COMMITTEE: University Curriculum Committee

MEETING DATE: April 10, 2014

PERSONS PRESIDING: Leigh Cellucci

REGULAR MEMBERS IN ATTENDANCE: Leigh Cellucci, David Batts, Michael Dingfelder, Donna Kain, and Mark Richardson

EX-OFFICIO MEMBERS IN ATTENDANCE: Josie Bowman, Rita Reaves, Jean-Luc Scemama, Katherine Swank, and Karen Vail-Smith

EXCUSED: Lori Flint, Amy McMillan

ABSENT:

SUPPORT: Kimberly Nicholson

OTHERS IN ATTENDANCE:

Thomas Harriot College of Arts and Sciences, Department of Mathematics, Gail Ratcliff
College of Technology and Computer Science, Department of Engineering, Ricky Castles and Leslie Pagliari
College of Health and Human Performance, Department of Health Education and Promotion, Susan McGhee and Michele Wallen
Thomas Harriot College of Arts and Sciences, Department of Biology, Jean-Luc Scemama
Thomas Harriot College of Arts and Sciences, North Carolina Studies Interdisciplinary Program, Christopher Oakley
Office of the Registrar, Diane Coltraine

ACTIONS OF MEETING

Agenda Item: I. Call to Order

(1.) Minutes
The 3/27/14 UCC minutes was distributed for an electronic vote and approved by the majority of the committee.

Discussion:

NA

Action Taken:

NA

(2.) Announcements

Discussion: NA
Action Taken: NA

Agenda Item: II. Thomas Harriot College of Arts and Sciences, Department of Biology, Jean-Luc Scemama

(1.) Title and/or prerequisite Revision of Existing Courses (no content change): BIOL 2110, BIOL 2140, BIOL 2141, BIOL 2150, BIOL 2151, BIOL 4170

Discussion: Dr. Dingfelder had reviewed the materials and mentioned a few changes that needed to be made:

- the additions to the catalog copy need to remove the blue highlighting with the links as it is difficult to see what is changed;
- The memorandum of request needs to be addressed to the UCC
- In the catalog copy for BIOL 2140 and BIOL 2141, add "Part 1 of a" before "two-semester integrated course" in the course description. For BIOL 2150 and BIOL 2151, add "Part 2 of a " before "two-semester integrated course."

Action Taken: Dr. Batts made a motion to accept as amended, and Dr. Dingfelder seconded the motion. The motion was approved.

Agenda Item: III. College of Technology and Computer Science, Department of Engineering Ricky Castles and Leslie Pagliari

(1.) Revision of Existing Course(s): ENGR 2070; ISYS 3060

Discussion: Dr. Castles introduced the changes that they brought forward pursuant to existing courses. Dr. Dingfelder stated that the memo should state that the faculty voted to approve these revisions, and Dr. Castles agreed to add this to the memo. Dr. Dingfelder stated that both course syllabi were required to include the plus/minus grading scale, and Dr. Cellucci further explained that this was the university policy as listed in the ECU undergraduate catalog. Professor Vail-Smith added that the course proposals we approve would contain the official syllabus of record, though each individual instructor may make his/her own adjustments. Dr. Castles agreed to add the plus/minus grading system to both course syllabi. Dr. Reaves asked that the justification (Item #5) for both courses should be revised to include a summary statement that these changes are being made to improve the courses based on student-learning outcomes. Dr. Dingfelder noted that the grading scale for ISYS 3060 must list a "D—". Additionally, Diane Coltraine stated that a URL was needed at the top of the marked catalog copy. Dr. Castles agree to make all the changes requested.

Action Taken: Dr. Batts made a motion to accept as amended, and Dr. Dingfelder seconded the motion. The motion was approved.

Agenda Item: IV. College of Health and Human Performance, Department of Health Education and Promotion, Susan McGhee and Michele Wallen

(1.) Proposal of New Course(s): HLTH 2900, HLTH 3550

Discussion: Dr. McGhee and Dr. Wallen introduced themselves, and then Dr. Wallen stated that the changes to these courses were based upon student feedback from a capstone course. She explained that the faculty is introducing changes based upon needs of the students. Dr. Reaves praised them for the statements in the justification regarding using student learning outcomes. Dr. Batts stated that the memo should state that the faculty voted and approved the changes. The committee agreed that the new course proposals were satisfactory.

Action Taken: Dr. Scemama moved to approve as amended, and Dr. Batts seconded the motion. The motion was approved.

(2.) Revision of Existing Course(s): HLTH 4305, HLTH 4323

Discussion: There was some discussion of the listing of course credit (Item 13) on the course proposal form for HLTH 4323 and whether credit should be separated to give 2 hours for the lecture and 1 hour for the lab. Dr. Dingfelder stated that sometimes the lab is a separate course where the lab gets credit, but other courses allow you to have lab hours per week that are only a portion of the course credit hour. Dr. Scemama stated that in most courses where the lab is part of the course, the lecture is credited with the total credit hours and not the lab. The number of hours (in time) that students actually meet in lecture and lab are noted on the form as well. Dr. Kain said that what Dr. Scemama stated has been the practice. After the discussion, the committee was polled and Dr. Cellucci clarified the result. The UCC consensus was that the lecture be credited with the 3 credit hours and the lab be credited with zero credit hours. Ms. Nicholson suggested that the form might be changed to avoid the confusion with the course credit. Regarding HLTH 4305, Ms. Coltraine asked Dr. Wallen if they might consider adding reference to the practicum in the course description, and Dr. Wallen clarified the practicum would be incorporated within the class and not be a separate component so they did not wish to mention it in the course description. Dr. Wallen agreed to make all the changes requested by the committee.

Action Taken: Dr. Scemama moved to approve as amended, and Dr. Batts seconded the motion. The motion was approved.

(3.) Title and Prerequisite Revision of Existing Course (no content change): HLTH 3244

Discussion: The committee agreed with this revision.

Action Taken: Dr. Scemama moved to approve as amended, and Dr. Batts seconded the motion. The motion was approved.

(4.) Revision of Exiting Degree(s): BS in School Health Education

Discussion: Dr. Kain stated that request #7 in the memo regarding READ 5317 should be removed from the memo because 5000-level courses are under GCC jurisdiction as graduate courses. She also said that READ 5317 must be removed from the proposed marked catalog copy under the Core courses for the School Health Education BS degree in order for UCC to approve the marked catalog copy. Dr. Wallen agreed to make the changes requested.

Action Taken: Dr. Scemama moved to approve as amended, and Dr. Batts seconded the motion. The motion was approved.

(5.) Revision of Existing Academic Concentration(s): Interdisciplinary Human Studies

Discussion: Additionally, Dr. Kain stated that HLTH 5310 should be removed from the proposed marked catalog copy since UCC cannot approve including a graduate course; she asked Dr. Wallen if this removal would hurt the licensure. Dr. Cellucci suggested that the faculty could propose a 4000-level course to replace this HLTH 5310 for the undergraduates; if faculty moved quickly the new course could be added to the agenda in the fall. Dr. McGhee asked if they could instead replace the course listing with the phrase "and an approved human sexuality course," and the committee agreed to this change.

Action Taken: Dr. Scemama moved to approve as amended, and Dr. Batts seconded the motion. The motion was approved.

Agenda Item: V. Thomas Harriot College of Arts and Sciences, Department of Mathematics
Gail Ratcliff

(1.) Revision of an Existing Degree(s): BA in Mathematics, BS in Mathematics

Discussion: Dr. Ratcliff explained that the faculty approved changes in credit hours for the BA and BS degrees because students are taking extra electives that are not required for the degree. She stated that students would only need 120 hours not 126 hours. Dr. Batts stated that under Item 4. of the Math BS degree, that "according to concentration area" be added after "Specified electives." Dr. Ratcliff agreed to this change.

Action Taken: Dr. Scemama moved to approve as amended, and Dr. Batts seconded the motion. The motion was approved.

Agenda Item: VI. Thomas Harriot College of Arts and Sciences, North Carolina Studies Interdisciplinary Program, Christopher Oakley

(1.) Prerequisite Revision of Existing Course(s): NCST 4000

Discussion:. Dr. Oakley introduced the revisions made to NCST 4000. Dr. Kain asked if this was a current course, and Dr. Oakley responded that it is currently taught. Dr. Oakley stated that he would teach the NCST 4000 course even though he has few students right now; he is hopeful that the student enrollment will increase.

Action Taken: Dr. Scemama moves to approve, and Dr. Batts seconded the motion. The motion was approved.

(2.) Deletion of Existing Course(s): NCST 2000, NCST 4010

Discussion: The committee approved the deletion of NCST 2000 and NCST 4010.

Action Taken: Dr. Scemama moves to approve, and Dr. Batts seconded the motion. The motion was approved.

(3.) Revision of Existing Minor(s): North Carolina Studies Minor

Discussion: Dr. Oakley explained that the revision of the minor was made so that it was easier for students to complete the requirements. Professor Vail-Smith asked about the process of curricular approval, and Dr. Oakley replied that the College of Arts and Sciences curriculum committee approved the revision to the minor. Professor Vail-Smith asked that the memo be revised so that it is addressed to UCC committee. Dr. Reaves stated that the memo must state who approved the revision, and she reminded Dr. Oakley that just a revision to a minor does not have to go to EPPC. Diane Coltraine mentioned that the marked catalog copy would need to be revised to replaced underlines with strikethroughs. Dr. Kain reminded Dr. Oakley that UCC couldn't approve changes to 5000-level courses, so HIST 5135 must be removed from the list of electives. Dr. Oakley agreed to make the changes.

Action Taken: Dr. Scemama moves to approve as amended, and Dr. Batts seconded the motion. The motion was approved.

Agenda Item: VI. Old Business

No items for this meeting

Agenda Item: VII. New Business

(1) Involving UCC Liaisons—Dr. Cellucci suggested that the UCC might put forth a recommendation to the Faculty senate to request support in having the UCC liaisons more involved in the review of curricular changes before they are sent to the UCC. Professor Vail-Smith suggested that this liaison be listed in each unit's approved unit code. Dr. Batts suggested that a signature line be added to the signature form to show

the liaison's review and approval. Diane Coltraine stated that the Faculty Senate did not want to add another step to the approval process by establishing an additional check-off by the liaison. Ms. Nicholson described to the UCC members the policy used for UCC vs. GCC; she said with the GCC, the GCC resource person was being copied on all correspondence with changes. Dr. Cellucci asked Ms. Nicholson if the process of notifying the liaison by being copied on all the changes has worked well, and she responded that she thought it was beneficial. Dr. Kain confirmed that the UCC had been notifying liaisons of packages when packages were submitted by other faculty and suggested that before we proceed with changes we take a poll of the liaisons to see what they think. Dr. Swank suggested that if when the materials are submitted, if 80% of the submission is incorrect—could it not be returned to the unit? It was noted that the UCC does send packages back for more work if they are not correct. Staff confers with the Chair on issues prior to the development of the agenda. Dr. Kain noted that very few packages come to the committee with that many problems but even with pre-review, some problems are going to surface in the committee. The purpose of the committee is to review. Additionally, Dr. Kain reminded the committee that not all liaisons attend training, and not every unit has its own liaison. Dr. Cellucci recommended that the UCC Chair (Dr. Flint) could reach out to the liaisons and see what they would like to see happen with their involvement. Dr. Reaves stated that there was a two-hour meeting for liaison training scheduled each fall semester, but perhaps more could be done. The committee agreed to discuss this again at our next meeting when Dr. Flint is present.

(2) Recognition of out-going members—will be done at the 4/24/14 UCC Organizational meeting.

Curricular Actions Reviewed at This Meeting:

New Courses:	2
Revised/Renumbered/Unbanked Courses (includes title/prereq./prefix):	12
New Degrees/Programs:	0
New Minors	0
New Concentrations:	2
New Certificates:	0
Revised Existing Degrees/Concentrations/Departmental Text:	5
Deletion of Existing Degrees/Concentrations:	0
Revised Minors/Certificates:	1
Deletion of Existing Minors/Certificates:	0
Banked Courses:	0
Deletion of Existing /Banked Courses:	2

Curricular Actions Reviewed to Date (to include this meeting):

New Courses:	92
Revised/Renumbered/Unbanked Courses (includes title/prereq./prefix):	462
New Degrees/Programs:	1
New Minors:	1
New Concentrations:	12
New Certificates:	1
Revised Existing Degrees/Concentrations/Departmental Text	67
Deletion of Existing Degrees/Concentrations:	8
Revised Minors/Certificates:	11
Deletion of Existing Minors/Certificates:	2
Banked Courses:	23
Deletion of Existing /Banked Courses:	82

NEXT MEETING: April 24, 2014, organizational

ITEMS TO BE DISCUSSED: see agenda

ADJOURNMENT: Dr. Cellucci moved to adjourn at 4:15PM. Motion passed. Meeting adjourned.

Respectfully Submitted by

Mark D. Richardson
Secretary of the UCC

Marked Catalog Copy:

Agenda Item II.
Thomas Harriot College of Arts and Sciences
Department of Biology

http://catalog.ecu.edu/preview_entity.php?catoid=4&ent_oid=285&returnto256

BIOL 2110 - Fundamentals of Microbiology

3 F,S FC:SC

3 lecture hours per week. May not count toward BIOL major or minor. P: CHEM 1120, CHEM 1130 or BIOL 1100 and CHEM 1150; 2.75 GPA ~~or consent of instructor~~; RP: BIOL 1050, BIOL 1051 or BIOL 1100, BIOL 1101. General study of microorganisms and their importance to humans. Emphasis on fundamental life processes, including a brief introduction to epidemiology and immunology.

BIOL 2140 - Human Physiology and Anatomy I

3

Part one of a t~~T~~wo-semester integrated course. A maximum of 4 s.h. of 2000-level human physiology and anatomy coursework may count toward the BIOL major or minor. P: CHEM 1120 or CHEM 1150; 2.75 GPA ~~or consent of instructor~~; C: BIOL 2141. Normal physiology and functional anatomy of human organ systems.

BIOL 2141 - Human Physiology and Anatomy I Laboratory

1

3 lab hours per week. Part one of a t~~T~~wo-semester integrated labs. A maximum of 4 s.h. of 2000-level human physiology and anatomy coursework may count toward the BIOL major or minor. C: BIOL 2140. Application of anatomical and physiological concepts.

BIOL 2150 - Human Physiology and Anatomy

3

Part two of a t~~T~~wo-semester integrated course. A maximum of 4 s.h. of 2000-level human physiology and anatomy coursework may count toward the BIOL major or minor. P: BIOL 2140; 2.75 GPA ~~or consent of instructor~~; C: BIOL 2151. Normal physiology and functional anatomy of human organ systems.

BIOL 2151 - Human Physiology and Anatomy II Laboratory

1

3 lab hours per week. Part two of a t~~T~~wo-semester integrated labs. A maximum of 4 s.h. of 2000-level human physiology and anatomy coursework may count toward the BIOL major or minor. P: BIOL 2141; C: BIOL 2150. Application of anatomical and physiological concepts.

BIOL 4170 - Immunology I

3 F

P: ~~BIOL 2300~~ BIOL 3220, BIOL 3260 or consent of instructor. Structure, function, and genetic organization of body's defense system. Interactions of immunocompetent cells and their role in infection, disease, and autoimmunity.

Agenda Item III.
College of Technology and Computer Science
Department of Engineering

URL:
http://catalog.ecu.edu/content.php?filter%5B27%5D=ENGR&filter%5B29%5D=2070&filter%5Bcourse_type%5D=-1&filter%5Bkeyword%5D=&filter%5B32%5D=1&filter%5Bcpage%5D=1&cur_cat_oid=4&expand=&navoid=257&search_database=Filter&filter%5Bexact_match%5D=1#

ENGR 2070 - Materials and Processes

3 ~~WI*~~

3~~2~~ lecture ~~and 2 lab~~ hours per week. P: CHEM 1150; ENGL 1200. Study of the materials used in engineering and related manufacturing processes. Materials topics include the atomic structure of materials, alloys, phase diagrams, and heat treatment. Manufacturing processes include casting, forming, machining, and joining processes.

URL:
http://catalog.ecu.edu/content.php?filter%5B27%5D=ISYS&filter%5B29%5D=3060&filter%5Bcourse_type%5D=-1&filter%5Bkeyword%5D=&filter%5B32%5D=1&filter%5Bcpage%5D=1&cur_cat_oid=4&expand=&navoid=257&search_database=Filter&filter%5Bexact_match%5D=1#

ISYS 3060 - Systems Optimization

3 Formerly SYSE 3060

3~~2~~ lecture ~~and 2 lab~~ hours per week. P: MATH 2154, MATH 3307. Mathematical tools applied to system optimization: problem formulations, identification of decision variables, use of graphical methods, linear programming, duality, and sensitivity analysis. Applications include transportation analysis, network analysis, project management, decision analysis, and production planning.

Agenda Item IV.
College of Health and Human Performance
Department of Health Education and Promotion

http://catalog.ecu.edu/preview_entity.php?catoid=4&ent_oid=323&returnto=256

Health

HLTH 2900 - Health Education Curriculum and Planning
3
Introduction to curriculum design and planning for effective health education.

HLTH 3244 - ~~Practices and Procedures in~~ Health Methods for Elementary Grades ~~School~~
2 F,S,SS
P: HLTH 1000 or HLTH 1050 and any ~~HLTH~~ 2123 course, or consent of the instructor. Required of all elementary education majors. Class organization, principles, and practices associated with health education at elementary level.

HLTH 3550 - Assessment in Health Education
3
P: HLTH 2900. Designing and using assessments in health education.

HLTH 4305 – ~~Class~~Classroom Organization and Management in Health Education ~~Occupations~~
3 ~~F~~
~~Strategies for managing behaviors in the health education classroom and related clinical settings.~~
P: HLTH 2900. Organizational and management foundations to create a positive classroom environment and optimize student learning.

HLTH 4323 - ~~Methods of Teaching Health Education~~ Health Education Methods for Middle and Secondary Grades
3 F,S

Two lecture and two practicum hours per week. For pre-service health education teachers. P: Admission to upper division; HLTH 2900; HLTH 3550; P for BS in physical education majors and health education alternative licensure students: Consent of BS in health education degree director. Theory and application of content and methodologies to be utilized in middle grades and secondary school health education settings. Supervised teaching practicum and preparation for internship semester ~~school health program~~.

http://catalog.ecu.edu/preview_program.php?catoid=4&poid=818

School Health Education, BS

Students entering the school health degree program must have a minimum cumulative 2.5 GPA. See ~~Section 4,~~ Academic Advisement, Progression and Support, Special Requirements for the BS Degree for Students Preparing to Teach. Minimum degree requirement is **126 s.h.** of credit as follows: ~~Note: These degree requirements are subject to change beginning Fall 2010 pending NC State Board of Education approval of revised licensure program requirements. Students should consult their departmental advisor for specific program information.~~

1. Foundations curriculum requirements including those listed below - 42 s.h.

(For information about courses that carry foundations curriculum credit see Liberal Arts Foundations Curriculum)

BIOL 1050 - General Biology
BIOL 1051 - General Biology Laboratory
BIOL 2130 - Survey of Human Physiology and Anatomy
HLTH 1000 - Health in Modern Society
MATH 1065 - College Algebra
PSYC 1000 - Introductory Psychology
PSYC 3206 - Developmental Psychology
SOCI 1025 - Courtship and Marriage
~~Choose a history course (FC:SO)~~
~~Choose a literature course (FC:HU)~~

2. Core - 5~~3~~5 s.h.

~~BIOL 2131 - Survey of Human Physiology and Anatomy Laboratory~~
EDTC 4001 - Technology in Education

EDUC 3002 - Introduction to Diversity or
PSYC 2777 - Ethnocultural Psychology or
SOCI 1010 - Race, Gender, Class

EDUC 3200 - Foundations of American Education

EDUC 4400 - Foundations of School Learning, Motivation, and Assessment or
PSYC 4305 - Educational Psychology

HLTH 2000 - Principles of Public Health
HLTH 2123 - Early Experiences for the Prospective Teacher
HLTH 2125 - Safety Education and First Aid
HLTH 2126 - Safety Education and First Aid
HLTH 2900 - Health Education Curriculum and Planning
~~HLTH 3010 - Health Problems I~~
~~HLTH 3020 - Health Disparities~~
~~HLTH 3030 - Health Behavior~~
HLTH 3244 - ~~Practices and Procedures in~~ Health Methods for Elementary Grades ~~School~~
HLTH 3355 - Alcohol, Tobacco, and Other Drugs Education and Prevention
HLTH 3550 - Assessment in Health Education
HLTH 4305 - Classroom Organization and Management in Health Education
HLTH 4323 - ~~Methods of Teaching Health Education~~ Health Methods for Middle and Secondary Grades
HLTH 4324 - Internship in Health Education
HLTH 4326 - Internship Seminar: Issues in Health Education
HLTH 5310 - Education for Human Sexuality

NUTR 1000 - Contemporary Nutrition or
NUTR 2105 - Nutrition Science

READ 3990 - Teaching Reading in the Content Areas in the Secondary School
SPED 4010 - Effective Instruction in Inclusive Classrooms

3. Approved academic concentration - 18-24 s.h.

(A maximum of 6 s.h. may count toward foundations curriculum requirements.)

Click here for approved Academic Concentrations.

4. Electives to complete requirements for graduation.

http://catalog.ecu.edu/preview_program.php?catoid=4&poid=868

Academic Concentrations

Students in business education, elementary education, physical education, and health education are required to complete one 18 s.h. academic concentration. Middle grades education students are required to complete two 24 s.h. academic concentrations from English, mathematics, social studies, and general science only. Please consult your advisor for the appropriate concentration(s) in your area. A maximum of 6 s.h. can be counted toward foundations curriculum.

Interdisciplinary Human Studies - 18 s.h.

Choose 9 s.h. from the following:

EXSS 2900 - Teaching Skillful Movement
EXSS 3300 - Applied Sports Psychology
EXSS 3301 - Physical Education and Sport in Modern Society
EXSS 3900 - Elementary School Instruction in Physical Education
HLTH 2900 - Health Education Curriculum and Planning
~~HLTH 3020 - Health Disparities~~
~~HLTH 3030 - Health Behavior~~
~~HLTH 4001 - Stress Management: Principles and Practices~~
HLTH 5310 - Education for Human Sexuality
PSYC 1000 - Introductory Psychology
PSYC 4350 - Psychology of Sexual Behavior
~~REHB 2003 - Alcohol and Drug Abuse: Health and Social Problem~~
SOCI 1025 - Courtship and Marriage
SOCI 3325 - Sociology of Human Sexuality

Choose 9 s.h. from the following:

BIOL 2130 - Survey of Human Physiology and Anatomy
EHST 2110 - Introduction to Environmental Health Sciences
EXSS 2202 - Motor Learning and Performance
EXSS 3805 - Physiology of Exercise
EXSS 3850 - Introduction to Biomechanics
EXSS 3906 - Physical Education for Special Populations
EXSS 4804 - Measurement and Evaluation in Exercise and Sport Science
EXSS 4805 - Exercise Evaluation and Prescription Laboratory
EXSS 4806 - Exercise Evaluation and Prescription
HLTH 2125 - Safety Education and First Aid

HLTH 2126 - Safety Education and First Aid
~~HLTH 3010 - Health Problems I~~
HLTH 3355 - Alcohol, Tobacco, and Other Drugs Education and Prevention HLTH 3550 - Assessment in Health Education
HLTH 4305 - Classroom Organization and Management in Health Education
NUTR 1000 - Contemporary Nutrition or
NUTR 2105 - Nutrition

Note: Physical education majors seeking a license in health education are required to take: HLTH 2900, HLTH 3550, HLTH 4305, and an approved human sexuality course.

Agenda Item V.
Thomas Harriot College of Arts and Sciences
Department of Mathematics

http://catalog.ecu.edu/preview_program.php?catoid=4&poid=672

MATHEMATICS, BA

Credit toward a mathematics major will not be given in any MATH course or in CSCI 2310, CSCI 2311 with a grade less than C- (1.7). The degree offers two concentration areas: mathematics and statistics. The mathematics concentration requires a minor and the statistics concentration requires specified cognates in lieu of a minor. Minimum degree requirement is ~~**126**~~ **120 s.h.** of credit as follows:

1. Foundations curriculum - 42 s.h.

(For information about courses that carry foundations curriculum credit see *Liberal Arts Foundations Curriculum*.)

2. Foreign language through level 1004 - 12 s.h.

3. Common core - 30 s.h.

- MATH 2171 - Calculus I
- MATH 2172 - Calculus II
- MATH 2173 - Calculus III
- MATH 2300 - Transition to Advanced Mathematics
- MATH 3256 - Linear Algebra

- MATH 3263 - Introduction to Modern Algebra
- MATH 3307 - Mathematical Statistics I
- MATH 4101 - Advanced Calculus I
- MATH 4331 - Introduction to Ordinary Differential Equations

4. Cognate - 4 s.h.

- CSCI 2310 - Algorithmic Problem Solving and Programming Laboratory
- CSCI 2311 - Algorithmic Problem Solving and Programming Laboratory

5. Concentration area to include minor or specified cognates as listed below. - ~~31-40~~ 27 – 36 s.h.

(Choose one area.)

Mathematics - 30-36 s.h.:

Choose 6 s.h. of MATH electives numbered above 2999, excluding MATH 3229, MATH 3237, MATH 3239

Minor (24-30 s.h.)

Statistics – 27 s.h.:

~~Choose 9 s.h. of MATH electives numbered above 2999, excluding MATH 3229 , MATH 3237 , MATH 3239 , and excluding cognates listed below.~~

Excluding the cognates below, choose 9 s.h. of electives from

- ECON 3343 - Econometrics
- ECON 4430 - Business Cycles and Forecasting
- MATH courses numbered above 2999
- OMGT 4493 - Quality Management

Cognates (18 s.h.):

- ~~CSCI 5774 - Programming for Research~~
- MATH 3308 - Mathematical Statistics II
- MATH 4005 - Introduction to Sampling and Experimental Design
- ~~MATH 5031 - Applied Statistical Analysis~~
- MATH 4031 - Applied Statistical Analysis

- MATH 4201 - Introduction to Stochastic Processes
- MATH 4774 - Programming for Research
- ~~MATH 5801 – Probability Theory~~
- MATH 4801 - Probability Theory

~~Choose 6 s.h. from:~~

- ~~ECON 3343 - Econometrics~~
- ~~ECON 4430 - Business Cycles and Forecasting~~
- ~~MATH 4201 - Introduction to Stochastic Processes~~
- ~~MATH 5000 - Introduction to Sampling Design~~
- ~~MATH 5132 - Probabilistic Methods in Operations Research~~
- ~~OMGT 4493 - Quality Management~~

6. Electives to complete requirements for graduation.

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http://catalog.ecu.edu/preview_program.php?catoid=4&poid=748&returnto=250

MATHEMATICS, BS

Credit toward a mathematics major will not be given in any MATH course with a grade less than C (1.7). Minimum degree requirement is ~~**126**~~ **120 s.h.** of credit as follows:

1. Foundations curriculum - 42 s.h.

(For information about courses that carry foundations curriculum credit see *Liberal Arts Foundations Curriculum*.)

2. Common mathematics core - 37 s.h.

- MATH 2171 - Calculus I
- MATH 2172 - Calculus II
- MATH 2173 - Calculus III
- MATH 2300 - Transition to Advanced Mathematics
- MATH 3256 - Linear Algebra
- MATH 3263 - Introduction to Modern Algebra
- MATH 3307 - Mathematical Statistics I
- MATH 3308 - Mathematical Statistics II

- MATH 4101 - Advanced Calculus I
- MATH 4331 - Introduction to Ordinary Differential Equations
- CSCI 2310 - Algorithmic Problem Solving and Programming Laboratory
- CSCI 2311 - Algorithmic Problem Solving and Programming Laboratory

3. Concentration area - 13-33 s.h.

(Choose one area.)

Mathematics - 27-33 s.h.:

- MATH 4110 - Elementary Complex Variables
- Minor (24-30 s.h.)

Science - 27-28 s.h.

- CHEM 1150 - General Chemistry I
- CHEM 1151 - General Chemistry Laboratory I
- CHEM 1160 - General Chemistry II
- CHEM 1161 - General Chemistry Laboratory II
- MATH 4110 - Elementary Complex Variables
- PHYS 2350 - University Physics
- PHYS 2360 - University Physics

Choose one of the following:

- BIOL 1100 - Principles of Biology I
- BIOL 1101 - Principles of Biology I Laboratory
- and
- BIOL 1200 - Principles of Biology II
- BIOL 1201 - Principles of Biology II Laboratory
- A combination of any 3 courses numbered above 1999 in Chemistry or numbered above 3999 in Physics.

Statistics - ~~21~~ 18 s.h.

- ~~ENGL 3880 - Writing for Business and Industry~~
- MATH 4005 - Introduction to Sampling and Experimental Design
- MATH 4031 - Applied Statistical Analysis

- MATH 4100 - Mathematics of Risk Analysis or

- MATH 4300 - Financial and Actuarial Mathematics

- MATH 4201 - Introduction to Stochastic Processes
- ~~MATH 4201 - Introduction to Stochastic Processes or~~
- ~~MATH 5000 - Introduction to Sampling Design~~
- MATH 4774 - Programming for Research
- MATH 4801 - Probability Theory
- ~~MATH 4999 - Capstone and Statistical Consulting~~
- ~~PHIL 2274 - Business Ethics~~

Computer Science - 13 s.h.

- CSCI 2410 - Digital Electronics or
- EENG 2410 - Digital Electronics
  or
- CSCI 3675 - Organization of Programming Language
  or
- MATH 4110 - Elementary Complex Variables

- CSCI 3300 - Introduction to Algorithms and Data Structures
- CSCI 3310 - Advanced Data Structures and Data Abstraction
- CSCI 3650 - Analysis of Algorithms

4. Specified electives, according to concentration area

Mathematics - 9 s.h.:

Choose 9 additional s.h. in consultation with advisor from

- MATH 3174 - Vector Calculus
- MATH 3233 - College Geometry
- MATH 3273 - Combinatorics
- MATH 3301 - Foundations of Geometry
- MATH 3573 - Introduction to Numerical Analysis
- MATH 4005 - Introduction to Sampling and Experimental Design
- MATH 4100 - Mathematics of Risk Analysis
- MATH 4201 - Introduction to Stochastic Processes
- MATH 4264 - Introduction to Modern Algebra II
- MATH 4300 - Financial and Actuarial Mathematics
- MATH 4801 - Probability Theory
- ~~MATH 5000 - Introduction to Sampling Design~~

- MATH 5002 - Logic for Mathematics and Computer Science
- MATH 5021 - Theory of Numbers I
- MATH 5102 - Advanced Calculus II
- MATH 5121 - Numerical Analysis in One Variable
- MATH 5122 - Numerical Analysis in Several Variables
- MATH 5131 - Deterministic Methods in Operations Research
- MATH 5132 - Probabilistic Methods in Operations Research
- MATH 5311 - Mathematical Physics
- MATH 5322 - Foundations of Mathematics
- MATH 5551 - The Historical Development of Mathematics

Science - 3 s.h.

Choose 3 additional s.h. in consultation with advisor from

- MATH 3174 - Vector Calculus
- MATH 3233 - College Geometry
- MATH 3273 - Combinatorics
- MATH 3301 - Foundations of Geometry
- MATH 3573 - Introduction to Numerical Analysis
- MATH 4005 - Introduction to Sampling and Experimental Design
- MATH 4100 - Mathematics of Risk Analysis
- MATH 4201 - Introduction to Stochastic Processes
- MATH 4264 - Introduction to Modern Algebra II
- MATH 4300 - Financial and Actuarial Mathematics
- MATH 4801 - Probability Theory
- ~~MATH 5000 - Introduction to Sampling Design~~
- MATH 5002 - Logic for Mathematics and Computer Science
- MATH 5021 - Theory of Numbers I
- MATH 5102 - Advanced Calculus II
- MATH 5121 - Numerical Analysis in One Variable
- MATH 5122 - Numerical Analysis in Several Variables
- MATH 5131 - Deterministic Methods in Operations Research
- MATH 5132 - Probabilistic Methods in Operations Research
- MATH 5311 - Mathematical Physics
- MATH 5322 - Foundations of Mathematics
- MATH 5551 - The Historical Development of Mathematics

Statistics - ~~9~~ 12 s.h.

~~**Choose 3 additional s.h. from**~~

Choose 12 s.h. of electives from MATH courses numbered above 2999 (excluding MATH 3229, MATH 3237, MATH 3239), or ECON 3343, or ECON 4430, or OMGT 4493.

- ~~MATH 4201 - Introduction to Stochastic Processes~~
- ~~MATH 5000 - Introduction to Sampling Design~~
- ~~MATH 5132 - Probabilistic Methods in Operations Research~~
- ~~OMGT 4493 - Quality Management~~
- ~~ECON 3343 - Econometrics~~
- ~~ECON 4430 - Business Cycles and Forecasting~~

~~Choose 6 additional s.h. from~~

- ~~MATH 3174 - Vector Calculus~~
- ~~MATH 3233 - College Geometry~~
- ~~MATH 3273 - Combinatorics~~
- ~~MATH 3301 - Foundations of Geometry~~
- ~~MATH 3573 - Introduction to Numerical Analysis~~
- ~~MATH 4100 - Mathematics of Risk Analysis~~
- ~~MATH 4110 - Elementary Complex Variables~~
- ~~MATH 4264 - Introduction to Modern Algebra II~~
- ~~MATH 4300 - Financial and Actuarial Mathematics~~
- ~~MATH 5002 - Logic for Mathematics and Computer Science~~
- ~~MATH 5021 - Theory of Numbers I~~
- ~~MATH 5102 - Advanced Calculus II~~
- ~~MATH 5121 - Numerical Analysis in One Variable~~
- ~~MATH 5122 - Numerical Analysis in Several Variables~~
- ~~MATH 5131 - Deterministic Methods in Operations Research~~
- ~~MATH 5132 - Probabilistic Methods in Operations Research~~
- ~~MATH 5311 - Mathematical Physics~~
- ~~MATH 5322 - Foundations of Mathematics~~
- ~~MATH 5551 - The Historical Development of Mathematics~~

Computer Science - 15 s.h.

Choose 3 s.h. from

- MATH 3174 - Vector Calculus
- MATH 3233 - College Geometry
- MATH 3273 - Combinatorics
- MATH 3301 - Foundations of Geometry
- MATH 3573 - Introduction to Numerical Analysis
- MATH 4005 - Introduction to Sampling and Experimental Design
- MATH 4100 - Mathematics of Risk Analysis
- MATH 4201 - Introduction to Stochastic Processes
- MATH 4264 - Introduction to Modern Algebra II

- MATH 4300 - Financial and Actuarial Mathematics
- MATH 4801 - Probability Theory
- ~~MATH 5000 - Introduction to Sampling Design~~
- MATH 5002 - Logic for Mathematics and Computer Science
- MATH 5021 - Theory of Numbers I
- MATH 5102 - Advanced Calculus II
- MATH 5121 - Numerical Analysis in One Variable
- MATH 5122 - Numerical Analysis in Several Variables
- MATH 5131 - Deterministic Methods in Operations Research
- MATH 5132 - Probabilistic Methods in Operations Research
- MATH 5311 - Mathematical Physics
- MATH 5322 - Foundations of Mathematics
- MATH 5551 - The Historical Development of Mathematics

Choose 12 s.h. of

- CSCI electives numbered above 1999
-
- CSCI 2310 - Algorithmic Problem Solving and Programming Laboratory
- CSCI 2311 - Algorithmic Problem Solving and Programming Laboratory
-
- CSCI 2610 - Introduction to Computer Science II and Laboratory
- CSCI 2611 - Introduction to Computer Science II and Laboratory
- CSCI 3300 - Introduction to Algorithms and Data Structures
- CSCI 3310 - Advanced Data Structures and Data Abstraction
- CSCI 3510 - Data Structures
- CSCI 3584 - Computational Linear Algebra
- CSCI 3601 - Computer Organization and Programming
- CSCI 3650 - Analysis of Algorithms

5. Electives to complete requirements for graduation.

Agenda Item VI.
Thomas Harriot College of Arts and Sciences
North Carolina Studies Interdisciplinary Program

http://catalog.ecu.edu/content.php?filter%5B27%5D=NCST&filter%5B29%5D=&filter%5Bcourse_type%5D=-1&filter%5Bkeyword%5D=&filter%5B32%5D=1&filter%5Bcpage%5D=1&cur_cat_oid=4&expand=&navoid=257&search_database=Filter&filter%5Bexact_match%5D=1

~~NCST 2000 - Introduction to North Carolina Studies~~

~~3 F~~

~~NC studies via anthropology, biology of coastal plains, geography, history, literature, politics, and society.~~

NCST 4000 - Windows on North Carolina's Past

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3 S

~~P: NCST 2000 ;~~ 6 s.h. in NCST; or consent of director. Interdisciplinary research seminar focusing on selected events, localities, and/or groups from NC's past.

~~NCST 4010 - Contemporary Issues and Problems in North Carolina~~

~~3 S~~

~~P: NCST 2000 ; 6 s.h. in NCST; or consent of director. Interdisciplinary research seminar focusing on selected contemporary issues in NC.~~

http://catalog.ecu.edu/preview_program.php?catoid=4&poid=742&returnto=250

North Carolina Studies Minor

Christopher Oakley, 202A Brewster Building

The minor in North Carolina studies is an interdisciplinary program that requires 24 s.h. credit. The minor provides students with a comprehensive ~~natural and cultural history~~ overview of North Carolina ~~and a knowledge of the contemporary conditions and issues that history has created~~. The program requires ~~an introductory course, a senior research seminar, a series of core courses,~~ two core courses: HIST 3100 and NCST 4000. The program also includes cognates, from which students must choose one, and electives drawn from the following disciplines: anthropology, ~~biology~~, English, geography, ~~geology~~, history, and political science. ~~Courses taken to meet foundations curriculum requirements cannot be used to satisfy the requirements of the North Carolina studies minor but 3 s.h. of coursework from a student's major can be accepted as credit toward the minor.~~ A maximum of 6 s.h. may be used to satisfy foundations curriculum requirements and requirements for the North Carolina studies minor. No more than 3 s.h. of course work in the student's major field will be accepted for credit toward the minor. Additional courses beyond those listed below will be accepted if they significantly further the student's understanding of North Carolina studies. The student's minor program must be approved by the director of the North Carolina studies program.

1. Core - ~~15 s.h.~~ 6 s.h.

- ~~ENGL 4230 - North Carolina Literature~~
- ~~GEOG 3055 - North Carolina~~
- HIST 3100 - North Carolina History ~~or~~
- ~~HIST 5135 - Problems in North Carolina History~~
- ~~NCST 2000 - Introduction to North Carolina Studies~~
- NCST 4000 - Windows on North Carolina's Past ~~or~~
- ~~NCST 4010. Contemporary Issues and Problems in North Carolina (3) (S) (P: NCST 2000; 6 s.h. in NCST; or consent of director)~~

2. ~~Electives - 9 s.h.~~ Cognates - 3 s.h.

Students must choose one of the following courses. The others may be taken as electives.

- ENGL 4230 - North Carolina Literature
- GEOG 3055 - North Carolina

- POLS 3244 - North Carolina Politics

~~2. Electives - 9 s.h.~~ 3. Electives - 15 s.h.

(Choose from at least two of the areas listed below.)

~~No more than 3 s.h. of course work in the student's major field will be acceptable for credit toward the minor. Additional courses beyond those listed below will be accepted if they significantly further the student's understanding of North Carolina studies; prior approval by the director is required for additional courses.~~

- ANTH 3005 - North American Indians
- ANTH 3111 - North American Archaeology
- ANTH 5120 - Archaeology of the Southeastern US
- ~~BIOL 1010 - Biodiversity of Coastal North Carolina~~
- ~~BIOL 3400 - Biological Field Studies of the Coastal Plain~~
- ~~BIOL 3401 - Biological Field Studies of the Coastal Plain Laboratory~~
- ENGL 2230 - Southern Literature
- ENGL 3570 - American Folklore
- ENGL 4230 - North Carolina Literature
- ENGL 4890 - Practicum: Careers in Writing
- ~~ENGL 5230 - Southern Regional Literature~~
- ~~GEOL 5500 - Directed Studies in Geology~~
- GEOG 2410 - Fundamentals of GIS
- GEOG 3001 - Historical Geography of the United States
- GEOG 3055 - North Carolina
- GEOG 4220 - Coastal Geography
- ~~HIST 3100 - North Carolina History~~
- HIST 3110 - History of African-Americans
- HIST 3170 - History of Native Americans
- HIST 5140 - The Old South
- HIST 5141 - The South Since 1877
- POLS 3240 - State and Local Government
- POLS 3244 - North Carolina Politics
- POLS 4321 - Contemporary Southern Politics