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EAST CAROLINA UNIVERSITY CURRICULUM COMMITTEE
Minutes of November 14, 1991

Members present: Cain, Cox, Daugherty, Gartman, Grossnickle, Harris,
Lapas, Neal, Richards, Topper, Wease, Wittman.

Members absent: Wilentz, Mulwee, Leonard.

One correction in the minutes of October 24, Catalog copy: page 3, under
Psyc 2240, line 7, change PSYC 22440 to PSYC 2240. The minutes stood
approved as corrected.

Grossnickle moved to bank POLS 4305, 4306, 4307, 5030, 5050, 5381, 5410, and
to revise the Comparative Government and International Relations Minor as
follows: Drop POLS 5381 or 5410 as a requirement; change the number of
required hours from 9 to 6; change the number of elective hours from 15 to
18. Neal seconded; the motion passed.

Richards moved that curriculum changes for the School of Business be
accepted as requested by a letter from Dr. Zincone. These changes include
a revision of BSBA; eliminate Management Science concentration; revise
Computer Information Systems concentration; change prerequisite for ACCT
2401, DSCI 3243, 3623, 4293. Harris seconded, and the motion passed.

Professors Rothfedder, Thompson, Cobb, and Palmer requested a change in the
BA and minor in History; BS in Public History (Maritime Option); to change
5510 to 5515 (Maritime History of the Western World, 1415-1815); add 5230
(Themes in African American History), 5525 (Sea Power: 480 BC to the
Present), 5765 (Latin America: 1492 to the Present); delete 5760. Wease
moved approval; Daugherty seconded. The motion passed.

Professor Cox presented a request to revise BSN; and to change prerequisites
for NURS 2400, 2401, 2700, 2701, 3000, 3001, 3700, 3701, 3800, 3801, 3900,
3901, 4000, 4001, 4360. Gartman moved approval as amended; Richards
seconded. The motion passed.

Professor Knight requested a revision of the BS in Biology. Neal moved
approval; Wittman seconded. The motion passed.

Professor Neal requested a revision in the BS and minor in Geology.
Richards moved approval as amended; Harris seconded. The motion passed.

Wittman moved that the revision in the Ethnic Studies minor and new courses
be tabled until the November 21 meeting since all committee members had not
received the materials. Lapas seconded. The motion passed.

Professors Inman, Shea, Finley, and Hobbs presented requests to revise the
Nutrition and Dietetics major, the Hospitality Management major, the Apparel
and Textiles major, the Interior Design major, the Apparel and Textiles
minor, the Child Development and Family Relations major, and to change the
name of the minor in Apparel and Textiles to a minor in Merchandising; also
to revise AMID 2003, 2004; change 5333 to 4333; change 5334 to 4334; change
prerequisites for 4337, 4882, 4883; revise CDFR 4308; change NUHM 5303, 5304
to 4303, 4304; and to revise NUHM 4990, 4991. Neal moved approval as
amended; Cox seconded. The motion passed.

Professor Smith presented a request to revise the BS in Clinical Laboratory
Science; to change CLSC 4110, 4111 to 3130, 3131; to change 5030, 5031 to
4530, 4531; to change 5040, 5041 to 4540, 4541; to change 5050, 5051 to
4550, 4551; to change 5060, 5061 to 4560, 4561; to change 4301 to 4302; to

change 5000 to 4570; and to change 5001 to 4305. Wease moved approval as amended; Wittman seconded. The motion passed.

The School of Industry and Technology proposed changes were presented by Dean Davis and Professors Reaves, McPherson, Schlesenburger, Gobeski, and Kruger. Prior to the presentation, Dean Davis gave the Committee an overview of the process in developing the curriculum changes. He outlined the structure of the school and how course and curriculum changes in the are departments handled. Curriculum committees are elected by faculty within each department, and a committee for the whole school reviews the proposals. If there are problems with the proposals, they are sent back to the originating committee; otherwise, they are sent on to the University curriculum Committee.

In the fall, Construction Management presented major changes since the department is working for accreditation. Changes developed within the department were presented to the faculty of the entire school. A Task Force was formed to review the core and to examine concentration areas. Four school-wide meetings were held in the Fall of 1991 to discuss issues. Meanwhile, departmental meetings were also being held to discuss changes.

Input came from the departmental and the school levels. At the meetings of the entire school, courses were brought up on an individual basis and received unanimous or at least 90% approval.

Dean Davis felt that there was adequate faculty input as well as outside input - from students, employers, etc. He does not feel that it is an ideal curriculum from the dean's point of view; it is a compromise from several perspectives.

Professors Reaves, McPherson, Schlesenburger, Gobeski, and Kruger agreed that Dr. Davis had presented an accurate chronology of the changes, and that all faculty members had had ample opportunity for input.

At a question from a committee member, Dr. Davis stated that the Code of the School of Industry and Technology does address curriculum changes. The procedures followed in this case went beyond the Code from the department level to the school level for approval of changes. The other faculty members present agreed with this statement. Another committee member asked if all faculty in the school were aware of today's agenda. This was answered in the affirmative.

The Curriculum Committee felt that it was appropriate to continue with the agenda as circulated: to revise the BS Professional Degree in Industrial Technology, the Technical Institute/Community College Transfer Program, the BA in Industrial Technology, the Industrial Technology minor; to revise DESN 2034, 2035, add CMGT 2664, 2666, 4600; ELEC 4060, 4061, 4690, 4591; MANF 3500, 3800; ITEC 2090; and to change the prerequisites for ELEC 2056, 2057, 4505; MANF 2066, 2067, 2076, 2077, 3020, 3072, 3300, 4020, 4021, 4023, 4092, 4093, 4094, 4095, 4200, 4502, 4507. 5060; to bank CMGT 2662; and delete MANF 3010, 3011, 3022, 4060, 4061, 4072; and to change prerequisites for CMGT 3660, 4660, 4664, 4666; ITEC 3020, 3072, 3300, 4020, 4021, 4023, 4092, 4093, 4094, 4095. Wease moved approval as amended; Harris seconded.

The meeting adjourned at 5:10.

Respectfully submitted,

Martha Lapas, Secretary

CURRICULUM COMMITTEE CATALOG COPY
November 14, 1991

POLITICAL SCIENCE

Page 140, revise

BA DEGREE IN POLITICAL SCIENCE

3. Requirements in Political science:

36 s.h. with at least 24 s.h. selected from courses numbered above 2999. Courses to be distributed as follows:

POLS 1010 3 s.h.

At least one additional course in American government

(POLS 2102, 3011, 3033, 3035, 3039, 3144, 3155,

3202, 3203, 3204, 3223, 3224, 3241, 3242, 3243,

3252, 3253, 3254, 3255, 3256, 4310, 4321) .. 3 s.h.

At least one course in comparative government and

politics (POLS 2107, 3234, 3235, 3260, 3265, 3270,

3282, 4360) 3 s.h.

At least one course in international relations (POLS

2106, 3145, 3293, 3295, 4380, 4384, 4386) ... 3 s.h.

At least one course in political theory and

methodology (POLS 2108, 3031, 3370, 4371, 4373)

..... 3 s.h.

Plus elective...

BS PROFESSIONAL DEGREE IN POLITICAL SCIENCE

2. Political science requirements:

...

At least one additional course in American government

(POLS 2102, 3011, 3033, 3035, 3039, 3144, 3155, 3202, 3203,

3204, 3223, 3224, 3241, 3242, 3243, 3252, 3253, 3254, 3255,

3256, 4310, 4321) 3 s.h.

At least one course in comparative government and politics

(POLS 2107, 3234, 3235, 3260, 3265, 3270, 3282, 4360)

..... 3 s.h.

At least one course in international relations (POLS

2106, 3145, 3293, 3295, 4380, 4384, 4386).... 3 s.h.

At least one course in political theory and

methodology (POLS 2108, 3031, 3370, 4371, 4373)...3 s.h.

Plus electives...

MINOR PROGRAMS

A. Public Administration

Required courses: POLS 3252 and two of the following three: MATH 3228; ENGL 3880; CSCI 2600 9 s.h.

Plus electives selected from the following: POLS 3031,

3202, 3203, 3204, 3241, 3242, 3243, 3253, 3254, 3255, 3256,

4310, 4991, 4992, PLAN 3000; PSYC 3241 18 s.h.

Page 141, revise

B. Political Science

Requirements in political science: 24 s.h. with at least 15 s.h. selected from courses numbered above 2999. Courses to be

distributed as follows: POLS 1010..... 3 s.h.

At least one additional course in American government (POLS

2102, 3011, 3033, 3035, 3039, 3144, 3155, 3202, 3203, 3204, 3223,

3224, 3241, 3242, 3243, 3252, 3253, 3254, 3255, 3256, 4310, 4321)

..... 3 s.h.

At least one course in comparative government and politics
(POLS 2107, 3234, 3235, 3260, 3265, 3270, 3282, 4360)
..... 3 s.h.
At least one course in international relations (POLS 2106,
3145, 3293, 3295, 4380, 4384, 4386) 3 s.h.
At least one course in political theory and methodology
(POLS 2108, 3031, 3370, 4371, 4373 3 s.h.
Plus electives in POLS to total a minimum of 24 s.h.

C. Comparative Government and International
Relations

Required political science courses: POLS 2106, 2107
..... 6 s.h.

Electives in comparative government and international
relations selected from the following: POLS 3144, 3145,
3155, 3234, 3235, 3260, 3265, 3270, 3282, 3293, 3295,
4360, 4380, 4384, 4386 18 s.h.

Pages 142, 143 Bank POLS 4305, 4306, 4307, 5030, 5050, 5381,
5410.

BUSINESS

Page 195, revise:

BS DEGREE IN BUSINESS ADMINISTRATION
(BSBA)

1. General education requirements (see Section 6, The
General College: REQUIREMENTS FOR BACCALAUREATE
DEGREE PROGRAMS) including ECON 2113, 2133; MATH
1066; PSYC 1000 or 1050; SOCI 2110; SPCH 2080 ... 44 s.h.
2. Page 196, revise: AREAS OF CONCENTRATION

In addition to the general education and common body of knowledge
courses outlined above, all BSBA degree candidates must select an
area of concentration from the following: real estate, banking,
computer information systems, finance, human resource management,
production management, entrepreneurship and small business
management, marketing management, and retailing management.

DEPARTMENT OF DECISION SCIENCES

Computer information Systems: DSCI 4103, 4113, 4123, 4163;
CSCI 2618 or ACCT 3551 or 3621; DSCI 4133.

Page 197, revise:

ACCT 2401. Financial Accounting (3)
Prerequisite: MATH 1065 or 1066.

DSCI 3243. Managerial Economics (3)
Prerequisites: ECON 2113; MATH 1066, 2283.
(Math 1065 may be substituted until August 1994).

DSCI 3623. Management Science (3)
Prerequisites: MATH 1066, 2283. (MATH 1065 may
be substituted until August, 1994).

Page 198, revise:

DSCI 4293. Statistical analysis (3)
Prerequisites: MATH 1066, 2283 (MATH 1065 may be
substituted until August, 1995).

DEPARTMENT OF HISTORY

Charles W. Calhoun, Chairperson
A-315 Brewster

In order to declare a major in history, a student must satisfy the requirements as stated in the catalog for transfer to departments in the College of Arts and Sciences (Section 6, The General College), and must have credit for a foreign language through level 1001 for BA or BS in History. (Foreign language not required for Public History options.)

BA DEGREE IN HISTORY

- 3. Required history courses: HIST 1030, 1031, 1050, 1051; plus a minimum of 24 s.h. electives from courses numbered above 2999, these courses to be distributed as follows:

At least one course (3 s.h.) in American History (HIST 3010, 3011, 3031, 3050, 3110, 3120, 3200, 3210, 3215, 3220, 3225, 3230, 3235, 3240, 3245, 3920, 5122, 5140, 5141, 5150, 5210, 5230, 5520)

At least one course (3 s.h.) in European History (HIST 3405, 3410, 3415, 3420, 3425, 3430, 3435, 3440, 3450, 3455, 3480, 3481, 3489, 3550, 5310, 5350, 5360, 5440, 5450, 5460, 5470, 5515, 5660, 5670),

At least one course (3 s.h.) in Other World Area History (HIST 3610, 3611, 3620, 3630, 3670, 3710, 3711, 3760, 3780, 3810, 4610, 5300, 5340, 5680, 5765, 5770),

The following courses vary in content and will be classified according to Topic (HIST 3005, 4521, 4522, 4550, 4551, 5005, 5525).

At least 3 s.h. must be taken at the senior-graduate (5000-5999) level.

..... 36 s.h.

Page 121, revise

Option III: Maritime History 61 s.h.

B. Professional phase requirements: HIST 5515 or 5520; 5920, 5921, 5930, 5931, 5950, 5951 12 s.h.

MINOR PROGRAMS

A. History

9 s.h. required from HIST 1030, 1031, 1050, 1051; plus 15 s.h. of history electives above 2999 24 s.h.

Page 125, add

HIST 5230. Themes in African American History (3)
An intensive examination of pivotal themes and writings in African American History.

Page 125, delete HIST 5510.

Page 125, add

HIST 5515. Maritime History of the Western World, 1415-1815 (3) (Formerly HIST 5510)

Maritime activities in the Western World from the Age of Discovery to 1815. Emphasis on European voyages of discovery, expansion of maritime commerce, establishment of overseas possessions, and domination of the world's sea-lanes. Designated as a European history course.

HIST 5525. Sea Power: 480 B.C. to the Present (3)

A survey of the nature of warfare at sea, and the changing role of sea power in eras of peace and war, from the classical period to the atomic age.

HIST 5765. Latin America: 1492 to the Present (3)

An analysis of selected historical problems in Latin American society and economy including conquest and settlement, the role of indigenous peoples in the development of Latin American society, reform and revolution, independence and organization of nation-states.

NURSING

Page 257, revise

SCHOOL OF NURSING

Phyllis N. Horns, Dean, 153 Nursing

Therese G. Lawler, Associate Dean for Academic Services,
157 Nursing

Judy Bernhardt, Chairperson, Department of
Community & Mental Health Nursing and
Nursing Services Administration, 256 Nursing

Dorothy Mellow, Interim Chairperson, Department of
Parent-Child Nursing, 254 Nursing

Mary K. Kirkpatrick, Chairperson, Department of
Adult Health Nursing, 252 Nursing

CURRICULUM

The baccalaureate program in nursing educates students for professional nursing practice and is characterized by a combination of general education and nursing courses. The focus of the nursing courses is on nursing theory and scientific principles applied to the care of healthy persons as well as acute and chronic health problems of individuals, families, and groups. Clinical experiences are provided in a variety of health care settings, such as hospitals, health departments, nursing homes, mental health centers, and other health-related community agencies.

All students - high school graduates, transfer students, diploma or associate degree graduates in nursing - earn the bachelor of science in nursing degree (BSN). The awarding of the BSN does not license one as a registered nurse. A separate examination (NCLEX-RN) is administered by the board of nursing in the state in which the applicant wishes to be registered. The School of Nursing will certify completion of degree requirements, but meeting other requirements for licensure is the responsibility of each candidate. Graduates are prepared

for beginning positions in nursing with the potential for positions of leadership and graduate study.

Registered nurses seeking to obtain a BSN are offered an opportunity for educational mobility through the ReNew Track option. The curriculum track for RNs uses both traditional and nontraditional study methods. Modifications in course offerings include flexible scheduling, special sections for RNs and creative methods of meeting course objectives. Registered nurse students meet course requirements by transfer, advanced placement, credit by exam, CLEP, and completion of courses by enrollment.

The program is accredited by the National League for nursing and approved by the North Carolina Board of Nursing.

ADMISSION

Freshmen may declare nursing as their major but are officially admitted to the School of Nursing after filing an Intent to Enroll form and meeting eligibility requirements prior to enrollment in the sophomore year. Eligibility is based upon a minimum cumulative GPA of 2.2 and a minimum grade of C in each required math, biology, and chemistry course. Admission to clinical courses may be limited due to space availability and accrediting requirements. Students desiring readmission after an absence of one or more semesters must secure approval from the university Admissions Office and the School of Nursing Student Affairs Committee. Financial aid is available through scholarships and loans from government and private sources, work-study, and self-help programs. Information is available from the university director of financial aid or the School of Nursing director of student services.

SIGNIFICANCE OF COURSE NUMBERS AND NAME ABBREVIATIONS:
SEE APPENDIX B.

BS DEGREE IN NURSING (BSN)

Minimum degree requirement is 126 s.h. of credit as follows:

1. General education requirements (see Section 6, The General College: REQUIREMENTS FOR BACCALAUREATE DEGREE PROGRAMS) including cognate courses: CHEM 1120, 2620, 2621; PSYC 1050, 3206; SOCI 2110, 3213, 3214 or equivalent 44 s.h.
- 2.a. Professional nursing: NURS 1000, 2400, 2401, 2700, 2701, 3000, 3001, 3060, 3400, 3401, 3500, 3501, 3700, 3701, 3800, 3801, 4000, 4001, 4200, 4202, 4320, 4360, 4600, 4601, 4701 62 s.h.
- b. Registered Nurse students professional nursing: NURS 3900, 3901, 3060, 4000, 4001, 4200, 4202, 4320, 4360, 4600, 4601, 4701 32 s.h.

(30 hours advanced placement awarded upon successful completion of NURS 3900, 3901) 30 s.h.

62 s.h.

3. Required cognates: BIOL 1050, 2110, 2111, 2130, 2131:
 CDFR 1103 15 s.h.
4. Electives 4 s.h.

Page 258, revise:

Specific health requirements are stated in the School of Nursing Student Handbook.

A comprehensive examination for senior nursing students is required during the semester in which the student expects to complete requirements for graduation. A special fee is charged for this examination.

Credit for courses in the School of Nursing is determined by the following formula:

- 1 classroom/lecture hour per week = 1 s.h. credit
- 2 laboratory hours per week = 1 s.h. credit
- 3 practicum hours per week = 1 s.h. credit

- NURS 2400. Introduction to Health Assessment (2)
 Two classroom hours per week.
 Prerequisites: Admission to the clinical major;
 NURS 1000; BIOL 1050, 2130, 2131; CHEM 1120,
 2620, 2621; CDFR 1103; PSYC 3206; MATH 1065 or
 2127 (Logic may not be substituted).
 Corequisites: NURS 2401, 2700, 2701; BIOL 2110,
 2111.
 Offers students a knowledge base in general
 principles of health assessment of well clients.
- NURS 2401. Practicum in Introduction to Health Assessment
 (1)
 Two laboratory hours per week.
 Prerequisites: Same as NURS 2400. Corequisites:
 NURS 2400, 2700, 2701; BIOL 2110, 2111.
 Offers the student an opportunity to practice
 and demonstrate a comprehensive health
 assessment.
- NURS 2700. Introduction to Nursing Process (3) (Formerly
 NURS 2500)
 Three classroom hours per week.
 Prerequisites: Same as NURS 2400. Corequisites:
 NURS 2400, 2401, 2701; BIOL 2110, 2111.
 Provides an introduction to the basic concepts
 of nursing.
- NURS 2701. Practicum in Introduction to Nursing Process
 (2) (Formerly NURS 2501)
 Six clinical hours per week.
 Prerequisites: Same as NURS 2400. Corequisites:
 NURS 2700, 2400, 2401.
 The practicum provides the student an
 opportunity to apply basic concepts and
 practice basic skills of nursing.
- NURS 3000. Nursing of Adults I (4) (Formerly NURS 2600)
 Four classroom hours per week.
 Prerequisites: All required nursing courses
 below 3000; BIOL 2110, 2111. Corequisites: NURS
 3001.

Provides theoretical bases for applying the nursing process in the care of adults experiencing alterations in health.

NURS 3001. Practicum in Nursing of Adults I (2) (Formerly NURS 2601)

Six clinical hours per week.

Prerequisites: All required nursing courses below 3000; BIOL 2110, 2111. Corequisites: NURS 3000.

Practicum provides the student an opportunity to apply the nursing process in caring for adults experiencing alterations in health.

DELETE NURS 2106, 2107. 2500, 2501, 2600, 2601, 3100, 3101.

Page 259, revise

NURS 3700. Nursing of Adults II (2) (Formerly NURS 3100)

Two classroom hours per week.

Prerequisites: NURS 3000, 3001; corequisites: NURS 3701; prerequisite or corequisite: NURS 3060.

Provides additional theoretical bases for applying the nursing process in the care of adult clients experiencing alteration in health.

NURS 3701. Practicum in Nursing of Adults II (3) (Formerly NURS 3101)

Nine clinical hours per week.

Prerequisites: Nurs 3000, 3001; corequisites: NURS 3700; prerequisite or corequisite: NURS 3060.

The practicum provides additional opportunities for the student to apply the nursing process in caring for adults experiencing alterations in health. Focus in on the adult as a family member.

NURS 3800. Psychiatric/Mental Health Nursing (2) (Formerly NURS 4400)

Two classroom hours per week.

Prerequisites: NURS 3000, 3001; corequisites: NURS 3801; Prerequisite or corequisite: NURS 3060.

Concepts of mental health promotion, maintenance, restoration, and theoretical foundations upon which to base nursing intervention with individuals and families.

NURS 3801. Practicum in PSychiatric/Mental Health Nursing (3) (Formerly NURS 4401)

Nine clinical hours per week.

Prerequisites: NURS 3000, 3001; corequisites: NURS 3800; Prerequisite or corequisite: NURS 3060.

Practicum provides opportunities to apply the nursing process with individuals, families and small groups needing mental health promotion services or early detection, treatment, and rehabilitation for psychiatric-mental illness.

NURS 3900. Concepts in Professional Nursing (3)

Three classroom hours per week.

Prerequisites: RN status, completion of required sciences, general education and cognate courses and permission of RN/BSN Director; corequisites: NURS 3901; prerequisite or corequisite: NURS 3060.

Introductory course and practicum required for registered nurse students. Examination of the theoretical foundations of professional nursing practice, application of nursing process, and utilization of nursing research.

NURS 3901. Practicum in Concepts in Professional Nursing
(2)

Two clinical/laboratory hours per week and clinical days as scheduled by instructor and student.

Prerequisites: RN status, completion of required sciences, general education and cognate courses and permission of RN/BSN Director; corequisites: NURS 3901; prerequisite or corequisite: NURS 3060.

Practicum provides RN student opportunities to apply the theoretical foundations of professional nursing practice and the nursing process with clients in a variety of practice settings. (Successful completion of NURS 3900, 3901 grants RN 30 s.h. of advanced placement).

NURS 4000. Family and Community Health Nursing (4)

Four classroom hours per week.

Prerequisites: All required nursing courses below 4000; corequisite: NURS 4001.

Synthesizes knowledge from previous courses and public health concepts to develop nursing care for families, groups, and communities as clients.

NURS 4001. Practicum in Family and Community Health
Nursing (3)

Nine clinical hours per week.

Prerequisites: All required nursing courses below 4000; corequisites: NURS 4000.

Practicum utilizes the nursing process and concepts of public health in care of families, groups, and communities in a variety of settings.

NURS 4360. Research in Nursing (2)

Prerequisite: All 3000 level nursing courses and one statistics course or consent of instructor. Introduction to nursing research methods, with emphasis upon the application of the research process and critical review of contributions in the health fields.

DELETE NURS 4050, 4400, 4401

BIOLOGY

Page 76, revise: BS DEGREE IN BIOLOGY

3. b. Ecology/Environmental Biology

Choose at least one of the following: BIOL 4200, 4201; 4300, 4301. Choose at least one of the following: BIOL 3310, 3311; 3320, 3321. Choose one botany course: BIOL 3070, 3071; 3230, 3231; 5040, 5041; 5230, 5231. Choose one zoology course: BIOL 3240, 3241; 5070, 5071; 5150, 5151; 5200, 5201; 5550, 5551; 5640, 5641; plus elective course in ecology: BIOL 3660, 3661; 5050; 5220, 5221; 5260, 5261; 5270; 5351, 5630, 5631; 5730, 5731.

- c. ...
- d. ...
- e. Marine Biology
 Following courses are required: BIOL 3660, 3661;
 5200, 5201; 5270; 5550, 5551; 5600, 5601; 5680;
 COAS 2125; GEOL 1550. A minimum of 5 s.h. from the
 following: BIOL 5220, 5221; 5230, 5231; 5351; COAS
 5025, 5026; GEOL 5300.

The following biology courses may be repeated only once, but no more than six s.h. may be used toward biology electives: BIOL 3550, 4504, 4514, 4550 and 5995.

GEOLOGY

Page 106, revise: BS DEGREE IN GEOLOGY

- 2. Required geology courses: GEOL 1500, 1501, 1600, 1601, 3000, 3001, 3100, 3101, 3200, 3201, 3300, 3301, 4000, 4010, 4011, 4020, 4021, 4200, 4201 38 s.h.
- 3. Required cognate courses 20-24 s.h.
 - a. One of the following options:
 - 1. MATH 1085, 2171, 2172
 - 2. MATH 2119, 3228; CSCI 2510 or 2600
 - b. At least 8 s.h. from the following: PHYS 1250, 1251, 1260, 1261; BIOL 1050, 1051, 1100, 1101, 1200, 1201 or additional courses in mathematics, chemistry, biology, or physics approved by the chairperson of the Department of Geology.
 - c. ENGL 3820 or 3880; or ITEC 3290, 3291.
- 4. ...

GEOLOGY MINOR

Required geology courses: GEOL 1500, 1501, 1600, 1601;
 at least 12 s.h. of GEOL electives above 2999 24 s.h.

Page 107, add:

GEOL 4010, 4011. Sedimentology (3,0) (Formerly GEOL 5200, 5201)

Two lectures and one three-hour laboratory per week.

Prerequisites: GEOL 3000, 3001.

Analysis of the processes involved in the formation of sedimentary rocks, including origin, transportation, and deposition of rock-forming materials, their diagenesis and lithification.

GEOL 4020, 4021 Stratigraphy (3,0) (Formerly GEOL 5250, 5251)

Two lectures and one two-hour laboratory per week.

Prerequisites: GEOL 1600, 1601

Description, classification and interpretation of stratified sedimentary rocks. Emphasis on principles and methodology.

Page 107, bank GEOL 4100, 4101.

Page 107, delete GEOL 5200, 5201, 5250, 5251.

CLINICAL LABORATORY SCIENCE

Page 163, revise: BS DEGREE IN CLINICAL
 LABORATORY SCIENCE

A. Clinical Laboratory Science/Medical Technology

Minimum degree requirements is 134 s.h. of credit as follows:

1. General education requirement (see Section 6, The General College: REQUIREMENTS FOR BACCALAUREATE DEGREE PROGRAMS) including: MATH 1065; CHEM 1150, 1151, 1160, 1161; PSYC 1000 or 1050, 2101; SOCI 2110 44 s.h.
2. Required cognate courses: BIOL 1100, 1101, 2110, 2111, 2130, 3310, 3311; CHEM 1163, 2250, 2251, 2650, 2651 27 s.h.
3. Required professional courses: CLSC 3110, 3111, 3120, 3121, 3130, 3131, 4210, 4211, 4300, 4302, 4305, 4450, 4530, 4531, 4540, 4541, 4550, 4551, 4560, 4561, 4570, 4992, 4993, 4994 and 4997 63 s.h.

B. Cytotechnology

Minimum degree requirement is 126 s.h. of credit as follows:

1. General education requirements (see Section 6, The General College: (REQUIREMENTS FOR BACCALAUREATE DEGREE PROGRAMS) including: BIOL 1100, 1101, 1200, 1201; MATH 1065; PSYC 1000 or 1050, 2101; SPCH 2080 ..44 s.h.
2. Required cognate courses: CHEM 1120, 1121, 2620, 2621, or CHEM 1150, 1151, 1160, 1161; BIOL 2110, 2111, 2130, 3300, 4060, 4061 or 5480, 5481, 5450, 5451; MRAD 3000; DSCI 2223 or ASIP 2112 44 s.h.
3. Required professional courses: CLSC 3110, 3111, 3130, 3131, 4300, 4600, 4601, 4610, 4611, 4620, 4630, 4640, 4650, 4660, 4665, 4750, 4751 46 s.h.
4. ...

Page 169, add:

CLSC 3130, 3131. Clinical Immunology and Serology (2,1)
(Formerly CLSC 4110, 4111)

Two lecture and three laboratory hours per week.

Prerequisite: Permission of instructor.

Basic concepts and techniques of immunology and serology as applied in the clinical laboratory.

CLSC 4302. Research Project (2)

Prerequisite: Consent of instructor. Open only to CLSC majors.

Planning and completion of an independent research project under the guidance of academic and clinical faculty.

CLSC 4305. Special Topics in Clinical Laboratory Science (1) (Formerly CLSC 5001)

Prerequisite: Consent of instructor. Open only to CLSC majors.

Selected current topics in clinical laboratory science.

CLSC 4530, 4531. Clinical Chemistry I (3,2) (Formerly CLSC 5030, 5031)

Three lecture and six laboratory hours per week.

Prerequisites: Four courses in chemistry. Consent of instructor for non-majors.

Application of the basic principles of analytical and biochemistry to the quantitation of chemical constituents in body fluids and their relationship to disease states.

CLSC 4540, 4541. Clinical Chemistry II (3.1) (Formerly CLSC 5040, 5041)
Three lecture and three laboratory hours per week.
Prerequisites: CLSC 4530, 4531. Consent of instructor for non-majors.
A continuation of CLSC 4530, 4531.

CLSC 4550, 4551. Clinical Microbiology I (4,2) (Formerly CLSC 5050, 5051)
Four lecture and six laboratory hours per week.
Prerequisites: BIOL 2110, 2111 or BIOL 3220, 3221; 3310, 3311; or consent of instructor.
The essentials of clinical mycology and clinical parasitology. Lectures, demonstrations, and programmed instruction used as teaching vehicles.

CLSC 4560, 4561. Clinical Microbiology II. (4,3) (Formerly CLSC 5060, 5061)
Four lecture and nine laboratory hours per week.
Prerequisites: CLSC 4550, 4551 or consent of instructor.
The essentials of clinical bacteriology. Lectures and demonstrations used as teaching vehicles.

CLSC 4570. Special Topics in Microbiology (2) (Formerly CLSC 5000)
Prerequisite: Consent of instructor.
Current, advanced topics in clinical microbiology for medical technologists.

Page 169, delete CLSC 4110, 4111; 4301

Page 170, delete CLSC 5000, 5001; 5030, 5031, 5040, 5041, 5050, 5051, 5060, 5061

HUMAN ENVIRONMENTAL SCIENCES

Page 220, revise:

C. Child Life Major

2. Required human environmental sciences courses: CDFR 1103; 2200, 2201, 2202, 3002, 3203, 4306, 4308, 4996, 4997, 5309, 5413, 5414, 5415; HESC 1001, 2001, 3001; NUHM 2105 48 s.h.
3. ...

CHILD LIFE ADMISSION AND PROGRESSION STANDARDS

Freshmen may declare Child Life as a major but are officially admitted to the program only after filing an Intent to Enroll form with the program coordinator and meeting eligibility requirements no earlier than the end of the sophomore year. Eligibility is based on the completion of all general education and cognate requirements, a total of 53 semester hours, with a 2.5 GPA. Students must earn a minimum grade of C in each course required for the child life major as specified in 1, 2, and 3 above. A student earning a D in any required

CDFR course subsequent to admission to the major must petition the Department for probationary continuation. A student earning a third D in required CDFR courses will no longer be eligible to remain in the major. Students on probation may not enroll for CDFR 5414, 5415, Child Life Internships.

Page 220, revise:

B. Apparel and Textiles Major

2. Required human environmental sciences courses: AMID 1135, 1180, 2034, 2035, 2040, 2050, 4300, 4333, 4334, 4337, CDFR 2126; HESC 1001, 2001, 3001; plus 6 s.h. of electives from the following: AMID 3003, 3235, 3237, 5338; HESC 3990, 3991, 3992 40 s.h.

C. Interior Design Major

Sophomore Portfolio Review: During the spring semester, students submit portfolios which contain representative work from design studios, AMID 1181, 2501, 2601, and DESN 3031. This work is evaluated by the interior design faculty, who recommend whether students are prepared to enter professional level interior design courses (junior- and senior-level courses). Students who do not meet the level of proficiency needed for the professional level courses have the opportunity to re-enroll in lower level courses until they acquire acceptable proficiency.

Senior Portfolio Review: During the senior year and while enrolled in AMID 4700, students are required to present portfolios to be reviewed by interior design professionals. Students who received "conditional" evaluations will be required to meet recommended conditions stated by the reviewers.

Policy on Student Projects: The AMID department reserves the right to retain, exhibit, and reproduce design projects submitted by students for class assignments for the purpose of complying with accreditation and program evaluation requirements. Work submitted for grades is the property of the department until it is returned to the students.

Minimum degree requirement is 126 s.h. of credit as follows:

1. General education requirements (see Section 6, The General College: REQUIREMENTS FOR BACCALAUREATE DEGREE PROGRAMS) including cognate courses: ART 1905 or 1910; ECON 1000 or 2113; MATH 1065; PSYC 1000 or 1050, 3221; SPCH 2080 or 3004 44 s.h.
2. Required human environmental sciences courses: AMID 1180, 1181, 2040, 2500, 2501, 2600, 2601, 2700, 2750, 3500, 3550, 3600, 3601, 3700, 3999, 4500, 4501, 4600, 4601, 4700, 4750, 4880; CDFR 2126; HESC 1001, 2001, 3001 55 s.h.
3. To be admitted into the professional level courses (junior-senior) students must pass sophomore portfolio review and have achieved an overall 2.0 GPA and a 3.0 GPA in AMID courses (AMID 1180, 1181, 2040, 2500, 2501, 2600, 2601) with no grade less than C.

4. Required cognate courses: DESN 3030, 3031; DESN elective; ACCT 2401; MKTG 3832; 6 s.h. from the following: MKTG 4352, 4362, 4752 18 s.h.
5. Restricted electives: 6 s.h. from the following: ART 1005, 1015, 1020, 1030, 1906, 1907, 4950 .. 6 s.h.
6. Electives to complete requirements for graduation 6 s.h.

Page 221, revise:

DEPARTMENT OF NUTRITION AND
HOSPITALITY MANAGEMENT

A. Nutrition and Dietetics Major

Each NUHM course must be completed with a grade of C or better.

Minimum degree requirement is 126 s.h. of credit as follows:

1. General education requirements (see Section 6, The General College: REQUIREMENTS FOR BACCALAUREATE DEGREE PROGRAMS) including cognate courses: CHEM 1150, 1151, 1160, 1161; ECON 1000 or 2113; SOCI 2110; SPCH 2080 or 3004; PSYC 1000 or 1050, 3241; MATH 1065 44 s.h.
2. Required human environmental sciences courses: HESC 1001, 2001, 3001; NUHM 1010, 2105, 2110, 2111, 2350, 3208, 3209, 3226, 3227, 3393, 4303, 4304, 4311, 4312, 4313, 4340, 5335; 5355; plus 3 s.h. from AMID or CDFR 53 s.h.

B. Hospitality Management Major

Each NUHM course must be completed with a grade of C or better.

Minimum degree requirement is 126 s.h. of credit as follows:

1. General education requirements (see Section 6, The General College: REQUIREMENTS FOR BACCALAUREATE DEGREE PROGRAMS) including cognate courses: ECON 1000 or 2113; PSYC 1000 or 1050, 3241; MATH 1065; PHIL 2274 or 2275; SPCH 2080 44 s.h.

MINOR PROGRAMS

D. Merchandising

Required AMID courses: AMID 1135, 2034, 2035, 2050, 3235 or 4337, 3237, 4300 or 4333, 4334; plus 6 s.h. of AMID electives above 2999 24 s.h.

Page 222, revise:

CDFR 4308. Preschool Methods and Materials (3)

Two lecture and two laboratory hours per week.

Prerequisites: CDFR 2200, 2201, 2202; or consent of instructor.

Application of principles of child development, and preschool education in designing developmentally appropriate curricula for children age birth through five years.

Page 224, revise:

NUHM 4303, 4304. Experimental Food Study (3,0) (Formerly
NUHM 5303, 5304)

Two lecture and three laboratory hours per
week.

Prerequisites: CHEM 1160, 1161; NUHM 2110,
2111; and one statistics course.

A study of food, with emphasis on composition,
physical and chemical changes, quality and
consumer acceptability.

Page 225, revise:

NUHM 4990. Field Experience in Foodservice Management (3)
Field experience to be arranged to include 200
hours per semester for each 3 s.h. credit.

Prerequisites: NUHM 3208, 3209; 2.0 overall
GPA; and consent of instructor.

Supervised work experience designed to
strengthen competency in foodservice management
by providing a setting in which a student can
utilize didactic knowledge in practice.

NUHM 4991. Field Experience in Lodging Management (3)

Field experience to be arranged to include 200
hours per semester for each 3 s.h. credit.

Prerequisites: NUHM 3100, 2.0 overall GPA, and
consent of instructor.

Supervised work experience designed to
strengthen competency in lodging management by
providing a setting in which a student can
utilize didactic knowledge in practice.

Page 225, delete NUHM 5303, 5304.

Page 226, revise:

AMID 2003. Apparel Construction for Secondary Education
(2)

Corequisite: AMID 2004.

Application and evaluation of techniques in
teaching fabric selection and apparel
construction.

AMID 2004. Apparel Construction for Secondary Education
Laboratory (1)

Three laboratory hours per week.

Corequisite: AMID 2003.

Application of construction principles: the
interrelationship of fabric selection, pattern
selection and alteration, and garment fit.

Page 227, add:

AMID 4333. Textile Analysis (2) (Formerly AMID 5333)

Prerequisites: AMID 2034, 2035.

Corequisites: AMID 4334.

Quality assurance theory and techniques.

Advanced study of textile fibers and fabrics
through standard testing procedures. Evaluation
of fabric data in relation to end-use
performance and to existing quality standards.

AMID 4334. Textile Analysis Lab (1) (Formerly AMID 5334)

Prerequisites: AMID 2034, 2035. Corequisite:
AMID 4333.

Advanced study of textile fibers and fabrics through standard testing procedures based on quality assurance theory and techniques. Evaluation of fabric data in relation to end-use performance and to existing quality standards.

AMID 4337. History of Textiles (3)
Prerequisites: AMID 2034 or 2040; HIST 1030 or 1031.

Chronological study of the development and characteristics of textiles and accessories.

AMID 4882. Merchandising Internship Seminar (1)
Prerequisites: AMID 3237. Minimum 2.0 GPA required.

Preparation for merchandising internship. Professional practices in merchandising and promotion.

AMID 4883. Merchandising Internship (3)
Minimum of 200 work hours required.
Prerequisites: AMID 1135, 3237, 4882; ECON 1000 or 2113; senior standing; or consent of instructor. Minimum 2.0 GOA required.
A supervised work experience designed to enhance the student's competency in merchandising through integration of theory and practice.

Page 227. Delete AMID 5333, 5334.

INDUSTRY AND TECHNOLOGY

Page 229, revise

SCHOOL OF INDUSTRY AND TECHNOLOGY

Darryl Davis, Dean
120 Rawl

CURRICULA

The School of Industry and Technology offers a bachelor of arts and a bachelor of science (professional) degree in industrial technology and minors in industrial technology and military science.

DEPARTMENT OF CONSTRUCTION MANAGEMENT DEPARTMENT OF MANUFACTURING

The School of Industry and Technology offers undergraduate and graduate programs accredited by the National Association of Industrial Technology.

ADMISSIONS

Admission to the university does not guarantee admission to majors in industrial technology. For both departmental majors, students must submit an application for admission to the chairperson of the department indicating that the following minimum requirements for admission are met: a minimum cumulative GPA of 2.0 on at least 30 s.h. and completion of Math 1065 or 1066; PHYS 1250, 1251; and 9 s.h. of industrial technology courses.

SIGNIFICANCE OF COURSE NUMBERS AND NAME ABBREVIATIONS: See Appendix B.

BS PROFESSIONAL DEGREE IN
INDUSTRIAL TECHNOLOGY

A. Industrial Technology Major

Minimum degree requirement is 126 s.h. of credit as follows:

1. General education requirements (see Section 6, The General College: REQUIREMENTS FOR BACCALAUREATE DEGREE PROGRAMS) including ECON 2113, 2133 (CMGT major only); MATH 1065 or 1066; PSYC 1050, 3241; PHYS 1250, 1251, 1260, 1261; SPCH 2080 or THEA 2005 44 s.h.
2. Required cognate courses: ACCT 2401; FINA 2244; MATH 1074, 2283, or 3228; computer-related elective ; 3 s.h. from ITEC 2000/2001; DSCI 2223; ASIP 2112, 2212, 2213; CSCI 2600; ELEC 4050; construction management concentration requires GEOL 1500/1501; other concentrations require 4 s.h. CHEM elective excluding CHEM 0150; related electives: 6 s.h. from ACCT 2521; ITEC 4293; MANF 3800; MGMT 3202; MKTG 3832 (technical sales and service requirements) 24 s.h.
3. Department of Construction Management:
Construction Management concentration: 48 s.h. ITEC 2020, 3290, 3292; DESN 2034/35, 3036/37; CMGT 2660, 2661, 2664, 2666, 3660, 3664, 3666, 3667, 4600, 4660, 4662, 4664 and 4666.
Design and drafting concentration: ITEC 2010, 2020, 2090, 3290, 3292; DESN 2034/35, 2036/37, 3030/31, 3032/33, 4030/31, 4234/35; ELEC 2054/55; 12 s.h. of approved industrial technology electives.
Technical Sales and Service Concentration: ITEC 2010, 2020, 2090, 3290, 3100, 3292, 5290; IDIS 3770; DESN 2034/35; ELEC 2054/55; MANF 3020; BVTE 3302; MKTG 4532; plus 9 s.h. of technical electives from: ITEC 4300; CMGT 2660/61, 2664, 3660; DESN 2036/37, 3030/31, 3032/33; ELEC 2056/57, 4060; MANF 2066/67, 2076/77, 3300.
Department of Manufacturing:
Electricity/Electronics concentration: ITEC 2010, 2020, 2090, 3290, 3292, 4300; DESN 2034/35; ELEC 2054/55, 2056/57, 2150/51, 3056/57, 3058/59, 3150/51, (take 4050/51 as computer elective), 4052/53, 4060/61 or 5552, 4590/91 or 4505.
Manufacturing concentration: ITEC 2010, 2020, 2090, 3290, 3292, 4300; DESN 2034/35; ELEC 2054/55; MANF 2076/77, 3020, 3300, 3500, 4020/21, 4023, 4200; 3 s.h. of industrial technology electives.
4. Electives to complete requirements for graduation.

B. Industrial Technology Major
(Technical Institute/Community College
Transfer Program)

Student must have as associates degree from an approved technical program.

Minimum degree requirement is 126 s.h. of credit as follows:

1. General education requirements (see Section 6, The General College: REQUIREMENTS FOR BACCALAUREATE DEGREE PROGRAMS) including ECON 2113; MATH 1065 or 1066; PSYC

- 1050, 3241; PHYS 1250, 1251, 1260, 1261; THEA 2005 or SPCH 2080 or 3304 44 s.h.
2. Required industrial technology and technical transfer courses 48 s.h.
Student must complete a minimum of 24 s.h. credit, 18 s.h. from 3000 level or above and 6 s.h. from 2000 level or above. Additional courses may be necessary to meet required pre-requisites. Technical transfer courses, plus industrial technology courses completed at ECU must total 48 s.h. Courses needed to meet requirements may not include ITEC 3100, ITEC 4100 or any course that does not meet as a class.
 3. Required cognate courses: ACCT 2401; FINA 2244; MATH 1074, 2283, or 3228; computer-related elective; 3 s.h. from ITEC 2000/2001; DSCI 2223; ASIP 2112, 2212/2213, CSCI 2600; ELEC 4050; construction management requires GEOL 1500/1501; electronics requires CHEM 1150/51; other areas require 4 s.h. CHEM elective excluding CHEM 0150; related electives: 6 s.h. from ACCT 2521; ITEC 4293, MANF 3800; FINA 3274, MGMT 3202; MKTG 3832 (technical sales and service requirements) ... 24 s.h.
 4. Electives to complete requirements for graduation.

BA DEGREE IN INDUSTRIAL TECHNOLOGY

Minimum degree requirement is 126 s.h. of credit as follows:

1. General education requirements (see Section 6, The General College: REQUIREMENTS FOR BACCALAUREATE DEGREE PROGRAMS). (Encouraged to take MATH 1065 or 1066, PHYS 1250/51, 1260/61; ECON 1000 or 2113, PSYC 1000 or 1050, 3241; and Speech) ... 44 s.h.
2. Foreign language through level 1004 12 s.h.
3. Required industrial technology courses: ITEC 2020, 2090, 3292; CMGT 2660 or 2664; DESN 2034; ELEC 2054; MANF 2076; plus 15 s.h. from any of the following technology areas: construction, design and drafting, electricity/electronics, manufacturing, and technical sales and service 37 s.h.
4. Plus minor 24-30 s.h.
5. General electives to complete requirements for graduation.

INDUSTRIAL TECHNOLOGY MINOR

Students must take ITEC 2020, 3290, 3292; choose one from ITEC 4300 or CMGT 3664; plus 9 s.h. of required courses in one concentration area:

CMGT concentration: CMGT 2660, 2664, DESN 3036/37;
 DESN concentration: DESN 2034/35, 3030/31, 3032/33;
 ELEC concentration: ELEC 2054/55, 2056/57, 2150/51;
 MANF concentration: MANF 2076/77, 3300, ITEC 2090;
 TECH SALES concentration: MKTG 3832, BVTE 3302; IDIS 3370.

In addition students must take 6 s.h. of technology courses 27 s.h.

Page 230, add:

CMGT 2664. Construction Techniques II (3) (Formerly CMGT 2662)

(1) An introduction to construction as a career. (2) The most common of construction

tasks: Earthwork, foundations, concrete, steel,
and basic building components.

CMGT 2666. Soils and Foundations (3)
Prerequisites: CMGT 2664, GEOL 1500, 1501.
A survey of the fundamentals of soil mechanics
as it relates to construction and structural
foundations, and construction of shallow and
deep foundations.

Page 230, bank CMGT 2662.

Page 231, Add:
CMGT 4600. Standards and Inspection Management (3)
Prerequisites: CMGT 3660, 3664.
Tests, inspections and methods used to control
the quality of construction.

Page 231, revise:
DESN 2034, 2035. Engineering Graphics I (3,0)
Two lecture and two laboratory hours per week.
Survey communications course that gives the
basic skills and theory of graphics.
Application of graphics in manufacturing,
construction and related fields.

Page 232, add:
ITEC 2090. Energy Processing and Trans-Actional Power
Systems (3)
A technical investigation into energy
converters and trans-actional power systems
including mechanical, combustion, electrical,
and fluid power converters.

Page 233, add:
ELEC 4060, 4061. Electronic Control of Robotic and
Automated Manipulators (3,0)
Two classroom and two laboratory hours per
week.
Prerequisites: ITEC 2090; ELEC 2056, 2057.
An analysis of the electronic and power systems
utilized to control robotic manipulators and
equipment within automated environments.

ELEC 4590, 4591. Electronic System Design (3,0)
Two classroom and two laboratory hours per
week.
Prerequisites: ELEC 3056, 3057, 3058, 3059.
An analysis of electronic systems design
concepts and methodology.

Page 233, revise prerequisites for:
ELEC 2056, 2057. Electronic Power Systems (3,0)

...
Prerequisites: Elec 2150/51

MANF 2066, 2067. Polymeric Materials (3,0)
...
Prerequisites: ITEC 2020; DESN 2034/2035

MANF 3020. Manufacturing Processes (3)
...
Prerequisites: ITEC 2000; MANF 2076/2077.

Page 233, delete MANF 3010, 3011.

Page 234, add:

MANF 3500. Automated Systems (3)
Prerequisites: ITEC 2090; ELEC 2054, 2055; MANF 3020.

A study of the basic types of automated systems commonly used in industry, including control systems, common types of automated manufacturing equipment and systems, and computer applications in the design, development and management of automated manufacturing systems.

MANF 3800. Capital Equipment (3)
Prerequisites: ACCT 2401; MATH 1065 or 1066; ITEC 3292.

The analysis of competitive equipment offerings, make-versus-buy opportunities, and repair-versus-replacement costs associated with manufacturing and construction equipment decisions.

Page 234, delete MANF 3022, 4060, 4061, 4072.

Page 234, revise prerequisites for:

MANF 3072. Metals Technology (3)

Prerequisite: MANF 2076/2077.

MANF 3300. Plant Layout and Materials Handling (3)

Prerequisites: ITEC 2090; MANF 3020.

MANF 4020, 4021. Process System Design (3,0)

Prerequisites: ITEC 3292, 4300; MANF 3020, 3300, 3500; 3 credit hour management/human relations elective, and consent of instructor.

MANF 4023. Process System Application (3)

Prerequisites: MANF 4020/4021 and consent of instructor.

MANF 4092, 4093. Manufacturing (3,0)

Prerequisites: ITEC 2090; MANF 3020, 3300, 3500.

MANF 4094, 4095. Industrial Maintenance (3,0)

Prerequisites: ELEC 2054/2055; ITEC 2989; MANF 3020.

MANF 4200. Work Methods Analysis (3)

Prerequisites: MANF 3020, 3300.

MANF 4501. Laboratory Problems: Maintenance (3)

No prerequisites

MANF 4502. Laboratory Problems: Production (3)

Prerequisite: MANF 3020.

MANF 4507. Laboratory Problems: Metals (3)

Prerequisites: MANF 2076/2077.

MANF 5060. Organic Matrix Composite Materials (3)

Prerequisites: CHEM elective; ITEC 2020; MANF 2066/2067.

MANF 5504. Independent Study: Manufacturing (3)

Prerequisite: Consent of instructor.