MINUTES OF THE UNIVERSITY CURRICULUM COMMITTEE
27 February 2003, Brewster B-104

Excused: M. Bassman, T. Skalko Also Present: S. Bland

I. Apologies were presented on behalf of Bassman and Skalko. The committee decided by consensus that it would not consider arguments concerning shared appointments on item 13, as that falls outside the committee’s charge.

II. Sylvie Henning presented the following items on behalf of Foreign Languages and Literatures: Unbanking and revision of FREN 2108: Culture and Communication, addition FREN 2108 in the BA French and French minor; Unbank and revise RUSS 2120 Introduction to Russian Culture (formerly Russian Civilization), Revise name and content of RUSS 2220 Nineteenth Century Russian Literature in Translation (formerly Russian Prose of the Nineteenth Century in Translation), Revise name and content of RUSS 2221 Twentieth Century Russian Literature in Translation (formerly Russian Prose of the Twentieth Century in Translation), New course RUSS 2700 Special Topics in Russian Studies. Hudson moved approval, Batie seconded. Motion passed unanimously.

III. Susan Williams presented the following on behalf of Nursing: Change s.h. of NURS 3210/3211 Nurse as Care Provider from 3,9 to 4,6. Graziani moved approval, Hudson seconded. Motion passed unanimously.

IV. Gil Leebieck presented the following actions on behalf of Art:

V. Michelle Hairston, Michael Crane, and Thomas Huener presented the following Music proposals: Revision of s.h. for MUSC 1705—Marching Band, new course MUSC 1706—Marching Band Field Experience, new course Arts Marketing MUSC 4228, Editorial revisions to admissions and course prerequisites/co-requisites for MUSC 1186: specify MUSC 1166 as a co-requisite in the description for MUSC 2176: specify MUSC 2156 as a co-requisite, in the description for MUSC 2186: specify MUSC 2166 as a co-requisite MUSC 4496 (formerly 5796) Opera History, specify MUSC 2416 (Music History and Literature) as a pre-requisite for MUSC 4596 (formerly 5616) Historical Development of Solo Vocal Literature, specify MUSC 2416 as a pre-requisite for MUSC 4525 (History of Sacred Music and Worship), specify MUSC 2416 as a pre-requisite for MUSC 3156 (Conducting), specify MUSC 2186 (Basic Musicianship Lab) as a pre-requisite for MUSC 3176 (Orchestration), specify MUSC 2186 as a pre-requisite. Hudson moved approval pending receipt of catalogue copy within 24 hours, Smith seconded. Motion passed unanimously.

VI. Greg Lapicki presented the following Physics curriculum change: change cognate requirements for degree programs from MATH 1085 to MATH 1083. Graziani moved approval, Hudson seconded. Motion passed unanimously.

VII. Marie Farr and Maya Socolovski presented the following items on behalf of English:
New course ENGL 3240: U.S. Latino/a Literature, Title change 4910: Film Literature and History I to Survey of Film Styles and Movements, 4920: Film Literature and History II 4920: Contemporary American and International Cinema; Change course description of ENGL 1000 to limit enrollment to students with fewer than 40 credit hours. Discussion focused on whether or not this would cause major scheduling problems for students at the end of their careers, and how staffing would be arranged. The representatives replied it was a pedagogical question of whom should be enrolled, that it made no sense for students who had already taken literature courses enroll in what was essentially a skills course. The question was raised whether this would limit GE:HU options; the representatives replied that English offers a wide variety of literature courses fulfilling that requirement. Hudson moved approval, Smith seconded. The motion carried 7-1.

VIII. Al Burne presented new course in Planning, PLAN 4021 Advanced GIS. Gares moved approval, Batie seconded. Motion passed unanimously.

IX. Steve Estes presented the following items for Exercise and Sports Science: Title change of EXSS 1114 “Aerobic Dance” to “Group Fitness Activities”, New courses EXSS 1010 Fitness Walking EXSS 1214 Advanced Group Fitness EXSS 4001, 4002, 4003. Hudson moved to approve with editorial changes to the course descriptions, Batie seconded. Motion passed unanimously.

X. David Loy and Cheryl Estes presented the following on behalf of Recreation and Leisure Studies: Revision of admission and retention policies Moving BIOL 2131 from General Education to Area 3: Cognates Adding to Core Prerequisites for Recreational Therapy classes Revised Course Descriptions: 2230, 3240, 4250, 42524260, 4262, 4264, 4266 Revision of Semester Offerings; change in s.h. RCLS 3202 from 2 to 3. Hudson moved approval pending changes to affected prerequisites, Smith seconded. Motion passed unanimously.
XI. Carl Abrahamson presented the following changes to the Computer Science curriculum: Prerequisite Changes: CSCI 2618, CSCI 3573, CSCI 3700, CSCI 4530; Course Title Change CSCI 4200 to Software Engineering I; New Courses CSCI 4000 - 
Senior Assessment CSCI 4230 --- Software Engineering II CSCI 4710 --- Introduction to Developing e-Business Systems. It was noted that Wi credit had not yet been approved for the new courses. Hudson moved approval with editorial changes to new course descriptions, Graziani seconded. Motion passed unanimously.

XII. Jim Toppen presented the following on behalf of Industrial Science:
Prerequisite changes:  - IDIS 2770. Industrial Distributor: Purpose and Function (3)(F)(S)
New courses: IDIS 3805. Purchasing Logistics (3)(F)(S) (P: IDIS 2771) - IDIS 3815. Supply Chain Logistics (3)(F) (P: IDIS 2771). Deletion of 3 hour technical elective that is listed at the bottom of our degree program and requirement of BVTE 3302 Distribution Technology III: Selling (3)(F,S) or MKTG 4352. Selling and Sales Management (3)(F,S) and MATH 2228 Elementary Statistical Methods.

XIII. Gail Ratcliff presented revisions to the requirements for the BA in Mathematics; revision of the BA in Mathematics to include: "Credit toward a mathematics major will not be given in any MATH course or in CSCI 2510 or 2600 with a grade less than C."; Deletion of the following banked courses from the catalog: MATH 2165, 2166, 2182, 2183, 3219, 3220, 3221, 3222, 3268, 3269, 3275. Michelson moved approval, Batie seconded. Motion passed unanimously.

The Chair announced that the representative of Mathematics and faculty from that unit granted speaking privileges would be allowed twenty minutes to present their arguments; the representatives of Math Education would have the same time to present their proposal; then the floor would be opened for questions and discussion. Gail Ratcliff presented the following proposal for Mathematics; also speaking to the issue from Mathematics were Zachary Robinson and Michael Spurr. Val DeBellis was also granted speaking privileges.

Ratcliff put forth the following proposal:
Prefix changes in response to the request of the Faculty Senate last December regarding the move of various programs formerly housed in the Department of Mathematics to the School of Education: MATH prefix of the following courses be changed to MATE:
MATH 2123 Early Experiences for the Prospective Teacher
MATH 3004 Seminar in Secondary Mathematics Curriculum: Algebra
MATH 3005 Seminar in Secondary Mathematics Curriculum: Geometry
MATH 3218 Teaching Mathematics in Special Education
MATH 3223 Teaching Mathematics in the Elementary Grades (K-6)
MATH 4001 Technology in Secondary Mathematics Education
MATH 4319 Teaching Mathematics in the Middle Grades
MATH 4323 Teaching of Mathematics in High School
MATH 4324 Internship in Mathematics
MATH 4325 Internship Seminar: Issues in Mathematics Education
Recommendation that the Mathematics Department retain the prefix MATH in the catalogue, without being cross-listed;
MATH 1067 Algebraic Concepts and Relationships
MATH 1077 Precalculus Concepts and Relationships
MATH 2129 Basic Concepts of Mathematics II
MATH 2282 Data Analysis and Probability
MATH 2775 Topics in Discrete Mathematics
MATH 2935 Data Analysis
MATH 3166 Euclidean Geometry
MATH 3237 Discrete Mathematics

Robinson and Spurr then spoke in favor of the motion; see appendices 1 and 2 for their arguments, included at their request.

Val DeBellis presented the argument that the six courses in dispute needed to be offered in the Mathematics Department to be considered content courses in order to bring ECU's education students' s.h. in content courses in line with those of graduates of comparable institutions. She asserted that when considering applications, administrators look at that number and automatically disqualify candidates who do not have enough credit hours in content courses.

John Carter presented the following proposal from Mathematics Education; Ron Preston and Sid Rachlin also were granted speaking privileges and spoke to the issue:
Transfer of courses from The Department of Mathematics to the Department of Mathematics and Science Education., courses will change from the MATH prefix to the MATE prefix.
2123. Early Experiences for the Prospective Teacher (1)
2129. Basic Concepts of Mathematics (2)
To transfer to the School of Education:

2123 Early Experiences for the Prospective Teacher
2129 Basic Concepts of Mathematics II
3004 Seminar in Secondary Mathematics Curriculum: Algebra
3005 Seminar in Secondary Mathematics Curriculum: Geometry
3006 Seminar in Secondary Mathematics Curriculum: Advanced Mathematics
3218 Teaching Mathematics in Special Education
3223 Teaching Mathematics in the Elementary Grades K-6

4001 Technology in Secondary Mathematics Education
4319 Teaching Mathematics in the Middle Grades
4323 The Teaching of Mathematics in High School
4324 Internship in Mathematics
4325 Internship Seminar: Issues in Mathematics Education

Courses that will remain in the Department of Mathematics:

1077 Pre-Calculus Concepts and Relationships
3237 Discrete Mathematics*

II. Cross-listing of courses in the Department of Mathematics and the Department of Mathematics and Science Education.

These courses will be listed with both
MATH and MATE prefixes.

1067. Algebraic Concepts and Relationships (3).
2282. Data Analysis and Probability (3)
2775. Topics in Discrete Mathematics (3)
2935. Data Analysis (3).
3166. Euclidean Geometry (3)
3237. Discrete Mathematics (3) (Cross-listed beginning 2004)
3239. Applied Mathematics Via Modeling (3)

After the Mathematics Education faculty finished their proposals, Knickerbocker suggested a compromise: that the curriculum changes made by the Transition Committee be kept in effect for the fall 2003 and spring 2004 semesters, that the curriculum committees of Mathematics and Mathematics Education meet to work out revision of the six courses in dispute or write proposals for new courses to replace them in a way that would keep content courses in the Department of Mathematics, provide sufficient content courses and ensure the best professional training in pedagogy for Mathematics Education majors, and fulfill all SACS and NCATE accreditation and licensure requirements. They would be required to submit these proposals directly to the UCC by a given deadline; failure to meet that deadline would result in the imposition of a solution by the UCC, the Faculty Senate, and the Chancellor.

During the ensuing discussion, the following questions were considered: whether the faculty in Math Education that teach and will teach the transferred and cross-listed courses possessed the 18 hours of graduate study in mathematics required by SACS for accreditation; whether with this change our education graduates would be able to meet certification requirements in other states; whether it is the norm or not to include 1000-level courses in the calculation of content hours; what students (math or math education) primarily take the courses in dispute; and whether the Department of Mathematics would at present be able to staff courses if they were returned to that department.

Hudson requested that the UCC consider the compromise solution. During discussion, it was pointed out that a) the fall course schedules had already been turned in to the registrar b) the faculty of Mathematics had complained that they were not given sufficient notice in September of 2002 to review the curriculum changes put forth by the Transition Committee, nor were they given time to work out the issues at stake with the Mathematics Education faculty c) the faculty of those two disciplines are the people most qualified to decide what courses should be considered primarily content or pedagogy oriented. DeBelli expressed concern that in the mean time the Dept. of Mathematics offer enough content courses for teaching majors; representatives of that unit assured that this would be done. Hudson then moved that the UCC accept the compromise solution and impose a deadline of the end of fall 2003 semester for bringing the proposals back to the UCC, Graziani seconded. The motion was unanimously approved.
The meeting adjourned at 5:30.

Presentation to the University Curriculum Committee
Zachary Robinson,
Mathematics Department

As of early last fall, it almost looked as if the established procedures for curricular matters would be brushed aside in the rush to split teacher education programs and faculty from the College of Arts and Sciences. I would like to thank the Faculty Senate for upholding our right to vote and to be properly represented on this important issue of academic affairs.

This matter is on today's agenda because on February 10, the voting faculty of the Mathematics Department approved by ballot, with one abstention and no opposing vote, the Resolution on the Disposition of Mathematics Content Courses. The resolution has 4 points, in summary: (i) Mathematics content courses shall retain the catalogue prefix MATH without being cross-listed, (ii) among those courses under discussion, the department faculty certifies a list of math content courses, (iii) another list is held to be primarily professional methods courses, which may be transferred, and (iv) the math faculty invites the university to make joint appointments of the Mathematics Education faculty to the Mathematics Department.

I would like to briefly outline our perspective, and express my hope that in the debates and decisions regarding this curricular matter, not administrative expediency but academic concern, take center stage. Our main point is this: for well-understood reasons, the university is organized into departments, in which scholarship, including teaching and research, in a given, recognized area of academic expertise may be conducted by those who have achieved certification at the highest level of education in that discipline in order to benefit students and to increase knowledge. Indeed, the proper maintenance of that academic enterprise is the focus of a large portion of the Faculty Manual and of the SACS principles of accreditation. It is perhaps unusual to invoke such a basic principle in committee discussion, but that is exactly what is at stake here.

Secondly, although it is true that Chancellor Muse, in his June 2002 memorandum, did not agree with the faculty's position opposed to the transfer of teacher education faculty and programs, we do feel supported by certain key provisions. Dr. Muse states, “Teacher education is a high priority and central to the mission of East Carolina University. Students who are preparing for a career in teaching must develop a satisfactory understanding of the content or subject matter they will be teaching; the responsibility for achieving that goal must remain with the disciplinary units.” Chancellor Muse goes on to qualify his support for the transfer of teacher education faculty and programs by calling for “a high level of cooperation and coordination between the content and pedagogy processes,” and to call for “joint appointment in the disciplinary unit.”

We believe that the Math Department's resolution advances the framework mandated by the chancellor in two ways: first, by placing mathematics content courses under the supervision of the Mathematics Department, whose faculty members are obliged and qualified by professional training to uphold the quality of the mathematics curriculum; and second, by inviting the university to give joint appointments to mathematics educators, not the present 0% so-called appointments, so they may continue to play a vital role in the mathematics department.

In the name of pragmatism, some would oppose the mathematics faculty's proposal by trying to second-guess the wishes of the administration. The Southern Association of Colleges and Schools (SACS), our accreditation association, publishes policies, procedures and guidelines for accreditation. Their most important standards are termed 'principles of accreditation.' Principle 12, listed under the heading Standards for all Educational Programs, states unequivocally, "The institution places primary responsibility for the content, quality and effectiveness of its curriculum with its faculty." I believe that doing the right thing, focusing on academic and educational concerns, is pragmatic; otherwise, resulting problems will bring this issue before us once and over again. The crux of the matter before us is to decide which courses are mathematics content courses, the responsibility for which should remain with the Mathematics Department, and to support the best arrangement by seeking true joint appointments for the Mathematics Education faculty.

[presented by Prof. Michael Spurr, Dept. of Mathematics]
- Chancellor Muse’ directive states:
  - Students who intend to teach “must develop a satisfactory understanding of the content or subject matter they will be teaching; the responsibility for achieving that goal must remain with the disciplinary units.”
  - “teacher education faculty who will now have their primary appointments in the School of Education be allowed to have a joint appointment in the disciplinary unit, consistent with their desires and the approval of the unit.”
- The Mathematics Department voting faculty passed by a vote of [9 yes, 0 no, and 1 abstention] a resolution to keep math content courses in the math department, including the following content courses which would be kept under the prefix MATH without cross listing:
  - Math 1067, 2129, 2282, 2775, 2935, 3166, 3237, 3239, 1077, 6251, 6252, and 6272
- We document that these are Mathematics content courses, using documentation provided by the Math Education Area:
  - Program Description documents
  - Publication describing initiatives at ECU
  - NSF proposal
  - Sid Rachlin’s Memorandum
- We discuss in some detail Math content courses under consideration that we have personally taught, helped design, or with which we have been involved:
Ron Preston, Department of Mathematics and Science Education

1) Reasons for moving the courses in question from the Department of Mathematics to the Department of Mathematics and Science Education.

! The courses are mathematics education courses.

! Mathematics educators created the courses.

! Mathematics educators are the primary teachers of the courses.

! Mathematics educators have administered the courses.

! In some cases, mathematics educators developed the entire materials for course (e.g., in the case of 1067 and 3239).

! These courses are what mathematics educators do. That is, the focus for mathematics educators is the teaching and learning of mathematics.

! For some mathematics educators, these courses are their primary focal point – not just for teaching, but also research. For two mathematics educators whose research interest is research and development of undergraduate courses in mathematics, these courses are much more than teaching load and program.

! These classes make up a program that attempts to assure the proper content, technologies, methodologies, tools, etc. are used to prepare teachers according to national, state, and program area goals. For example, 3239 is a capstone class for the program. Who modifies the class as other classes change? Who collects the evaluation data (formal and informal, observational) about the program?

! These classes need continual revision (point to award where we demonstrated continual improvement). National and state standards change frequently; technologies change frequently. It is our profession to stay abreast of these issues and revise courses continually.

2) Description of the nature of the courses.

! The courses are mathematics courses.

! The courses in question are courses with integrated content and methods. Some might describe them as a blending of mathematics and pedagogy.

! However, the courses are more than a combination of mathematics and pedagogy. They include mathematics content that is structured in a fundamentally different way than other university mathematics courses. They are created with a different set of goals in place.
At times, these courses take mathematical content that begins in the appropriate school curriculum and traces it to university mathematics. This makes mathematical connections between the school curriculum our students will be teaching and the university curriculum. This is mathematics, but mathematics that primarily is intended for educators.

Assessments, writings, etc. are designed for future teachers, but involving university mathematics content.

Courses aim not just for knowledge and skill, but for deep understanding and connections.

Courses look for multiple representations (e.g., connections between graphical and symbolic). This occurs in other mathematics courses, but usually not to the same degree. Courses look to enrich the future teachers knowledge of mathematics, but also understanding a diverse population of students who will learn under their instruction.

Summary: These courses do not just connect content to pedagogy (although the courses do), but the ever changing school curriculum to the university curriculum. It is deepening the understanding of content by considering multiple solutions, making connections between graphical and analytical approaches to a task, it is using the latest technologies, it is keeping up with the latest demands on the curriculum mandated by federal and state legislation.

Question: Why not integrate methods and content? One can get at methods at the same time content is being considered. Methodological opportunities arise naturally in a math course for pre-service teachers. Why not take advantage of them?

3) A possible course of action for the University Curriculum Committee.

The intent of the mathematics education group was to have the ability to teach, revise, develop, and assign faculty to the courses in the cross-listed part of our joint proposal with the leadership of the Department of Mathematics. This proposal was submitted 13 September 2002 by the chair of the Department of Mathematics. We proposed cross listing for two reasons: (1) to maintain the same curricular input from the Department of Mathematics as we had before (their quality assurance for the courses, if you will) and (2) to insure that students taking math classes would not be hurt by some graduate school looking at their transcript and deciding they had not had math classes.

However, given that the Department of Mathematics faculty voted not to cross list after the negotiated proposal went through our School of Education structures, I am asking the UCC to do the only thing that will meet the primary objective of the mathematics education area: transfer the courses cross listed on our proposal to the Department of Mathematics and Science Education.

I hope that at some future time we can convince the Department of Mathematics to cross list. For a department that would not have the resources to teach the classes, would not have the time to stay current with latest recommendations and technologies, and would not have the reward structures in place to make it worth their while to contribute major resources to revising such courses when the need arises, the curricular quality control of cross-listing would seem to meet most needs and put the Department of Mathematics at past practice.

Finally, I encourage you to make the decision now so we can react for the future. We need to revise pre-requisites to classes now to meet needs of students, but do not have access to the courses.

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Brief History of Transfer if Mathematics Education from the College of Arts and Sciences to the School of Education
Prepared by John E. Carter, Interim Chair

On November 28, 2001, Dr. Robert Thompson sent to the departments involved a proposal for the movement of selected education programs (including mathematics education) from the College of Arts and Sciences to the School of Education. The proposal grew out of subsequent discussion by Dr. Thompson, Dean Sparrow, and Dean Sheerer. During this process, they proposed possible courses to be transferred based on their review of Catalog descriptions, degree requirements, and faculty teaching those courses.

June 11, 2002 letter from William V. Muse, Chancellor, states, “I am, therefore, approving the proposal for the transfer of the programs, effective July 1, 2002, and appointing the following committee [Transition Committee] as specified by the Faculty Manual, to oversee the implementation of these changes.”

August 9, 2002 letter from Robert J. Thompson, Chair of the Teacher Education Programs Transition Committee stated, “…The program faculty and Chairs of the Departments of Mathematics, English, and History are hereby asked to confirm the list of courses to be transferred by no later than September 13, 2002…”

September 13, 2002 letter from Gail L. Ratcliff, Chair of the Department of Mathematics forwarded a list of courses to the Transition Committee to be transferred. [This list was developed in a meeting of the Chair of the Mathematics Department, The Math Coordinator for Undergraduate Studies, and the Math Director of Graduate Studies, the faculty in the area of Mathematics Education, and the Interim Chair of the Department of Mathematics and Science Education. The above group went through each course individually that was listed in the above-mentioned letters to determine whether that course would be transferred. When differences arose in regard to the placement of a course, an accepted compromise was reached.] The Department of Mathematics and Science Education formally accepted the transfer of courses specified in the September 13 letter from the Chair of Mathematics.
After the mathematics educational faculty had become a part of the Department of Mathematics and Science Education in the School of Education, they chose and agreed unanimously for the course prefix of MATE. It was activated by the registrar’s office on September 23, 2002.

October 10, 2002 The University Curriculum Committee forwarded that same list of courses (as in September 13 letter) to the Faculty Senate.

On December 10 and 19, 2002 the Chair of the Faculty Senate stated that the courses should retain the old prefixes, and “...All courses should go through the appropriate curriculum committee process before action will be taken by the Faculty Senate.....”

The Department of Mathematics and Science Education, at their next meeting on January 7, 2003 reaffirmed their willing to accept the courses listed in the September 13 letter and forwarded that document through the required School of Education committees for their approval. During January and February it went through the Department Curriculum Committee, the School of Education Curriculum Committee, the Council for Teacher Education Curriculum Committee, the full Council for Teacher Education, and was forwarded to the University Curriculum Committee on February 20.

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## UNIVERSITY CURRICULUM COMMITTEE

**CATALOG COPY FOR MINUTES OF 2/27/2003 UCC MEETING**

### Department of Foreign Languages and Literatures

**FRENCH**

Unbank and Revise course

p. 332

2108 Culture and Communication (3) (F) (P: FREN 1004) Practice in spoken language. Emphasis on developing a practical vocabulary for use in conversations and discussions relating to contemporary French and Francophone culture. Includes use of variety of print and multimedia texts including literature, newspapers, magazines, film, television, and the world wide web.

p. 101, BA in French, 2. Core, Choose 9 s.h. from, add:

FREN 2108. Culture and Communication (3) (P: FREN 1004)

**RUSSIAN**

Add new course

p. 408

2700. Special Topics in Russian Studies (3) (S) May be repeated for maximum of 6 s.h. with change of topic. May not count toward general education requirements. May be taught in Russian or English. Selected topics relating to language, literature or culture of Russia (pre-Soviet, Soviet or post-Soviet. Topics may vary.

Unbank and Revise Courses

p. 408

2120. Introduction to Russian Culture (3) (GE:HU) (F) Taught in English. No knowledge of Russian required. May not count toward foreign language requirement. Introduces most significant achievements of Russian culture in their socio-historical context through study and discussion of important literary texts and other cultural elements.

Revise Courses

p. 408

2220. Nineteenth Century Russian Literature in Translation (3) (GE:HU) (F) Taught in English. No knowledge of Russian required. May not count toward foreign language requirement. Literature of Russia during the nineteenth century through study of selected readings in translation.

2221. Twentieth Century Russian Literature in Translation (3) (GE:HU) (S) Taught in English. No knowledge of Russian required. May not count toward foreign language requirement. Literature and culture of Russia and Soviet Union during twentieth century through reading and discussion of significant texts in translation.

### School of Nursing (NURS)

p. 386, Revise:

3210,3211. Nurse as Care Provider (6) (F,S) 4 lecture and 9 practicum hours per week. C: NURS 3020, 3021, 3040, 3200, 3270, 3271. Holistic view of adult client in acute care settings. Theoretical foundations of wellness and illness and their relationship to nursing practice.

### School of Music (MUSC)
New Courses

p. 379, 382
MUSC 1706. Marching Band Field Experience (1) May be repeated for credit. Open to all students. Participation in marching band with teaching component emphasizing marching band pedagogy through student leadership positions.

MUSC 4228. Arts Marketing (3) May count toward MUSC major electives. Key concepts, background, public relations strategies, and arts-specific marketing solutions for teachers, sacred musicians, and community-sponsored arts program directors to promote music, theatre, and art programs effectively.

p. 374, Prerequisite changes:
MUSC 3156, 3166. Conducting (1,1) P: MUSC 2166, 2186; P for 3166: MUSC 3156.

p. 376-77, Prerequisite changes:
MUSC 4496. Opera History (2) (WI) (S03) Formerly MUSC 5796 P: MUSC 2416.

MUSC 4596. Historical Development of Solo Vocal Literature (2) (WI) (S04) Formerly MUSC 5616 P: Senior standing; undergraduate survey of music history; MUSC 2416.

p. 379, Increase s.h. credit.
MUSC 1705. Marching Band (2) (GE:FA) May be repeated for credit. Open to all students.

p. 380, Prerequisite changes:

p. 381, Add corequisites:
MUSC 1176, 1186. Basic Musicianship Laboratory (1,1) (F,S,SS) 2 1-hour sessions per week. P for 1186: MUSC 1176; C for 1186: MUSC 1166.

MUSC 2176, 2186. Basic Musicianship Laboratory (1,1) 2 1-hour sessions per week. P for 2176: MUSC 1186; C for 2176: MUSC 2166; P for 2186: MUSC 2176; C for 2186: MUSC 2166.

Change prerequisite:
MUSC 3176. Orchestration (2) P: MUSC 2166, 2186.

pp. 236-246, Changes in MUSC degrees noted below:

Applied and Core Music Regulations for Music Majors and Minors

Add: MUSC 2248
A minimum grade of C in core MUSC courses (1156, 1166, 1176, 1186, 1406, 2156, 2166, 2176, 2186, 2248, 2406, 2416, 3156, 3166, 3176) is required to receive credit toward the music major.

BACHELOR OF MUSIC DEGREES

Add sentence to end of introductory paragraph.
For admission to upper level theory-composition concentrations, a student must have a minimum cumulative 3.0 GPA in music courses at the end of the sophomore year.

BM in Music Education

Under
2. Common core................................................................. 64 s.h.

Revise:

Core MUSC courses (30 s.h.):
MUSC 1156 (F), 1166 (S). Basic Musicianship (3,3)
MUSC 1176 (F), 1186 (S). Basic Musicianship Laboratory (1,1) (C for 1186: MUSC 1166)
MUSC 1406 (S), 2406 (F), 2416 (S). Music History and Literature (3,3,2) (WI, WI, WI)
MUSC 2156 (F), 2166 (S). Basic Musicianship (3,3) (P: MUSC 1166)
MUSC 2176 (F), 2186 (S). Basic Musicianship Laboratory (1,1) (P: MUSC 1186; C for 2176: MUSC 2156; C for 2186: MUSC 2166)
MUSC 2248 (F,S,SS). Music of the World's Peoples (2)
MUSC 3156 (F), 3166 (S). Conducting (1,1) (P: MUSC 2166, 2186)
MUSC 3176. Orchestration (2) (F,S) (P: MUSC 2166, 2186)

Performance groups (7 s.h.):
Minimum of 5 semesters large ensemble
Minimum of 2 semesters small ensemble
Wind and percussion majors must include 2 semesters of MUSC 1706. Marching Band Field Experience (1) (F)

3. Applied music (Keyboard, String, Voice, Wind or Percussion)................................. 22 s.h.
Revise:
  Applied minor (8 s.h.):
    Major Instrument: Keyboard

Revise: Choose one from MUSC 1405, 1415, 1425. Woodwind Group (1,1,1) (F,S)
To read: MUSC 1415. Woodwind Group (1) (F,S)

Revise: Choose one from MUSC 2305, 2315. String Class (1,1) (F,S)
To read: MUSC 2315. String Class (1) (F)

  Major Instrument: Strings

Revise: Choose one from MUSC 1405, 1415, 1425. Woodwind Group (1,1,1) (F,S)
To read: MUSC 1415. Woodwind Group (1) (F,S)

  Major Instrument: Voice

Revise: Choose one from MUSC 1405, 1415, 1425. Woodwind Group (1,1,1) (F,S)
To read: MUSC 1415. Woodwind Group (1) (F,S)

Revise: Choose one from MUSC 2305, 2315. String Class (1,1) (F,S)
To read: MUSC 2315. String Class (1) (F)

  Major Instrument: Wind or Percussion

Revise: Choose one from MUSC 1405, 1415, 1425. Woodwind Group (1,1,1) (F,S)
To read: MUSC 1415. Woodwind Group (1) (F,S)

Revise: Choose one from MUSC 2305, 2315. String Class (1,1) (F,S)
To read: MUSC 2315. String Class (1) (F)
Add: Choose 1 s.h. MUSC elective in consultation with advisor.

BM in Music Therapy

Under
2. Common Core ........................................................................................................ 64 s.h.

Revise
Core MUSC courses (30 s.h.):
  MUSC 1156 (F), 1166 (S). Basic Musicianship (3,3)
  MUSC 1176 (F), 1186 (S). Basic Musicianship Laboratory (1,1) (C for 1186: MUSC 1166)
  MUSC 1406 (S), 2406 (F), 2416 (S). Music History and Literature (3,3,2) (WI, WI, WI)
  MUSC 2156 (F), 2166 (S). Basic Musicianship (3,3) (P: MUSC 1166)
  MUSC 2176 (F), 2186 (S). Basic Musicianship Laboratory (1,1) (P: MUSC 1166; C for 2176: MUSC 2156; C for 2186: MUSC 2166)
  MUSC 2248 (F,S,SS). Music of the World's Peoples (2)
  MUSC 3156 (F), 3166 (S). Conducting (1,1) (P: MUSC 2166, 2186)
  MUSC 3176. Orchestration (2) (F,S) (P: MUSC 2166, 2186)

BM in Performance

Under
2. Common core (Core MUSC courses) 30 s.h.
  MUSC 1156 (F), 1166 (S). Basic Musicianship (3,3)
  MUSC 1176 (F), 1186 (S). Basic Musicianship Laboratory (1,1) (C for 1186: MUSC 1166)
  MUSC 1406 (S), 2406 (F), 2416 (S). Music History and Literature (3,3,2) (WI, WI, WI)
  MUSC 2156 (F), 2166 (S). Basic Musicianship (3,3) (P: MUSC 1166)
  MUSC 2176 (F), 2186 (S). Basic Musicianship Laboratory (1,1) (P: MUSC 1166; C for 2176: MUSC 2156; C for 2186: MUSC 2166)
  MUSC 2248 (F,S,SS). Music of the World's Peoples (2)
  MUSC 3156 (F), 3166 (S). Conducting (1,1) (P: MUSC 2166, 2186)
  MUSC 3176. Orchestration (2) (F,S) (P: MUSC 2166, 2186)

Under Jazz studies, instrumental, performance groups:
Performance groups (10 s.h.):
Minimum of 2 semesters selected from:

Delete: MUSC 1705. Marching Band (1) (F)
Add: MUSC 1706. Marching Band Field Experience (1) (F)

p. 245 Voice Performance: Applied Music, Performance Groups
Change s.h. and text
Applied music (18 s.h.):
16 s.h. voice
Present a half junior recital and a full senior recital
2 s.h. minor

Students are required to pass a departmental piano proficiency examination. In preparation for the exam, students must enroll in MUSC 1305, 1315 (Functional Piano for Singers) for 2 semesters. Students desiring further preparation may take piano minor, piano accompanying, MUSC 1105, 1115, 2105, and/or 2115 for no credit.

Music history and literature (4 s.h.):
MUSC 4496. Opera History (2) (WI) (P: MUSC 2416)
MUSC 4596. Historical Development of Vocal Literature (2) (WI) (P: MUSC 2416)

Performance groups (10 s.h.):
Minimum of 8 semesters large choral ensemble
Minimum of 2 semesters of opera workshop or theater

Change name of Voice diction and requirements to:
Foreign language and diction (21 s.h.):
Minimum of 6 s.h. of French
Minimum of 6 s.h. of German
Minimum of 3 s.h. of Italian
MUSC 1627. Italian Lyric Diction for Singers (2) (F)
MUSC 1637. French Lyric Diction for Singers (2) (S02)
MUSC 1647. German Lyric Diction for Singers (2) (S03)

(Leave Voice pedagogy (3 s.h.) as is.)
Delete: Free electives (5 s.h.)

BM in Theory-Composition

Add introductory sentence:
For admission to upper level theory-composition concentrations, a student must have a minimum 3.0 GPA in music courses at the end of the sophomore year.

2. Common core........................................................................................................................................ 58 s.h.

Core MUSC courses (30 s.h.):
MUSC 1156 (F), 1166 (S). Basic Musicianship (3,3)
MUSC 1176 (F), 1186 (S). Basic Musicianship Laboratory (1,1) (C for 1186: MUSC 1166)
MUSC 1406 (S), 2406 (F), 2416 (S). Music History and Literature (3,3,2) (WI, WI, WI)
MUSC 2156 (F), 2166 (S). Basic Musicianship (3,3) (P: MUSC 1166)
MUSC 2176 (F), 2186 (S). Basic Musicianship Laboratory (1,1) (P: MUSC 1186; C for 2176: MUSC 2156; C for 2186: MUSC 2166)
MUSC 2249 (F,S,SS). Music of the World's Peoples (2)
MUSC 3156 (F), 3166 (S). Conducting (1,1) (P: MUSC 2166, 2186)
MUSC 3176. Orchestration (2) (F,S) (P: MUSC 2166, 2186)

Revised:

1. Theory and Literature
MUSC 1156 (F), 1166 (S). Basic Musicianship (3,3)
MUSC 1176 (F), 1186 (S). Basic Musicianship Laboratory (1,1) (C for 1186: MUSC 1166)
MUSC 1406 (S), 2406 (F), 2416 (S). Music History and Literature (3,3,2) (WI, WI, WI)

Music Minor

Department of English (ENGL)
p. 318, Revise

1000. Appreciating Literature (3) (F,S,SS) (GE:HU) For General College students; enrollment limited to students with fewer than 40 s.h. credit. Introduction to past and present readings to enhance the student's enjoyment and understanding of literature.
p. 322, Revise Titles of Film Literature and History I and Film Literature and History II as follows:

4910. Survey of Film Styles and Movements (no other changes)

4920. Contemporary American and International Cinema (no other changes)
p. 319, New Course

3240. U.S. Latino/a Literature (3) Examines literatures written in English in United States by Latino/a writers, including Chicano/a, Cuban-American, Dominican-American, and Puerto-Rican American writers.

School of Art (ART)

p. 3260. Intermediate Photography (3) (F,S) P: ART 2220. In-depth exploration in camera work, darkroom techniques, and visual literacy.

p. 152, Communication Arts, Photography arts statement should read as follows:

Photography students take ART 2210, 2220, 3080, 3200, 3250, 3260, 4220, 4240, 4250, 5220.

Department of Physics (PHYS)

p. 122, BA in Physics, substitute this text for 4. Cognates: 15 s.h.

4. Cognates
MATH 1083. Introduction to Functions (3) (F,S,SS) (GE:MA) P: Consent of dept chair
MATH 2171. Calculus I (4) (F,S,SS) (GE:MA) (P: MATH 1083 or MATH 1085 or 2122 with a minimum grade of C)
MATH 2172. Calculus II (4) (F,S,SS) (GE:MA) (P: MATH 2122 with a minimum grade of C or MATH 2171)
MATH 2173. Calculus III (4) (F,S,SS) (GE:MA) (P: MATH 2172)

p. 123, BSAP (BS in Applied Physics), substitute this text for 3. Cognates:

3. Cognates 18 s.h.
MATH 1083. Introduction to Functions (3) (F,S,SS) (GE:MA) (P: Consent of dept chair)
MATH 2171. Calculus I (4) (F,S,SS) (GE:MA) (P: MATH 1083 or MATH 1085 or 2122 with a minimum grade of C)
MATH 2172. Calculus II (4) (F,S,SS) (GE:MA) (P: MATH 2122 with a minimum grade of C or MATH 2171)
MATH 2173. Calculus III (4) (F,S,SS) (GE:MA) (P: MATH 2172)
MATH 4331. Introduction to Ordinary Differential Equations (3) (F,S) (P: MATH 2173)

Department of Recreation and Leisure Services

pp. 403-404

Revise title:

RCLS 3202. Camping and Adventure Programming for Individuals with Disabilities (3) (P and description remains the same.)

RCLS 3240. Disability Survey for Recreational Therapy Services (3) (F,S)P: Declared RT major; BIOL 2130, 2131; RCLS 2000; or consent of instructor. (Description remains the same.)

Revise prerequisite:

RCLS 2230. Recreational Therapy Foundations (3) (F,S) P: RCLS 2000 or consent of instructor. (Description remains the same.)

RCLS 4250. Recreational Therapy Program Design (3) (F,S) P: Declared RT major RCLS 2230, 3003, 3004, 3240; or consent of instructor. (Description remains the same.)
Revise prerequisite and semester of offering:

RCLS 4252. Recreational Therapy Leadership and Group Dynamics (3) (S) P: Declared RT major; RCLS 2230, 3003, 3004, 3240; or consent of instructor. (Description remains the same.)

RCLS 4262. Recreational Therapy Interventions and Techniques (3) (F) P: Declared RT major; RCLS 2230, 3003, 3004, 3240; or consent of instructor. (Description remains the same.)

RCLS 4264. Recreational Therapy Assessment, Documentation, and Evaluation (3) (F) P: RCLS 2230, 3003, 3004, 3240; or consent of instructor. (Description remains the same.)

4266. Organization and Management of Recreational Therapy Services (3) (F) P: RCLS 2230, 3003, 3004, 3240; or consent of instructor. (Description remains the same.)

pp. 203-204, Replace first paragraph in Recreational Therapy with the following:

Any student wishing to declare a major in recreational therapy must, at the time of entrance into the curriculum, possess a minimum 2.0 GPA; have no more than 10 s.h. of general education remaining; have submitted written application; have a personal interview with a faculty member; and have completed a sequencing form (timetable) in consultation with the RCLS adviser. Admission to recreational therapy is competitive and limited due to space availability. Majors must maintain a minimum cumulative 2.0 GPA and a minimum cumulative 2.0 GPA in all cognate courses to remain in good standing. Majors must earn a minimum grade of C in all required RCLS courses. A student wishing to appeal should contact the RCLS department chair within two weeks of notification of academic deficiency. Students graduating in recreational therapy are eligible to apply for certification as a therapeutic recreation specialist in North Carolina and at the national level. Minimum degree requirement is 123 s.h. of credit as follows:

Under 1. General Education Requirement

Delete: BIOL 2131. Survey of Human Physiology and Anatomy Laboratory (1) (F,S,SS) (P/C: BIOL 2130)

Replace courses under 2. Core....49 s.h., with the following:

RCLS 2000. Introduction to Leisure Services (3) (F,SS)
RCLS 2230. Recreational Therapy Foundations (3) (F,S) (P: RCLS 2000 or consent of instructor.)
RCLS 3003, 3004. Leisure Programming and Laboratory (3,1) (F,S) (P: Declared RT major, or MRFS major or minor; RCLS 2000)
RCLS 3240. Disability Survey for Recreational Therapy Services (3) (F,S) (P: BIOL 2130, 2131; RCLS 2000; or consent of instructor)
RCLS 4000. Research Methods and Techniques (3) (F,S) (P: Declared RT major or MRFS major or minor; RCLS 3003, 3004)
RCLS 4004. Philosophical and Current Issues in Leisure (3) (F,S (WI)*) (P: Declared RT major or MRFS major or minor; RCLS 3003, 3004)
RCLS 4250. Recreational Therapy Program Design (3) (F,S) (P: Declared RT major; RCLS 2230, 3003, 3004, 3240; or consent of instructor)
RCLS 4252. Recreational Therapy Leadership and Group Dynamics (3) (S) (P: Declared RT major; RCLS 2230, 3003, 3004, 3240; or consent of instructor)
RCLS 4260. Recreational Therapy Practicum (1) (F,S) (P: Declared RT major; RCLS 2230, 3003, 3004, 3240)
RCLS 4262. Recreational Therapy Interventions and Techniques (3) (F) (P: Declared RT major; RCLS 2230, 3003, 3004, 3240; or consent of instructor)
RCLS 4264. Recreational Therapy Assessment, Documentation, and Evaluation (3) (F) (P: Declared RT major; RCLS 2230, 3003, 3004, 3240; or consent of instructor)
RCLS 4266. Organization and Management of Recreational Therapy Services (3) (F) (P: Declared RT major; RCLS 2230, 3003, 3004, 3240; or consent of instructor)
RCLS 4902. Recreational Therapy Internship Pre-placement Seminar (2) (F,S) (P: Declared RT major; minimum cumulative 2.0 GPA; consent of RCLS adviser)
RCLS 4990. Recreation Internship (12) (WI) (F,S,SS) (P: Declared RT or MRFS major; RCLS 4902; senior standing; minimum cumulative 2.0 GPA; minimum grade of C in all RCLS courses; successful completion of all other degree requirements; current certification in first aid and CPR)

Under 3. Cognates, change 20 s.h. to 21 s.h. and insert as the first course under 3:
BIOL 2131. Survey of Human Physiology and Anatomy Laboratory (1) (F,S,SS) (P/C: BIOL 2130)

Also, under 3., add the following courses at the bottom of the list under the heading, Choose 6 s.h. from:

RCLS 3202. Camping and Adventure Programming for Individuals with Disabilities (3) (P: Consent of instructor.)
RCLS 5000. Theoretical Foundations of Aquatic Rehabilitation (3) (S)
RCLS 5001. Applied Techniques in Aquatic Rehabilitation (3) (F) (P: RCLS 5000 or consent of instructor)

p. 205, Management of Recreation Facilities and Services Minor: s.h. requirement should be 25.
Department of Exercise and Sport Science
p. 324-327, Add new courses:

EXSS 1214. Advanced Group Fitness (1) For students who have mastered fundamentals of basic group fitness activities. P: EXSS 1114. Additional skill development and practice.

EXSS 4001, 4002, 4003. Special Topics in Exercise and Sport Science (1,2,3) May be repeated for a maximum of 6 s.h. with new topic. New or advanced topics vary by current faculty applied research.

p. 325, Revise title
EXSS 1114. Group Fitness Activities (1) (Other info remains the same.)

Department of Planning (PLAN)
p. 227, add new course:
PLAN 4021. Advanced GIS Applications in Planning (3) (F,S) 2 lecture and 2 lab hours per week. P: Understanding of basic GIS concepts; PLAN 3051 or GEOG 3410. Overview of advanced principles and applications of GIS in planning using vector, raster, and TIN data models. Focuses on use of GIS to facilitate and support decision-making in planning process.

p. 227, BS in Urban and Regional Planning:
Under 4. Area of emphasis, add PLAN 4021 in alpha/numeric order under each area:
Coastal Planning and Development:
PLAN 4021. Advanced GIS Applications in Planning (3) (F,S) (P: PLAN 3051 or GEOG 3410)

Urban and Regional Planning:
PLAN 4021. Advanced GIS Applications in Planning (3) (F, S) (P: PLAN3051 or GEOG 3410)

Industrial Distribution (IDIS)
p. 356, revise:
IDIS 3785: Global Logistics (3) (F,S) P: IDIS 2771. Evaluates impact of global and third party logistics. Intercoms, global logistics strategy, inventory management, global sourcing, issues related to global logistics documents and customs, and international transportation discussed in detail.

Add new courses:

IDIS 3805. Purchasing Logistics (3) (F,S) P: IDIS 2771. Evaluates impact of logistical operating costs, strategies used to support logistical investments, and competitive ways to reduce capital costs. Purchasing and procurement issues related to logistics, warehousing, and supply chain management discussed in detail.

IDIS 3815. Supply Chain Logistics (3) (F) P: IDIS 2771. Evaluates supply chain and its effects in logistics. Covers concepts and strategies used to design and manage supply chain, and explains relationship proper supply chain management has between indus sales and logistics.

Revise prerequisites:

IDIS 2770. Industrial Distributor: Purpose and Functions (3) (F,S) Formerly IDIS 3770 P: IDIS major or minor. (Description remains the same.)

IDIS 2771. Introduction to Logistics (3) (F,S) Delete prerequisite and remainder of description remains the same.

IDIS 3780. Warehousing and Materials Handling (3) (S) P: IDIS 2771. (Description remains the same.)

Revise semester of offering and prerequisites:

IDIS 3790. Technical Presentations (3) (F,S,SS) Formerly ITEC 5290 Delete prerequisite and remainder of description remains the same.

IDIS 3795. Distributor Sales (3) (S) P: IDIS 2770. (Remainder of course is the same.)

IDIS 3800: Transportation Logistics (3) (F,S) P: IDIS 2770, 2771. (Remainder of course is the same.)

p. 223-224, BS in Industrial Distribution and Logistics
Under 1. General education requirements, delete option of MATH 1066 so that only specified math course is 1065.

Revis. Core .................. 48 s.h. to read as follows:
ELEC 2054, 2055. Electricity/Electronics Fundamentals (3,0) (F,S,SS) (P: MATH 1065 or 1066 or 1085 or 2119)
IDIS 2770. The Industrial Distributor: Purpose and Functions (3) (F)(S)
IDIS 2771. Introduction to Logistics (3) (F) (S)
IDIS 2775. Blueprint Reading and Sketching (3) (F)(S)(SS)
IDIS 3780. Warehousing and Materials Handling (3)(F)(S) (P: IDIS 2771)
IDIS 3785: Global Logistics (3)(F)(S)(P: IDIS 2771)
IDIS 3790. Technical Presentations for Industry (3) (F,S,SS)
IDIS 3795. Distributor Sales (3) (S) (P: IDIS 2770)
IDIS 3800: Transportation Logistics (3)(F)(S)(P: IDIS 2771)
IDIS 3805. Purchasing Logistics (3)(F)(S) (P: IDIS 2771)
IDIS 3815: Supply Chain Logistics (3)(F) (P: IDIS 2771)
IDIS 4802: Distribution Research (3)(S)(P: Senior status and consent of instructor)
ITEC 2090. Energy Processing and Transactional Power Systems (3) (F,SS)
ITEC 3290. Technical Writing (3) (WI) (F,SS,SS) (P: ENGL 1200)
MANF 3020. Manufacturing Processes (3) (WI) (F,SS,SS) (P: ITEC 2090; MANF 2076, 2077)

Revis. 3. Cognates ............ 24 s.h. by deleting the option of MATH 2283 so that the only specified math course under 3. is MATH 2283.

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<th>Department of Computer Science</th>
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p. 300-301, Add new courses:
CSCI 4000. Senior Assessment (0) (F,S) To be taken by CSCI seniors in final year. Assessment of departmental programs.

4230. Software Engineering II (3) (F,S) P: CSCI 4200 or consent of the instructor. Conceptual and practical knowledge in relation to large-scale software development using established software engineering principles. Requires completion of major project using tools and methodologies provided.

4710. Introduction to Developing e-Business Systems (3) (F,S) P: CSCI 3510 or consent of instructor. Introduces use of concepts, technologies, and building blocks from computer science, practical software engineering, and business development in building e-Commerce systems. Describes systematic life-cycle approach to developing successful e-Commerce systems and presents knowledge essential to wide range of organization and software developers. Requires completion of major term projects using state-of-the-art tools and methodologies.

Revis. prerequisites:

2618. COBOL (3) (F) P: CSCI 2610. (Description remains the same.)

3573. Introduction to Numerical Analysis (3) (S) Same as MATH 3573 P: CSCI 2610 or consent of instructor; MATH 2119 or 2172 or equivalent. (Description remains the same.)

3700. Database Management Systems (3) (F) P: 3510. (Description remains the same.)

4530. Computer Networks and the Internet (3) (S) P: CSCI 3510 or consent of the instructor. (Description remains the same.)

Revis. Course Title:

4200. Software Engineering I (3) (Remainder is the same.)

pp. 169-170, BA in Computer Science

Under 3. Core .................. 34 s.h.

Revise Course title
CSCI 4200. Software Engineering I(3)(WI) (F,S) (P: CSCI 3510; CSCI major)

In BS in Computer Science

Under 3. Concentration area (Choose one.) ................................................................. 12 s.h.

Applications Development:

Revise Prerequisites
CSCI 2618. COBOL (3) (F) (P: CSCI 2610)
CSCI 3700. Database Management Systems (3) (F) (P: CSCI 3510)

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<th>Department of Mathematics</th>
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https://author.ecu.edu/cs-acad/sonline/cu/cu2_032.cfm
pp. 118-119, Revise the BA in Mathematics as follows:
In first paragraph, enter "2510 or" between CSCI and 26100.

In 2, remove (preferably French, German, or Russian)

In 4., under Computer Science, add the following prerequisite for the CSCI 3573 requirement:
P: CSCI 2610 or consent of instructor; MATH 2119 or 2172 or equivalent.

In 4, under both the mathematics and statistics concentration, insert as a choice for CSCI 2600, the following: CSCI 2510. Introduction to Computer Science I (3) (F,S,SS) (P: MATH 1065 or 1066) or CSCI 2600 ...