

1992-93
**CATALOG
SUPPLEMENT**



MIDDLESEX COUNTY COLLEGE



1992 - 1993 CALENDAR

Fall 1992

September of	1	Faculty Orientation and Meetings — First Day
		Faculty Obligation
	2 & 3	Change of Program; New Student Orientation and Advisement by Faculty
	7	Labor Day — Holiday Observed
	8	Classes Begin — Fall Semester
	21	Last Day to Change Status of Course to Audit
October	12	Columbus Day — Holiday Observed
	27	Mid-Semester
November	10	Last Day to Withdraw Without an Evaluation
	11	Veterans Day — Holiday Observed
	26 & 27	Thanksgiving Day — Holidays Observed
December	9	Last Day to Withdraw From Classes
	18	Last Day of Classes — Fall Semester
	19, 21 & 22	Specially Scheduled Final Exams
	24	Winter Recess Begins
	29	Wintersession 1993 Begins

Spring 1993

January of	18	Martin Luther King Day — Holiday
	20	Faculty Orientation and Meetings — First Day
		Faculty Obligation, Spring Semester
	21 & 22	Change of Program; New Student Orientation Advisement by and Faculty Observed
	25	Classes Begin — Spring Semester
February	6	Last Day to Change Status of Course to Audit
	15	Presidents' Day — Holiday Observed
March	15	Mid-Semester
	29	Last Day to Withdraw Without an Evaluation
April	2	Spring Recess Begins
	12	Classes Resume
	30	Last Day to Withdraw From Classes
May	11	Last Day of Classes — Spring Semester
	12	Reading Day
	13, 14 & 15	Specially Scheduled Final Exams
	20	Student Academic Status Review
	26	Graduation



INTRODUCTION

Because the 1991-93 catalog is a two-year catalog, this supplement is being issued. The supplement should be used in conjunction with the Catalog. It contains updated information on the academic programs, calendar, tuition and fees, policies and other information. Additional information may be obtained from the appropriate office or the Registrar.

Notice

The information contained herein is for the 1991-93 academic years. However, program requirements, courses, policies, tuition, fees and procedures are subject to change as circumstances require.

Accreditation

Middlesex County College is accredited by the Middle States Association of Colleges and Secondary Schools.

The Dental Hygiene program is accredited by the Commission on Dental Accreditation of the American Dental Association.

The Medical Laboratory Technician program is accredited by the American Medical Association Committee on Allied Health Education and Accreditation and the National Association for Accreditation of Clinical Laboratory Sciences.

The Radiography Education program is accredited by the New Jersey Department of Environmental Protection and the American Medical Association Committee on Allied Health Education and Accreditation.

The associate degree programs in Civil/Construction Engineering Technology, Electrical Engineering Technology and Mechanical Engineering Technology are accredited by the Technology Accreditation Commission of (ABET), the Accreditation Board for Engineering and Technology.

The Dietetic Technology Program is approved by the American Dietetic Association and the Dietary Managers Association.



PROGRAM OFFERINGS

Division of Business Technologies

DEGREE PROGRAMS:

Accounting

Business Administration Transfer

Dietetic Technology

Fashion Merchandising and Retail Management

Hotel, Restaurant and Institution Management

Options in:

Hotel/Motel Management

Restaurant/Food Service Management

Legal Assistant

Management

Options in:

Credit and Financial Management**

Management**

Marketing

Options in:

Marketing

Materials Management

Transportation and Distribution

Marketing Art and Design

Options in:

Advertising Graphics Design

Professional Commercial Photography

Office Systems Technology

Option in:

Word Processing

CERTIFICATE PROGRAMS:

Food Preparation

International Business

Legal Assistant+

Management Support Services

Materials Management

Office Systems Technology

Transportation and Distribution

Division of Engineering Technologies and Science

DEGREE PROGRAMS:

Automotive Technology*

Biological Laboratory Technology

Chemical Technology

Civil/Construction Engineering

Technology

Option in:

Surveying Technology

Computer Integrated Manufacturing Technology

Computer Science (Information Systems)

Electrical Engineering Technology

Option in:

Computer Electronics

Environmental Technology**

Fire Science Technology**

Heating, Ventilating and Air Conditioning Design Technology (An Energy Technology Program)

Industrial Technology

Mechanical Engineering Technology (Design)

Engineering Science

Science Transfer

Options in:

Biology

Chemistry

Computer Science

Mathematics

Physics

CERTIFICATE PROGRAMS:

Basic Fire Science+

Civil/Construction Engineering Technology

Chemical Technology+

Computer Programming+

Electrical Engineering Technology+

Heating, Ventilating and Air Conditioning Design Technology

Industrial Technology

Mechanical Engineering Technology

Mechanical Computer Aided Drafting

Surveying Technology

Division of Health Technologies

DEGREE PROGRAMS:

Dental Hygiene*

Medical Laboratory Technology*

Nursing—Joint Program with UMDNJ

Psycho-Social Rehabilitation & Treatment—Joint Program with UMDNJ

Radiography Education*

Division of Social Sciences and Humanities

DEGREE PROGRAMS:

Liberal Arts

Options in:

Business

English

History

Honors

Journalism

Liberal Arts—General

Liberal Arts—Business

Modern Languages

Music

Physical Education, Health and Recreation

Political Science

Psychology

Social and Rehabilitation Services

Social Sciences

Sociology

Theater

Visual Arts

Education Technology

Options in:

Assistant in Early Childhood Education

Assistant in Special Education

Teacher Assistant

Criminal Justice

Options in:

Correction Administration**

Police Science

CERTIFICATE PROGRAMS:

Correction Administration**

Teacher Aide

Programs are generally offered during the day or in the evening; exceptions are noted as follows:

*Certain major courses offered only in the day.

**Certain major courses offered only in the evening.

+Certificate Programs offered only in the evening.

GENERAL INFORMATION

Application Procedures for Full- or Part-time Study

All applicants for full- or part-time study must return the following items:

1. A check or money order for \$25 payable to Middlesex County College. This is a **non-refundable** fee.
2. A completed Application for Admission Form.

Applicants who are declaring a major for a degree or certificate program must also submit the following documents:

3. High school transcripts. Applicants must request their high school guidance office to forward an **official** copy of their transcript to the Office of Admissions and Recruitment.
4. GED scores (where applicable). Applicants who hold a high school equivalency diploma must present scores from the GED test.



5. College transcripts (where applicable). Applicants must have each previous postsecondary school and/or college send an **official** transcript directly to the Office of Admissions and Recruitment.

Special Notice: Applicants for Dental Hygiene, Medical Laboratory Technology, Joint Nursing Program with UMDNJ and Radiography Education for Fall 1993 must submit an application by December 31, 1992. For more information, call the Office of Admissions and Recruitment at (908) 906-2510.

Expenses

Tuition and Fees (Subject to Change)

Tuition

Tuition is charged by the credit

Middlesex County Residents	\$52.25	per credit or credit equivalent
Out-of-County Residents	\$104.50	per credit or credit equivalent
Out-of-State Residents	\$104.50	per credit or credit equivalent

Maximum Annual Tuition*

Middlesex County Residents	\$1,254
Out-of-County Residents	\$2,508
Out-of-State Residents	\$2,508

(Includes non-immigrant alien students.)

Maximum Semester Tuition*

Middlesex County Residents	\$ 836
Out-of-County Residents	\$1,672
Out-of-State Residents	\$1,672

(Includes non-immigrant alien students.)

NOTE: Enrollment for fewer than 16 credits will result in correspondingly lower charges.

*Students who receive permission to register for more than 20 credits will be charged per credit tuition beyond this maximum.

Fees

General Service	\$5.25	per credit or credit equivalent
(Non-refundable)		
Student Service	\$2.50	per credit or credit equivalent

General Expenses

Parking Decal

Full-time Students (12 or more credits or credit equivalents)
Full academic year \$30
Spring semester only \$15

Part-time Students (11 or fewer credits or credit equivalents)
Full academic year \$15

Spring and Summer or
Summer only \$ 6

Additional decals \$ 2
per decal

Motorcycle One half the rates
quoted above

Parking Decal fees are refundable only upon return of the decal.

Insurance

Accident/Health and
Sickness \$55
per year
..... \$47
for half a year
(Required of full-time students)

Malpractice Insurance* \$17
**Mandatory for students enrolled in Dental Hygiene, Nursing, Medical Laboratory Technology or Radiography Education courses with clinic requirements.*

Miscellaneous Fees

Application Fee \$25
Curriculum Change Fee \$10
Graduation Application Fee* \$40

**Students pay this fee only once for each degree or certificate awarded.*

These miscellaneous fees listed above are non-refundable.

Late Registration

Period I \$ 15
per semester

Begins 40 days after the last scheduled day of returning student registration.

Period II \$ 25
per semester

Begins one week immediately prior to the first day of classes and continues through the registration period.

Special Fees

International Credential Evaluation

All College programs except Medical Laboratory Technology \$130

Dental Hygiene Senior Students

Licensing Examination Fees
National Board Examination \$ 75
North East Regional Board \$350

Advanced Placement-Nursing

Phase I \$ 65
Phases II and II \$135
Dishonored Check Fee \$ 20
per dishonored check

Books and Supplies

These charges are approximate or estimates and are subject to change.

Automotive Technology

Tools \$1,600

Dental Hygiene

Instrument Kit
Freshmen 720
Seniors 300
Uniform 300

Engineering Program

Drawing Kits 50

Hotel, Restaurant, and Institution Management

Knives 20
approximately
Uniform 70

Marketing Art and Design

A camera with adjustable shutter speed and aperture settings and a non-automatic metering system is required. A second-hand camera in good working condition meeting these specifications may be used.

Art and photographic equipment and supplies 125

Medical Laboratory Technology

Uniform 45

Joint Nursing Program with UMDNJ

Uniform 100

ACADEMIC STANDARDS AND REGULATIONS

Placement

New Jersey College Basic Skills Placement Test (NJCBSPT)

The New Jersey Board of Higher Education requires all public colleges within the state to test incoming students in reading, writing and mathematics skills. The purpose of the test is to help place students in the courses appropriate to their background and needs.

Elementary Algebra Policy

Students who matriculated in a degree or certificate program as of Fall 1992 and who need remediation in elementary



algebra must successfully complete MAT 013 (Algebra I) with a grade of C or better.

Academic Integrity Policy

Academic integrity is essential to all educational endeavors and demands that each individual adheres to its basic ethical principles. All academic work must be wholly the product of the individual or individuals who submit it except as properly noted; joint efforts are legitimate only when assigned or approved by the instructor.

Examples of academic dishonesty include, but are not limited to:

- Plagiarism - presenting someone else's words, ideas or findings, in whole or in part, as one's own without properly acknowledging the source.
- Consulting or possession of unapproved materials during a test.
- Submitting for a grade work copied in any medium from another student.
- Using a stand-in to take an exam or acting as a stand-in to take an exam for another.
- Falsification of a lab report.
- Unapproved possession of test material.
- Unapproved collaboration.
- Sabotaging another's work.
- Altering a graded assignment to obtain a better grade without instructor permission.
- Forgery, alteration or misuse of any College document.
- Deliberately aiding another in committing an act of academic dishonesty.

Any violation of the principles of academic integrity is a serious offense. Penalties imposed by the instructor can range from an alternate assignment to failure in the course. In addition, the instructor can file code of student conduct charges which can result in suspension from the College.

Special Programs and Services

Reserve Officers Training Corps (ROTC)
Students cross-enrolling at Rutgers for courses in military science are charged per credit hour. The Air Force Reserve Officers Training Corps (AFROTC) requires a \$100 deposit for uniforms and books.

For further information, contact the Middlesex County College Registrar's Office or call (908) 932-7706/7430 (Air Force ROTC) or (908) 932-7311/7313 (Army ROTC) at Rutgers University.

Division of Business Technologies

All students matriculated in AS or AAS degree programs in the Division of Business Technologies must demonstrate proficiency in keyboarding/typewriting, by either completing OST 010 Keyboarding for Computers, an appropriate typewriting course or by appropriate waiver from the Office Systems Technology Chairperson.

Food Preparation Certificate Program

REQUIRED COURSES		
Course Code		Credits
HRI 103	Principles of Food Selection & Preparation	3
HRI 107	Baking Fundamentals	3
HRI 108	Quantity Food Production	3
HRI 111	Professional Food Preparation Practicum I	3
HRI 114	Garde Manger	3
HRI 115	Foodservice Operations	3
HRI 203	Volume Food Management & Production	4
HRI 205	Food & Beverage Cost Controls & Purchasing	3
HRI 208	Environmental Sanitation	3
ENG 121	English Composition I	3
	General Education Elective	3
		TOTAL CREDITS 34

Legal Assistant Associate in Applied Science Degree

SEMESTER I		
Course Code		Credits
BUS 107	Introduction to Business Data Processing*	3
ENG 121	English Composition I	3
LET 100	Introduction to Legal Assisting	2
LET 101	Introduction to Legal Research & Writing	3
	Mathematics Elective**	3 or 4
	Social Science Elective	3
		Subtotal 17 or 18

SEMESTER II		
Course Code		Credits
ECO 201	Principles of Economics I	3
ENG 122	English Composition II	3
LET 104	Property Transactions	3
LET 110	Litigation Procedure	4
LET 111	Contracts & the Uniform Commercial Code	3
PED	Physical Education	
	or	
HED	Health Education	1 or 3
		Subtotal 17 or 19

SEMESTER III		
Course Code		Credits
ACC 101	Financial Accounting	4
LET 108	Torts	3
LET 112	Business Organizations & Govt Regulation	3
LET	Legal Assistant Elective***	3
	Humanities Elective	3
		Subtotal 16

SEMESTER IV		
Course Code		Credits
ACC 102	Managerial Accounting	4
LET 280	Senior Seminar for Legal Assistants	3
LET	Legal Assistant Elective***	3
	Humanities Elective	
	or	
	Social Science Elective	3
	Science Elective****	3 or 4
		Subtotal 16-17
		TOTAL CREDITS 66-70

*Students are required to attain a passing grade in OST 010, or must obtain an approved waiver demonstrating proficiency in keyboarding prior to enrolling.

**BUS 115 is recommended. Students with the appropriate academic prerequisites, in consultation with their Academic Advisor, should enroll in an appropriate mathematics course.

***Students may chose from: LET 105, 106, 107, 109, and 208.

****Students may elect courses offered by the Biology, Chemistry, or Physics Department for which they have an appropriate academic background.

Legal Assistant Certificate Program

Required Courses		
Course Code		Credits
ENG 121	English Composition I	3
ENG 122	English Composition II	3
LET 111	Contracts & the Uniform	3
LET 112	Business Organizations & Govt. Regulations	3
LET 100	Introduction to Legal Assisting	2
LET 101	Legal Research & Writing	3
LET 104	Property Transactions	3
LET 108	Torts	3
LET 110	Litigation Procedure	4
LET 280	Senior Seminar for Legal Assistants	3

Electives (6 credits)		
Course Code		Credits
LET 105	Family Law	
LET 106	Estate and Tax Law	
LET 109	Criminal Law and Procedure	
LET 208	Legal Assistant Field Experience	
		TOTAL CREDITS 36

Division of Engineering Technologies and Science

Automotive Technology

Student Service Educational Program (ASSET) Associate in Applied Science Degree

Sample 2 1/3 Year Plan of Study

SEMESTER I		
Course Code		Credits
AUT 111	Minor Automotive Services	3
AUT 115	Automotive Brake Systems	2
AUT 117	Automotive Electrical Systems	3
ENG 121	English Composition I	3
MAT 107	Mathematics I	3
	Physical/Health Education	1-3
		Subtotal 15-17

SEMESTER II		
Course Code		Credits
AUT 108	Automotive Technology Work Experience I (15 weeks co-op)	3



SEMESTER III

Course Code	Credits
AUT 122 Analysis and Tune Up	3
AUT 124 Automotive HVAC Systems	3
AUT 126 Alignment, Suspension & Steering Systems	2
CSC 117 Introduction to Technical Programming	2
ENG 122 English Composition II	3
MAT 108 Mathematics II	3
Subtotal	16

SEMESTER IV

Course Code	Credits
AUT 208 Automotive Technology Work Experience II (15 weeks co-op)	3

SEMESTER V

Course Code	Credits
AUT 211 Standard Transmission & Drive Train	3
AUT 213 Automatic Transmission I	3
AUT 216 Fuel and Emission Systems	3
AUT 217 Engine Diagnostics & Repair I Humanities Elective	3
Subtotal	15

SEMESTER VI

Course Code	Credits
AUT 218 Automotive Technology Work Experience III (15 weeks co-op)	3

SEMESTER VII

Course Code	Credits
AUT 226 Automatic Transmission II	2
AUT 228 Engine Diagnostics & Repair II	3
AUT 229 Automotive Electricity & Electronics	3
PHY 101 Principles of Physics I Social Science Elective	4
Subtotal	15
TOTAL CREDITS	70-72

Electrical Engineering Technology Associate in Applied Science Degree

Sample Two-Year Plan of Study

SEMESTER I

Course Code	Credits
CSC 117 Introduction to Technical Programming	2
ELT 101 Circuits I	4
ELT 111 Digital Electronics	3
ENG 121 English Composition I	3
MAT 109 College Algebra & Trigonometry I	3
MEC 117 Electrical Drawing	1
Subtotal	16

SEMESTER II

Course Code	Credits
ELT 102 Circuits II	4
ELT 103 Electronics I	4
ENG 122 English Composition II	3
MAT 110 College Algebra & Trigonometry II	2
ELT 223 Electronic Design & Manufacturing	2
ELT 226 Microcomputers	2
Subtotal	17

SEMESTER III

Course Code	Credits
ELT Technical Elective I	3
ELT 203 Electronics II	4
Humanities Elective+	3
PHY 115 College Physics I	4
MAT 112 Unified Calculus I	3
Subtotal	17

SEMESTER IV

Course Code	Credits
PHY 116 College Physics II	4
ELT 224 Communication Electronics	3
ELT 205 Electromagnetic Devices	3
ELT Technical Elective II	3
Social Science Elective+	3
Physical/Health Education	1-3
Subtotal	17-19
TOTAL CREDITS	67-69

Technical Elective Courses for Electrical Engineering Technology Curriculum:

Course Code	Credits
ELT 208 Electrical Engineering Tech Work Experience	3
ELT 233 Control of Industrial Motors*	3
ELT 234 Audio Technology	3
ELT 235 Robotics Technology	3
ELT 236 Automatic Controls	3
ELT 237 Digital Communications*	3
ELT 238 Advanced Digital Electronics	3

*Course to be taken as technical electives in fourth semester only.

Students are eligible for a Certificate in Electrical Engineering Technology after successful completion of the first two semesters.

Division of Health Technologies

Joint Nursing Program, UMDNJ/MCC Associate in Science Degree

Sample Two-Year Plan of Study

SEMESTER I

Course Code	Credits
NRS 101 Basic Principles of Nursing	4
NRS 102 Principles of Mental Health Nursing	4
BIO 111 Anatomy and Physiology I	4
PSY 123 Introductory Psychology	3
ENG 121 English I	3
Subtotal	18

Wintersession

Course Code	Credits
NRS 103 Medication Administration	1

SEMESTER II

Course Code	Credits
NRS 104 Nursing and the Childbearing Family I	4
NRS 105 Nursing and the Childbearing Family II	4
BIO 112 Anatomy and Physiology II	4
ENG 122 English II	3
CSC 107 Computer Applications in Health Care	1
Subtotal	16

Summer Session (Optional)

Course Code	Credits
NRS 211 Clinical Enrichment Program	3

SEMESTER III

Course Code	Credits
NRS 206 Principles of Adult Nursing I	4
NRS 207 Principles of Adult Nursing II	4
BIO 211 Principles of Microbiology Humanities Elective	4
Sociology Elective	3
Subtotal	18

SEMESTER IV

Course Code	Credits
NRS 208 Changes & Alterations in Life-Long Health	4
NRS 209 Nursing Preceptorship	4
SCI 121 Physical Science Humanities Elective	4
Physical Education Elective	3
Subtotal	16
TOTAL CREDITS	72

Radiography Education

Associate in Applied Science Degree

Sample Two-Year Plan of Study

SEMESTER I

Course Code	Credits
BIO 111 Human Anatomy and Physiology I	4
ENG 121 English Composition I	3
RAD 201 Introduction to Radiographic Physics	4
RAD 203 Radiographic Positioning/Anatomy I	4
RAD 207 Exposure I/Radiation Protection	3
Subtotal	18

SEMESTER II

Course Code	Credits
BIO 112 Human Anatomy and Physiology II	4
ENG 122 English Composition II	3
CSC 107 Computer Applications for Health Care Personnel	1
PHY 108 Radiographic Physics I	3
RAD 204 Radiographic Positioning & Anatomy II	3
RAD 208 Exposure II	2
RAD 210 Clinical Practicum I	2
Subtotal	18

Summer Session

Course Code	Credits
RAD 220 Clinical Practicum II	2
RAD 205 Radiographic Positioning/Anatomy III	4
Subtotal	6

SEMESTER III

Course Code	Credits
RAD 127 Radiation Biology	1
RAD 206 Radiographic Positioning & Anatomy III	3
RAD 215 Advanced Radiography	2
RAD 230 Clinical Practicum III	2
PHY 109 Radiologic Physics	4
Subtotal	12

SEMESTER IV

Course Code	Credits
PSY 123 Introductory Psychology	3
RAD 219 Introduction to Pathology	2
RAD 250 Clinical Practicum IV	3
RAD 256 Radiographic Seminar I Humanities Elective	2
Physical/Health Education	3
Subtotal	14-16

Summer Session

Course Code	Credits
RAD 257 Radiographic Seminar II	2
RAD 260 Clinical Practicum V	3
Subtotal	5
TOTAL CREDITS	73-75



Division of Social Sciences and Humanities

Criminal Justice
Associate in Science Degree

Correction Administration Option

Sample Two-Year Plan of Study

SEMESTER I

<i>Course Code</i>		<i>Credits</i>
ENG 121	English Composition I	3
CJU 123	Criminal Justice I*	3
POS 201	U.S. State and Local Government*	3
SOC 121	Introduction to Sociology I	3
	Social Science Elective+++	3
	<i>Subtotal</i>	<i>15</i>

SEMESTER II

<i>Course Code</i>		<i>Credits</i>
ENG 122	English Composition II	3
CJU 124	Criminal Justice II*	3
SOC 140	Introduction to Criminology	3
POS 220	U.S. National Government	3
PSY 123	Introductory Psychology	3
CSC 105	Computer Applications & Systems	3
	<i>Subtotal</i>	<i>18</i>

SEMESTER III

<i>Course Code</i>		<i>Credits</i>
COR 207	Correctional Institutions*	3
PSY 222	Social Psychology	3
	Mathematics/Science++	3-4
	Humanities Elective+	3
	Social Science Elective+++	3
	Physical/Health Education	1-3
	<i>Subtotal</i>	<i>16-19</i>

SEMESTER IV

<i>Course Code</i>		<i>Credits</i>
COR 201	Intro to Corrections Administration*	3
POS 231	Constitutional Law	
	or	
SOC 225	Juvenile Delinquency	3
COR 280	Corrections Externship	
	or	
POL 204	Law Enforcement & the Community	3
	Mathematics/Science++	3-4
	Humanities Elective+	3
	<i>Subtotal</i>	<i>15-16</i>
	TOTAL CREDITS	64-68

*Major Course

+For course selection, see Liberal Arts Humanities Requirements.

++For course selection and sequence, see Liberal Arts Mathematics/Science Requirements. A sequence requirement in either mathematics or science must be met.

+++For course selection, see Liberal Arts Social Sciences requirements.

COURSE DESCRIPTIONS

Accounting

ACC 101
Financial Accounting
4 credits (4-0)

The accounting cycle from the recording and analyzing procedures through the summarizing procedures and preparation of general purpose financial statements; the introduction of accounting for partnerships and corporations with emphasis on the capital structure of the corporation; the statement of cash flows.

ACC 102
Managerial Accounting
4 credits (4-0)

Prerequisite: ACC 101
Covers the nature of Managerial Accounting, job order cost systems, process cost systems, cost allocation and activity-based costing; analyses for managerial decision making; budgeting, standard cost systems, accounting for decentralized operations; transfer pricing and financial statement analysis.

Art

ART 110
Figure Drawing
3 credits (3-0)

Practice combining nature and the imagination is directed toward exploring the human form and developing the basic techniques of figure drawing. *Field trips.*

GE HUM

Biology

BIO 111
Human Anatomy and Physiology I
4 credits (3-3)

Prerequisite: High school Biology and Chemistry with labs or BIO 010 or CHM 010
A study of human cells and tissues as they relate to organs and systems. Structural and functional features of the skeletal, muscular and nervous systems are examined. *Recommended for students in the health sciences.*

GE SCI

Business

BUS 107
Introduction to Business
Data Processing
3 credits (3-0)

Prerequisite OST 010 or waiver approved by the Chairperson of the Office of Systems Technology Department and the Dean of the Division of Business Technologies
Covers a full range of data processing methods and devices. Emphasizes use of microcomputers. Hands on instruction includes the use of electronic spreadsheets, database management software, word processing, disk operating systems and graphics, as well as BASIC programming.

Computer Integrated Manufacturing Technology

CIM 206
Computer Integrated Manufacturing Project
2 credits (1-4)

Prerequisites: CIM 203, CSC 117, ELT 111, MAT 110, MEC 112 and 124
Students complete a comprehensive project in an area of computer integrated manufacturing, including a working model, completed part, or investigation into a CIM area. Students use equipment in the developmental laboratories or one of the specialty laboratories: Robotics, F.M.S. cell, CNC, CAD/CAM. A professionally prepared report and an oral presentation are required. Offered at N.J.I.T. under the supervision of N.J.I.T. faculty. The project must be approved by an MCC faculty member.

Computer Science
CSC 107

Computers in Health Technologies
1 credit (2-0)

A survey of computer applications and their use in the health technology fields. Discussion of the major components of a computer, an introduction to software application packages including word processing and database, and an exposure to a personal computer operating system. Hands-on experience will be emphasized utilizing WordPerfect, dBase, and DOS.

Dance

DAN 131
Elements of Dance
3 credits (3-0)

Provides fundamental movement skills, and body awareness in Modern Dance, basic training at the elementary level of Ballet technique, introduction to a cross section of Jazz technique, movement styles and rhythms, theory and practical application in the principles of dance forms.

Emphasizes placement, strength, flexibility, coordination, musicality within the different dance idioms: the exploration of space, time and energy as the raw materials in dance; the specific vocabulary relating to the different dance techniques and the creative experiences of short movement patterns.

GE HUM

DAN 132
Dance Appreciation
3 credits (3-0)

Prerequisite: Departmental permission required
Students about dance as a performing art, through the critical evaluations of the various dance styles. Discusses the role and collaboration of performers/dancers, choreographers, artistic advisors, composers, technicians and the audience. Include lectures, lecture-demos, discussion, selected readings, films, video tapes, slides, live performances and experimental dance/movement sessions.

Attendance recommended. Dance performances are required. Written reports are required.

GE HUM



DAN 201 **GE HUM**
Methods and Modern Technique
in Dance

Prerequisite: Departmental Permission Required
 Provides development in Modern Dance through theory and practical application. Emphasizes the practice of composition skills, clarity of movement, initiation, body articulation, and dynamics of performance. Focuses on the development of small group work and solos, including form and structure. Attendance is required at two professional dance productions. Written reports must be submitted.

DAN 202 **GE HUM**
Improvisation and Composition
3 credits (3-0)

Departmental permission required
 A comprehensive introduction to the creative and theoretical aspects of contemporary dance, with focus on improvisation toward composition. Dance studies will be designed through problem-solving experiences, exploration of resources, use of ideas, knowledge of forms, development of craft. Emphasizes the excitement of making choices and taking chances. Studies will be performed as works in progress at the end of semester (informal showing: individuals or group). Class sessions will include lectures, films, discussion, selected readings on theory, philosophy, current trends of dance and experimental dance/movements.

Electrical Engineering
Technology and
Computer Electronics
ELC 211

Computer Peripherals
3 credit (2-3)

Prerequisites: ELC 214
 A study of various computer peripheral devices, to include: their architecture, operation, interfacing, installation, maintenance and repair. Peripheral devices studied include: fixed and removable disk drives, magnetic tape drives, video and hard-copy terminals as well as line printers. Laboratory experiments allow students to gain experience with peripheral equipment.

ELC 212
Data Communications and Interfacing
3 credits (2-3)

Prerequisites: ELC 214
 A study of various types of data communication systems. System components network structures and interface techniques are examined. Transmission codes and multiplexing methods are emphasized. Extensive laboratory work included.

ELT 106
Technical Electricity
4 credits (3-3)

Corequisite: MAT 110
 A study of the theory and practical applications of electricity. Topics include fundamental principles of electricity. AC and DC circuits, electrical instruments, electro-magnetic devices (transformers and rotating machinery) and electronic circuits and devices. Laboratory provides hands-on experience.

ELT 208
Electrical Engineering Technology
Co-Op Work Experience
3 credits (1-12)

Prerequisites: ELT 111
Corequisite: ELT 108
 A cooperative work experience program whereby students are employed in a technical position in order to gain some of the practical experience necessary for success in technology. Supervision of this departmentally approved position is provided by the College through on-the-job visits and individual progress review sessions. Students are required to establish learning objectives related to their position in order to effect the attainment of specific job competencies. Students attend a weekly, one-hour seminar on campus and work for a minimum 13 hours a week. Students are required to work a total of 180 hours during the semester. Students must be recommended by the Department faculty. Students must register with the department of cooperative education.

ELT 215
Applied Electricity
3 credits (2-3)

Corequisite: MAT 108
 An introduction to the theory and practical applications of electricity. Topics such as: DC and AC circuit theory, electrical instrumentation, electromagnetic devices and circuits and electronic devices and circuits are covered. Laboratory experimentation included.

ELT 237
Digital Communications
3 credits (2-3)

Prerequisite: ELC 103
 A study of digital communications including the following topics: Time Division, Multiplexing, Pulse Code, Modulation techniques, amplitude shift keying, error rate measurement, parallel/serial, and serial/parallel conversion, electrical interface techniques, parity and block code circuitry, measurements of delay distortion and other impairments.

English
ENG 122
English Composition II
3 credits (3-0)

GE COM

Prerequisite: English 121 with a grade of "C" or better
 Through writing, reading of essays, short stories and poems, and speaking, students continue to learn and to practice the skills of clear, correct, effective English. Through a variety of projects requiring techniques such as cause and effect, analysis, evaluation, classification, argumentation, and persuasion, as well as a through formal research (library) paper, students write between 7,000 and 10,000 words, including drafts and revisions.

English as a Second Language
ESL 010
Basic English as a Second Language
6 credit equivalents (4-2)

Basic English language skills including attention to listening skills, basic conversation, basic structure and some elementary writing skills. Two hours of individualized work will be required in the ESL Learning Center in addition to class hours. "C" is the minimum acceptable grade for movement from one remedial/developmental level to another and for completion of remediation/developmental requirements to include all credit equivalent courses.

ESL 019
Intermediate Discussion/Phonology
3 credit equivalents (3-0)

Oral communication at the intermediate level. Attention will be paid to pronunciation problems as well as to conversation techniques and strategies in different situations. "C" is the minimum acceptable grade for movement from one remedial/developmental level to another and for completion of remediation/developmental requirements to include all credit equivalent courses.

ESL 031
ESL Structure/Writing I
4 Credit equivalents (4-0)

Prerequisite: ESL 010 or permission of ESL chairperson
Corequisite: ESL 041
 Designed to develop skills in structure and writing at a low intermediate level. Students review basic structure and practice writing by combining sentences to form a good paragraph. Individualized work required in the ESL Learning Center in addition to class hours. "C" is the minimum acceptable grade for movement from one remedial/developmental level to another and for completion of remediation/developmental requirements to include all credit equivalent courses.



ESL 032

ESL Structure/Writing II 4 credit equivalents (4-0)

Prerequisite: ESL 031 or permission of ESL chairperson

Corequisite: ESL 042

A continuation of ESL 031 introducing more advanced structural items. Writing emphasis placed upon expanding paragraph development. Individualized work required in the ESL Learning Center in addition to class hours. "C" is the minimum acceptable grade for movement from one remedial/developmental level to another and for completion of remediation/developmental requirements to include all credit equivalent courses.

History

HIS 202 GE HUM

Ancient Egypt's History: An Introduction 3 credits (3-0)

This survey traces the genesis, rise, and development of the high culture and dynastic civilization of pharaonic Egypt from the Predynastic Period through New Kingdom (approx. 3500 to 1000 B.C.). An interdisciplinary approach will be used that takes into account the effects that geography and topography had on Egypt's cultural development. Topics discussed will include language, religion, mummification, funerary architecture and art. Course will be illustrated with slides as well as with artifacts and artifact-facsimiles.

Hotel, Restaurant, and Institution Management

HRI 111

Food Preparation Practicum 3 credits (1-13)

Prerequisite: HRI 103

A practicum designed to develop and refine professional food preparation and production skills through an approved on-site industry experience. Learning activities are planned, supervised and evaluated by qualified chefs and/or food production managers in coordination with the program director.

Legal Technology

LET 100

Introduction To Legal Assisting 2 credits (2-0)

An introduction to the functions and duties of the legal assistant. Students explore the regulation of legal assistants, ethics, privilege and ABA considerations. Students are introduced to the court system and law office routines.

LET 101

Legal Research and Writing 4 credits (4-0)

Prerequisites or Corequisites: ENG 121 and LET 100

An introduction to the functions and duties of the legal assistant. Students explore the American legal system and are introduced to the New Jersey court system. Students use the law library including encyclopedias, reporter systems, digests, and practice manuals including updating sources. Students are introduced to the use of computer assisted research by use of WESTLAW including reporter systems, statutes, administrative codes, updating sources and extended databases.

LET 106

Wills and Estate Administration 3 credits (3-0)

Prerequisite: LET 100 and LET 101

Substance and procedure with respect to wills, estates, trusts, probate, life insurance, and federal and state taxes.

LET 107

Law Office Management 3 credits (3-0)

Prerequisites: LET 100 and 101

Students learn the basics of law office management including, but not limited to, accounting procedures, scheduling, filing, and office systems.

LET 110

Litigation Procedure 4 credits (4-0)

Prerequisites: LET 100 and 101

Covers the rules governing courts and basic litigation procedures including telephone technique, client interviews, complaints, interrogatories, etc.

LET 111

Contracts and the Uniform Commercial Code 3 credits (3-0)

Prerequisites: LET 100 and 101

Detailed study of the substantive law of contracts, sales law, and commercial paper. In applicable areas, the Uniform Commercial Code is covered as well as the common law principles. Emphasis is placed on source materials, research and writing. Legal principles are applied to theoretical problems as well as current New Jersey cases.

LET 112

Business Organizations and Government Regulation 3 credits (3-0)

Prerequisite: LET 111

Detailed study of the substantive law of agency and employment, security devices, bankruptcy, partnerships and corporations. (In applicable areas the Uniform Commercial Code is covered as well as the common law principles.)

LET 280

Senior Seminar for Legal Assisting 3 credits

Prerequisites: LET 104, 108, 110 & 112

Students integrate their knowledge of theoretical concepts and practical application of legal research, litigation, property, torts, and business law through case analysis and the completion of assigned projects.

Must be taken the last semester prior to graduation.

Mathematics

MAT 012

Basic Mathematics/Algebra I 6 credits (6-0)

Prerequisite: A score between 15-19 on the NJCBSPT and some familiarity with Algebra (the 15-19 score could vary, contingent on changes in the NJCBSPT cut-off scores, as determined by the Director of Institutional Planning.)

The first third of the course will focus on the Basic Mathematics curriculum, including topics in Basic Mathematics Computation. Some work in whole numbers, all operations in fractions, decimals and percents as well as word problems in all areas will be covered. Ratio and proportion and some metric and basic geometry topics will be included in the curriculum.

The remaining two-thirds of the course will cover topics in elementary algebra: integral, rational and irrational numbers, techniques of graphing and solving of linear equations, polynomials and their operations, special products and factoring, fractional expressions and equations, quadratic equations and methods of solutions, radical expressions and inequalities.

Mechanical Engineering Technology

MEC 123

Technical Graphics/CAD I 3 credits (6-0)

A study of the graphic language of engineering and technology to include linework, lettering, graphs, geometric construction, orthographic projections, pictorial, sectional and auxiliary drawings and dimensioning techniques. An introduction to the Computer-Aided Graphics system is included. Laboratory projects provide hands-on experiences and develop graphic skills. Laboratory time is spent using (CAD) computer-aided drafting system with AUTOCAD.



Medical Laboratory Technology

MED 100

Phlebotomy

7 credits (4-4)

Educates medical laboratory personnel in the technics of obtaining blood specimens from patients for the purpose of testing and analysis. The students are taught procedures relating to the preparation and maintenance of equipment used for obtaining specimens, establishing a professional relationship with the patient, the selection of the site, care of the specimen, and clinical duties associated with record keeping of the laboratory tests.

Office Systems Technology

OST 010

Keyboarding for Computers

1 credit equivalent (1-1)

Keyboarding computer skills are developed through hands-on applications. The course teaches the touch operation of the alphabet, numeric, and command/function keys. Students learn to keyboard rapidly and accurately. Vocabulary and concepts used in keyboarding operations are also incorporated. *Not open to Office Systems Technology students.*

Physical Education

PED 145

ARC Lifeguard Training

1 credit (1-2)

Provide students with the minimum skills training to qualify as nonsurf lifeguards. Upon successful completion of the course requirements, students receive the American Red Cross Lifeguarding Certificate. N.M. Students may also take the course for college credit without becoming a certified lifeguard. Students must demonstrate strong swimming skills at the first class meeting.

In addition, students must possess, by the first class meeting, valid standard First Aid and CPR certification. These certifications cannot expire until after the course concludes.

Physics

PHY 010

Basic Physics

4 credit equivalents (2-4)

Corequisite: MAT 013 or equivalent

A one-semester, non-credit introductory physics course designed to give students sufficient background to enter non-calculus physics courses.

PHY 101

Principles of Physics I

4 credits (3-2)

Prerequisite: MAT 107 or equivalent

Includes an introduction to Newtonian mechanics with application of the conservation laws to physical systems. Electromagnetism and geometrical optics are introduced at an elementary level. Topics in wave propagation, thermodynamics, atomic and nuclear physics.

GE SCI

PHY 108

Radiographic Physics I

3 credits (2-2)

Prerequisite: one year high school algebra I or MAT 013

Technical skills needed for physics course and for other courses in the Radiography Education Program are taught including calculating skills, using formulas, and graphing. Basic physics consists of mechanics, energy, electrostatics, simple D.C. circuits, and atomic theory. Appropriate laboratory experience provided and includes computer skills. The first semester of a two semester course.

PHY 121

General Physics I

4 credits (2-4)

Prerequisite: MAT 109

Emphasizes theoretical models and basic physical principles. The course is precalculus-based and uses some basic calculus in the development and applications of physical principles in a scientific environment. Students will use computers in the laboratory for developing programming skills for the analysis of experimental data. Topics include kinematics, dynamics, conservation of energy and momentum, waves, temperature and heat, and thermodynamics. The first semester of a two-semester college-parallel sequence for liberal arts science and preprofessional students.

Psychology

PSY 223

GE SS

Child Psychology

3 credits

Prerequisite: PSY 123

Human behavior from prenatal development to maturity. The study of physical, intellectual, and emotional behavior. Behavior characteristics of different age levels, individual differences and methods of adjustment.

PSY 260

Psychology Field Experience

3 credits (1-12)

Prerequisite: PSY 123 with a grade of "C" or better and departmental approval

A cooperative work experience program whereby the student is employed in a departmentally approved position in order to gain the practical competency necessary for success in Applied Psychology. Supervision is provided by the College through on-the-job visits and individual progress review sessions. The student must be approved by the department and is required to establish learning objectives related to his or her position. The regular day student attends a weekly, one-hour seminar on campus and works approximately 13 hours a week, for a total of 180 field experience hours during the semester. DCE students' hours are adjusted to fit the different semester lengths, yet reflect the same total hours.

Reading

RDG 009

Reading Skills for College I

4 credit equivalent (3-1)

Provides intensive instruction to help students develop basic reading comprehension, vocabulary, communication and study skills. In order to receive a passing grade of "C" or better and move on to RDG 011, students must make an appropriate score on the re-test version of NJCSPY Reading Comprehension section. *"C" is the minimum acceptable grade for movement from one remedial/developmental level to another and for completion of remediation/developmental requirements to include all credit equivalent courses.*

Science

SCI 155

GE SCI

Introduction to Geology and

Oceanography

4 credits (3-2)

Prerequisite: one year high school laboratory science and MAT 014 or equivalent

A one-semester course dealing predominately with Geology and with the physical aspects of the ocean. Topics include a discussion and identification of rocks and minerals, volcanism, the geologic time scale, earthquakes, and their origin. Introduces important topics in Physical Oceanography and the Geology of New Jersey and environs. Students conduct appropriate laboratory exercises.

SCI 156

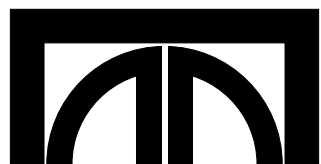
GE SCI

Introduction to Astronomy

4 credits (3-2)

Prerequisite: one year high school laboratory science and MAT 014 or equivalent

An introduction to descriptive space science covering the historical development of astronomy and planetology. Basic physical laws are introduced to help explain the tools used in the investigation of the solar system and the galaxy. Topics include stellar and solar systems, evolution and cosmology. The possibility of extraterrestrial life and communication with it is included as a necessary part of the subject. Laboratory experience included.



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