratory care department.

## RpTT 0240 — Clinical Practice IV (5)

This course offers the student advanced clinical practice in the specialty areas of the neonatal intensive care unit, the pulmonary function and cardio-vascular diagnostic laboratory, and advanced clinical practice in the intensive/coronary care

## RpTT 0241 — Clinical Practice V (1)

This course provides the student with the opportunity to develop additional clinical practice skills in a specialty area of the students selection. Emphasis and course objectives will vary in accordance with the specialty area selected. Not required for those students successfully completing RpTT 0142.

## RpTT 0250 — Registry Review (3)

This course provides the sophomore level student with a pregraduation review of the principles and practice of respiratory care with emphasis on the N.B.R.C. examinations. Emphasis is placed on the actual participation of simulated national examinations and an analysis of the students' performance.

## \*Denotes classes with Lab fees.

## **SECRETARIAL**

## \*ExST 0101 — Typing I (3)

Typing I is a study of the touch system of typewriting with emphasis on development of speed and accuracy and the production of simple problems such as: personal notes, letters, outlines, short tabulated reports, and manuscripts.

## \*ExST 0102 — Typing II (3)

Prereq. Typing I.
Typing II is a continuation of Typing I with students applying basic typing techniques to increasingly more difficult problems.

## \*ExST 0103 — Typing III (3)

Prereq. Typing I & II.

Typing III is a continuation of Typing II with emphasis on developing the student's ability to produce mailable copy of technical reports, drafts, business correspondence, etc. All students will study the uses of the electronic typewriter.

## ExST 0104 — Typing IV (3)

Prereq. Typing I, II, and III.

Typing IV consists of a production typing practice set.

## ExST 0105 — Typing V (3)

Prereq. Typing I, II, III, and IV. Typing V is a continuation of Typing IV production typing practice set.

## ExST 0111 — Shorthand I (3)

The student is taught to read and write Gregg shorthand and develop the nonshorthand elements of transcription which include vocabulary development, spelling, punctuation, and grammar.

#### ExST 0112 — Shorthand II (3)

Prereq. Shorthhand I.

A continuation of Shorthand I designed to perfect shorthand theory, phonetics, word families, brief forms and phrases, and penmanship. Students are encouraged to raise speed and accuracy levels.

#### ExST 0113 — Shorthand III (3)

Prereg. Shorthand I and II.

A continuation of Shorthand II with greater emphasis on building speed and accuracy.

## ExST 0214 — Shorthand IV (3)

Prereq. Shorthand I, II, and III. Emphasizes speed building and increasing mailable copy rate.

## ExST 0215 — Shorthand V (3)

Prereq. Shorthand I, II, III, and IV. Further emphasizes speed in taking dictation and an increased mailable copy rate.

#### ExST 0216 - Shorthand VI (1)

Prereq. Shorthand I, II, III, IV, and V. A course designed to increase each student's ability to take dictation at high rates of speed and transcribe it into mailable copy.

## \*ExST 0120 — Business Machines I (3)

A course designed to develop the student's ability to use electronic calculators.

## ExST 0121 — Introduction to Word Processing (4)

Prereq. Minimum typing speed of 40 wpm. and the ablity to set up letters, memos, reports, and tabulations.

## \*ExST 0221 — Dictation and Transcription I (3)

Prereq. Typing I, II, and III.

A course designed to develop the student's ability to use transcription equipment for mailable copy.

## \*ExST 0222 — Dictation and Transcription II (3)

Prereq. Dictation and Transcription I; Typing I, II, & III; and Shorthand I, II, & III or three basic business electives.

A course designed to introduce the student to a medical and a legal vocabulary. The general majors will complete their course requirements using transcription equipment and the executive majors will use their shorthand skills.

## ExST 0231 — Records Management (3)

A comprehensive course dealing with the creation, distribution, retention, utilization, storage, retrieval, protection, preservation, and final disposition of all types of records within an organization.

## \*ExST 0241 — Secretarial Practices I (3)

Prereq. Typing I, II, and III; Shorthand I, II, and III, or three basic business electives for general majors; Records Management; Business Machines I; and Dictation and Transcription I.

This class is designed to emphasize the responsibilities and opportunities of a secretarial position. It encompasses a variety of secretarial duties such as: using word processing equipment, using transmittal services, assisting with travel arrangements, planning meetings, and presenting busines data. The personal qualities of a professional secretary and job opportunities available to the college-trained secretary are also discussed.

## \*ExST 0242 — Secretarial Practices II (3)

Prereq. Secretarial Practices I, Dictation and Transcription II, Typing IV, and Shorthand IV or basic business elective. This class will give the student the opportunity to learn to prepare medical and legal documents for office use.

#### \*ExST 0243 — Secretarial Practices III (5)

Prereq. All classes in major that are required for graduation. General secretarial majors must have completed all basic business electives required in place of shorthand.

This class is an executive secretarial simulation project and a word processing simulation project which are completed in the classroom.

## MdST 0111 — Medical Shorthand I (3)

Designed to give advanced shorthand students practice in note taking and transcription of medical reports, diagnoses, case histories, and correspondence.

#### MdST 0112 — Medical Shorthand II (3)

Prereq. Medical Shorthand I.

A continuation of Medical Shorthand I. This course is designed to develop skill in writing and transcribing shorthand notes containing words and phrases commonly used in the language of medicines.

## \*MdST 0221 — Medical Dictation and Transcription I (3)

Prereq. Typing I, II, & III and Shorthand I, II, and III. Emphasis is on the development of mailable transcription from a transcribing machine, medical vocabulary building, and a review of punctuation and spelling.

## \*MdST 0222 — Medical Dictation and Transcription II (4)

Continuation of MdST 0221. Emphasis is on mailable transcription to meet medical office standards.

## MdST 0223 — Medical Terminology I (3)

Prereq. Shorthand I, II, & III.

Develops skill in writing and transcribing words and phrases occuring in the spoken and written language of medicine.

## MdST 0224 — Medical Terminology II (3)

Continuation of MdST 0223.

## \*Denotes classes with Lab fees.

## MdST 0241 — Medical Secretarial Practices I (3)

Prereq. Typing I, II, & III, Shorthand I, II & III, Records Management, Business Machines I & II, Dictation and Transcription I.

An introduction to the general responsibilities required by a medical secretary, including the preparation of medical documents and development of a competent medical vocabulary.

## MdST 0242 — Medical Secretarial Practices II (2)

Prereq. Medical Secretarial Practices I.

A continuation of MdST 0241. In addition, a general background in basic diagnostic tests, techniques, and assisting with patients is provided.

## LgST 0111 — Legal Shorthand I (3)

Designed to give practice in note taking and transcription to advanced shorthand students. Preparation of legal correspondence, pleadings, testimonies and depositions.

## LgST 0112 - Legal Shorthand II (3)

Prereq. Legal Shorthand I.

This course is designed to develop skill in writing and transcribing shorthand notes containing words and phrases commonly recurring in the spoken and written language of law.

## \*LgST 0221 — Legal Dictation and Transcription I (3)

Prereq. Typing I, II, & III and Shorthand I, II, & III. Emphasis is on the development of mailable transcription from a transcribing machine, legal vocabulary building and a review of punctuation.

## \*LgST 0222 — Legal Dictation and Transcription II (4)

Continuation of LgST 0221. Emphasis is on mailable transcription to meet legal office standards.

## LgST 0223 — Legal Terminology & Judicial Procedures I (3)

Prereq. Shorthand I, II, & III.

A study of customary terms and practices in law offices, legal departments of business organizations, and courts.

## LgST 0224 — Legai Terminology & Judicial Procedures II (3)

Continuation of LgST 0223.

## LgST 0241 — Legal Secretarial Practices I (3)

Prereq. Typing I, II, & III, Shorthand I, II, & III, Records Management, Business Machines I & II, Dictation and Transcription I.

An introduction to the general responsibilities required by a legal secretary, including the preparation of legal documents and the development of a competent legal vocabulary.

## **SOCIAL WORK**

## \*\*SoWr 0101 — Introduction to Social Welfare and Social Work (3)

Overview of field of social welfare with equal emphasis on fundamental concepts and services in social welfare and current and emerging tasks in profession of social work.

#### SOCIOLOGY

## Soci 0101 — Principles of Sociology (4)

Nature of human society and factors affecting its development. Fundamental concepts of sociology: culture, collective behavior, personality, groups, institutions.

## Soci 0201 — Current Social Problems (4)

Prereq. Soci 0101.

An examination of the ways in which society comes to define certain conditions as social problems, a descriptive survey of the nature and distribution of contemporary American social problems, and a discussion of the various theoretical orientations used in classifying social problems. Problems under study would include crime and juvenile delinquency, alcoholism and drug abuse, poverty, mental disorder, family disintegration, and problems arising out of discrimination against ethnic minorities and women in American culture.

## Soci 0202 — Marriage and Family Sociology (4)

Special emphasis is placed upon the American family experiences. Of central concern is the contemporary marriage process and context, family relationships, sexuality, family dysfunctions, and changes.

## Soci 0203 — Introduction to Social Psychology (4)

Prereq. Soci 0101.

Patterning of conduct through social interaction; functional analysis of individual-group relationships in various organizational contexts; current theory and research in the field.

## Soci 0205 — Sociology of Appalachia (4)

Prereq. Soci 0101.

Intensive study of Appalachia from sociological perspective. Emphasis on population of Appalachia (number and distribution of inhabitants, characteristics of population, vital processes and migration), "culture of rural poverty," acceptance of innovation and social change in Appalachia, major social institutions in the area and community power structure in Appalachia.

## Soci 0210 - Women in Society (4)

A study of women's role in society from a historical and sociological perspective.

## Soci 0211 — Human Sexuality (4)

An in-depth view of the current status of human sexuality in the United States. Examined are sexual perspectives; current research; modes of sexual expression and enhancement; physiological, sociological and psychological basis of human sexuality; sexual variations, and sex ethics.

## Soci 0224 — Urban Sociology (4)

Examines the structure and nature of social organization from a sociological perspective. Ecological and nonecological theories are used to study the processes of urbanization and the involvements and problems of the urban community.

## Soci 0227 -- Sociology of Education (4)

This course consists of a series of lectures on the anatomical and physiological concepts and principles related to normal and abnormal lung function. Emphasis is placed on the application of these concepts to the clinical practice of respiratory care.

## Soci 0229 — Minority Groups (4)

Basic approaches are used to analyze American minority groups and their contemporary situation. Speciasl emphasis is placed on patterns of prejudice and discrimination as well as the dynamics of race relations.

## Soci 0234 — Sociology of Aging (4)

Various aspects of aging are examined with special upon social theories of aging, demographics, physical, psychological, and sociological aspects of the aging process.

## Soci 0261 — Social Deviance (4)

Traditional and nontraditional theories are used to present the nature of deviance and its consquences. A variety of deviant patterns of behavior are examined such as sexual deviance, drugs, violence, amateur crime, criminal subculture and organizations, white-collar and government crime, and cognitive deviance.

- \*\*Soci 0290A Topics in Sociology (2)
  \*\*Soci 0290B Topics in Sociology (3)
  \*\*Soci 0290C Topics in Sociology (4)

Prereq. Permission of instructor is required.

Topics of special interest to students are investigated under the direction of the sociology staff. This course may be repeated, but not to exceed a total of six hours.

## **SPANISH**

## \*\*Span 0111 — Elementary Spanish (4)

Development of comprehension, speaking and reading skills. Basic grammar. Lab required. Beginning course of 3-qtr. 1st-yr. sequence.

## \*\*Span 0112 — Elementary Spanish (4)

Prereg. 0111

Continuation of 0111.

## \*\*Span 0113 — Elementary Spanish (4)

Prereg. 0112.

Continuation of 0112.

## \*Denotes classes with Lab fees.

## \*\*Span 0211 — Intermediate Spanish I (4)

Prereq. Span 0113 or instructor's approval. Reviews grammar. Offers selected readings in Hispanic literature. Oral facility is emphasized. 3 lec. 3 lab.

## \*\*Span 0212 — Intermediate Spanish II (4)

Prereq. Span 0211 or instructor's approval. Emphasizes oral and written expression. Continues intensive review of grammar. Selected readings in Hispanic literature are stressed. 3 lec. 3 labs.

## \*\*Span 0213 — Intermediate Spanish II (4)

Prereq. Span 0212 or instructor's approval. Emphasizes the building of more advanced vocabulary and sentence structure through more difficult prose. Increasing emphasis is placed on conversation and free composition. 3 lec. 3 lab.

#### **SPEECH**

# Spch 0101 — Speech I (The Fundamentals of Human Communication) (3)

Introductory analysis of oral communication in human relationships with focus on variety of contexts including: dyadic, small group, and public communication experiences. Serves as survey of human communication processes. Mass lecture.

# Spch 0102 — Speech II (Fundamentals of Public Speaking (3)

Principles of public speaking. Practice in presenting informative and persuasive speeches with emphasis on communicative process.

## \*\*Spch 0105 — Introduction to Mass Communication (4)

All forms of mass communication including newspapers, magazines, radio-television, book publishing, public relations, advertising, and photojournalism. Begins with an analysis of communication process and ends with media career opportunities.

## \*\*Spch 0215 — Group Discussion (4)

Study of structure and internal dynamics of small groups, nature and functions of leadership and group participation, problem solving and decision making; frequent participation in group discussion activities.

## \*\*Spch 0220 — Oral Interpretation of Literature (4)

Techniques of oral interpretation and development of adequate intellectual and emotional responsiveness to meaning of literature.

- \*\*Spch 0290A Topics in Communication (1)
  \*\*Spch 0290B Topics in Communication (2)
- \*\*Spch 0290C Topics in Communication (3)

Study of various topics otherwise not available to students.

## THEATER

## Thar 0105 — Practicum in Management (2-4)

Supervised lab practice in problems of theater publicity, finance, and house management. May be repeated.

## Thar 0110 — Introduction to Performance (4)

Introductory study of acting and actor. Emphasizes preparation of self and text, exploration of space, development of physical and vocal freedom through improvisation and theater games

## Thar 0135 — Practicum in Production Design (2-4)

Supervised lab practice in design and execution of scenery, lighting, costumes, properties, and sound. May be repeated.

## Thar 0170 — The Theater Experience (4)

Exploration of nature and function of theater as art form through exploration of performer/space/audience interrelationship. Attendance at selected rehearsals and performances. Theater productions augment lecture and discussion sessions. Attendance at selected professional theatrical performances may be included.

<sup>\*\*</sup>Offered on demand only.

## Thar 0201 — Children's Theatre (5)

A course designed to cover dramatic compositions and practical production procedures for child abuse.

## Thar 0205 — Practicum in Management (2-4)

Supervised lab practice in problems of theater publicity, finance, and house management. May be repeated.

## Thar 0210 - Acting I (4)

Prereq. Thar 0110 or instructor permission.

Principles and techniques of acting with major emphasis on developing trust and freedom. Warm-up techniques, theater games, improvisation, monologue exercises, and preliminary scoring techniques underline this introduction to work of actor.

## Thar 0215 — Practicum in Acting (2-4)

## m in Production Design (2-4)

Prereq. Instructor permission.

Supervised lab practice in rehearsal and public performance of roles. May be repeated.

## Thar 0220 — Oral Interpretation (3)

Techniques in oral interpretation and development of intellectual and emotional responsiveness to meaning of literature.

## Thar 0235 — Practicum in Production Design (2-4)

Prereq. Instructor permission.

Supervised lab practice in design and execution of scenery, lighting, costumes, properties, and sound. May be repeated.

## Thar 0237 — Basic Makeup (1)

Prereq. Theater or instructor permission. Theory and practice of stage makeup.

#### WELDING

## Weld 0101 — Welding Symbols and Prints (4)

A study of blueprint details of how structures are to be made weld locations, types of joints, correct size and amount of weld deposited at designated seams. Welding symbols as they apply to all forms of manual and automatic machine welding as standardized by the American Welding Society (AWS).

## \*Weld 0111 — Basic Oxy-Acetylene Welding (4)

A course designed to teach the procedures for oxy-acetylene welding and cutting. Fabrication of gas-welded structures, position welding, and the care of gas-welding equipment are included.

## \*Weld 0112 - Basic Inert Gas Welding (3)

Prereq. Weld 0111 and Weld 0113.

A course in the fundamentals of gas metal arc welding and tungsten inert gas welding. Special emphasis is placed on welding ferrous metals with these processes.

## \*Weld 0113 — Basic Arc Welding (4)

Prereg. Weld 0111.

A study of all types of welded joints, stressing care, maintenance, and the use of the arc welder in fabrication of steel structures

## Weld 0102 — Template Layout and Construction (4)

A course designed for students majoring in Welding, to give a working knowledge of template development. Emphasis is placed on design and making templates for the layouts of various pipe joints.

## \*Weld 0201 — Combined Welding I (4)

Prereq. Weld 0111.

A combined welding course which gives the student experience in varied welding shop projects with oxy-acetylene and arc welding. Practice in making horizontal, vertical, and overhead welds is included.

#### \*Denotes class with Lab fees.

## \*Weld 0114 — Advanced Arc Welding (4)

Prereq. Weld 0111, 0112, 0113.

A course designed to give the student more advanced practice in gas metal arc and tungsten inert gas arc welding. The course includes the welding of non-ferrous alloys and position welding with these processes.

## \*Weld 0202 — Combined Welding II (4)

A combined course in gas and arc welding to provide the machinist or other tradesman with sufficient welding experience to make minor repairs and to fabricate simple assemblies. Emphasis is placed on the building up of worn parts and the repair of broken parts. The use of low temperature rods is included to make the repair of machine tools, such as milling cutters, possible.

## \*Weld 0211 — Advanced Structural Welding (4)

This course is designed to teach the experienced welder how to certify on structural welding using Electric Arc and welding machines. It also teaches students how to prepare, weld, and test open groove joints in all positions.

## Weld 0122 — Welding Metallurgy (3)

The study of steel classifications, heat treatment procedures, properties of ferrous and non-ferrous metals, and non-destructive testing.

A lecture-demonstration course designed to give welding students a better understanding of effects of alloying elements on welds. The course utilizes the metallurgy laboratory and deals with the inspection and testing of welds, etching, grain structure changes made by welding, and slags and gases for welding shielding.

## \*Weld 0203 — Combined Welding III (4)

A combined welding course covering gas arc theory and practice, structured for students needing more than the offering of Combined Welding II.

## \*Weld 0212 — Pipe Welding (6)

This course is designed to teach the experienced welder how to certify on pipe welding in all positions using Arc, Mig., and Tig welding machines. It also teaches students how to prepare, weld, and test open groove joints.

## \*Weld 0213 — Advanced Pipe Welding (4)

A course designed to produce an experienced welder prepared for rapid advancement in the field. It includes nonferrous welding, alloy castings, welding of pressures, vessels, pipe fabrication, and more intricate welding procedures and application.

## \*Weld 0214 — Advanced Inert Gas Welding (3)

A course designed to give the student more advanced practice in gas metal arc and tungsten inert gas arc welding. This course includes the welding of non-ferrous alloys and position welding with these processes.

## \*Weld 0216 — Welding Certification and Testing (6)

Prereg. Weld 0211, 0212, and 0213.

A continuing of Weld 0211. Advanced Structural Welding, and Weld 0212. Advanced Pipe Welding, for qualification and certificating testing. Certification papers will be given to all students passing the bend test.

# SHAWNEE STATE COMMUNITY COLLEGE

Board of Trustees	
Gerald R. Jenkins	
Gerald R. Jenkins  Victor W. Morgan	Chairmar
Victor W. Morgan V	ice-Chairman
Carolyn Andrews V Walter N. Brown	Member
Walter N. Brown	Member
Orville Ferguson, Sr	Member
F. D. Hyland  John T. Rittenour, J.D.	Member
Dr. George F. White	Member
Administrative Officers of the College	
Frank C. Taylor, M.A	
Frank C. Taylor, M.A.  Neil Hawk, B.B.A.	President
Joseph R Jackson, B.B.A. Vice-President of Student Services Staff	Controller
Dotty Welch, M.A.  Richard T. Davidson, M.A.  Counselor, Director of	Admissions
M1	
A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Gene Beckett, M.A Administrative Data Processing F	I Education
	Loucation
Library/Media Services Staff	
Teresa D. Midkiff, MLS Director of Library and Med	dia Sanvicae
William P. Duncan, B.S.C	Cordinator
	Joordinator
Continuing Education	
Danny L. Evans, M.A.Ed Director/Evening Program C	No o wallim make in
	oordinator
Ohio Technology Transfer Organization	
Gary Gulker, B.A C	Na a saddin sa
	oordinator
S.O.C.F. Coordinator	
Jack Lucas, M.A. (part-time) C	
	oordinator
Public Relations	
Susan Warsaw Director/C	
	oordinator
Sports Facilities	
larry E. Weinbrecht, M.S.PE., Athletic Director/Director of Sport	
	s Facilities
Special Programs	
Pave Gleason	
	Director

## ACADEMIC FACULTY

## **HUMANITIES/SOCIAL SCIENCES**

Shirley Crothers, Music - B.S., Ohio State University; M.A., Ohio University Barbara Edwards, English — B.A., University of Kentucky; M.A., Marshall University

James Flavin, English — B.A., M.A., Kansas State; Ph.D., Miami University Emily Gulker, Speech/Theater — B.S. Ed., Ohio State University; M.A., Marshall University

Betty Hodgden, English — B.A., Otterbein College; M.A., Marshall University John Kelley, History/Government — B.A., Marian College; M.A. History, Indiana University; Additional Graduate Work, Indiana University.

Shannon Kiser, Coordinator, English — B.S., Morehead State University; M.A., University of Kentucky

Eleanor Marsh, Sociology/Anthropology — B.A., M.A., Washington State University

Edward Minor, Sociology - A.B., Youngstown State; M.A., Ph.D., Kent State University.

Kathleen Simon, Énglish — A.B., M.A., Eastern Kentucky University.

Thomas D. Stead, Art — B.F.A., M.F.A., Ohio University

Jerry Walke, Psychology — B.S. Capital University; M.A., Ohio University; Ph.D., Ohio State University

Betty Waller, Physical Education — B.S.Ed., Miami University; M.S. Marshall

Robert L. Wilson, English — B.S., Kent State University; M.Ed., Xavier University; Ph.D., Florida State University

## MATH/SCIENCE

Julia Basham, Biology — B.A., B.S.Ed., M.S. Ed., University of Cincinnati Trudy Bostick, Math — B.S., Ohio University, M.S., Wright State

R. Thomas Frazee, Chemistry — B.S., Marshall University; M.S., Iowa State Gary Gemmer, Physics — B.A., Morehead State University; M.A.T., Miami University

Sibylle Herrmann, Biological Science — B.S., Ohio University; M.S., University of Michigan

Phyllis Kegley, Mathematics — B.S., Ohio State University; M.A. Marshall University

Scott Oliver, Biological Science - B.A., Ohio University; D.D.S., Ohio State University

John Shupert, Mathematics B.S., Ohio University; M.A., Louisiana State University; M.A., University of Illinois

David Todt, Coordinator, Parks & Recreation/Biological Science — B.S., M.A., Miami University

## TECHNICAL FACULTY ALLIED HEALTH TECHNOLOGIES

**Associate Degree Nursing** 

Joanne Abel, Director — B.S. Nursing, Alderson-Broaddus College; M.A. Behavioral Disorders and Special Education, West Virginia College of **Graduate Studies** 

Mary Dillon, R.N. - BSN, Ohio University

Anna Gampp, R.N. — BSN, Ohio State University; M.Ed., Ohio University Gayle Massey, R.N. — BSN, Catherine Spalding College

Jane Mayo, R.N. — BSN, University of Kentucky Sharon Scott, R.N. — B.S., Bowling Green University; M.Ed., Ohio University Becky Thiel, R.N. — BSN, Ohio State University

**Dental Hygiene** James R. Kadel, Director — B.A., Ohio State University; M.Ed., Cleveland State University - Vocational Education; M.B.A., Ohio University; D.D.S., Ohio State University College of Dentistry

Sheryl Allison — Certificate of Graduate Dental Hygienist, B.S., A.O.P., Ohio State University; M.Ed., Ohio University

Elizabeth A. Gowdy — A.A.S. Dental Hygiene, Scioto Technical College; B.S. Community Health, Ohio University

Barbara S. Mullens — A.A.S. Dental Hygiene, Scioto Technical College; B.S. Community Health, Ohio University

Linda Riffe - A.A.S. Dental Hygiene, Scioto Technical College; B.S. Health Education, Ohio University, M.Ed. Higher Education, Ohio University

Emergency Medical Technician — Paramedic

Fran Griffith, Acting Director — A.A.S. Shawnee State Community College

Medical Laboratory Technology

Frederick W. Law, Director — B.S., MT(ASCP), CLS (NCA), University of Wisconsin-Madison; M.S, West Virginia University

Brenda F. Pinkerman — B.S., MT(ASCP), Marshall University; M.S. Marshall University

**Practical Nursing** 

Brenda Horr, R.N., Director — A.D.N., Ohio University-Portsmouth; BSN, Ohio University

Debbie Bihl, R.N., BSN — Ohio University

Mary Lynd, R.N. — B.S., Ohio University Linda Wooddell, R.N. — B.S. University of Alabama, School of Nursing; M.Ed., Ohio University

Radiologic Technology

William Sykes, Director — A.A.S., Central Ohio Technical College; B.S., Ohio State University;

Jack Thomas, Clinical Coordinator — B.S., Ohio State University

Respiratory Therapy

Robert W. Thomas, Director — A.D. Respiratory Therapy, Community College of Denver, B.S., Metropolitan State College

Mona Staten, RTT — B.A., Ottawa University - Kansas City

## **BUSINESS TECHNOLOGIES**

Accounting

Larry C. Essman, Chairperson — B.B.A., Ohio University; M.B.A., Ohio University; C.P.A.

Loretta Jenkins — A.A.S., Shawnee State Community College; B.B.A., Ohio University

**Business Management** 

Robbie Burke – B.A., West Virginia Wesleyan College; M.S., Marshall University

Larry Estepp — B.B.A., Ohio University; M.A., Marshall University

**Data Processing** 

Gerald Barry — B.A., Ohio University
Mike Gampp — M.B.E., Morehead State University

Anita Holt — B.S., Indiana University - Pennsylvania

Secretarial Technology

Catherine Chaffin — M.B.E., Morehead State University Joyce Kiser — B.A., M.B.E., Morehead State University

## **ENGINEERING AND INDUSTRIAL TECHNOLOGIES**

**Automotive Technology** 

Rankin E. Barnes — A.A.S., Shawnee State Community College Thomas K. Charles — B.S., M.A., Western Michigan University

**Civil Engineering** 

Richard Hevenor — B.S., University of Virginia

**Diesel Technology** 

**Electro-Mechanical Engineering** 

C. Ray Irwin, Chairperson — B.S.E.E., Ohio University Ken Warfield — A.A.S., Shawnee State Community College

Instrumentation Technology

Edmon Scott — B.S. Bowling Green University
William Penn — B.S. Mechanical Engineering Technology, Miami University

Plastics/Chemical Engineering

Lyle Smith — B.S., Ohio University

George Trampe — B.S., University of Illinois; Ph.D. Chemistry, Purdue University

Welding Technology

Robert Humble — Ohio University (N.G.) Emile L. Jividen — Marshall University (N.G.)

## PUBLIC SERVICE TECHNOLOGY

Social Services Technology

Paul Fowler — B.S.C. Business Administration, Ohio State University; LL.B., Ohio State University of Law, J.D., Ohio State University of Law Jack James — B.A., Houghton College; M.S., Alfred University; M.Div., Colgate Rochester Divinity School

# SHAWNEE STATE COMMUNITY COLLEGE

# **APPLICATION FOR ADMISSION**

Complete this application and return it with the non-refundable \$15 application fee to the Office of Admissions at Shawnee. Please have your high school transcript or general equivalence certificate (GED) also mailed to the same office. If you have attended another college or university, please have the registrar mail an official college transcript to the Admissions Office.

PERSONAL DATA:					
Mr. Mrs. NAME: Miss					
Last	The state of the s	First		Middle/Maiden/A	opended Title
PERMANENT OR					ipportace Title
PARENT'S ADDRESS:					
	Street	City	State	Zip Code	County
LOCAL ADDRESS:					
	Street	City	State	Zip Code	County
DATE OF BIRTH:	. HOME PHONE:	BUSIN	ESS PHONE_		
HIGH SCHOOL ATTENDED			RADUATION:		
GED TEST:	SOCIAI	SECURITY NI	IMPED:		
Date Received			JIVIDEN		
HIGH SCHOOL ADDRESS:					
	Street	City	State	Zip Code	County
SEX: Male (1) Female (2)	MARITAL STATUS: Married	d (1) Single _	(2) Divorced	(3) Widowe	ed (4)
Resident Status for Past 12 Months	Race/Ethnic:		Housing/Living Arrang	ements:	
0 - Resident of Scioto County     1 - Resident of Ohio, not Scioto County     1 - Resident of Another State     3 - Other National     4 - Foreign	— 1 - Black/Negro — 2 - American Ind — 3 - Asian or Pacii — 4 - Hispanic — 5 - Caucasian/Wl — 6 - Non-Resident	fic Islander	1 - Commuter (drivi	e from home)	
VETERANS/FINANCIAL AID					
Do You wish to apply for financial aid? Yes	No				
Will you be making application for veteran's b	enefits? Yes No				

(OVER)

## TRANSFER INFORMATION

vious College Attended:		
gree Earned:	Dates Attended:	
•		
you transferring college credit to this in	stitution? Yes NO	
you receive financial aid? Yes N	0	
and the conditions		
dent intent in enrolling:		
A. Work toward an associate deg	/00	
B. Gain qualifications and skills for		
C. Taking course for personal en	richment (non-degree)	
	o another institution (non-degree)	
How did you hear about Shav	nee State?	
Tion did you man an		
01 Accounting01 Business Business Management Banking and Finance Real Estate Retail Marketing Mgt03 Data Processing05 Secretarial06 Chemical/Plastics Engineering07 Civil Engineering	08 Electro-Mechanical Engineering     09 Instrumentation Technology     Robotics Technology     10 Automotive Technology     11 Diesel Technology     12 Welding Technology     16 Dental Hygiene     17 Associate Degree Nursing     18 Medical Laboratory     Occupational Therapy Assistant	<ul> <li>19 Radiology (X-ray) Technology</li> <li>20 Practical Nursing (one year)</li> <li>21 Respiratory Therapy (one year)</li> <li>22 Emergency Medical Technician Paramedic (one year)</li> <li>23 Teacher Education</li> <li>24 Humanities/Fine Arts</li> <li>25 Social Sciences</li> <li>26 Mathematics/Sciences</li> <li>27 Individualized Studies</li> </ul>
	enter: Fall Winter Spring Summer	
I certify that the statem	ents included in this application are accu	rate and rue to the best of my knowledge.
		Signature of Applicant
Please return the completed ap	olication and a non-refundable \$15 checl	k or money order made payable to Shawnee St
Community College to:	Admissions Office	
	Shawnee State Co	ommunity College
	940 Second Street	t

**Please Note:** All applicants to the following Allied Health Programs must submit the test results of the American College Test (ACT): Dental Hygiene, Medical Laboratory Technology, Associate Degree Nursing, Radiologic Technology and Respiratory Therapy. It is suggested that applicants have the ACT results submitted to the college before May 1.

Portsmouth, Ohio 45662

\*This institution does not discriminate with regard to race, sex, color, religion, or national origin; the information is for State and Federal reports on equal opportunity for education or employment

\*\*This institution, in compliance with Section 504 of the 1973 Rehabilitation Act does not discriminate against handicapped persons.

# **CALENDAR FOR 1984-85 ACADEMIC YEAR**

## **Summer Quarter 1984**

Winter	Quarter	1025
******	<b>Wualtel</b>	1303

**Spring Quarter 1985** 

		winter Quarter 19	985
June 15	Last day to pay fees (late fee of \$20 after this date)	December 31	Last day to pay fees (late fee of \$20 after this
June 18	Late registration for Summer Quarter (\$25 late fee if enrolled during Spring Quarter)	January 2	date)  Late registration for Winter Quarter (\$25 late fee if enrolled during Fall Quarter)
June 19	First day of evening classes only	January 3	First day of classes
	First day of classes	January 14	Martin Luthor King Dov. Online L.
June 22	Last day for full refund on first 5-week session course for withdrawal or change order	January 17	Martin Luther King Day — College closed Last day to add a class or apply for pass/fail
June 23-26	60% refund of instructional fees on first 5-week session upon withdrawal		Last day for full refund upon withdrawal or change order
June 26	Last day to add a 5-week session course or	January 18-23	50% refund of instructional fees upon withdrawal
July 2	apply for pass/fail Last day for full refund on full quarter courses	January 28-Feb. 15 February 18	Spring Quarter walk in registration
	upon withdrawal or change order		President's Day — College open
July 3	Last day to add a full quarter course or apply for pass/fail	February 21	Last day to apply for non-credit and drop a class
July 3-9		February 27	Registration for Spring Quarter
· ·	50% refund of instructional fees on full quarter course or upon withdrawal	March 14	Quarter ends
July 4	Independence Day Callage Of	March 15, 16,	
July 11	Independence Day — College Closed	18, 19	Finals for evening and Saturday classes
<b>,</b>	Last day to drop a 5-week session course or	March 15, 18	and datarday olasses
July 24	apply for non-credit	19, 20	Finals for day classes
00.y E1	Last day for 5 week session	March 22	Grades due to ADP by 12 noon
July 25	Final exams for 5 week session		200 to 1151 by 12 110011
July 26	First day of 2nd 5 week session		
•	Grades due to ADP for 5 week session		
July 28	Last day for full refund on 2nd 5 week session upon withdrawal or change order		
July 29-Aug 1	60% refund of instructional fees on 2nd 5 week session upon withdrawal		
July 30-Aug 13	Fall Quarter walk-in registration		
August 7	l ast day to drop a full guarder assure		
•	Last day to drop a full quarter course or apply for non-credit		
August 14-15	Registration for Fall Quarter		
Anguet 28	Full Overton and		

## Fall Quarter 1984

December 1, 3, 4, 5

December 7 December 25

January 1

Full Quarter ends Final exams for full quarter

Grades due to ADP by 12 noon

Finals for day and evening classes Grades due to ADP by 12 noon

Holiday — New Years Day observed

Christmas observed — Holiday

August 28

August 29

April 30-July 13 July 30-August 13	Fall Quarter walk in registration Fall Quarter walk in registation reopens	March 29	Last day to pay fees (late fee of \$20 after this date)
August 14-15 August 31	Registration Fall Quarter  Last day to pay fees (late fee of \$20 due after this date)	April 1	Late registration for Spring Quarter (\$25 late fee if enrolled during Winter Quarter)
September 3	Labor Day — College Closed	April 2	First day of evening classes only
September 4, 5	Late registration (\$25 late fee required if enrolled during Summer Quarter)	April 15	First day of classes Last day to add a class or apply for pass/fail
September 6, 7	Faculty in-service days		Lst day for full refund upon withdrawal or change order
September 10	First day of classes	April 16-21	50% refund of instructional fees upon
September 21	Last day to add a class or apply for pass/fail	, <u>-</u> .	withdrawal
September 24-28	Last day for full refund upon withdrawal or change order 50% refund of instructional fees upon	April 29-May 10 May 20 May 22	Summer Quarter and Fall walk in registration Last day to drop a class or apply for noncredit Summer registration
Ootobou 0	withdrawal	May 30	Memorial Day — College closed
October 8 October 8-26	Columbus Day — College Open	June 5	Quarter ends
October 29	Winter Quarter walk in registration	June 6, 7, 8, 10, 11	Final for evening and Saturday classes
November 7	Last day to drop a class or apply for non-credit Winter Quarter registration	June 6, 7, 10, 11	Finals for day classes
November 12	Veterans Day — College closed	June 12	Grades due to ADP by 12 noon
November 22, 23	Thanksgiving Holiday — College closed (Columbus Day sub.)	June 13 June 16	Graduation practice Graduation
November 28	Quarter ends		
November 29, 30			

Shawnee State Community College reserves the right to make any calendar adjustment that may become necessary.

# **CALENDAR FOR 1985-86 ACADEMIC YEAR**

## ----- Ouarter 1985

## Winter Quarter 1986

Summer Quarter 1985		Winter Quarter 1986		
		December 31	Last day to pay fees (late fee of \$20 after this	
June 14	Last day to pay fees (late fee of \$20 after this	<b>3000</b> 20. 0.	date)	
June 17	date) Late registration for Summer Quarter (\$25 late fee if enrolled during Spring Quarter)	January 2	Late registration for Winter Quarter (\$25 late fee if enrolled during Fall Quarter) First day of evening classes only	
	First day of evening classes only	January 3	First day of classes	
June 18	First day of classes	January 13	Martin Luther King Day — College closed	
June 21	Last day for full refund on first 5 week session course for withdrawal or change order	January 17	Last day to add a class or apply for pass/fail Last day for full refund upon withdrawal or	
June 22-25	60% refund of instructional fees on first 5-week session course upon withdrawal	January 18-23	change order 50% refund of instructional fees upon	
June 25	Last day to add a 5-week course or apply pass/fail		withdrawal Walk in registration for Spring Quarter	
July 1	Last day for full refund on full quarter courses	January 27-Feb 14 February 17 February 20	President's Day — College open Last day to apply for non-credit	
July 2	Last day to add a full quarter course or apply for pass/fail	February 26 March 12	Registration for Spring Quarter (early)  Ouarter ends	
July 2-8	50% refund of instructional fees on full quarter course or upon withdrawal	March 13, 14, 15 March 17, 18, 19	Finals for evening and Saturday classes Finals for day classes	
July 4	Independence Day — College closed	March 21	Grades due to ADP by 12 noon	
July 10	Last day to drop a 5-week session course or apply for non-credit	War on E		
July 23	Last day of 5-week session			
July 24	Final exams for 5-week session			
July 25	First day of 2nd 5-week session			
July 29	Last day for full refund on 2nd 5-week session for withdrawal or change order			
April 29-July 12	Walk in registation for Fall Quarter			
July 28-31	60% refund of instructional fees on 2nd 5-week session upon withdrawal			
August 6	Last day to drop a full quarter course or apply for non-credit			
August 13, 14	Registration for Fall Quarter			
August 29	Full Quarter ends			
•	Final exams for full quarter			
August 30	Grades due to ADP by 12 noon			
		Spring Quarter 1	1986	

January 1

sub.)

Holiday — New Year's Day observed

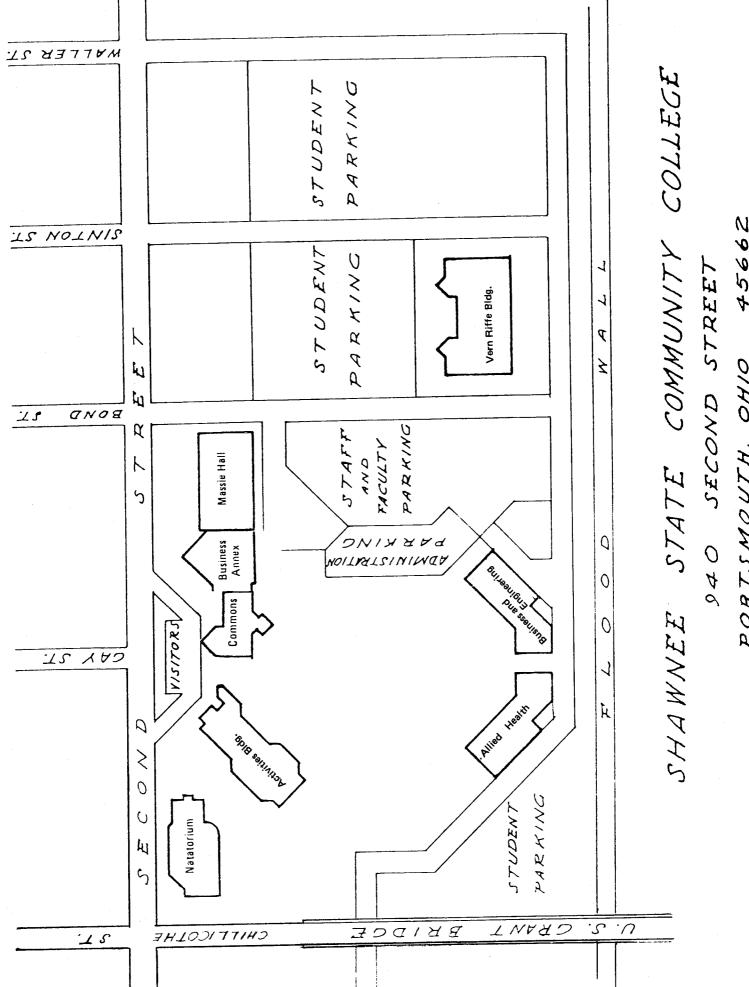
		Spring Quarter 1986	
Fall Quarter 1985		Spring Quarter 1900	
July 29-August 12	Fall Quarter advising	March 28	Last day to pay fees (late fee of \$20 after this date
August 13, 14 August 30	Registration for Fall Quarter  Last day to pay fees (late fee of \$20 after this date)	March 31	Later registration for Spring Quarter (\$25 late fee if enrolled Winter Quarter) First day of evening classes only
September 2 September 4	Labor Day — College closed  Late registration (\$25 late fee required if enrolled during Summer Quarter)	April 1 April 14	First day of classes Last day to add a class or apply for pass/fail Last day for full refund upon withdrawal or
September 5, 6	Faculty in-service days		change order
September 9 September 20	First day of classes Last day to add a class or apply for pass/fail	April 15-21	50% refund of instructional fees upon withdrawal
September 22	Last day for full refund upon withdrawal or change order	April 28-May 9	Walk in registration for Spring Quarter Walk in registration for Fall Quarter
September 23-28	50% refund of instructional fees upon withdrawal	April 28-July 11 May 19	Last day to drop a class or apply for non-credit Summer Quarter registration (early)
October 14	Columbus Day — College open Winter Quarter walk in registration	May 21 May 30	Memorial Day — College closed
October 7-25 October 28	Last day to drop a class or apply for non-credit	June 4 June 5, 6, 7, 9, 10	Quarter ends Finals
November 6	Early registration for Winter Quarter Veterans Day — College closed	June 11 June 12	Grades due to ADP by 12 noon Graduation Practice
November 11 November 28-29	Thanksgiving Holiday — College closed (Columbus Day sub.)	June 15	Graduation
November 30	Quarter ends		
December 2, 3, 4, 5, 6, 7	Finals		
December 9	Grades due to ADP by 12 noon Holidays — Christmas observed (Pres. Day		
December 25, 26	sub.)		

Shawnee State Community College reserves the right to make any calendar adjustments that may become necessary.

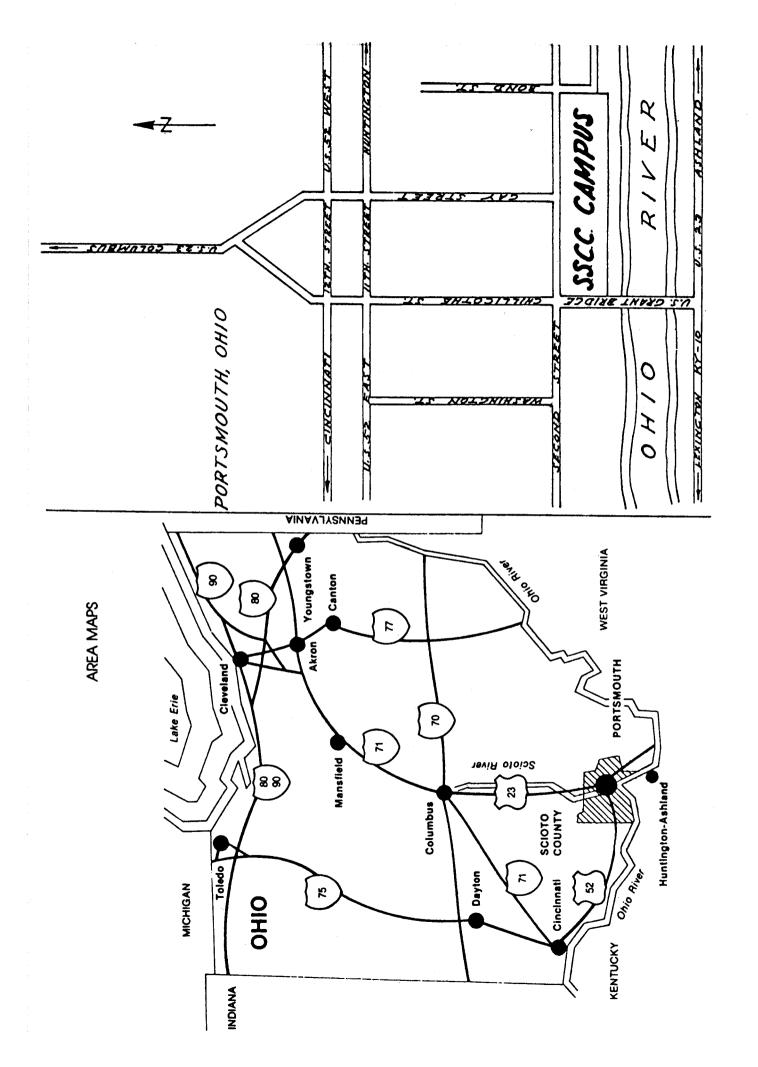
# NOTES

# **NOTES**

## **NOTES**



PORTSMOUTH, OHIO



# SHAWNEE STATE COMMUNITY COLLEGE

940 Second Street Portsmouth, Ohio 45662 Special Fourth Class Book Rate