

**University Courses & Curricula Committee 2016-2017**

May 3<sup>rd</sup>, 2017  
Talley Student Union 4140  
12:45pm-2:45pm

**Call to Order 12:45pm**

- Welcome and Instructions, Chair Andy Nowel
- Remarks from Associate Vice Provost, Dr. Barbara Kirby
- Approval of UCCC April 26<sup>th</sup>, 2017 Minutes
- Course and Curricular Business

**New Business**

Consent Agenda			
Action	Type	Notes	
<a href="#">CSC 402 Networking Projects</a>	Revision	Title and Description	
<a href="#">EC 351 Data Analysis for Economists</a>	Revision	Description	
<a href="#">EC 451 Introduction to Econometrics</a>	Revision	Requisites	
<a href="#">LOG 201 Logic</a>	Revision	Description	
<a href="#">MES 300 Systems Engineering</a>	Revision	Requisites	
<a href="#">ST 305 Statistical Methods</a>	Revision	Requisites	
<a href="#">ST 421 Introduction to Mathematical Statistics I</a>	Revision	Description	
<a href="#">ST 422 Introduction to Mathematical Statistics II</a>	Revision	Description	
<a href="#">ST 431 Introduction to Experimental Design</a>	Revision	Requisites	
<a href="#">ST 432 Introduction to Survey Sampling</a>	Revision	Requisites	
<a href="#">ST 445 Introduction to Statistical Computing and Data Management</a>	Revision	Requisites and description	
ACC Financial Analysis 20ACCFA	Revision	Adding BUS 429 to degree plan	
BS Construction Engineering- Mechanical 14CONBS-14CONMEC	Discontinue	Low Enrollment	
Engineering First Year 14EFY	Revision	Adding E 102 to degree plan	

College of Natural Resources			
Presenter	Reviewers	Action	Type
Tarpy	Rieder, Hergeth, Fath	<a href="#">ENV 101 Exploring the Environment</a>	New Course
Trivedi	Ferguson, Hessling, Despain	PRT 358 Recreation Program Planning	Service Learning Attribute. Revisions coming soon.

College of Engineering			
Presenter	Reviewers	Action	Type
Ferguson	Driscoll, Wu, Beller	<a href="#">BME 315 Biotransport</a>	New Course
Ferguson	Klesath, Banks, Harper	<a href="#">BME 355 Biocontrols</a>	New Course
Ferguson	Fath, Banks, Podurgal	<a href="#">MES 200 Introduction to Mechanical Engineering Systems</a>	New Course
Ferguson	Wu, Rieder, Podurgal	<a href="#">MES 201 Mechanical Engineering Systems Lab I</a>	New Course
Ferguson	Lindsay, Young, Ophanides	<a href="#">MES 301 Mechanical Engineering Systems Lab II</a>	New Course
Ferguson	Klesath, Beller, Harper	<a href="#">MES 302 Mechanical Engineering Systems Lab III</a>	New Course
Ferguson	Rieder, Hergeth, Trivedi	<a href="#">MES 400 Mechanical Engineering Systems Lab IV</a>	New Course
Ferguson	Hessling, Klesath, Beller	<a href="#">MES 403 MES Capstone Design II</a>	New Course
Ferguson	Despain, Lindsay, Banks	BS in Engineering; Mechanical Engineering Systems 14EGRBS-14EGRMES	Revisions
Ferguson	Ophanides, Fath, Tarpy	BS Construction Engineering 14CONBS-14CONGEN	Revisions

University College			
Presenter	Reviewers	Action	Type
Beller	Ferguson, Hessling, Despain	<a href="#">USC 116 Introduction to Sustainability for EcoVillage</a>	New Course

<b>Poole College of Management</b>			
<b>Presenter</b>	<b>Reviewers</b>	<b>Action</b>	<b>Type</b>
Podurgal	Lindsay, Trivedi, Banks	<a href="#">ACC 220 Introduction to Managerial Accounting</a>	New Course
Podurgal	Wu, Harper, Hergeth	<a href="#">ACC 340 Accounting Information Systems</a>	Revising: requisites, description, SLOs
Podurgal	Harper, Hergeth, Wu	<a href="#">BUS 351 Predictive Analytics for Business</a>	New Course
Podurgal	Hessling, Tarp, Despain	ACC and BUS Curricula update	Revisions
Podurgal	Fath, Rieder, Driscoll	Business Analytics Honors Program	Revisions

<b>College of Sciences</b>			
<b>Presenter</b>	<b>Reviewers</b>	<b>Action</b>	<b>Type</b>
Klesath	Despain, Trivedi, Beller	<a href="#">CH 345 Chemistry and War</a>	New Course
Klesath	Harper, Wu, Ferguson	<a href="#">MA 231 Calculus for Life and Management Sciences B</a>	Revising: requisites, description, SLOs, grading
Banks	Rieder, Tarp, Hergeth	BA in Physics 17PHYSBA	Revisions
Banks	Driscoll, Trivedi, Podurgal	BS in Physics 17PHYSBS	Revisions

<b>College of Humanities and Social Sciences</b>			
<b>Presenter</b>	<b>Reviewers</b>	<b>Action</b>	<b>Type</b>
Driscoll	Klesath, Young, Wu	<a href="#">LPS 398 Special Topics in Leadership in the Public Sector</a>	New Course
Driscoll	Orphanides, Banks, Tarp	16FLLBA-16FLLGSCI	Revisions
Despain	Young, Fath, Podurgal	16IDSBA-16IDSWGS	Revisions
Despain	Hergeth, Banks, Lindsay	16LIM	Revisions
Despain	Ferguson, Rieder, Fath	Philosophy Minor	Revisions

**SLO = Student Learning Outcomes**

**Discussion:** Vote on short term and long term Syllabus Availability proposals.

**Notes:**

- All linked course actions are viewable in CIM.
- To view actions, please click on the hyperlink. You may need to use your Unity ID to log in.
- If you experience issues logging in, please go to <https://next-catalog.ncsu.edu/courseadmin/> and type the course prefix and number into the search bar.

**University Courses and Curricula Committee**April 26, 2017  
Talley Student Union 4140  
Call to Order: 12:46 pm

**Members Present:** Chair Andy Nowel, Amanda Beller, Scott Despain, Catherine Driscoll, Andreas Orphanides, Kathleen Rieder, Richard Podurgal, Daniel Harper, Scott Ferguson, Helmut Hergeth, Peter Hessling, Shweta Trivedi, Marta Klesath, David Tarpy, Edwin Lindsay, Shauna Morin (Proxy)

**Members Absent:** Michael Robinson, Steven Peretti, Mian Wu, Elizabeth Fath, Greg Young, Alton Banks

**Guest:** Michael Escuti

**Ex-Officio Members Present:** Lexi Hergeth, Li Marcus, Rebecca Swanson, Kyle Pysher, Charles Clift, John Harrington, Lindsey Mihalov, Carrie Zelna

**WELCOME AND INTRODUCTIONS**

- **Remarks from Chair Andy Nowel-** Chair introduced guests and proxy. Chair also reminded the committee the syllabus availability proposal has had some updates and will be discussed after the course and curricular actions. He also thanked Dr. Mullen for lunch.
- **Remarks from Vice Chancellor and Dean Dr. Mike Mullen-** Thanked the committee for their service and discussed the national search to fill Dr. Kirby's position and thanked Dr. Kirby for all of her service of over 20 years in CALS and DASA as an administrator. Dr. Mullen also announced Carrie Zelna will provide administrative leadership in the interim period.
- **Approval of the Minutes from April 12<sup>th</sup> 2017 – Approved Unanimously**
  - Discussion: Member Scott Despain moved to approve.

**NEW BUSINESS**

- **Consent Agenda—Approved Unanimously**  
Discussion: Member Scott Despain moved to approve.
- **ANS 495 Special Topics in Animal Science— Approved Unanimously**  
Discussion: Member Shweta Trivedi presented the course. Member commented shells are in almost every curriculum and supports this course. Member provided suggested updated wording for the academic integrity section of the syllabus in order to bring the relevant administrative office into the proceeding for any infractions. Presenter is also the instructor and agreed to make the suggested updates.
- **FS 481 Research Experience in Food and Bioprocessing Science— Approved Pending**  
Discussion: Member Shweta Trivedi presented the course. Member commented that there appear to be many contact hours compared to the credit hours. Members discussed and agreed the contact hours are correct because this course is a lab and is taught over 10 weeks in the Summer. Member brought attention to the syllabus on the second page indicating "2 +1 (Poster)" and asked for clarification on what this means. Another member suggested that clarity on the conversion of the 75 possible assignment points to a letter grade would be beneficial to students. Pending the clarification of grading as well as clarity on the meaning of 2+1 (poster).
- **BS Biological Engineering Environmental Engineering 11BEBS-11BEBEE – Approved Unanimously**  
Discussion: Member David Tarpy presented the curricular action.
- **ECE 420 Wireless Communication Systems- Approved Unanimously**  
Discussion: Member Scott Ferguson presented the course. Member made the friendly suggestion to amend the language in the Attendance/Participation grade section of the syllabus to indicate that "reasonable" absences follow the excused absence rules of the existing University attendance policy. Guest Michael Escuti indicated this should not be a problem.
- **MAE 251 Aerospace Vehicle Performance- Approved Unanimously**  
Discussion: Member Scott Ferguson presented the course. Member pointed out that while the sum total of weeks represented in the Topic Outline for the course in CIM added up to 14 weeks, the syllabus reflected the full and expected 15 weeks of course work plus a final exam and recommended that the CIM record be updated to reflect the

syllabus information. Member indicated the prerequisite to have a 2.0 minimum GPA seems odd because a 2.0 equates to good standing in University policy. Members discussed and established that as students are able to take some courses on academic warning or probation, the GPA requirement does make sense.

- **MSE 320 Introduction to Defects in Solids- Approved Unanimously**  
Discussion: Member Scott Ferguson presented the course. Member asked for clarification on the grading – whether a homework grade was subject to a rubric or was an all-or-none sort of grade. Presenter explained that the homework grade is used to see if student have attempted the homework and so presenter indicated it depends on the instructor and homework assignment in question. Friendly suggestion was made to provide additional information for the students such as a rubric in order to make expectations clear.
- **PS 353 Issues in Latin American and Caribbean Politics- Approved Unanimously**  
Discussion: Member Catherine Driscoll presented the course. Member made the friendly suggestion to include the course objectives as listed in the syllabus in CIM.
- **Foreign Languages and Literatures, Foreign Language Education concentration 16FLLBA-16FLLD - Approved Unanimously**  
Discussion: Member Scott Despain presented the course.
- **BA Leadership in the Public Sector-DE 16LPSBA-16LPSBAZ - Approved Unanimously**  
Discussion: Member Scott Despain presented the curricular action.
- **Bachelor of Science in Genetics 17GNBS - Approved Unanimously**  
Discussion: Member Marta Klesath presented the curricular action. Member complimented the curricula action.

#### **Syllabus Availability Subcommittee Results and UCCC Recommendation:**

Chair turned meeting over to subcommittee co-chairs Daniel Harper and Peter Hessling. Member asked where this is in the approval process. Daniel Harper and Li Marcus explained that this recommendation would need to be approved by UCCC in order to go as a recommendation to Dr. Mullen and the Provost's office, at which point it would continue to be disseminated and discussed with groups such as Associate Deans and Faculty Senate.

Daniel Harper **moved to approve the long-term solution and brought attention to the second two bullet points in the proposal** dealing with a redesign of the Syllabus Tool and the need for a central repository of syllabi to be made available to students. The motion was seconded.

Discussion: Member said that they were not convinced the \$150,000 is justified based on how many people use the syllabus tool and how many students desire syllabi, as well as the type and amount of information students will receive and be able to use and whether that information will be up to date. Daniel responded that the syllabi in this process would be 100% up to date because they would use the new syllabus tool from which this information is pulled. If this tool is well-made and created with faculty input, faculty will use this tool. Peter Hessling outlined points from the subcommittee's meeting with DELTA and explained the cost and idea behind updating the syllabus tool.

Member asked if the repository cost is included in the \$150,000. Li Marcus confirmed that the repository will have a separate cost based on the discussion with DELTA. Member asked if there is a way for the syllabus repository could be linked with CIM. Co-chairs confirmed that integration with CIM is unlikely as the vendor software is very proprietary. Members discussed the additional factors that updating the syllabus tool influence, including the potential for SACs requiring a repository. Carrie Zelna indicated that the most recent information from the Assistant Vice Provost for Accreditation. Members discussed removing the eighth bullet point (about the SACs justification) because the main purpose is to help students, not to predict what rulings SACs will pass. The goal is to bring information to students, and the bullet point that included the SACS reasoning in the recommendation findings was removed.

Daniel reminded the committee there will always be students who do not read the syllabi but overall, the number of students reading syllabi is expected to increase if provided easy access and that the information will be extremely helpful for those entrepreneurial students.

Member indicated they are still not convinced if this is worthwhile. Member indicated the money will not come from UCCC. Members discussed how the new syllabus tool would be helpful with a more user-friendly interface that would save time and frustration for faculty building their syllabus as well as for reviewers of course actions along the approval process as well as beneficial for student information.

Member asked if the syllabus tool update will be able to improved reporting tools. Li Marcus indicated MyPack does have a wide array of existing possibilities for reporting, but that the new tool could (with faculty input) include report-friendly functionality different from what MyPack offers.

Chair recognized the guest Michael Escuti, who heard about this proposal for the first time. He spoke in favor for the value of the time saved for faculty. He indicated the value of the time saved outweighs the monetary value.

Co-Chair Daniel moved to approve the long-term recommendations regarding the development of the new syllabus tool and the syllabus repository in the context of the rest of the document (with the exception of the short-term recommendation).

**Approved with one objection.**

Daniel **moved to approve the short-term proposal to be enacted in the interim** until a syllabus tool and repository can be put in place. Short term solution was summarized by Daniel; the policy will be to contact the instructor first, after 48 hours the student will contact the college/department person.

Member asked why the faculty are contacted first because many instructors are on a 9-month schedule. Members discussed removing the instructor contact suggestion and simply providing the list of the identified contact people. Daniel explained the last time the proposal was discussed there were concerns about the number of requests being overwhelming for the contact person. Member suggested amending the proposal that the university publish a message to the students saying to contact the department and a message to the departments requesting the identity of a designated person.

Members discussed the points of faculty response time, faculty workload specifically regarding recommendations and requests for syllabi, the non-universal practice of having a departmental e-mail, and the difficulty for students to know the correct departmental person to contact in the case of faculty non-response (especially if a section is listed as being taught by "staff").

Member asked if students are asking specifics about the syllabus that the instructor needs answer, student senate member indicated these specific questions are less likely to be asked until the first day of courses. The proposal was specifically to address student need for information during the registration periods during the months of March/April and October/November.

Member suggested updating the proposal to exclude "strongly", "only" and other specific language to make the proposal less intense. Member Scott Despain provided the Foreign Language and Literary syllabus repository (organized via google drive and accessed through a UnityWRAP website) as a possible response from departments to the proposed short term recommendation. Members discussed if the proposal should remove the language that "students should contact the faculty first". Member asked why couldn't each department decide how they provide syllabi, if they want them to contact the faculty first or not. Members discussed removing the statements "Students will be encouraged....the department/college representative." And "Students should contact the....from the professor." and replacing it with the statements that the department will provide a webpage listing the processes will be created and published so that students may obtain syllabus information before course registration. Members agreed that the resulting recommendation, which would allow for departments to choose and relay to students the best way to access course syllabi, whether it would be contacting the instructor, contacting a departmental e-mail, accessing a website, or another method. This information page would be housed on the OUCAS website and managed by the Office of Undergraduate Courses and Curricula while the long-term resolutions are implemented, to be resolved one the central repository is complete.

**Motion to recommend the revised short-term policy in interim up implementing the long-term solution was approved with one abstention.**

Meeting adjourned at 2:11 pm

*Respectfully submitted by Lexi Hergeth*



## MEMO

Date: April 13, 2017  
To: Dr. Barbara Kirby, Associate Vice Provost, Academic Programs & Services  
From: Dr. Tamah Morant, Associate Dean, Management  
Subject: Accounting – Financial Analysis Concentration Update

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The Poole College of Management proposes to make a minor revision to the Accounting Major – Financial Analysis Concentration (20ACCFA) concentration electives, effective SU 2017. The Business Finance department has created a new course, BUS 429 – Financial Modeling, and Accounting would like to add the recently created course to the concentration electives for the Financial Analysis Concentration for current and past Accounting curricula.

Proposed changes are outlined below and a revised 8-semester display for both scenarios (current and previous requirement terms) are provided with this memo.

### Concentration Requirements for Pre-2171 Curricula

Currently:

ACC 411

Three from: BUS 420, BUS 422, BUS 425,  
BUS 426, BUS 428, EC 404 or 474

Proposed:

ACC 411

Three from: BUS 420, BUS 422, BUS 425,  
BUS 426, BUS 428, BUS 429, EC 404 or 474

### Concentration Requirements For 2171

Currently:

ACC 411

Two from: BUS 420, BUS 422, BUS 425, BUS 426,  
BUS 428, EC 404 or 474


Proposed:

ACC 411

Two from: BUS 420, BUS 422, BUS 425, BUS 426,  
BUS 428, BUS 429, EC 404 or 474

ENDORSED BY:

 4-19-17  
\_\_\_\_\_  
CHAIR, COLLEGE COURSES & CURRICULA COMMITTEE DATE

 4/19/17  
\_\_\_\_\_  
DEPARTMENT HEAD, ACCOUNTING DATE

 4/19/17  
\_\_\_\_\_  
COLLEGE DEAN DATE

APPROVED BY:

\_\_\_\_\_  
CHAIR, UNIVERSITY COURSES & CURRICULA COMMITTEE DATE

\_\_\_\_\_  
CHAIR, COUNCIL ON UNDERGRADUATE EDUCATION DATE

\_\_\_\_\_  
DEAN OF UNDERGRADUATE ACADEMIC PROGRAMS DATE

# Accounting (BS) – Financial Analysis Concentration: (20ACCFA)

Semester Display 4-13-17 (v2.6)

<b>FRESHMAN YEAR</b>				
<b>Fall Semester</b>	<b>Credits</b>		<b>Spring Semester</b>	<b>Credits</b>
M 100 Professionalism, Diversity and Acad Success in Mgmt <sup>1</sup>	1		MA 114 Finite Math <sup>7</sup>	3
ENG 101 <sup>2</sup> or Natural Science (with Lab) <sup>3</sup>	4		Communications <sup>8</sup> or Humanities <sup>9</sup>	3
MA 121/131/141 Calculus <sup>4</sup>	3		ENG 101 <sup>2</sup> or Natural Science (with Lab) <sup>3</sup>	4
FL_ 201 <sup>5</sup>	3		EC 201 Principles of Microeconomics <sup>10</sup>	3
MIE 201 Intro to Business Processes	3		ACC 210 Concepts of Financial Reporting <sup>11</sup>	3
HESF 1** Health & Exercise Studies Course <sup>6</sup>	1			
	<b>15</b>			<b>16</b>
<b>SOPHOMORE YEAR</b>				
<b>Fall Semester</b>	<b>Credits</b>		<b>Spring Semester</b>	<b>Credits</b>
ACC 200 Intro to Managerial Accounting <sup>11</sup>	3		ACC 310 Intermediate Financial Accounting I <sup>11</sup>	3
Communications <sup>8</sup> or Humanities <sup>9</sup>	3		BUS 340 Information Systems Management	3
BUS/ST 350 Econ Bus Statistics <sup>12</sup>	3		BUS 320, 360, 370, MIE 305, 330	3
Natural Science <sup>3</sup>	3		PSY 200 Intro. to Psychology	3
EC 202 Principles of Macroeconomics	3		Additional Breadth <sup>13</sup>	3
			ST 307 Intro to Statistical Programming - SAS	1
	<b>15</b>			<b>16</b>
<b>JUNIOR YEAR</b>				
<b>Fall Semester</b>	<b>Credits</b>		<b>Spring Semester</b>	<b>Credits</b>
ACC 311 Intermediate Financial Accounting II <sup>11</sup>	3		ACC 330 Intro to Income Tax <sup>11</sup>	3
ACC 340 Accounting Info. Systems <sup>11</sup>	3		BUS 320, 360, 370, MIE 305, or 330 ( <i>take two</i> )	6
BUS 320, 360, 370, MIE 305, 330 ( <i>take two</i> )	6		Concentration <sup>16</sup>	3
Advanced Writing <sup>14</sup>	3		Free Elective <sup>17</sup>	3
HES_ *** Health & Exercise Studies Course <sup>15</sup>	1			
	<b>16</b>			<b>15</b>
<b>SENIOR YEAR</b>				
<b>Fall Semester</b>	<b>Credits</b>		<b>Spring Semester</b>	<b>Credits</b>
ACC 450 Auditing & Assurance Services <sup>11</sup>	3		Concentration <sup>16</sup>	3
Concentration <sup>16</sup>	3		MIE 480 Business & Policy Strategy	3
Interdisciplinary Perspectives <sup>18</sup>	2		Free Electives <sup>17</sup>	6
Free Electives <sup>17</sup>	4			
Humanities <sup>9</sup>	3			
	<b>15</b>			<b>12</b>
<b>Minimum Credit Hours Required for Graduation*</b>				<b>120</b>



GPA Graduation Requirements:

Overall GPA for all courses attempted at NC State must be 2.0 or higher; and  
Overall GPA for all ACC courses attempted at NC State must be 2.0 or higher.

1. Students should take M 100 their first semester in the program
2. A grade of C- or better is required.
3. 7 credit hours-include one laboratory course or course with a lab from the GEP Natural Sciences list.
4. MA 131 or MA 141 are encouraged for students who qualify and aspire to take additional calculus. For students completing MA 141, one credit of MA141 will count as free elective credit.
5. Unless a placement exam is successfully completed, students are required to complete FL\_ 201 – the third semester of a foreign language (through the intermediate level). Students will not receive credit for courses below 102 unless starting a language different from their high school proficiency. Students who place beyond FL\_201 and choose not to take a foreign language course will have satisfied the foreign language requirement but will not receive hour credit.
6. 1 hour of Health & Exercise Studies at the 100 level.
7. MA 242 may substitute
8. COM 110, 112, or 211
9. Choose two courses from the GEP Humanities list; Students must also take one course from the Poole College of Management Ethics list- MIE 306, PHI 214, 221, 312, 375 (no credit hour requirement); If a student takes a PHI course to satisfy the Ethics requirement, it may double-count as the second humanities course provided the first course was not also a PHI course.
10. ARE 201 may substitute.
11. ACC COURSES REQUIRING “C- or C+” PREREQUISITES:

ACC 310: C+ or better in ACC 210	ACC 311: C- or better in ACC 310
ACC 330: C- or better in ACC 210	ACC 410: C- or better in ACC 210
ACC 420: C- or better in ACC 200	ACC 440: C- or better in ACC 340
ACC 450: C- or better in ACC 311	
12. ST 302, 361, 370 or 372 may substitute for BUS 350
13. Take one from the GEP Additional Breadth- Humanities/Social Sciences/Visual Performing Arts list.
14. Select one of the following courses: ENG 331 Communication for Engineering and Technology, ENG 332 Communication for Business Mgmt., or ENG 333 Communication for Science and Research.
15. 1 hour of Health & Exercise Studies. (PEC, PEF, PEH, PEO and PES courses cannot be taken to satisfy this requirement.) (HES courses may be taken credit only.)
16. For the Financial Analysis concentration (9 credits hours), student should take ACC 411 and two of the following:

BUS 420, 422, 425, 426, 428, 429 EC 404 or 474.
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17. Free elective credit will not be allowed for FL 101 or 105 (in any language in which proficiency requirement is met), and MA 101, 103, 105. ACC 495/498/499 can count for up to 6 hours of free electives. Free electives may be taken for credit only.
18. Choose one course from the GEP Interdisciplinary Perspectives list. For students completing a three-credit IP course, one credit will count in free electives.

\* Students must also complete as a part of their degree requirements one course from the GEP U.S. Diversity list (no credit hour requirement) and one course from the GEP Global Knowledge list (no credit hour requirement)

**CURRICULUM REQUIREMENTS****Format B**

<u>Degree/Plan Title:</u> B.S. Accounting	<u>Plan SIS Code:</u>
<u>Concentration/Subplan Title:</u> ACC-Undeclared, Financial Analysis, Information Systems, Internal Auditing, Managerial, Government/Nonprofit	
<u>Subplan SIS Code:</u>	
<u>Indicate requirements status:</u> Current:	Proposed: x
<u>Proposed Effective Semester:</u> Summer 2017	
<u>New Degree Audit required?</u> (Y or N) Y	
<u>Critical Path Courses</u> - Identify using the code (CP) which courses are considered critical path courses which represent specific major requirements that are predictive of student success in a given program/plan. Place the (CP) next to the credit hours for the course.	

<b>MAJOR FIELD OF STUDY REQUIREMENTS:</b>		
<b><i>Required Courses/Groups/ Electives:</i></b>	<b><i>Credit Hours</i></b>	<b><i>GEP category, if applicable</i></b>
<b>Indicate if course or course groupings have a C-wall or MGPA requirement and which are considered Critical Path courses – indicate with (CP) next to applic. course.</b>		<b>List GEP category and hours satisfied by a Major requirement</b>
Math MA 121 or 131 or 141; MA 114 (MA 114 or 242)	6	Mathematics (6 hours)
Major (non- ACC/BUS/MIE)		
Advanced Writing (ENG 331, 332, 333)	3	Advanced Communication (3 hours)
EC 201 (EC 201 or ARE 201)	3	Social Sciences (3 hours)
EC 202	3	
PSY 200	3	Social Sciences (3 hours)
FL 201	3	
Communication/Speech (COM 110, 112, 211)	3	
ST 307	1	
Major (ACC/BUS/MIE)		
BUS/ST 350 (BUS/ST 350, ST 302, 361, 370, 372)	3	Technology Fluency (3 hours)
BUS 320	3	
BUS 340	3	Technology Fluency (3 hours)
BUS 360	3	
BUS 370	3	
MIE 201	3	Interdisciplinary Perspectives (3 hours)
MIE 305	3	
MIE 330	3	
MIE 480	3	
ACC 210 (C+ or better)	3	
ACC 200 (C- or better)	3	
ACC 310 (C- or better)	3	
ACC 311 (C- or better)	3	
ACC 330 (C- or better)	3	
ACC 340 (C- or better)	3	
ACC 450	3	
<b><u>Concentration Courses/Groups/Electives:</u></b>		
No Concentration: 9 hours of free electives		
Financial Analysis: ACC 411 and two from BUS 420, 422, 425, 426, 428, 429, EC 404 or 474	9	
Information Systems: ACC 440 and two from BUS 440, 441, 442, 444, 449, 458, 459		

Internal Auditing: ACC 440 and 451 and two from BUS 440, 441, 470, 472, EC 404 or 474 Managerial: ACC 420 and two from MIE 435, BUS 470, 472, 473, 474, 475, 479 Government/Nonprofit: ACC 460 (formerly ACC 410) and 420 and one from PS 202, 203, 312, HI 380, COM 466		
<b>Free Electives:</b> May not be MA 101, 103, 105, or FL 101 or 105 (in the language in which proficiency is met)	13	This assumes students complete a 2 hr Interdisciplinary Perspectives course
<b>Total credit hours under Major Field of Study:</b> <i>Minimum 27 hours required in program area.</i>	95 hours	
<b>COLLEGE REQUIREMENTS:</b>		
<b>Orientation Course(s):</b> M 100	1	U.S. Diversity Corequisite
<b>Other:</b> Ethics Corequisite One from the following: MIE 306, PHI 214, 221, 312, 375	0	
<b>Total credit hours under College Requirements:</b>	96 Hours	

<b><u>NCSU GENERAL EDUCATION PROGRAM REQUIREMENTS</u></b>		<b>At least one of the following must be listed:</b>
<p><i>Courses in the Major and/or Minor may also fulfill a General Education requirement; however, a GEP category may not be subset to require a specific course from the category list. Required courses must be listed in the Major/College requirements.</i></p> <p><i>Specific courses should not be listed in any of the fields below other than ENG 101.</i></p>		<ol style="list-style-type: none"> <li>Choose course(s) from the University Approved GEP course list for this category.</li> <li>Minimum requirements are satisfied by Major/College course requirements.</li> <li>Major/College course requirement satisfies X credit hrs of this requirement. Remaining hours required must be chosen from the University Approved GEP course list for the category.</li> <li>Co-requisite is satisfied by a Major/College course requirement.</li> <li>Choose course(s) from the University Approved GEP course lists for the Humanities/ Social Sciences/ Visual &amp; Performing Arts.</li> <li>Choose course(s) from the University Approved GEP course lists for Natural Sciences/Mathematical Sciences.</li> </ol>
<b>General Education Program Requirements:</b> <i>Minimum 39-40 hrs</i>	<b>Credit hours</b>	<b>How will the GEP requirement be met?</b> <b>(Choose applicable statement from 1-6 listed above)</b>
<b>Mathematical Sciences</b> (6 credits) (At least 1 course with MA or ST prefix) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	X	7 (Choose statement 1, 2 or 3) Minimum requirements are satisfied by Major/College course requirements.
<b>Natural Sciences</b> (7 credits) (At least 1 lab course or course with a lab) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	7	8 (Choose statement 1, 2 or 3) Choose course(s) from the University Approved GEP course list for this category.
<b>English 101 (C- or better required)</b> (4 credits)	4	ENG 101
<b>Humanities</b> (6 credits) (Courses from two different disciplines) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	6	9 (Choose statement 1, 2 or 3) Choose course(s) from the University Approved GEP course list for this category.
<b>Social Sciences</b> (6 credits) (Courses from two different disciplines) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	X	10 (Choose statement 1, 2 or 3) Minimum requirements are satisfied by Major/College course requirements.
<b>Additional Breadth</b> (3 credits) (Choose approach that is different from the approach of the Major) <i>Major/College requirements cannot satisfy this requirement and an AB course cannot be double-counted except in satisfying the Global Knowledge or U.S. Diversity co-requisites.</i>	3	(Choose statement 5 or 6) 11 Choose course(s) from the University Approved GEP course lists for the Humanities/ Social Sciences/ Visual & Performing Arts.
<b>Interdisciplinary Perspectives</b> (5 credits) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	2	12 (Choose statement 1, 2 or 3) Major/College course requirement satisfies 3 credit hrs of this requirement. Remaining hours required must be chosen from the University Approved GEP course list for the category.

<b>Health and Exercise Studies</b> (Including one <i>Fitness and Wellness</i> course)	(2 credits) 2	Choose course(s) from the University Approved GEP course list for this category.
<b>Total credit hours needed to complete GEP that are <u>not</u> satisfied as part of the Major/College requirements.</b>	24 hours	
<b>GEP Co-Requisites:</b>		<b>Courses taken in the Major, GEP, or Minor may double-count to fulfill the co-requisites. Courses that satisfy the U.S. Diversity or Global Knowledge co-requisite are marked on course lists with a "USD" or "GK" indicator.</b>
<b>U.S. Diversity co-requisite</b> (USD)	n/a	13 (Choose statement 1 or 4) Co-requisite is satisfied by a Major/College course requirement.
<b>Global Knowledge co-requisite</b> (GK)	n/a	14 (Choose statement 1 or 4) Choose course(s) from the University Approved GEP course list for this category.
<b>Foreign Language Proficiency</b>	n/a	FL 201 required.
<b>The following requirements must be satisfied within the College/Program:</b>	x	Place an X in the credit hour box to indicate below that the requirement is " <b>Satisfied by College/Program Requirements</b> "
<b>Communication in the Major (Advanced Communication)</b>	X	Satisfied by College/Program Requirements
<b>Technology Fluency</b>	X	Satisfied by College/Program Requirements
<b>Total credit hours required to complete Degree:</b> Total must be within 120-128 credit hours.	120 Total hours	<b>As applicable, indicate here the overall GPA requirement for degree completion including course completion.</b>

**NC STATE UNIVERSITY**

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Campus Box 7908  
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919.515.7908 Fax  
www.ce.ncsu.edu

**MEMORANDUM**

Date: April 12, 2017

To: Dr. Michael D. Mullen, Vice Provost and Dean, Division of Academic and Student Affairs

From: Dr. Morton Barlaz, Head, Department of Civil, Construction, and Environmental Engineering

Re: Request for authorization to discontinue a degree program concentration:  
BS Construction Engineering – Mechanical (**14CONBS – 14CONMEC**)

**Why the program is being discontinued.**

The CCEE Department recommends that the degree program concentration **14CONBS – 14CONMEC** be discontinued because of long-term and persistent low enrollment, very few degrees awarded, and the fact that the program is unlikely to grow sufficiently to have a critical mass of students. The CCEE Department offers a related ABET accredited construction engineering degree 14CONBS-14CONGEN that serves the construction profession and students well and provides a highly related alternative. There is sufficient capacity for the 14CONBS-14CONGEN program to grow.

**Steps to be taken to allow students enrolled in the program to complete their courses of study.**

Students in the current program will be offered the choice of continuing in the program and earning the degree, or switching to the related 14CONBS-14CONGEN curriculum. NC State will officially discontinue the program when all continuing students have been graduated or have otherwise left the program. Steps have been taken to prevent any new students to CODA in the program starting fall semester 2017

**Consequences of discontinuation.**

There will be no impact on current faculty and staff in the CCEE Department. Overall enrollment in the other degree programs is strong and increasing. Considering the total number of undergraduate students in the department, the number of students currently in the 14CONBS-14CONMEC program is negligible. No courses in the current program were specifically for the 14CONBS-14CONMEC curriculum.

**Proposed effective date.**

Fall 2017

**RECOMMENDED BY:**

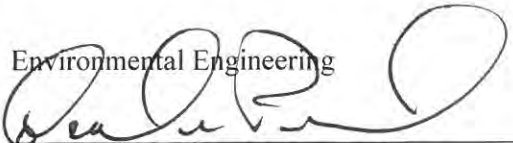


Head, Department of Civil, Construction, and

April 12, 2017

Date

Environmental Engineering

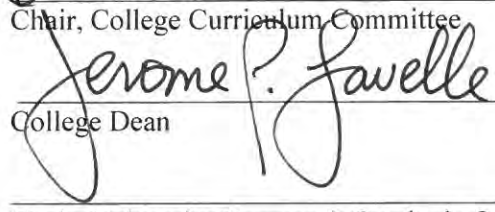


16 April '17

**APPROVED BY:**

Chair, College Curriculum Committee

Date



4/17/17

College Dean

Date

Chair, University Courses & Curricula Committee

Date

Office of the Provost

Date

**APPROVED EFFECTIVE DATE:**

\_\_\_\_\_

**NC STATE UNIVERSITY**

Office of Academic Affairs  
Box 7904 / Page Hall  
Raleigh, North Carolina 27695-7904  
919.515.3263 (phone)  
919.515.8702 (fax)

**DATE:** April 17, 2017  
**TO:** Dr. Michael D. Mullen, Vice Provost and Dean of Academic and Student Affairs  
**FROM:** Dr. David Parish, Assistant Dean and Chair, College Course and Curriculum Comm.  
**RE:** Curriculum Revision of GEP (IP) Course, E102: Engineering in the 21<sup>st</sup> Century

By means of this memorandum and the attached documents, the College of Engineering proposes to modify its Engineering First Year (EFY) curriculum. The revision specifies a 2-hour, interdisciplinary perspective, general education elective in the second semester of the first year for engineers. The course, E102: Engineering in the 21<sup>st</sup> Century, is designed as an early exploration class intended to introduce students to the Engineering Grand Challenges. This GEP course will be open to the campus. There is no change in the number of credit hours and resources are being allocated to accomplish this change. Attached is a semester-by-semester display with the revision shown in blue. A new Format B has also been attached showing the change. Consultation with all engineering departments was achieved through committee during the College's Course and Curriculum Committee meeting on March 16<sup>th</sup> 2017 (attached).

MAJOR ACTION SIGNATURES

**RECOMMENDED BY:**  17 April '17  
HEAD, DEPARTMENT/PROGRAM DATE

**ENDORSED BY:**  17 April '17  
CHAIR, COLLEGE COURSES & CURRICULA COMMITTEE DATE

 4/19/17  
COLLEGE DEAN DATE

**APPROVED BY:** \_\_\_\_\_  
CHAIR, UNIVERSITY COURSES & CURRICULA COMMITTEE DATE

\_\_\_\_\_  
DEAN OF UNDERGRADUATE ACADEMIC PROGRAMS DATE

APPROVAL DATE \_\_\_\_\_

GEP FORMAT A  
(SEMESTER-BY-SEMESTER CURRICULUM DISPLAY)

Current:                      Proposed: **X**    Proposed Effective Semester: **7/2017**

PLAN TITLE: **Engineering First Year**

SUBPLAN TITLE: N/A

CURRENT DEGREE KEY: **14 EFY 2011**

FRESHMAN YEAR							
FALL SEMESTER			CREDITS	SPRING SEMESTER			CREDITS
CH	101	Chemistry, A Molecular Science <sup>1</sup>	3	MA	241	Calculus II <sup>1</sup>	4
CH	102	General Chemistry Lab <sup>1</sup>	1	PY	205	Physics for Engr & Sc I <sup>1</sup>	4
E	101	Introduction to Engr & Prob Solv <sup>1</sup>	1	***	***	Major Course Requirement <sup>2</sup>	3 /4
E	115	Intro to Computing Environ	1	EC	205	Economics (or EC 201 or ARE 201)*	3
ENG	101	Academic Writing and Research*	4	PE	***	Phys Ed/Healthy Living Elective*	1
MA	141	Calculus I <sup>1</sup>	4	E	102	Engineering in the 21 <sup>st</sup> Century	2
PE	10*	Fitness & Wellness Course*	1				
			<i>Total: 15</i>				<i>Total: 17/18</i>
SOPHOMORE YEAR							
FALL SEMESTER			CREDITS	SPRING SEMESTER			CREDITS
MA	242	Calculus III	4	MA	3**	Math Course Requirement <sup>4</sup>	3
PY	208	Physics for Engr & Sc II	4	***	***	Major Course Requirement <sup>5</sup>	3
***	***	Major Course Requirement <sup>3</sup>	3 /4	***	***	Major Course Requirement <sup>5</sup>	3
***	***	Major Course Requirement <sup>3</sup>	3 /4	***	***	Major Course Requirement <sup>5</sup>	3
			<i>Total: 14-16</i>				<i>Total: 15/16</i>
JUNIOR YEAR							
FALL SEMESTER			CREDITS	SPRING SEMESTER			CREDITS
			<i>Total:</i>				<i>Total:</i>
SENIOR YEAR							
FALL SEMESTER			CREDITS	SPRING SEMESTER			CREDITS
			<i>Total:</i>				<i>Total:</i>
Minimum Credit Hours Required for Graduation*:							

**Major/Program Footnotes:**

<sup>1</sup>C- or higher required

<sup>2</sup>BAE 100, CH 201, CH 202, CH 221, CH 222, CH 220, CSC 112, CSC 116, ECE 109, ISE 110, TE 105, TE 110

<sup>3</sup>BAE 200, BME 201, BME 203, CE 214, CE 373, CH 221, CH 222, CHE 205, ECE 200, ECE 209, GC 120, MAE 206, MSE 201, MSE 203, NE 201, ST 371, TDE 220, TE 200

<sup>4</sup>MA 303, 305 or 341

<sup>5</sup>ACC 200, BAE 202, BIO 183, BME 204, BME 210, BME 252, CE 261, CE 301, CE 313, CE 382, CE 215, CE 313, CH 220, CH 223, CHE 225, COM 110, ECE 211, ECE 212, ECE 220, ECE 331, GC 120, ISE 216, MAE 208, MAE 261, MAE 301, MAE 308, MAE 314, MEA 323, MSE 200, MSE 201, MSE 255, MSE 260, MSE 270, NE 202, ST 370, ST 372, TE 201, TE 205, Advanced Communication Elective (COM 110, COM 112, COM 211, ENG 288, ENG 289, ENG 316, ENG 331, ENG 332, ENG 333, FL\* 201, FL\* 202, GRK 201, GRK 202), Biology/Science/Chemistry Elective (BIO 414, CH 201, CH 202, CH 220, CH 221, CH 222, FS 462, GN 311, HS 462, MB 351, PB 321, PB 414, SSC 200, SSC 332)

**\*General Education Program (GEP) requirements and GEP Footnotes:**

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied.

University approved GEP course lists for each of the following categories can be found at <http://www.ncsu.edu/uap/academic-standards/gep/courselists/index.html>.

- A. Mathematical Sciences** (6 credit hours – one course with MA or ST prefix)  
Choose from the University approved GEP Mathematical Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **MA 141, MA 241**
- B. Natural Sciences** (7 credit hours – include one laboratory course or course with a lab)  
Choose from the University approved GEP Natural Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **CH 101, CH 102, PY 205**



- C. Humanities** (6 credit hours selected from two different disciplines/course prefixes)  
*Choose from the University approved GEP Humanities course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement:*
- D. Social Sciences** (6 credit hours selected from two different disciplines/course prefixes)  
*Choose from the University approved GEP Social Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: EC 205 (ARE 201 or EC 201)*
- E. Physical Education/Healthy Living** (2 credit hours – at least one 100-level Fitness and Wellness Course)  
*Choose from the University approved GEP Physical Education/Healthy Living course list.*
- E. Additional Breadth** - (3 credit hours to be selected from the following checked University approved GEP course lists)  
 Humanities/Social Sciences/Visual and Performing Arts or \_\_\_\_\_Mathematical Sciences/Natural Sciences/Engineering
- G. Interdisciplinary Perspectives** (5-6 credit hours)  
*Choose from the University approved GEP Interdisciplinary Perspectives course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement:*
- H. Introduction to Writing** (4 credit hours satisfied by completing ENG 101 with a C- or better )

**The following Co-Requisites must be satisfied to complete the General Education Program requirements:**

- I. U.S. Diversity** (USD)  
*Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite. The following course(s) completed as part of the Major requirements may fulfill this requirement:*
- J. Global Knowledge** (GK)  
*Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite. The following course(s) completed as part of the Major requirements may fulfill this requirement:*
- K. Foreign Language proficiency** - Proficiency at the FL\_102 level is required for graduation.

## GEP FORMAT B – CURRICULUM REQUIREMENTS

<b>Degree Title:</b> Engineering First Year
<b>Current Degree Key:</b> 14EFY116
<b>Proposed:</b> <u>Plan Code:</u> 14EFY <u>Requirement Term:</u> Sum 1 2017
<b>Effective Date of Revision:</b> 7/2017

MAJOR FIELD OF STUDY REQUIREMENTS:	Credit Hours	GEP category, if applicable
<b>Required Courses/Groups/ Electives:</b>		
Indicate if course or course groupings have a C-wall or MGPA requirement		List GEP category & hours satisfied by a Major requirement
<b>Math</b> MA 141 (C- Wall); MA 241 (C- Wall); MA 242	12	Mathematics (6 hours)
<b>Sciences</b> CH 101 (C- Wall); CH 102 (C- Wall) PY 205 (C- Wall); PY 208	4 8	Natural Sciences (4 hours) Natural Sciences (4 hours)
<b>Other Courses</b> <b>GRP 030</b> Freshman Classes (BAE 100, CH 201, CH 202, CH 220, CH 221, CH 222, CSC 112, CSC 116, ECE 109, ISE 110, PSE, 201, TE 105, TE 110) <b>GRP 031</b> Sophomore Classes First (BAE 200, BME 201, BME 203, CE 214, CE 373, CH 221, CH 222, CHE 205, ECE 200, ECE 209, GC 120, MAE 206, MSE 201, MSE 203, NE 201, ST 371, TDE 220, TE 200) <b>GRP 033</b> Sophomore Classes Second (ACC 200, BAE 202, BIO 183, BME 204, BME 210, BME 252, CE 261, CE 301, CE 313, CE 382, CE 215, CE 313, CH 220, CH 223, CHE 225, COM 110, ECE 211, ECE 212, ECE 220, ECE 331, GC 120, ISE 216, MAE 208, MAE 261, MAE 301, MAE 308, MAE 314, MEA 323, MSE 200, MSE 201, MSE 255, MSE 260, MSE 270, NE 202, ST 370, ST 372, TE 201, TE 205, <b>GRP 034, GRP 035, GRP 036</b> ) <b>GRP 034</b> Advanced Communication Elective (COM 110, COM 112, COM 211, ENG 288, ENG 289, ENG 316, ENG 331, ENG 332, ENG 333, FL* 201, FL* 202, GRK 201, GRK 202) <b>GRP 035</b> Biology/Science/Chemistry Elective (BIO 414, CH 201, CH 202, CH 220, CH 221, CH 222, FS 462, GN 311, HS 462, MB 351, PB 321, PB 414, SSC 200, SSC 332) <b>GRP 036</b> Sophomore Math Second (MA 303, MA 305, MA 341)	34	
<b>Concentration Courses/Groups/Electives:</b>		
<b>Free Electives:</b>		
<b>Total credit hours under Major Field of Study:</b> <i>Minimum 27 hours required in program area.</i>	58 hours	
COLLEGE REQUIREMENTS:		
<b>Orientation Course(s):</b> E 101 and E 115	2	E 115 satisfies Technology Fluency Requirement
<b>Other:</b> (ex: Adv Communication courses) Economics Elective (EC 205, 201; ARE 201) <a href="#">E102</a>	5	Social Science Interdisc. Persp.
<b>Total credit hours under College Requirements:</b>	7 hours	

<b><u>NCSU GENERAL EDUCATION PROGRAM REQUIREMENTS</u></b>		<b>At least one of the following must be listed:</b>
<p><i>Courses in the Major and/or Minor may also fulfill a General Education requirement; however, a GEP category may not be subset to require a specific course from the category list. Required courses must be listed in the Major/College requirements.</i></p> <p><i>Specific courses should not be listed in any of the fields below other than ENG 101.</i></p>		<p><sup>1</sup>Choose course(s) from the University Approved GEP course list for this category.</p> <p><sup>2</sup>Minimum requirements are satisfied by Major/College course requirements.</p> <p><sup>3</sup>Major/College course requirement satisfies X credit hrs of this requirement. Remaining hours required must be chosen from the University Approved GEP course list for the category.</p> <p><sup>4</sup>Co-requisite is satisfied by a Major/College course requirement.</p> <p><sup>5</sup>Choose course(s) from the University Approved GEP course lists for the Humanities, Social Sciences, or Visual &amp; Performing Arts.</p> <p><sup>6</sup>Choose course(s) from the University Approved GEP course lists for the Natural and Mathematical Sciences.</p>
<b>General Education Program Requirements:</b> <i>Minimum 39-40 hrs</i>	<i>Credit hours</i>	<i>How will the GEP requirement be met? (choose applicable statement from 1-6 listed above)</i>
<b>Mathematical Sciences</b> <i>(minimum of 6 credits)</i> (at least one with MA or ST prefix) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy both the Global Knowledge and Diversity co-requisites.</i>	X	<i>Minimum requirements are satisfied by Major course requirements</i>
<b>Natural Sciences</b> <i>(minimum of 7 credits)</i> (at least 1 laboratory) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy both the Global Knowledge and Diversity co-requisites.</i>	X	<i>Minimum requirements are satisfied by Major course requirements</i>
<b>English 101</b>	4	ENG 101
<b>Humanities</b> <i>(minimum of 6 credits)</i> (from two different disciplines) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy both the Global Knowledge and Diversity co-requisites.</i>	6	<i>Choose course(s) from the University Approved GEP course list for this category</i>
<b>Social Sciences</b> <i>(minimum of 6 credits)</i> (from two different disciplines) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy both the Global Knowledge and Diversity co-requisites.</i>	3	<i>Required College course satisfies 3 credit hrs of this requirement. Remaining hours required must be chosen from the University Approved GEP course list for the category.</i>
<b>Additional Breadth</b> <i>(minimum of 3 credits)</i> (Choose AB course list that is different from the approach of the Major) <i>Major/College requirements cannot satisfy this requirement and an AB course cannot be double-counted except in satisfying the Global Knowledge and Diversity co-requisites.</i>	3	<i>Choose course(s) from the University Approved GEP course lists for the Humanities, Social Sciences or Visual and Performing Arts</i>
<b>Interdisciplinary Perspective</b> <i>(minimum of 5-6 credits)</i> <i>Only course(s) in the Major may double-count to satisfy this requirement.</i>	3	<i>Choose course(s) from the University Approved GEP course list for this category</i>
<b>Physical Education/Healthy Living</b> (including one Fitness and Wellness course)	2	<i>Choose course(s) from the University Approved GEP course list for this category</i>
<b>Total credit hours needed to complete GEP that are not satisfied as part of the Major/College requirements.</b>	21 hours	
<b>GEP Co-Requisites:</b>		<i>Courses taken in the Major, GEP, or Minor may double-count to fulfill the co-requisites. Courses that satisfy the U.S. Diversity* or Global Knowledge** co-requisite are marked on course lists with asterisks as indicated.</i>
<b>U.S. Diversity co-requisite*</b>	n/a	<i>Choose course(s) from the University Approved GEP course list for this category</i>
<b>Global Knowledge co-requisite**</b>	n/a	<i>Choose course(s) from the University Approved GEP course list for this category</i>
<b>Foreign Language Proficiency</b>	n/a	FL_102
<b>The following requirements must be satisfied within the College/Program:</b>		
<b>Advanced Communication</b>	X	Satisfied by College/Program Requirements
<b>Computer Literacy</b>	X	Satisfied by College/Program Requirements
<b>Total credit hours required to complete Degree:</b> Total must be within 120-128 credit hours.	86 Total hours	<b>Graduation requirements include: (a) 2.0 overall GPA or higher in all courses attempted at NCSU and (b) 2.0 GPA or higher in all Major designated courses.</b>



## Course and Curriculum Committee Meeting Minutes

March 16, 2017  
EB 2 3002  
Call to Order: 10:00AM

**Members Present:** Chair David Parish, Dennis Bahler, Lisa Bullard,, Cheryl Cass, Jack Edwards, Mike Escuti, Sarah Heckman, Amy Matthews (Recorder), Hatice Ozturk, Myles Robinson, Rudi Seracino, John van Zanten

### WELCOME AND INTRODUCTIONS

Please see attached agenda for tomorrows meeting in EB 2 3002 at 10:00am.  
The minutes from February 16th, 2017 are also attached.

- *Remarks from Chair* – David Parish
- Approval of Minutes for the February 16, 2017 meeting.

### COURSE ACTIONS (CIM):

- **BME 362: Biomaterial Characterization** -Motion to approve
- **ECE 420: Wireless Communication Systems** -Learning outcome in syllabus does not match - Rollback to ECE for updates
- **BME 342: Analytical and Experimental Methods for Biomedical Engineers** - Change MAE course number - Motion to approve
- **CE 327: Reinforced Concrete Design**- Motion to approve
- **CE 420: Structural Engineering Project**- Motion to approve
- **CE 263: Intro to Construction Engineering**- Motion to approve
- **CE 365: Construction Equipment and Methods** -Motion to approve
- **CE 463: Construction Estimations , Planning and Design** -Motion to approve
- **CSC 326: Software Engineering** -update from 2+2 to 3+2 - Motion to approve
- **MAE 251: Aerospace Vehicle Performance**- Change GPA requirement from 2.5 to 2.0 due to it being a required course. Non Majors can be 2.5- Rollback to MAE for updates

### CURRICULUM ACTIONS:

- **Degree Revision for 11BEBS-11BEBEE, B.S. in Biological Engineering- Environmental Engineering Concentration** – Dr. Parish sent email and a motion was moved to approve via email
- **CONSTRUCTION ENGINEERING- General Curriculum Revisions** – Moved to next meeting
- **CONSTRUCTION ENGINEERING- Mechanical drop curriculum** – Moved to next meeting
- **CSC: 14BS (See Attached Memo)** - Motion to approve
- **CSC: 14BS Games (See Attached Memo)** – missing PY209 – approved with change
- **E102: Engineering in the 21<sup>st</sup> Century** – PSE –opt out due to other required freshman courses - Motion to approve

# PRT 358 Course Syllabus Spring 2017

## PRT 358 – The Recreation Program

**Monday + Wednesdays ~ 10:40 am - 11:30 am in 301 Mann Hall**  
**Wednesday Lab ~ 1:30 – 4:15 pm ~ in various locations**

**Visit PRT 358's Moodle site daily!**



### Leadership Team

**Annette C Moore** (mooreann) - *Instructor*

**Email:** [mooreann@ncsu.edu](mailto:mooreann@ncsu.edu)

**Phone:** 919-515-9572

**Office Location:** 4012 D Biltmore Hall

**Office Hours:** after class in 301 Mann Hall or Tuesdays 2–3:30 PM  
(in 4012 D Biltmore Hall) and by appointment

#### Course Assistants:

**Kaylee Williams** ([knwilli8@ncsu.edu](mailto:knwilli8@ncsu.edu))

**Brad Sniper** ([bmsniper@ncsu.edu](mailto:bmsniper@ncsu.edu))

**Logan Haynes** ([lmhayne2@ncsu.edu](mailto:lmhayne2@ncsu.edu))

**Kayla Phillips** ([kjphill3@ncsu.edu](mailto:kjphill3@ncsu.edu))

**Nikki Bradshaw** ([nkbradsh@ncsu.edu](mailto:nkbradsh@ncsu.edu))

I encourage you to come by or make an appointment even if you have ideas you'd like to explore, questions about course material, or if you just need to talk. In most cases, office visits are more helpful before a "crisis" than after one.

**In general: For questions regarding technical assistance or logistics, please email Kaylee, Brad, Logan, Kayla or Nikki.**

**If you have questions regarding concepts or other course content, please email Annette or visit during office hours.**

### Course Description

The ultimate goal of the recreation and park profession is to improve the quality of life for the people and communities we serve. We do this by providing programs for people. It is important for the student to realize the breadth of recreation program possibilities and to be able to analyze the program planning principles to deliver services in a variety of recreation settings. PRT 358 is designed to provide knowledge and tools to enable the student to achieve the above objectives. For many students, this should be one of the most valuable courses in the entire PRT curriculum.

The reflective and experiential components of this course are designed to assist **your transition from a student into a professional. Consider PRT 358 a guided practicum experience.** Course concepts are taught primarily via Moodle Books ~ with individual and SL group applications. You will need to prepare for class and lab and engage with your group there as well as between meeting times.

### Learning Goals + Outcomes



**= GOALS**

**Course Goals:** Fundamentally, the two-fold purpose of this course is for students:

1. To develop skills needed to plan recreation programs effectively; and
2. To design programs targeting long-term benefits and positive impacts on participants.

**Learning Outcomes:**

Through active participation in this course, students will:

1. Demonstrate effective direct leadership skills through in class and community leadership opportunities
2. Articulate the role recreation programs can have on improving the quality of life for those we serve and the communities in which we work.
3. Develop reflective and critical thinking skills as demonstrated by participation in small group discussions and in written work.
4. Examine their service-learning experience in areas of personal growth, academic enrichment and civic engagement.
5. Demonstrate skills needed to design, plan, implement, and evaluate at least 2 recreation programs for **their agency’s clientele.**
6. Document the procedures and impacts of programs they designed through the service-learning component of this course.
7. Present this documentation in a group format to their peers, agency representatives, NCSU faculty and members of the community.

**Key Course Concepts**

By the end of the semester (**+ for Exams**), you should be able to use following programming tools:

- Programming Wave
- Direct Leadership Skills
- POSA BESSE
- Goal and Objective Writing
- Evaluation
- Program Enhancements
- 40 Developmental Assets
- Marketing: designing and promoting programs
- Risk Management in program design and implementation
- Logic Model / Outcomes Based Programming
- Group Dynamics + Direct Leadership Skills
- Planning Processes / Time Lines / Run Sheets / Project Management Systems
- Critical Reflection + Articulated Learning Statement Writing

**Learning Roles**

**You are responsible for what you learn this semester.** You will take an active role in your learning both figuratively and literally! Our role as a leadership team is to help you to learn and grow this semester. Through class activities and discussions, your Service-Learning experience and guided reflection exercises, we will do what we can to facilitate learning opportunities in PRT 358. Our underlying goal is to set you up for success as a person, as a recreation professional, and as a member of society. PRT 358 is a very hands-on, applied course, one that is **academic, practical and reflective**. Therefore, you will need to **schedule time prior to each class period to prepare for what we’ll be doing in class**, including watching video lectures and completing quizzes / associated assignments prior as well as follow-up applications after class.

As a service-learning group, you will be designing and delivering at least 2 recreation programs for the clientele you will be serving with your partnering agency. These service-learning projects offer you incredible personal and professional development opportunities. We encourage you to **engage fully with your SL group throughout the semester** ~ in class, lab, on Moodle, in person, and between class and lab times.

**Course Structure**

PRT 358 is a **full-immersion service-learning** course. Our course is structured around the projects you and your group will be designing and delivering. Our Moodle site is designed to guide that process!



## Course Materials

### Textbooks

There is no required textbook for this course. Course materials are posted on our Moodle site each week.

**Expect to have homework prior to most class periods** (such as watching an online lecture, taking an online quiz, and contributing to your SL group's progress). These are posted on Moodle.

Our PRT 358 Moodle site is organized by topic, with academic content provided through Moodle Books.

**Milestone blocks** on Moodle provide **Tasks to Complete and Individual and Group Checklists**. These will require your continual attention throughout the semester.

We encourage you and your service-learning group to take advantage of a group messaging app to remind one another of upcoming tasks and deadlines.

### Technology Requirements

**You will need a web-enabled iPad, tablet, or laptop for most classes.** These items can be checked out from the NCSU libraries for a period of 4 hours to 7 days at a time.

→ You and your SL group will be working on Google Docs regularly during class. ←

### Technology Policy

1. **Laptops / tablets and cellphones are to be stored during class.** Shut off your devices if you are likely to be tempted by these distractions. Research shows that you will have greater likelihood of success if you take notes *by hand* during class.
2. During class, we will let you know when to power up your devices for use on in-class activities (ICA's). At other times, your electronics should be stowed or powered off.
3. Assignments should be saved and submitted on Moodle in a format that can easily be opened in Microsoft Word. Please make a backup of all your work.

### Classroom Policies

**Please be respectful of others** in our classroom + at your partnering agency. Minimize distractions as much as possible. Use respectful, professional language (e.g., including words such as "please / thank you" and excluding profanities and coarse language).

We will have periodic in class quizzes (ICQ's) and in class activities (ICA's) during class. You will need to be present to participate in these graded exercises.

Online Quizzes + Assignments should be submitted on Moodle unless specifically instructed to bring hardcopy to class. Moodle will not accept late assignments, so visit Moodle often to keep up with assignment due dates + times!

**Dress Code for Lab Periods:** Unless your supervisor asks you dress for painting (or other work project), students should attend on-site labs in "**Business Casual**" attire (khaki pants + polo shirt or equivalents) ←

### Restrictions

**Note: PRT 152 is a prerequisite for this course.**

### Grading

If you would like to receive an excellent grade in this course, make sure you are doing excellent (*not minimal*) work. Excellent, A -quality work demonstrates a depth of learning, analysis, synthesis and evaluation that goes beyond merely doing the minimum required in an assignment. Homework assignments and in class activities add up to represent a significant portion of your grade. The amount of effort you put into these small assignments will reflect the grade you earn in this course.

Since PRT 358 is SL Group focused, 40% of your grade is generated from group efforts, 60% individual. The breakdown of grading will be:

	Course Material related (60% of grade)	SL Application of Material Related (40% of grade)
<b>Individual Effort (60% of grade)</b>	Exam: 20% SL Application: 5% ICA's / ICQ's / HW / Reflections / Attendance: 25%	Contributions to SL Project 5% Peer / Supervisor Evaluations: 5% <b>* Please see highlighted note below</b>
<b>Group Effort (40% of grade)</b>	Group Leadership Activity (GLA) Event Leadership: 5% GLA Program Plan: 5%	Initial Video: 5% Final Video: 10% Documentation of Process, Programs, + Learning: 15%

**Important Note on SL Group Grades:** Please fully engage with your group and supervisor at your service-learning sites, contributing to the planning and delivery process as well as documentation of your SL project. Peer and supervisor evaluation of your participation affects your performance in this course. →\* **If you earn less than 75% of peer-supervisor-instructor evaluation points, you will receive only that portion of your group's video and Google Site grades.** ←

**The best way to receive full credit is to be fully engaged with your SL group the entire semester.**

## Letter Grades

This Course uses Standard NCSU Letter Grading:

97 ≤ <b>A+</b> ≤ 100	77 ≤ <b>C+</b> < 80
93 ≤ <b>A</b> < 97	73 ≤ <b>C</b> < 77
90 ≤ <b>A-</b> < 93	70 ≤ <b>C-</b> < 73
87 ≤ <b>B+</b> < 90	67 ≤ <b>D+</b> < 70
83 ≤ <b>B</b> < 90	63 ≤ <b>D</b> < 67
80 ≤ <b>B-</b> < 83	60 ≤ <b>D-</b> < 63
	0 ≤ <b>F</b> < 60

## Attendance / Absence Policy

Most class periods, students have the opportunity to earn in class activity points, which contribute to your final grade. If you are not in class for any reason, you cannot earn these points. You are expected to attend class and participate while there. **You cannot participate in class if you are not here.**

→ **Students missing 8 or more class periods will not pass this class** ← You need to be here to succeed in class and lab.

In-class activities and HW assignments will be given throughout the semester. Remember: In-class assignments and activities cannot be made up for any reason! They are based on activities we do IN class as a group. If you are not in class, you cannot participate.

You may miss two lecture periods without penalty or excuse. *Please present documentation for excused absences as soon as possible, within 2 class periods of absence.*

**One Grade (1%) Point is deducted for additional missed lecture periods.**

**Five full percentage points (= 1/2 letter grade) will be deducted for each lab period missed.**

It is your responsibility to provide documentation of your excused absence within 2 class periods of your absence.

Please refer to the NCSU Student Handbook for a listing of excused absences.  
<http://policies.ncsu.edu/regulation/reg-02-20-03>



## Late Assignments

Assignments are posted on Moodle, and appear on the Upcoming Events block as well as under Assignments, and in the weekly block. Please invest time every few day reviewing what is coming up. Homework assignments will not be accepted after the due date. **Exception:** SL Application.

You may submit assignments well before they are due. If you anticipate missing class for personal or university sanctioned events, please complete your assignments prior to their due date.

**Moodle quizzes cannot be reopened after they close.**

Please contact the course instructor and CA's in advance if you anticipate needing more time on a major course assignment.

## Requirements for Credit-Only (S/U) Grading

In order to receive a grade of S, students are required to take all exams and quizzes, complete all assignments, and earn a grade of C- or better. Conversion from letter grading to credit only (S/U) grading is subject to university deadlines. Refer to the Registration and Records calendar for deadlines related to grading. For more details refer to <http://policies.ncsu.edu/regulation/reg-02-20-15>.

**Note:** if you want PRT 358 to count on your Academic Degree Audit as a course for your major or minor, you must receive a letter grade. **S/U grades can only count as free electives.**

**Dropping classes after census date = W grade on your transcript.**

## Policies on Incomplete Grades

If an extended deadline is not authorized by the instructor or department, an unfinished incomplete grade will automatically change to an F after either (a) the end of the next regular semester in which the student is enrolled (not including summer sessions), or (b) the end of 12 months if the student is not enrolled, whichever is shorter. Incompletes that change to F will count as an attempted course on transcripts. The burden of fulfilling an incomplete grade is the responsibility of the student. The university policy on incomplete grades is located at <http://policies.ncsu.edu/regulation/reg-02-50-3>.

## Academic Integrity Policies

### Academic Integrity

Students are required to comply with the university policy on academic integrity found in the Code of Student Conduct found at <http://policies.ncsu.edu/policy/pol-11-35-01>

### Academic Honesty

See <http://policies.ncsu.edu/policy/pol-11-35-01> for a detailed explanation of academic honesty.

### Honor Pledge

Your written or electronic signature or name on any test or assignment indicates "I have neither given nor received unauthorized aid on this test or assignment."

## Electronically-Hosted Course Components

Students may be required to disclose personally identifiable information to other students in the course, via electronic tools like email or web-postings, where relevant to the course. Examples include online discussions of class topics, and posting of student coursework. All students are expected to respect the privacy of each other by not sharing or using such information outside the course.

**Electronically-hosted Components:** Moodle forums, group work, Google Site + video of SL projects

## Accommodations for Disabilities

Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, student must register with the Disability Services Office (<http://www.ncsu.edu/dso>), 919-515-7653. For more information on NC State's policy on working with students with disabilities, please see the Academic Accommodations for Students with Disabilities Regulation at <http://policies.ncsu.edu/regulation/reg-02-20-01>.

**NOTE: If you have any special needs related to a certifiable disability, please notify me as soon as possible (within the first 2 weeks of class) so we can make arrangements to accommodate them.**

## Non-Discrimination Policy

NC State University provides equality of opportunity in education and employment for all students and employees. Accordingly, NC State affirms its commitment to maintain a work environment for all employees and an academic environment for all students that is free from all forms of discrimination. Discrimination based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation is a violation of state and federal law and/or NC State University policy and will not be tolerated. Harassment of any person (either in the form of quid pro quo or creation of a hostile environment) based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation also is a violation of state and federal law and/or NC State University policy and will not be tolerated. Retaliation against any person who complains about discrimination is also prohibited. NC State's policies and regulations covering discrimination, harassment, and retaliation may be accessed at <http://policies.ncsu.edu/policy/pol-04-25-05> or [http://www.ncsu.edu/equal\\_op/](http://www.ncsu.edu/equal_op/). Any person who feels that he or she has been the subject of prohibited discrimination, harassment, or retaliation should contact the Office for Equal Opportunity (OEO) at 919-515-3148.

## Supporting Fellow Students in Distress

As members of the NC State Wolfpack community, we each share a personal responsibility to express concern for one another and to ensure that this classroom and the campus as a whole remains a safe environment for learning. Occasionally, you may come across a fellow classmate whose personal behavior concerns or worries you. When this is the case, I would encourage you to report this behavior to the NC State Students of Concern website: <http://studentsofconcern.ncsu.edu/>. Although you can report anonymously, it is preferred that you share your contact information so they can follow-up with you personally.

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### Note to all PRT and SMT Majors:

"All PRT and Sport Management majors must take either PRT 477 or PRT 486 during their senior year to fulfill the requirements of the degree. This capstone course will include an ePortfolio assignment where students will showcase a few of their best assignments. Students should update assignments after they have received feedback from course instructors. All assignments should be saved in a file that can easily be accessed during their senior year. Photographs and multi-media displays of work (i.e., power point presentations, videos, slide shows) are excellent artifacts to maintain for the ePortfolio."

Your PRT 358 Service-Learning experiences should be included on your updated professional resume. They are also excellent candidates for inclusion in your capstone class ePortfolio.

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**MEMORANDUM**

To: University Courses and Curricula Committee

From: Bill Fortney, Ph.D.  
Director, Havelock site-based BSE program

Subject: Degree Revision for 14EGRBS-14EGRMES Engineering (BS): Mechanical Engineering Systems concentration

For the past year, the MES Continuous Improvement Committee has been reviewing the program curriculum to ensure it continues to meet the program educational objectives. Comments from the 2013 and 2016 ABET site visits were considered as well as feedback from the program constituents including current students, alumni, and employers. Proposed curriculum changes were developed and reviewed by current students, alumni, and the MES Continuous Improvement committee. All groups commented that the proposed changes were needed and would allow the program to better meet the needs of the students and employers. The proposed curriculum was then presented to the Raleigh based MES Course and Curriculum Committee and all changes were approved. The proposed changes will take effect fall 2017 with incoming sophomores. None of the changes will impact existing MES students. None of the changes negatively impact ABET requirements for depth of study for Math and Basic Sciences, Engineering Topics, and General Education. No other department is impacted by these changes.

Effective in June 2017, the revisions listed below are requested for the B.S. in Engineering – Mechanical Engineering Systems concentration, 14EGRBS-14EGRMES. A summary of the proposed changes is given below and further justification of the changes, Format A (current and proposed) and Format B are attached.

Change MAE course numbers to reflect correct new changes made by MAE (noted in red on proposed format A)

- MAE 314 to 214
- MAE 301 to 201

Change semester course is shown to reflect new recommended course sequence (noted in green)

- GC 120 from Fall Sophomore to Fall Freshman
- EC 205 Fall Freshman to Spring Freshman
- GEP Spring Freshman to Fall Senior
- GEP – Social Science Req Spring Sophomore to Spring Senior
- GEP – Ethics Fall Senior to Spring Sophomore

MES COURSE CHANGES (noted in red)

- Add MES 200 (2) Fall Sophomore to increase depth of program content
- Remove MES 305 (1)
- Add MES 201 (2) Spring Sophomore to correct incorrect number of hours in MES 305

- Remove MES 405 (2)
- Add MES 301 (2) Fall Junior (replaces MES 405 with additional content)
- Add MES 301 (2) Spring Junior (replaces MES 405 with additional content)
- Add MES 400 (2) Fall Senior (replaces MES 405 with additional content)
  
- Remove MES 402 (4) Spring Senior
- Add MES 403 (3) Spring Senior (replaces MES 402 with machining content removed)

MISC.

- Change Minimum Credit Hours Required for Graduation from 120 to 125 (noted in red)
- Chang PHI 222 to PHI 221 in note "C" (noted in red)

North Carolina State University

This request has been reviewed and approved by the appropriate campus committees and authorities.

Endorsed By: Bills Fortney 4/13/17  
Head, Department/Program Date

Recommended By: David R. ... 13 April 17  
Chair, College Curriculum Committee Date

Endorsed By: Jerome P. Favelle 4/17/17  
College Dean Date

Recommended By: \_\_\_\_\_  
Chair, University Courses & Curricula Committee Date

Approved By: \_\_\_\_\_  
Dean, (DASA or the Graduate School) Date

GEP FORMAT A  
(SEMESTER-BY-SEMESTER CURRICULUM DISPLAY)

Current: Proposed: X Proposed Effective Semester: **Fall 2017**

DEGREE TITLE: B.S. in Engineering  
 CONCENTRATION TITLE: Mechanical Engineering Systems  
 CURRENT DEGREE KEY: 14EGRBS 14EGRMES

**FRESHMAN YEAR**

<u>Fall Semester</u>	<u>Credits</u>	<u>Spring Semester</u>	<u>Credits</u>
CH 101 Chemistry – A Molecular Science <sup>B,4</sup>	3	CSC 112/114 C++ or FORTRAN	3
CH 102 General Chemistry Laboratory <sup>B,4</sup>	1	MA 241 Analytic Geometry & Calculus II <sup>A,4</sup>	4
E 101 Intro. to Engineering & Prob. Solving <sup>1</sup>	1	PY 205 Physics for Engrs. & Sci. I <sup>B,4</sup>	3
<del>E 115 Intro. to Computing Environments</del>	<del>1</del>	PY 206 Physics for Engrs. & Sci. I Lab	1
ENG 101 Academic Writing and Research <sup>1,H</sup>	4	Physical Education/Healthy Living Elective <sup>E</sup>	1
MA 141 Analytic Geometry & Calculus I <sup>A,J,4</sup>	4	PE 1XX Fitness and Wellness Course <sup>E</sup>	1
GC 120 Foundations of Graphics	<u>3</u>	EC 205 Fundam. of Economics <sup>D</sup>	<u>3</u>
	<b>16+7</b>		<b>16</b>

**SOPHOMORE YEAR**

<u>Fall Semester</u>	<u>Credits</u>	<u>Spring Semester</u>	<u>Credits</u>
MAE 206 Engr. Mechanics – Statics <sup>1,2</sup>	3	MAE 208 Engr. Mechanics - Dynamics <sup>1,2</sup>	3
MSE 201 Mech. Prop. of Structural Materials	3	MAE <del>214</del> <del>314</del> Solid Mechanics <sup>1</sup>	3
MA 242 Calculus III	4	MA 341 Applied Diff. Equations	3
PY 208 Physics Engr. & Sci. II <sup>B</sup>	3	ST 370 Prob. & Stat. for Engineers	3
PY 209 Physics Engr. & Sci. II Lab	1	<del>MES 305 MES Lab I</del>	<del>1</del>
MES 200 Introduction to Mech Engr Systems	<u>2</u>	MES 201 MES Lab I	<u>2</u>
	<b>16+7</b>	*** **** GEP - Ethics <sup>C,3</sup>	<u>3</u>
			<b>17+6</b>

**JUNIOR YEAR**

<u>Fall Semester</u>	<u>Credits</u>	<u>Spring Semester</u>	<u>Credits</u>
MAE <del>201</del> <del>304</del> Engr Thermodynamics I <sup>1</sup>	3	MAE 316 Strength of Mech. Components	3
MAE 308 Fluid Mechanics	3	ECE 331 Principals of Elec. Engr. I	3
MAE 315 Dynamics of Machines	3	ENG 331 Comm For Engr & Tech	3
MES 300 Systems Engineering	4	MAE 435 Principals of Automatic Controls	3
MES 301 MES Lab II	<u>2</u>	MES 302 MES Lab III	<u>2</u>
	<b>15+3</b>	GEP Additional Breadth Requirement <sup>F</sup> (Hum/SS/VPA)	<u>3</u>
			<b>17+5</b>

**SENIOR YEAR**

<u>Fall Semester</u>	<u>Credits</u>	<u>Spring Semester</u>	<u>Credits</u>
MAE 415 Mech. Engr. Analysis	3	MAE 412 Ana & Design Energy Systems	3
MAE 310 Heat Transfer	3	<del>MES 402 Capstone Design II</del>	<del>4</del>
MES 401 Capstone Design I	3	MES 403 Capstone Design II	3
<del>MES 405 MES Lab II</del>	<del>2</del>	GEP Interdisciplinary Perspectives Requirement <sup>G</sup>	3
MES 400 MES Lab IV	<u>2</u>	GEP Social Science Requirement <sup>D</sup>	<u>3</u>
GEP Humanities Requirement <sup>C</sup>	<u>3</u>	GEP Interdisciplinary Perspectives Requirement <sup>G</sup>	<u>2 or 3</u>
	<b>14</b>		<del>12 or 13</del> 14 or 15

**Minimum Credit Hours Required for Graduation\* I,J,K = 125+20**

**Major/Program requirements and footnotes:**

- <sup>1</sup>Minimum grade of C-
- <sup>2</sup>Students must have a 2.5 to enroll in this course.
- <sup>3</sup>Select from PHI 214, PHI 221 or PHI 375.
- <sup>4</sup>Grade of C (2.0) or higher required.

**\*General Education Program (GEP) requirements and GEP footnotes:**

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied.

University approved GEP course lists for each of the following categories can be found at <http://www.ncsu.edu/uap/academic-standards/gep/courselists/index.html>.

<sup>A</sup> **Mathematical Sciences** (6 credit hours – one course with MA or ST prefix)  
 Choose from the University approved GEP Mathematical Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **MA 141,241**

- B. Natural Sciences** (7 credit hours – include one laboratory course or course with a lab)  
Choose from the University approved GEP Natural Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **CH 101, 102, 201, 202, PY 205, 208**
- C. Humanities** (6 credit hours selected from two different disciplines/course prefixes)  
Choose from the University approved GEP Humanities course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **PHI 214, PHI 221, ~~PHI 333~~, PHI 375**
- D. Social Sciences** (6 credit hours selected from two different disciplines/course prefixes)  
Choose from the University approved GEP Social Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **EC 205**
- E. Physical Education/Healthy Living** (2 credit hours – at least one 100-level Fitness and Wellness Course)  
Choose from the University approved GEP Physical Education/Healthy Living course list.
- F. Additional Breadth** - (3 credit hours to be selected from the following checked University approved GEP course lists)  
 Humanities/Social Sciences/Visual and Performing Arts or  Mathematical Sciences/Natural Sciences/Engineering
- G. Interdisciplinary Perspectives** (5-6 credit hours)  
Choose from University approved GEP Interdisciplinary Perspectives course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **None**
- H. Introduction to Writing** (4 credit hours satisfied by completing **ENG 101** with a C- or better )

The following Co-Requisites must be satisfied to complete the General Education Program requirements:

- I. U.S. Diversity**  
Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite. The following course(s) if completed as part of the Major requirements may fulfill this requirement: **None**
- J. Global Knowledge**  
Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite. The following course(s) if completed as part of the Major requirements may fulfill this requirement: **None**
- K. Foreign Language proficiency** - Proficiency at the **FL\_102** level is required for graduation.

GEP FORMAT A  
(SEMESTER-BY-SEMESTER CURRICULUM DISPLAY)

Current: X Proposed:

Effective Semester: 5/2013

DEGREE TITLE: B.S. in Engineering  
CONCENTRATION TITLE: Mechanical Engineering Systems  
CURRENT DEGREE KEY: 14 EGRBS 14GRMES

**FRESHMAN YEAR**

<u>Fall Semester</u>		<u>Credits</u>	<u>Spring Semester</u>		<u>Credits</u>
CH 101	Chemistry – A Molecular Science <sup>B,4</sup>	3	CSC 112/114	C++ or FORTRAN	3
CH 102	General Chemistry Laboratory <sup>B,4</sup>	1	MA 241	Analytic Geometry & Calculus II <sup>A,4</sup>	4
E 101	Intro. to Engineering & Prob. Solving <sup>1</sup>	1	PY 205	Physics for Engrs. & Sci. I <sup>B,4</sup>	3
E 115	Intro. to Computing Environments	1	PY 205	Physics for Engrs. & Sci. I Lab	1
ENG 101	Academic Writing and Research <sup>1,H</sup>	4		Physical Education/Healthy Living Elective <sup>E</sup>	1
MA 141	Analytic Geometry & Calculus I <sup>A,J,4</sup>	4	PE 1XX	Fitness and Wellness Course <sup>E</sup>	1
EC 205	Fundam. of Economics <sup>D</sup>	3		GEP Humanities Requirement <sup>C</sup>	3
		17			16

**SOPHOMORE YEAR**

<u>Fall Semester</u>		<u>Credits</u>	<u>Spring Semester</u>		<u>Credits</u>
MAE 206	Engr. Mechanics – Statics <sup>1,2</sup>	3	MAE 208	Engr. Mechanics - Dynamics <sup>1,2</sup>	3
MSE 201	Mech. Prop. of Structural Materials	3	MAE 314	Solid Mechanics <sup>1</sup>	3
MA 242	Calculus III	4	MA 341	Applied Diff. Equations	3
PY 208	Physics Engr. & Sci. II <sup>B</sup>	3	ST 370	Prob. & Stat. for Engineers	3
PY 208	Physics Engr. & Sci. II Lab	1	MES 305	MES Lab I	1
GC 120	Foundations of Graphics	3	GEP	Social Science Requirement <sup>D</sup>	3
		17			16

**JUNIOR YEAR**

<u>Fall Semester</u>		<u>Credits</u>	<u>Spring Semester</u>		<u>Credits</u>
MAE 301	Engr Thermodynamics I <sup>1</sup>	3	MAE 316	Strength of Mech. Components	3
MAE 308	Fluid Mechanics	3	ECE 331	Principals of Elec. Engr. I	3
MAE 315	Dynamics of Machines	3	ENG 331	Comm For Engr & Tech	3
MES 300	Systems Engineering	4	MAE 435	Principals of Automatic Controls	3
		13	GEP	Additional Breadth Requirement <sup>F</sup> (Hum/SS/VPA)	3
					15

**SENIOR YEAR**

<u>Fall Semester</u>		<u>Credits</u>	<u>Spring Semester</u>		<u>Credits</u>
MAE 415	Mech. Engr. Analysis	3	MAE 412	Ana & Design Energy Systems	3
MAE 310	Heat Transfer	3	MES 402	Capstone Design II	4
MES 401	Capstone Design I	3	GEP	Interdisciplinary Perspectives Requirement <sup>G</sup>	3
MES 405	MES Lab II	2	GEP	Interdisciplinary Perspectives Requirement <sup>G</sup>	2 or 3
*** ****	Ethics <sup>C,3</sup>	3			12 or 13
		14			

**Minimum Credit Hours Required for Graduation\*<sup>I,J,K</sup> = 120**

**Major/Program requirements and footnotes:**

<sup>1</sup>Minimum grade of C-

<sup>2</sup>Students must have a 2.5 to enroll in this course.

<sup>3</sup>Select from PHI 214, PHI 221 or PHI 375.

<sup>4</sup>Grade of C (2.0) or higher required.

**\*General Education Program (GEP) requirements and GEP footnotes:**

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied.

University approved GEP course lists for each of the following categories can be found at <http://www.ncsu.edu/uap/academic-standards/gep/courselists/index.html>.



- A. Mathematical Sciences** (6 credit hours – one course with MA or ST prefix)  
Choose from the University approved GEP Mathematical Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **MA 141,241**
- B. Natural Sciences** (7 credit hours – include one laboratory course or course with a lab)  
Choose from the University approved GEP Natural Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **CH 101, 102, 201, 202, PY 205, 208**
- C. Humanities** (6 credit hours selected from two different disciplines/course prefixes)  
Choose from the University approved GEP Humanities course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **PHI 214, PHI 221, PHI 375**
- D. Social Sciences** (6 credit hours selected from two different disciplines/course prefixes)  
Choose from the University approved GEP Social Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **EC 205**
- E. Physical Education/Healthy Living** (2 credit hours – at least one 100-level Fitness and Wellness Course)  
Choose from the University approved GEP Physical Education/Healthy Living course list.
- F. Additional Breadth** - (3 credit hours to be selected from the following checked University approved GEP course lists)  
 Humanities/Social Sciences/Visual and Performing Arts or  Mathematical Sciences/Natural Sciences/Engineering
- G. Interdisciplinary Perspectives** (5-6 credit hours)  
Choose from University approved GEP Interdisciplinary Perspectives course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **None**
- H. Introduction to Writing** (4 credit hours satisfied by completing **ENG 101** with a C- or better )
- The following Co-Requisites must be satisfied to complete the General Education Program requirements:
- I. U.S. Diversity**  
Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite. The following course(s) if completed as part of the Major requirements may fulfill this requirement: **None**
- J. Global Knowledge**  
Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite. The following course(s) if completed as part of the Major requirements may fulfill this requirement: **None**
- K. Foreign Language proficiency** - Proficiency at the **FL\_102** level is required for graduation.

**CURRICULUM REQUIREMENTS****Format B**

<u>Degree/Plan Title</u> : Bachelor of Science in Engineering	<u>Plan SIS Code</u> : 14EGRBS
<u>Concentration/Subplan Title</u> : Mechanical Engineering Systems	<u>Subplan SIS Code</u> : 14EGRMES
<u>Indicate requirements status</u> : Current:                      Proposed: X	<u>Proposed Effective Semester</u> : Fall 2017
<u>New Degree Audit required?</u> (Y or N) Y	
<u>Critical Path Courses</u> - Identify using the code (CP) which courses are considered critical path courses which represent specific major requirements that are predictive of student success in a given program/plan. Place the (CP) next to the credit hours for the course.	

<b>MAJOR FIELD OF STUDY REQUIREMENTS:</b>		
<b><i>Required Courses/Groups/ Electives:</i></b>	<b><i>Credit Hours</i></b>	<b><i>GEP category, if applicable</i></b>
<b>Indicate if course or course groupings have a C-wall or MGPA requirement and which are considered Critical Path courses – indicate with (CP) next to applic. course.</b>		<b>List GEP category and hours satisfied by a Major requirement</b>
<b>Math</b> MA 141(C-), MA 241(C-), MA 242 Differential Equations (MA 341)	12 3	Mathematics (6 hours)
<b>Sciences</b> CH 101 (C-), CH 102(C-) PY 205 (C-), PY 206 (C-), PY 208 (C-), PY 209 (C-)	4 8	Natural Sciences (4 hours) Natural Sciences (4 hours)
<b>Major</b> MAE 206 (C-) MAE 208 (C-) MAE 214 (C-) MAE 201(C-) MAE 308 MAE 310 MAE 315 MAE 316 MAE 412 MAE 415 MAE 435 MES 200 MES 201 MES 300 MES 301 MES 302 MES 400 MES 401 MES 403	3 3 3 3 3 3 3 3 3 3 3 2 2 4 2 2 2 2 3 3	Technology Fluency
<b>Other Major</b> (CSC 112 or CSC 114) GC 120 ECE 331 ENG 331 MSE 201 ST 370 Engineering Ethics (PHI 214, PHI 221 or PHI 375)	3 3 3 3 3 3 3	Communication in the major co-requisite Humanities or Interdisciplinary Perspectives

<b>Concentration Courses/Groups/Electives:</b>	0	
<b>Free Electives:</b>	0	
<b>Total credit hours under Major Field of Study:</b> <i>Minimum 27 hours required in program area.</i>	101 hours	
<b>COLLEGE REQUIREMENTS:</b>		
<b>Orientation Course(s):</b> E 101	1	
<b>Other:</b> Economics Elective (EC 205, 201; ARE 201)	3	Social Sciences
<b>Total credit hours under College Requirements:</b>	4 Hours	

<b><u>NCSU GENERAL EDUCATION PROGRAM REQUIREMENTS</u></b>		<b><u>At least one of the following must be listed:</u></b>
<p><i>Courses in the Major and/or Minor may also fulfill a General Education requirement; however, a GEP category may not be subset to require a specific course from the category list. Required courses must be listed in the Major/College requirements.</i></p> <p><i>Specific courses should not be listed in any of the fields below other than ENG 101.</i></p>		<ol style="list-style-type: none"> <li>1 Choose course(s) from the University Approved GEP course list for this category.</li> <li>2 Minimum requirements are satisfied by Major/College course requirements.</li> <li>3 Major/College course requirement satisfies <b>X</b> credit hrs of this requirement. Remaining hours required must be chosen from the University Approved GEP course list for the category.</li> <li>4 Co-requisite is satisfied by a Major/College course requirement.</li> <li>5 Choose course(s) from the University Approved GEP course lists for the Humanities/ Social Sciences/ Visual &amp; Performing Arts.</li> <li>6 Choose course(s) from the University Approved GEP course lists for Natural Sciences/Mathematical Sciences.</li> </ol>
<b>General Education Program Requirements:</b> <i>Minimum 39-40 hrs</i>	<b>Credit hours</b>	<b>How will the GEP requirement be met?</b> <b>(Choose applicable statement from 1-6 listed above)</b>
<b>Mathematical Sciences</b> (6 credits) (At least 1 course with MA or ST prefix) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	X	<i>(Choose statement 1, 2 or 3)</i> Minimum requirements are satisfied by Major course requirements
<b>Natural Sciences</b> (7 credits) (At least 1 lab course or course with a lab) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	X	<i>(Choose statement 1, 2 or 3)</i> Minimum requirements are satisfied by Major course requirements
<b>English 101</b> (C- or better required) (4 credits)	4	ENG 101
<b>Humanities</b> (6 credits) (Courses from two different disciplines) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	3	<i>(Choose statement 1, 2 or 3)</i> College course requirement satisfies <b>3</b> credit hrs of this requirement. Remaining hours required must be chosen from the University Approved GEP course list for the category.
<b>Social Sciences</b> (6 credits) (Courses from two different disciplines) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	3	<i>(Choose statement 1, 2 or 3)</i> College course requirement satisfies <b>3</b> credit hrs of this requirement. Remaining hours required must be chosen from the University Approved GEP course list for the category.
<b>Additional Breadth</b> (3 credits) (Choose approach that is different from the approach of the Major) <i>Major/College requirements cannot satisfy this requirement and an AB course cannot be double-counted except in satisfying the Global Knowledge or U.S. Diversity co-requisites.</i>	3	<i>(Choose statement 5 or 6)</i> Choose course(s) from the University Approved GEP course lists for the Humanities/ Social Sciences/ Visual & Performing Arts
<b>Interdisciplinary Perspectives</b> (5 credits) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	5	<i>(Choose statement 1, 2 or 3)</i> Choose course(s) from the University Approved GEP course list for this category
<b>Health and Exercise Studies</b> (2 credits) (Including one Fitness and Wellness course)	2	Choose course(s) from the University Approved GEP course list for this category.
<b>Total credit hours needed to complete GEP that are not satisfied as part of the Major/College requirements.</b>	20 hours	

<b>GEP Co-Requisites:</b>		<i>Courses taken in the Major, GEP, or Minor may double-count to fulfill the co-requisites. Courses that satisfy the U.S. Diversity or Global Knowledge co-requisite are marked on course lists with a "USD" or "GK" indicator.</i>
<b>U.S. Diversity co-requisite</b> (USD)	n/a	<i>(Choose statement 1 or 4)</i> Choose course(s) from the University Approved GEP course list for this category
<b>Global Knowledge co-requisite</b> (GK)	n/a	<i>(Choose statement 1 or 4)</i> Choose course(s) from the University Approved GEP course list for this category
<b>Foreign Language Proficiency</b>	n/a	Proficiency at the FL_102 level required.
<b>The following requirements must be satisfied within the College/Program:</b>		Place an X in the credit hour box to indicate below that the requirement is "Satisfied by College/Program Requirements"
<b>Communication in the Major (Advanced Communication)</b>	X	Satisfied by Program Requirements
<b>Technology Fluency</b>	X	Satisfied by Program Requirements (MES 200)
<b>Total credit hours required to complete Degree:</b> Total must be within 120-128 credit hours.	125 Total hours	<b>As applicable, indicate here the overall GPA requirement for degree completion including course completion.</b>

**Undergraduate Curriculum Action  
14EGRBS-14EGRMES  
Engineering (BS): Mechanical Engineering Systems (Havelock)  
Curriculum Revision  
April 2017**

For the past year, the MES Continuous Improvement Committee has been reviewing the program curriculum to ensure it continues to meet the program educational objectives. Comments from the 2013 and 2016 ABET site visits were considered as well as feedback from the program constituents including current students, alumni, and employers. Proposed curriculum changes were developed and reviewed by current students, alumni, and the MES Continuous Improvement committee. All groups commented that the proposed changes were needed and would allow the program to better meet the needs of the students and employers. The proposed curriculum was then presented to the Raleigh based MES Course and Curriculum Committee and all changes were approved. The proposed changes will take effect fall 2017 with incoming sophomores. None of the changes will impact existing MES students. None of the changes negatively impact ABET requirements for depth of study for Math and Basic Sciences, Engineering Topics, and General Education. No other department is impacted by these changes.

**Description of Changes**

A summary of the changes is given below.

- Add MES 200 (2 – Lect/SC Lab) Intro. to Mechanical Engineering Systems - Fall Sophomore
  
- Remove MES 305 MES Lab I (1) – Spring Sophomore
- Add MES 201 MES Lab I (2 – Lect/NSC Lab) - Spring Sophomore
  
- Remove MES 405 MES Lab II (2) – Spring Senior
- Add MES 301 MES Lab II (2 – Lect/NSC Lab) - Fall Junior
- Add MES 302 MES Lab III (2 – Lect/NSC Lab) - Spring Junior
- Add MES 400 MES Lab IV (2 – Lect/NSC Lab) - Fall Senior
  
- Remove MES 402 (4) Capstone Design II - Spring Senior
- Add MES 403 (3 Lect) Capstone Design - Spring Senior
  
- Add MES 200 as a prerequisite to MES 300
  
- Remove E115
- Update program hours to 125 from 120

## Justification

### Remove E115

This is a change that we have been considering for some time. Since our students are not on campus, much of the material in E115 is not applicable.

### Add MES 200 "Introduction to Mechanical Engineering Systems" during the fall of the sophomore year

- Course will be 2 credit hours (Lecture / Self-Contained Lab)  
This course is needed to fill some gaps in the current curriculum. Due to the other courses students will be taking with MES 200, the course will be designed with little out of class work (two hours each week). The two credit hours will be 1 hour lecture and 1 hour self-contained lab and will be scheduled for 4 hours each week.
- Key course goals are given below. Many of the goals will be accomplished throughout the course, but the number in parenthesis shows the approximate number of 4 hour blocks dedicated to the subject.
  - (2) Introduce students to the real-work of engineering problem solving so they can see how they will be using the technical knowledge they are about to learn. Course will include visiting engineers in their work environment such as at Cherry Point.
  - (1) Give students a solid foundation in logic as it relates to problem solving and programming.
  - (5) Introduce students to the MES data analysis process and ensure they are able to use fundamental analysis tools – Excel, Matlab. It is not feasible to replace the C++ programming course with Matlab since all of our students fulfill that requirement at the community college before they come to us. Instead, we will teach the initial Matlab skills in this course and then have sessions in other lab courses to add topics as needed.
  - (5) Familiarize students with basic mechanical components, tools and machines. The course will allow students to have hands-on exposure to common mechanical components that they will study about and utilize in their designs.
  - (2) Introduce students to professionalism and the professional characteristics employers require in their engineers. Help students access their current job readiness and develop a career readiness plan (will be done through a trial interview with business professionals).

### Remove MES 402 and Add MES 403

Currently MES 402 (Capstone Design II) is 4 credit hours and includes 16 hours of exposure to machining. This experience has been given through a Community College continuing education course and on base. With the addition of the hands-on experiences in the new seminar course and the tour in Lab IV, this experience is no longer needed, so a new 3 hour course MES 403 will be created to replace MES 402. Except for the elimination of the machining experience,

MES 403 will be exactly like the current MES 402. MES 402 must remain in place for existing MES students.

Remove all current MES labs (essentially 3) and replace with 4 lab courses

- When the MES Labs were initially setup, two mistakes were made.
  - First, MES 405 was the equivalent of two lab courses, but it was setup as one course. Practically, we have been doing this as two courses. With MES 305, this means the program currently has 3 lab courses.
  - Second, the credit hours for all MES labs were done incorrectly. There are two types of labs – self-contained and non-self-contained. When students have outside work for a lab like with the MES Labs, it is considered non-self-contained and these labs are scheduled two hours for one credit hour. All of the MES labs are one credit hour, but they are designed to meet for three hours. Since the first hour is typically spent lecturing on the theory and procedures of the lab, all MES Labs will be changed to 2 credit hours (1 hour lecture and 1 hour non-self-contained lab).
- The content of MES 405 will be split between three lab courses with additional content added to each. MES 305 will be replaced with MES 201 which has the correct number of hours. With these lab changes and the addition of MES 200, MES students will be in a local lab type course every semester starting with their sophomore year (see below).

Fall Sophomore →	MES 200 Introduction to Mech Engr Systems
Spring Sophomore →	MES 201 Lab I (Existing MES 305)
Fall Junior →	MES 301 Lab II (new course)
Spring Junior →	MES 302 Lab III (in place of MES 405a)
Fall Senior →	MES 400 Lab IV (in place of MES 405b)

Having students each semester allows us to accomplish several things as noted below.

- Technical Tours designed to reinforce academic material being covered in MAE courses during a semester will be built into each course and will be mandatory.
- Writing skills (especially lab reports) will be spread over 5 semesters so students can learn the skill without too much burden in any one class. I think this will allow students to enjoy the laboratory experience much more and be more likely to experiment during the lab.
- Professional skills will be reinforced over 5 semesters. All of the traits contained in the document “MES Essential Traits of an Engineer” have been divided up and assigned to one or more of the local courses. Specific activities will be built into the course to help students develop the specific traits.
- Additional topics of interest can be incorporated into the labs and adapted as technology changes.

- The content from MES 305 will remain basically the same in MES 201. The technical labs from MES 405 will be split between the three lab courses MES 301, 302, and 400 and then additional content will be added to each.

**Statement of Impact on and Consultation with Other departments**

None of the proposed changes impact courses taken by any other department so no consultation is needed.



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## **MEMORANDUM**

Date: April 10, 2017

To: Dr. Michael D. Mullen, Vice Provost and Dean, Division of Academic and Student Affairs

From: Dr. Morton Barlaz, Head, Department of Civil, Construction, and Environmental Engineering

Re: Curriculum Action for BS Construction Engineering – General (**14CONBS – 14CONGEN**)

### **Proposed Revisions:**

Although there are a number of proposed changes to this curriculum, none of them involve new course offerings. Three of the changes were facilitated by minor course actions to change pre/co-requisites of existing CE courses, which have been previously approved. The proposed changes are made to better reflect the sequence of course content required in this accredited degree program, and to provide greater flexibility to students in this curriculum participating in the co-op program. Following is an itemized list of each change, which is followed by a detailed justification for each.

1. E 102 (GEP IP course) added to Freshman Year, Spring Semester.
2. CSC 111 moved to Sophomore Year, Fall Semester.
3. CE Elective added to Sophomore Year, Fall Semester.
4. PY 208 moved to Sophomore Year, Spring Semester, and PY 209 removed.
5. CE 263 moved to Sophomore Year, Spring Semester.
6. MA 302 removed from Sophomore Year, Spring Semester.
7. MSE 200 moved to Junior Year, Fall Semester.
8. CE 327 moved to Junior Year, Fall Semester.
9. CE 390 removed from Junior Year, Fall Semester.
10. CE 332 moved to Junior Year, Spring Semester.
11. CE 367 added to Junior Year, Spring Semester, replacing existing group of CE Elective.
12. MEA 101 and MEA 110 added to Junior Year, Spring Semester, replacing existing group Math/Science Elective.
13. ACC 210 added to Senior Year, Fall Semester, replacing existing group (ACC 200 or MIE 330).
14. Basic Science Elective group added to Senior Year, Fall Semester.
15. CE 464 moved to Senior Year, Spring Semester.
16. Management Science Elective group (GEP Social Science course) moved to Senior Year, Spring Semester.
17. CE Lab Elective group removed from Senior Year, Spring Semester.
18. GEP Requirement courses redistributed to various semesters.

### **Proposed Changes in Format A eight semester display:**

See attached Format A display that highlights all of the proposed changes. Deleted or moved courses are identified by red color font with strikethrough, and revised courses are identified by blue color font.

**Justification for Change:**

1. Recently approved 2 credit hour **GEP IP course E 102 Engineering in the 21<sup>st</sup> Century** is required to CODA in the College of Engineering and is therefore integrated in the Freshman Year, Spring Semester. It is a spring only course.
2. *CSC 111 Intro to Computing: Python*, is a course restricted to students enrolled in the CCEE Department. Moving the course to the Sophomore Year, Fall Semester, ensures that all students consistently enroll in the course early in the curriculum, as intended by the course content, once they CODA in the curriculum.
3. A **CE Elective** is introduced in the Sophomore Year, Fall Semester, to add 3 engineering credit hours determined from the list of CE courses offered in consultation with the student's advisor.
4. *PY 208 Physics for Engineers and Scientists II* is moved to the Spring Semester to balance credit hours between semesters in the Sophomore Year with no impact on assumed knowledge required for other courses in the Spring Semester. The 1 credit hour lab component *PY 209 Lab* is removed from the curriculum in order to remain with the 128 credit hour limit for the curriculum and because there remains sufficient lab intensive courses and experiences throughout the curriculum to satisfy accreditation requirements.
5. *CE 263 Intro to Construction Engineering* is moved to the Spring Semester to balance credit hours between semesters in the Sophomore Year. In a separate minor course action previously approved CE 263 was switched from Fall only to Spring only and restricted to students in the 14CONBS curriculum.
6. The 1 credit hour *MA 302 Numerical Analysis of Differential Equations* is removed from the curriculum. With the addition of the **Basic Science Elective** group (see Item 14) the total number of Math/Science credit hours is increased in the curriculum and it is no longer necessary to maintain MA 302.
7. *MSE 200 Mechanical Properties of Structural Materials* is moved to Junior Year, Fall Semester to accommodate the changes made in the Sophomore Year. As MSE 200 is a pre-requisite of *CE 332 Materials of Construction*, CE 332 is moved to the Spring Semester of Junior Year (Item 10).
8. *CE 327 Reinforced Concrete Design* is moved to Fall Semester to balance credit hours in the Junior Year. This move was enabled by a previously approved minor course action removing CE 332 as a pre-requisite.
9. The 1 credit hour *CE 390 Engineering Economics* is removed from the curriculum as topics of engineering economics are sufficiently covered in other course options available in the **CE Elective** group (Item 3).
10. See Items 7 and 8.
11. *CE 367 Mechanical and Electrical Systems in Buildings* was among a list of 4 CE courses in the existing **CE Elective** group. However, of the existing list of elective, CE 367 was recommended and for consistency and to provide the most relevant knowledge required by the profession the existing elective list is replaced only by the recommended course, CE 367.
12. *MEA 101 Geology I: Physical* and the companion 1 credit hour lab *MEA 110* was one of four options in the existing **Math/Science Elective** group. The MEA 101/110 combination was always the recommended option, and one of the other options was technically not even possible. It is therefore most appropriate to remove the current elective list and replace it with the option that is recommended for the curriculum.
13. *ACC 210 Intro to Managerial Accounting* replaces the existing group (ACC 200 or MIE 330), which is a change implemented based on the recommendation of the Poole College of Management resulting in a change of pre-requisites to ACC 200.
14. **Basic Science Elective** group is added to the Fall Semester, Senior Year with the same elective list approved in the 14CEBS curriculum. This aligns the requirement in the two curricula in the CCEE Department, and removes the need for the 1 credit hour Math course (MA 302, see Item 6) and the 1 credit hour CE Lab Elective (see Item 17) in the current 14CONBS curriculum.
15. *CE 464 Legal Aspects of Contracting* is moved to the Spring Semester, Senior Year to balance credit hours between the Junior and Senior Year levels and to also provide another CE course in the final semester to accompany the senior design capstone course, CE 469.
16. **Management Science Elective** group (3 credit hour Social Science GEP) is moved to the Spring Semester, Senior Year, to balance credit hours between Sophomore and Senior Year levels. The list of approved elective courses was updated by deleting courses that appear to be no longer offered.
17. **CE Elective** group removed from curriculum (see Item 11).
18. The semester in which some of the **GEP Requirement** courses are shown is changed to balance credit hours between semesters in the curriculum.

**Consultation with other Departments:**

All of the courses in the proposed curriculum are in the current 14CONGEN curriculum with the exception of ACC 210. However, the change to include ACC 210 in place of the current ACC 200 was made based on the recommendation from the Poole College of Management.

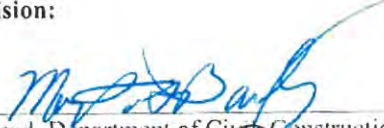
**Impact on Other Departments or Programs:**

The revisions itemized in this curriculum action have no effect on other programs outside the CCEE Department.

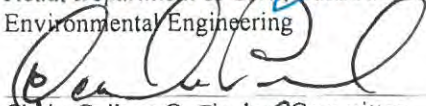
**Proposed Effective Date for Revision:**

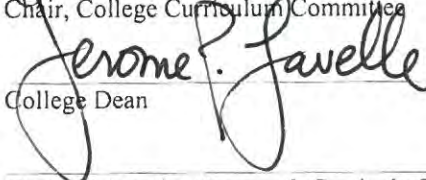
August, 2017

**RECOMMENDED BY:**

  
\_\_\_\_\_  
Head, Department of Civil, Construction, and Environmental Engineering  
Date 4/10/17

**APPROVED BY:**

  
\_\_\_\_\_  
Chair, College Curriculum Committee  
Date 13 April 17

  
\_\_\_\_\_  
College Dean  
Date 4/17/17

\_\_\_\_\_  
Chair, University Courses & Curricula Committee  
Date

\_\_\_\_\_  
Office of the Provost  
Date

**APPROVED EFFECTIVE DATE:** \_\_\_\_\_

FORMAT A  
(SEMESTER-BY-SEMESTER CURRICULUM DISPLAY)

(Marked up copy)

Indicate display status: Current: Proposed: X

Proposed Effective Semester: Fall 2017

Degree/Plan Title: Bachelor of Science in Construction Engineering

Concentration/Subplan Title: General

Plan SIS Code: 14CONBS

Subplan SIS Code: 14CONGEN

New Degree Audit required? (Y or N) Yes

Critical Path Courses - Identify using the code (CP) which courses are considered critical path courses which represent specific major requirements that are predictive of student success in a given program/plan. Place the (CP) next to the credit hours for the course.

FRESHMAN YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
CH 101 Chemistry, A Molecular Science	3	EC 205 Economics (GEP Requirements) <sup>1</sup>	3
CH 102 General Chemistry Laboratory	1	MA 241 Calculus II	4
E 101 Introduction to Engr & Prob. Solving	1	PY 205 Physics for Engineers & Scientists I	3
E 115 Intro to Computing Environments	1	PY 206 Physics for Engineers & Scientists I Lab	1
ENG 101 Academic Writing and Research	4	E 102 Engineering in the 21 <sup>st</sup> Century (GEP Req) <sup>1</sup>	2
MA 141 Calculus I	4	GEP Requirement <sup>1</sup>	3
HESF 1XX Fitness & Wellness Course	1	HES *** Phys. Ed/Healthy Living Course	1
		CSC 111 Intro. to Computing: Python	3
	Total: 15		Total: 16 15
SOPHOMORE YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
CSC 111 Intro. to Computing: Python	3	PY 208 Physics for Engineers & Scientists II	3
CE 214 Engineering Mechanics – Statics	3 (CP)	CE 313 Mechanics of Solids	3 (CP)
TDE 220 Civil Engineering Graphics	3	ST 370 Probability and Statistics for Engrs.	3
MA 242 Calculus III	4	CE 365 Construction Equipment & Methods (S)	3
CE Elective <sup>4</sup>	3	CE 263 Intro to Construction Engineering (S)	3 (CP)
PY 208 Physics for Engineers & Scientists II	3	HES *** Phys. Ed/Healthy Living Course	1
PY 209 Physics for Engineers & Scientists II Lab	1	MA 302 Num Analysis to Differential Eq	1
CE 263 Intro to Construction Engineering (F)	3	MSE 200 Mech. Prop. of Structural Materials	3
		Management Science Elective (GEP) <sup>1,2</sup>	3
	Total: 16 17		Total: 16
JUNIOR YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
MSE 200 Mech. Prop. of Structural Materials	3	CE 332 Materials of Construction	3
CE 301 Civil Engr. Surveying & Geomatics	3	CE 342 Engineering Behavior of Soils & Fdns.	4
CE 327 Reinforced Concrete design	3	CE 367 Mech. and Elect. Systems in Buildings (S)	3
CE 382 Hydraulics	3	MEA 101	3
CE 463 Const. Est., Planning & Control (F)	3	MEA 110	1
COM 110 Public Speaking OR	3	GEP Requirement <sup>1</sup>	3
ENG 331 Communication for Engr. & Tech.	3	CE 327 Reinforced Concrete design	3
CE 332 Materials of Construction	3	CE 464 Legal Aspects of Contracting (S)	3
CE 390 Engineering Economics	1	Math/Science Elective <sup>3</sup>	4
		CE Elective <sup>4</sup>	3
	Total: 18 16		Total: 17
SENIOR YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
CE 426 Structural Steel Design	3	CE 464 Legal Aspects of Contracting (S)	3
CE 466 Building Construction Engr. (F)	3	CE 469 Construction Eng. Project (S)	3
ECE 331 Principles of Electrical Engineering OR	3	Management Science Elective (GEP) <sup>1,2</sup>	3
MAE 201 Engr. Thermodynamics	3	GEP Requirement <sup>1</sup>	3
ACC 210 Intro. to Managerial Acc.	3	GEP Requirement <sup>1</sup>	3
Basic Science Elective <sup>3</sup>	3	GEP Requirement <sup>3</sup>	2
GEP Requirement <sup>3</sup>	3	CE Lab Elective <sup>5</sup>	1
GEP Requirement <sup>3</sup>	3	ACC 200 Intro to Managerial Acc. OR	3
		-MIE 330 Human Resource Management	3
	Total: 15		Total: 15
Minimum Credit Hours Required for Graduation*: 128 126			

**Major/Program Footnotes:**

- <sup>1</sup>GEP Requirements to be selected from the appropriate lists in consultation with the advisor.
- <sup>2</sup> Management Science Elective (2nd Soc Sci GEP) Select one: SOC 205, SOC 301, SOC 305/AFS 305 (USD), ~~SOC 310~~, PS 202, PS 310, PS 312, PS 314, ~~PS 315~~, or PS 320.
- <sup>3</sup> Basic Science Elective Select one: SSC 200; FOR 260; FOR/BIO/FW 221
- <sup>4</sup> Math/Science Elective Select one: ~~MEA 101 & Mea 110 (recommended); BIO 183; CH 201 & CH 202; of 1 hour MA or SCI + MA 105 or MA 141~~
- <sup>4</sup> CE Elective: Advised elective from CE course list
- <sup>4</sup> ~~CE 305, CE 325, CE 367, or CE 383~~
- <sup>5</sup> ~~CE 324, CE 381, or CE 468~~
- \*Foreign Language Proficiency at the FL\_102 level is required for graduation.

**\*General Education Program (GEP) requirements and GEP Footnotes:**

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied. University approved GEP course lists for each of the following categories can be found at <http://www.ncsu.edu/uap/academic-standards/gep/courselists/index.html>.

- A. **Mathematical Sciences** (6 credit hours – one course with MA or ST prefix)  
*Fulfilled as part of Major requirements.*
- B. **Natural Sciences** (7 credit hours – include one laboratory course or course with a lab)  
*Fulfilled as part of Major requirements.*
- C. **Humanities** (6 credit hours selected from two different disciplines/course prefixes)  
*Choose from the University approved GEP Humanities course list.*
- D. **Social Sciences** (6 credit hours selected from two different disciplines/course prefixes)  
~~*Choose from the University approved GEP Social Sciences course list in a discipline other than Economic.*~~ EC 205 (or EC 201 or ARE 201) taken as part of the Major requirements, satisfies 3 credit hours needed to fulfill the GEP Social Sciences requirement.  
*Course selected from the approved Management Science Elective list as part of the Major requirements satisfies 3 credit hours needed to fulfill the GEP Social Sciences requirement.*
- E. **Physical Education/Healthy Living** (2 credit hours – at least one 100-level Fitness and Wellness Course)  
*Choose from the University approved GEP Physical Education/Healthy Living course list.*
- F. **Additional Breadth** - (3 credit hours to be selected from the following checked University approved GEP course lists)  
 Humanities/Social Sciences/Visual and Performing Arts or \_\_\_\_\_ Mathematical Sciences/Natural Sciences/Engineering
- G. **Interdisciplinary Perspectives** (5-6 credit hours)  
*E 102 taken as part of the Major requirements satisfies 2 credit hours needed to fulfill the GEP Interdisciplinary perspectives requirement.*  
*Choose 3 credit hours from the University approved GEP Interdisciplinary Perspectives course list.*  
~~*Choose from the University approved GEP Interdisciplinary Perspectives course list.*~~
- H. **Introduction to Writing** (4 credit hours satisfied by completing ENG 101 w/ a C- or better )
- The following Co-Requisites must be satisfied to complete the General Education Program requirements:
- I. **U.S. Diversity** (USD)  
*Choose from the University approved GEP U.S. Diversity course list.*
- J. **Global Knowledge** (GK)  
*Choose from the University approved GEP Global Knowledge course list.*
- K. **Foreign Language proficiency** - Proficiency at the FL\_102 level is required for graduation.

**FORMAT A**  
(SEMESTER-BY-SEMESTER CURRICULUM DISPLAY)

Indicate display status: Current: Proposed: X

Proposed Effective Semester: **Fall 2017**Degree/Plan Title: **Bachelor of Science in Construction Engineering**Concentration/Subplan Title: **General**Plan SIS Code: **14CONBS**Subplan SIS Code: **14CONGEN**New Degree Audit required? (Y or N) **Yes**

**Critical Path Courses** - Identify using the code (CP) which courses are considered critical path courses which represent specific major requirements that are predictive of student success in a given program/plan. Place the (CP) next to the credit hours for the course.

FRESHMAN YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
CH 101 Chemistry, A Molecular Science	3	EC 205 Economics (GEP Requirements) <sup>1</sup>	3
CH 102 General Chemistry Laboratory	1	MA 241 Calculus II	4
E 101 Introduction to Engr & Prob. Solving	1	PY 205 Physics for Engineers & Scientists I	3
E 115 Intro to Computing Environments	1	PY 206 Physics for Engineers & Scientists I Lab	1
ENG 101 Academic Writing and Research	4	E 102 Engineering in the 21 <sup>st</sup> Century (GEP Req) <sup>1</sup>	2
MA 141 Calculus I	4	GEP Requirement <sup>1</sup>	3
HESF 1XX Fitness & Wellness Course	1		
<b>Total: 15</b>		<b>Total: 16</b>	
SOPHOMORE YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
CSC 111 Intro. to Computing: Python	3	PY 208 Physics for Engineers & Scientists II	3
CE 214 Engineering Mechanics – Statics	3 (CP)	CE 313 Mechanics of Solids	3 (CP)
TDE 220 Civil Engineering Graphics	3	ST 370 Probability and Statistics for Engrs.	3
MA 242 Calculus III	4	CE 365 Construction Equipment & Methods (S)	3
CE Elective <sup>4</sup>	3	CE 263 Intro to Construction Engineering (S)	3 (CP)
		HES *** Phys. Ed/Healthy Living Course	1
<b>Total: 16</b>		<b>Total: 16</b>	
JUNIOR YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
MSE 200 Mech. Prop. of Structural Materials	3	CE 332 Materials of Construction	3
CE 301 Civil Engr. Surveying & Geomatics	3	CE 342 Engineering Behavior of Soils & Fdns.	4
CE 327 Reinforced Concrete design	3	CE 367 Mech. and Elect. Systems in Buildings (S)	3
CE 382 Hydraulics	3	MEA 101	3
CE 463 Const. Est., Planning & Control (F)	3	MEA 110	1
COM 110 Public Speaking OR	3	GEP Requirement <sup>1</sup>	3
ENG 331 Communication for Engr. & Tech.			
<b>Total: 18</b>		<b>Total: 17</b>	
SENIOR YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
CE 426 Structural Steel Design	3	CE 464 Legal Aspects of Contracting (S)	3
CE 466 Building Construction Engr. (F)	3	CE 469 Construction Eng. Project (S)	3
ECE 331 Principles of Electrical Engineering OR	3	Management Science Elective (GEP) <sup>1,2</sup>	3
MAE 201 Engr. Thermodynamics		GEP Requirement <sup>1</sup>	3
ACC 210 Intro. to Managerial Acc.	3	GEP Requirement <sup>1</sup>	3
Basic Science Elective <sup>3</sup>	3		
<b>Total: 15</b>		<b>Total: 15</b>	
<b>Minimum Credit Hours Required for Graduation* : 128</b>			

**Major/Program Footnotes:**

<sup>1</sup>GEP Requirements to be selected from the appropriate lists in consultation with the advisor.

<sup>2</sup> Management Science Elective (2nd Soc Sci GEP) Select one: SOC 205, SOC 301, SOC 305/AFS 305 (USD), PS 202, PS 310, PS 312, PS 314, or PS 320.

<sup>3</sup> Basic Science Elective Select one: SSC 200; FOR 260; FOR/BIO/FW 221

<sup>4</sup> CE Elective: Advised elective from CE course list

\*Foreign Language Proficiency at the FL\_102 level is required for graduation.

**\*General Education Program (GEP) requirements and GEP Footnotes:**

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied.

University approved GEP course lists for each of the following categories can be found at <http://www.ncsu.edu/uap/academic-standards/gep/courselists/index.html>.

- A. **Mathematical Sciences** (6 credit hours – one course with MA or ST prefix)  
*Fulfilled as part of Major requirements.*
- B. **Natural Sciences** (7 credit hours – include one laboratory course or course with a lab)  
*Fulfilled as part of Major requirements.*
- C. **Humanities** (6 credit hours selected from two different disciplines/course prefixes)  
*Choose from the University approved GEP Humanities course list.*
- D. **Social Sciences** (6 credit hours selected from two different disciplines/course prefixes)  
*EC 205 (or EC 201 or ARE 201) taken as part of the Major requirements, satisfies 3 credit hours needed to fulfill the GEP Social Sciences requirement.*  
*Course selected from the approved Management Science Elective list as part of the Major requirements satisfies 3 credit hours needed to fulfill the GEP Social Sciences requirement.*
- E. **Physical Education/Healthy Living** (2 credit hours – at least one 100-level Fitness and Wellness Course)  
*Choose from the University approved GEP Physical Education/Healthy Living course list.*
- F. **Additional Breadth** - (3 credit hours to be selected from the following checked University approved GEP course lists)  
 Humanities/Social Sciences/Visual and Performing Arts or \_\_\_\_\_ Mathematical Sciences/Natural Sciences/Engineering
- G. **Interdisciplinary Perspectives** (5 credit hours)  
*E 102 taken as part of the Major requirements satisfies 2 credit hours needed to fulfill the GEP Interdisciplinary perspectives requirement.*  
*Choose 3 credit hours from the University approved GEP Interdisciplinary Perspectives course list.*
- H. **Introduction to Writing** (4 credit hours satisfied by completing ENG 101 with a C- or better )

The following Co-Requisites must be satisfied to complete the General Education Program requirements:

- I. **U.S. Diversity** (USD)  
*Choose from the University approved GEP U.S. Diversity course list.*
- J. **Global Knowledge** (GK)  
*Choose from the University approved GEP Global Knowledge course list.*
- K. **Foreign Language proficiency** - Proficiency at the FL\_102 level is required for graduation.

**CURRICULUM REQUIREMENTS****Format B**

<b>Degree/Plan Title:</b> Bachelor of Science in Construction Engineering	<b>Plan SIS Code:</b> 14CONBS
<b>Concentration/Subplan Title:</b> General	<b>Subplan SIS Code:</b> 14CONGEN
<b>Indicate requirements status:</b> Current:                      Proposed: <b>X</b>	<b>Proposed Effective Semester:</b> <b>Fall 2017</b>
<b>New Degree Audit required?</b> (Y or N) <b>Yes</b>	
<b>Critical Path Courses</b> - Identify using the code (CP) which courses are considered critical path courses which represent specific major requirements that are predictive of student success in a given program/plan. Place the (CP) next to the credit hours for the course.	

<b>MAJOR FIELD OF STUDY REQUIREMENTS:</b>		
<b>Required Courses/Groups/ Electives:</b>	<b>Credit Hours</b>	<b>GEP category, if applicable</b>
<b>Indicate if course or course groupings have a C-wall or MGPA requirement and which are considered Critical Path courses – indicate with (CP) next to applic. course.</b>		<b>List GEP category and hours satisfied by a Major requirement</b>
<b>Math</b> MA 141, MA 241, MA 242	12	Mathematics (6 hours)
<b>Sciences</b> CH 101, CH 102 PY 205, PY 206, PY 208	4 7	Natural Sciences (4 hours) Natural Sciences (3 hours)
<b>CE Major</b> CE 214 (C-wall) CE 263 CE 301 CE 313 (C-wall) CE 327 CE 332 CE 342 CE 365 CE 367 CE 382 CE 426 CE 463 CE 464 CE 466 CE 469 CE Elective	3 (CP) 3 (CP) 3 3 (CP) 3 3 4 3 3 3 3 3 3 3 3 3 3	
<b>Other Major</b> CSC 111 MEA 101 MEA 110 ACC 210 TDE 220 MSE 200 ST 370 GRP xxx (COM 110 or ENG 331) GRP xxx (MAE 201 or ECE 331) GRP xxx Basic Science Elective GRP xxx Management Science Elective	3 3 1 3 3 3 3 3 3 3 3 3 3 3 3	Social Science (3 hours)



<b>Concentration Courses/Groups/Electives:</b>		
<b>Free Electives:</b>		
<b>Total credit hours under Major Field of Study:</b> <i>Minimum 27 hours required in program area.</i>	<b>103 hours</b>	
<b>COLLEGE REQUIREMENTS:</b>		
<b>Orientation Course(s):</b> E 101 and E 115	2	
<b>Other:</b> Economics Elective EC 205 (or EC 201 or ARE 201) E 102	3 2	Social Science (3 hours) Interdisciplinary Perspectives (2 hours)
<b>Total credit hours under College Requirements:</b>	<b>7 hours</b>	

<b><u>NCSU GENERAL EDUCATION PROGRAM REQUIREMENTS</u></b>		<b>At least one of the following must be listed:</b>
<p><i>Courses in the Major and/or Minor may also fulfill a General Education requirement; however, a GEP category may not be subset to require a specific course from the category list. Required courses must be listed in the Major/College requirements.</i></p> <p><i>Specific courses should not be listed in any of the fields below other than ENG 101.</i></p>		<ol style="list-style-type: none"> <li>1 Choose course(s) from the University Approved GEP course list for this category.</li> <li>2 Minimum requirements are satisfied by Major/College course requirements.</li> <li>3 Major/College course requirement satisfies X credit hrs of this requirement. Remaining hours required must be chosen from the University Approved GEP course list for the category.</li> <li>4 Co-requisite is satisfied by a Major/College course requirement.</li> <li>5 Choose course(s) from the University Approved GEP course lists for the Humanities/ Social Sciences/ Visual &amp; Performing Arts.</li> <li>6 Choose course(s) from the University Approved GEP course lists for Natural Sciences/Mathematical Sciences.</li> </ol>
<b>General Education Program Requirements:</b> <i>Minimum 39-40 hrs</i>	<b>Credit hours</b>	<b>How will the GEP requirement be met?</b> <b>(Choose applicable statement from 1-6 listed above)</b>
<b>Mathematical Sciences</b> (6 credits) (At least 1 course with MA or ST prefix) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	X	(Choose statement 1, 2 or 3) <i>Minimum requirements are satisfied by Major/College course requirements.</i>
<b>Natural Sciences</b> (7 credits) (At least 1 lab course or course with a lab) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	X	(Choose statement 1, 2 or 3) <i>Minimum requirements are satisfied by Major/College course requirements.</i>
<b>English 101 (C- or better required)</b> (4 credits)	4	ENG 101
<b>Humanities</b> (6 credits) (Courses from two different disciplines) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	6	(Choose statement 1, 2 or 3) <i>Choose course(s) from the University Approved GEP course list for this category.</i>
<b>Social Sciences</b> (6 credits) (Courses from two different disciplines) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	X	(Choose statement 1, 2 or 3) <i>Minimum requirements are satisfied by Major/College course requirements.</i>
<b>Additional Breadth</b> (3 credits) (Choose approach that is different from the approach of the Major) <i>Major/College requirements cannot satisfy this requirement and an AB course cannot be double-counted except in satisfying the Global Knowledge or U.S. Diversity co-requisites.</i>	3	(Choose statement 5 or 6) <i>Choose course(s) from the University Approved GEP course list for this category.</i>
<b>Interdisciplinary Perspectives</b> (5 credits) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	3	(Choose statement 1, 2 or 3) <i>Major/College course requirement satisfies 2 credit hrs of this requirement. Remaining hours required must be chosen from the University Approved GEP course list for the category.</i>
<b>Health and Exercise Studies</b> (2 credits) (Including one Fitness and Wellness course)	2	<i>Choose course(s) from the University Approved GEP course list for this category.</i>
<b>Total credit hours needed to complete GEP that are not satisfied as part of the Major/College requirements.</b>	<b>18 hours</b>	

<b>GEP Co-Requisites:</b>			<i>Courses taken in the Major, GEP, or Minor may double-count to fulfill the co-requisites. Courses that satisfy the U.S. Diversity or Global Knowledge co-requisite are marked on course lists with a "USD" or "GK" Indicator.</i>
<b>U.S. Diversity co-requisite</b>	(USD)	n/a	<i>(Choose statement 1 or 4)</i>
<b>Global Knowledge co-requisite</b>	(GK)	n/a	<i>(Choose statement 1 or 4)</i>
<b>Foreign Language Proficiency</b>		n/a	Proficiency at the FL_102 level required.
<b>The following requirements must be satisfied within the College/Program:</b>			Place an X in the credit hour box to indicate below that the requirement is <b>"Satisfied by College/Program Requirements"</b>
<b>Communication in the Major (Advanced Communication)</b>		n/a	Satisfied by College/Program Requirements
<b>Technology Fluency</b>		n/a	Satisfied by College/Program Requirements
<b>Total credit hours required to complete Degree:</b>			<b>As applicable, indicate here the overall GPA requirement for degree completion including course completion.</b>
<b>Total must be within 120-128 credit hours.</b>		<b>128 Total hours</b>	

**Fwd: PY208/209**

1 message

**Rudi Seracino** <rseraci@ncsu.edu>  
To: David Parish <dwparish@ncsu.edu>

Mon, Apr 17, 2017 at 2:16 PM

Dave,

The following is communication with PY about the PY209 lab... suggests that they are willing to do this, just need to sort out the logistics. I can follow up with CH to see how they manage this for CH201/202.

Rudi

----- Forwarded message -----

From: **David Brown** <david\_brown@ncsu.edu>  
Date: Mon, Apr 11, 2016 at 3:51 PM  
Subject: Re: PY208/209  
To: Rudi Seracino <rseraci@ncsu.edu>

Dear Rudi, I talked through your situation with Keith Warren and with the department head. We don't have a way to decouple PY208 and PY209. That is, we need to keep these two courses as co-requisites, and keep the co-requisite check turned on in Registration and Records. Otherwise, we will have an avalanche of other problems.

What we can do is this: Have your students enroll in PY208 and PY209. Then, when most of the students have enrolled, send us a list of students (with their id numbers). We will then drop them from PY209 manually.

Let me know if you want to do this.

Best wishes, David

On Fri, Apr 8, 2016 at 9:41 AM, David Brown <david\_brown@ncsu.edu> wrote:  
Rudi, I forwarded your question to Keith Warren, our assistant department head. He deals with the details of PY205/206 and PY208/209. --David

On Thu, Apr 7, 2016 at 5:20 PM, Rudi Seracino <rseraci@ncsu.edu> wrote:  
Hi David,

I located you from the Physics department directory... if you are not the best person to answer my question below, I'd appreciate it if you would forward this email on to someone who can.

In the Dept of Civil, Construction and Environmental Engineering we are reviewing are degree audits as we are working towards a number of curriculum revisions to our degrees. In particular, I have a question regarding PY208/209 which we currently have in our Environmental Engineering degree (14ENEBS). Note, of course that our students also are required to take PY205/206.

Specifically, we do not need to have students enroll in the 1 credit hour PY209 lab to meet the science requirements for ABET accreditation, and at the same time we are planning to introduce a new 3 credit hour CE course in the same curriculum. I understand that according to the course catalog PY208 and 209 are co-reqs... but would it be possible for our ENE students to only enroll in PY208? It is a similar situation with CH201/202 where our students only enroll in CH201.

I appreciate your consideration of the above and look forward to your reply.

Regards,

Rudi

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Web: <http://www.ce.ncsu.edu/faculty/rudi-seracino/>

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David Brown  
Undergraduate Program Director  
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Web: <https://www.ccee.ncsu.edu/people/rseraci>



**MEMO**

Date: April 19, 2017  
 To: Dr. Barbara Kirby, Associate Vice Provost, Academic Programs & Services  
 From: Dr. Tamah Morant, Associate Dean, Management  
 Subject: Accounting Curriculum Update – ACC 220

The Poole College of Management proposes to add a new course, ACC 220 – Introduction to Managerial Accounting, to current and previous Accounting (ACC) and Business Management (BUS) curricula as an option to complete the managerial accounting requirement, effective Fall 2017. The Accounting Department has created this new course to better represent a pure managerial accounting classroom experience, and to allow for a logical sequence for students taking financial (ACC 210) and then managerial (ACC 220) accounting, without removing ACC 200 as an option for those students who have already taken the course or who will transfer in ACC 200. Accounting will stop teaching ACC 200 after FA17 and will begin teaching only ACC 220 in SP18.

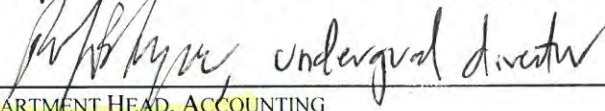
For the current ACC and BUS curricula (requirement term 2171), and for previous curricula, we propose to add ACC 220 as a degree option in addition to ACC 200 to fulfill the managerial accounting requirement. Format B's for 2171 for ACC and BUS are included with this memo, as are updated Format A's. Students can take either ACC 220 starting in SP18 if they have not yet completed their managerial accounting course, or use ACC 200 if they are taking it in FA17, or have previous credit for it.

Poole is also proposing new curricula for BUS and ACC in a separate action, and ACC 220 will be included in those as the primary option.

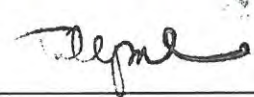
Accounting Area	Old Course	New Course
Financial accounting	ACC 210	ACC 210 (no change)
Managerial accounting	ACC 200	ACC 220

**ENDORSED BY:**

  
\_\_\_\_\_  
CHAIR, COLLEGE COURSES & CURRICULA COMMITTEE      4-19-17  
DATE

  
\_\_\_\_\_  
DEPARTMENT HEAD, ACCOUNTING      4/19/17  
DATE

  
\_\_\_\_\_  
DEPARTMENT HEAD, BUSINESS MANAGEMENT      4/19/17  
DATE

  
\_\_\_\_\_  
COLLEGE DEAN      4/19/17  
DATE

**APPROVED BY:**

\_\_\_\_\_  
CHAIR, UNIVERSITY COURSES & CURRICULA COMMITTEE      DATE

\_\_\_\_\_  
CHAIR, COUNCIL ON UNDERGRADUATE EDUCATION      DATE

\_\_\_\_\_  
DEAN OF UNDERGRADUATE ACADEMIC PROGRAMS      DATE

# Accounting (BS): (20ACCBS)

Semester Display 9-28-16 (v2.5)

<b>FRESHMAN YEAR</b>			
<b>Fall Semester</b>	<b>Credits</b>		<b>Spring Semester</b>
			<b>Credits</b>
M 100 Professionalism, Diversity and Acad Success in Mgmt <sup>1</sup>	1		MA 114 Finite Math <sup>7</sup>
ENG 101 <sup>2</sup> or Natural Science (with Lab) <sup>3</sup>	4		Communications <sup>8</sup> or Humanities <sup>9</sup>
MA 121/131/141 Calculus <sup>4</sup>	3		ENG 101 <sup>2</sup> or Natural Science (with Lab) <sup>3</sup>
FL_ 201 <sup>5</sup>	3		EC 201 Principles of Microeconomics <sup>10</sup>
MIE 201 Intro to Business Processes	3		ACC 210 Concepts of Financial Reporting <sup>12</sup>
HESF 1** Health & Exercise Studies Course <sup>6</sup>	1		
	<b>15</b>		<b>16</b>
<b>SOPHOMORE YEAR</b>			
<b>Fall Semester</b>	<b>Credits</b>		<b>Spring Semester</b>
			<b>Credits</b>
ACC 220 Intro to Managerial Accounting <sup>11,12</sup>	3		ACC 310 Intermediate Financial Accounting I <sup>12</sup>
BUS 340 Information Systems Management	3		BUS 351 Predictive Analytics for Business
BUS/ST 350 Econ Bus Statistics <sup>13</sup>	3		BUS 320, 360, 370, MIE 305, 330
Natural Science <sup>3</sup>	3		PSY 200 Intro. to Psychology
EC 202 Principles of Macroeconomics	3		Additional Breadth <sup>14</sup>
			ST 307 Intro to Statistical Programming - SAS
	<b>15</b>		<b>16</b>
<b>JUNIOR YEAR</b>			
<b>Fall Semester</b>	<b>Credits</b>		<b>Spring Semester</b>
			<b>Credits</b>
ACC 311 Intermediate Financial Accounting II <sup>12</sup>	3		ACC 330 Intro to Income Tax <sup>12</sup>
ACC 340 Accounting Info. Systems <sup>12</sup>	3		BUS 320, 360, 370, MIE 305, or 330 ( <i>take two</i> )
BUS 320, 360, 370, MIE 305, 330 ( <i>take two</i> )	6		Concentration or Free Elective <sup>17</sup>
Advanced Writing <sup>15</sup>	3		Communications <sup>8</sup> or Humanities <sup>9</sup>
HES_ *** Health & Exercise Studies Course <sup>15</sup>	1		
	<b>16</b>		<b>15</b>
<b>SENIOR YEAR</b>			
<b>Fall Semester</b>	<b>Credits</b>		<b>Spring Semester</b>
			<b>Credits</b>
ACC 450 Auditing & Assurance Services <sup>12</sup>	3		Concentration or Free Elective <sup>17</sup>
Concentration or Free Elective <sup>17</sup>	3		MIE 480 Business & Policy Strategy
Interdisciplinary Perspectives <sup>19</sup>	2		Free Electives <sup>17</sup>
Free Electives <sup>18</sup>	4		
Humanities <sup>9</sup>	3		
	<b>15</b>		<b>12</b>
<b>Minimum Credit Hours Required for Graduation*</b>			<b>120</b>

### GPA Graduation Requirements:

Overall GPA for all courses attempted at NC State must be 2.0 or higher; and  
Overall GPA for all ACC courses attempted at NC State must be 2.0 or higher.

1. Students should take M 100 their first semester in the program
2. A grade of C- or better is required.
3. 7 credit hours-include one laboratory course or course with a lab from the GEP Natural Sciences list.
4. MA 131 or MA 141 are encouraged for students who qualify and aspire to take additional calculus. For students completing MA 141, one credit of MA141 will count as free elective credit.
5. Unless a placement exam is successfully completed, students are required to complete FL\_201 – the third semester of a foreign language (through the intermediate level). Students will not receive credit for courses below 102 unless starting a language different from their high school proficiency. Students who place beyond FL\_201 and choose not to take a foreign language course will have satisfied the foreign language requirement but will not receive hour credit.
6. 1 hour of Health & Exercise Studies at the 100 level.
7. MA 242 may substitute
8. COM 110, 112, or 211
9. Choose two courses from the GEP Humanities list; Students must also take one course from the Poole College of Management Ethics list- MIE 306, PHI 214, 221, 312, 375 (no credit hour requirement); If a student takes a PHI course to satisfy the Ethics requirement, it may double-count as the second humanities course provided the first course was not also a PHI course.
10. ARE 201 may substitute.
11. ACC 200 may substitute.

### 12. ACC COURSES REQUIRING “C- or C+” PREREQUISITES:

ACC 310: C+ or better in ACC 210

ACC 311: C- or better in ACC 310

ACC 330: C- or better in ACC 210

ACC 410: C- or better in ACC 210

ACC 420: C- or better in ACC 200 or 220

ACC 440: C- or better in ACC 340

ACC 450: C- or better in ACC 311

13. ST 302, 361, 370 or 372 may substitute for BUS 350
14. Take one from the GEP Additional Breadth- Humanities/Social Sciences/Visual Performing Arts list.
15. Select one of the following courses: ENG 331 Communication for Engineering and Technology, ENG 332 Communication for Business Mgmt., or ENG 333 Communication for Science and Research.
16. 1 hour of Health & Exercise Studies. (PEC, PEF, PEH, PEO and PES courses cannot be taken to satisfy this requirement.) (HES courses may be taken credit only.)
17. Students have the option of choosing a 9 hour concentration or having 9 hours of additional free electives. Students choosing a concentration should pick from the following concentration lists:
  - Financial Analysis – ACC 411 and two of the following: BUS 420, 422, 425, 426, 428, 429, EC 404 or 474.
  - Managerial – ACC 420 and two of the following: MIE 435, BUS 470, 472, 473, 474, 475, 479.
  - Information Systems – ACC 440 and two of the following: BUS 440, 441, 442, 444, 449, 458, 459.
  - Internal Auditing – ACC 440 and ACC 451 and one of the following: BUS 440, 441, 470, 472, EC 404 or 474.
  - Government/Nonprofit – ACC 460 (formerly 410) and ACC 420 and one of: PS 202, 203, 312, HI 380 or COM 466
18. Free elective credit will not be allowed for FL 101 or 105 (in any language in which proficiency requirement is met), and MA 101, 103, 105. ACC 495/498/499 can count for up to 6 hours of free electives. Free electives may be taken for credit only.
19. Choose one course from the GEP Interdisciplinary Perspectives list. For students completing a three-credit IP course, one credit will count in free electives.

\* Students must also complete as a part of their degree requirements one course from the GEP U.S. Diversity list (no credit hour requirement) and one course from the GEP Global Knowledge list (no credit hour requirement)



## CURRICULUM REQUIREMENTS

### Format B

<u>Degree/Plan Title:</u> B.S. Accounting	<u>Plan SIS Code:</u>
Concentration/Subplan Title: ACC-Undeclared, Financial Analysis, Information Systems, Internal Auditing, Managerial, Government/Nonprofit	
<u>Subplan SIS Code:</u>	
<u>Indicate requirements status:</u> Current:                      Proposed: x <u>Proposed Effective Semester:</u> Summer 2017	
<u>New Degree Audit required?</u> (Y or N) Y	
<u>Critical Path Courses</u> - Identify using the code (CP) which courses are considered critical path courses which represent specific major requirements that are predictive of student success in a given program/plan. Place the (CP) next to the credit hours for the course.	

<b>MAJOR FIELD OF STUDY REQUIREMENTS:</b>		
<i>Required Courses/Groups/ Electives:</i>	<i>Credit Hours</i>	<i>GEP category, if applicable</i>
Indicate if course or course groupings have a <b>C-wall or MGPA requirement and which are considered Critical Path courses – indicate with (CP) next to applic. course.</b>		<b>List GEP category and hours satisfied by a Major requirement</b>
Math MA 121 or 131 or 141; MA 114 (MA 114 or 242)	6	Mathematics (6 hours)
Major (non- ACC/BUS/MIE)		
Advanced Writing (ENG 331, 332, 333)	3	Advanced Communication (3 hours)
EC 201 (EC 201 or ARE 201)	3	Social Sciences (3 hours)
EC 202	3	
PSY 200	3	Social Sciences (3 hours)
FL 201	3	
Communication/Speech (COM 110, 112, 211)	3	
ST 307	1	
Major (ACC/BUS/MIE)		
BUS/ST 350 (BUS/ST 350, ST 302, 361, 370, 372)	3	Technology Fluency (3 hours)
<b>BUS/ST 351</b>	3	
BUS 320	3	
BUS 340	3	Technology Fluency (3 hours)
BUS 360	3	
BUS 370	3	
MIE 201	3	Interdisciplinary Perspectives (3 hours)
MIE 305	3	
MIE 330	3	
MIE 480	3	
ACC 210 (C+ or better)	3	
<b>ACC 220 (or ACC 200)</b> (C- or better)	3	
ACC 310 (C- or better)	3	
ACC 311 (C- or better)	3	
ACC 330 (C- or better)	3	
ACC 340 (C- or better)	3	
ACC 450	3	
<b>Concentration Courses/Groups/Electives:</b>		
No Concentration: 9 hours of free electives		
Financial Analysis: ACC 411 and two from BUS 420, 422, 425, 426, 428, <b>429</b> , EC 404 or 474	9	
Information Systems: ACC 440 and two from BUS 440, 441, 442, 444. 449. 458, 459		

Internal Auditing: ACC 440 and 451 and two from BUS 440, 441, 470, 472, EC 404 or 474 Managerial: ACC 420 and two from MIE 435, BUS 470, 472, 473, 474, 475, 479 Government/Nonprofit: ACC 460 (formerly ACC 410) and 420 and one from PS 202, 203, 312, HI 380, COM 466		
<b>Free Electives:</b> May not be MA 101, 103, 105, or FL 101 or 105 (in the language in which proficiency is met)	10	This assumes students complete a 2 hr Interdisciplinary Perspectives course
<b>Total credit hours under Major Field of Study:</b> <i>Minimum 27 hours required in program area.</i>	95 hours	
<b>COLLEGE REQUIREMENTS:</b>		
<b>Orientation Course(s):</b> M 100	1	U.S. Diversity Corequisite
<b>Other:</b> Ethics Corequisite One from the following: MIE 306, PHI 214, 221, 312, 375	0	
<b>Total credit hours under College Requirements:</b>	96 Hours	

<b><u>NCSU GENERAL EDUCATION PROGRAM REQUIREMENTS</u></b>		<b>At least one of the following must be listed:</b>
<i>Courses in the Major and/or Minor may also fulfill a General Education requirement; however, a GEP category may not be subset to require a specific course from the category list. Required courses must be listed in the Major/College requirements.</i>		1 Choose course(s) from the University Approved GEP course list for this category.
<i>Specific courses should not be listed in any of the fields below other than ENG 101.</i>		2 Minimum requirements are satisfied by Major/College course requirements.
		3 Major/College course requirement satisfies <u>X</u> credit hrs of this requirement. Remaining hours required must be chosen from the University Approved GEP course list for the category.
		4 Co-requisite is satisfied by a Major/College course requirement.
		5 Choose course(s) from the University Approved GEP course lists for the Humanities/ Social Sciences/ Visual & Performing Arts.
		6 Choose course(s) from the University Approved GEP course lists for Natural Sciences/Mathematical Sciences.
<b>General Education Program Requirements:</b> <i>Minimum 39-40 hrs</i>	<i>Credit hours</i>	<b>How will the GEP requirement be met?</b> <b>(Choose applicable statement from 1-6 listed above)</b>
<b>Mathematical Sciences</b> (6 credits) <b>(At least 1 course with MA or ST prefix)</b> <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	X	7 <small>(Choose statement 1, 2 or 3)</small> Minimum requirements are satisfied by Major/College course requirements.
<b>Natural Sciences</b> (7 credits) <b>(At least 1 lab course or course with a lab)</b> <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	7	8 <small>(Choose statement 1, 2 or 3)</small> Choose course(s) from the University Approved GEP course list for this category.
<b>English 101 (C- or better required)</b> (4 credits)	4	ENG 101
<b>Humanities</b> (6 credits) <b>(Courses from two different disciplines)</b> <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	6	9 <small>(Choose statement 1, 2 or 3)</small> Choose course(s) from the University Approved GEP course list for this category.
<b>Social Sciences</b> (6 credits) <b>(Courses from two different disciplines)</b> <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	X	10 <small>(Choose statement 1, 2 or 3)</small> Minimum requirements are satisfied by Major/College course requirements.
<b>Additional Breadth</b> (3 credits) <b>(Choose approach that is different from the approach of the Major)</b> <i>Major/College requirements cannot satisfy this requirement and an AB course cannot be double-counted except in satisfying the Global Knowledge or U.S. Diversity co-requisites.</i>	3	<small>(Choose statement 5 or 6)</small> 11 Choose course(s) from the University Approved GEP course lists for the Humanities/ Social Sciences/ Visual & Performing Arts.
<b>Interdisciplinary Perspectives</b> (5 credits) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	2	12 <small>(Choose statement 1, 2 or 3)</small> Major/College course requirement satisfies 3 credit hrs of this requirement. Remaining hours required must be chosen from the University Approved GEP course list for the category.

<b>Health and Exercise Studies</b> (Including one <i>Fitness and Wellness</i> course)	(2 credits) 2	Choose course(s) from the University Approved GEP course list for this category.
<b>Total credit hours needed to complete GEP that are <u>not</u> satisfied as part of the Major/College requirements.</b>	24 hours	
<b>GEP Co-Requisites:</b>		<i>Courses taken in the Major, GEP, or Minor may double-count to fulfill the co-requisites. Courses that satisfy the U.S. Diversity or Global Knowledge co-requisite are marked on course lists with a "USD" or "GK" indicator.</i>
<b>U.S. Diversity co-requisite</b> (USD)	n/a	13 <small>(Choose statement 1 or 4)</small> Co-requisite is satisfied by a Major/College course requirement.
<b>Global Knowledge co-requisite</b> (GK)	n/a	14 <small>(Choose statement 1 or 4)</small> Choose course(s) from the University Approved GEP course list for this category.
<b>Foreign Language Proficiency</b>	n/a	FL 201 required.
<b>The following requirements must be satisfied within the College/Program:</b>	X	Place an X in the credit hour box to indicate below that the requirement is " <b>Satisfied by College/Program Requirements</b> "
<b>Communication in the Major (Advanced Communication)</b>	X	Satisfied by College/Program Requirements
<b>Technology Fluency</b>	X	Satisfied by College/Program Requirements
<b>Total credit hours required to complete Degree:</b> Total must be within 120-128 credit hours.	120 Total hours	<b>As applicable, indicate here the overall GPA requirement for degree completion including course completion.</b>

# Business Administration (BS): (20BUSBS)

Semester Display 9-28-16 (v2.5)

<b>FRESHMAN YEAR</b>			
<b>Fall Semester</b>	<b>Credits</b>		<b>Spring Semester</b>
			<b>Credits</b>
M 100 Professionalism, Diversity and Acad Success in Mgmt <sup>1</sup>	1		MA 114 Finite Math <sup>7</sup>
ENG 101 <sup>2</sup> or Natural Science (with Lab) <sup>3</sup>	4		Communications <sup>8</sup> or Humanities <sup>9</sup>
MA 121/131/141 Calculus <sup>2, 4</sup>	3		ENG 101 <sup>2</sup> or Natural Science (with Lab) <sup>3</sup>
FL_ 201 <sup>5</sup>	3		EC 201 Principles of Microeconomics <sup>2, 11</sup>
MIE 201 Intro to Business Processes	3		ACC 210 Concepts of Financial Reporting <sup>2</sup>
HESF 1** Health & Exercise Studies Course <sup>6</sup>	1		
	<b>15</b>		<b>16</b>
<b>SOPHOMORE YEAR</b>			
<b>Fall Semester</b>	<b>Credits</b>		<b>Spring Semester</b>
			<b>Credits</b>
ACC 220 Intro to Managerial Accounting <sup>2, 10</sup>	3		BUS 351 Predictive Analytics for Business
BUS 340 Information Systems Management	3		BUS 320, 360, 370, MIE 305, 310, 330 <sup>13</sup>
BUS/ST 350 Econ/Bus Statistics <sup>2, 12</sup>	3		(take two)
Natural Science <sup>3</sup>	3		PSY 200 Intro to Psychology
EC 202 Principles of Macroeconomics	3		Additional Breadth <sup>14</sup>
HES_ *** Health & Exercise Studies Course <sup>16</sup>	1		ST 307 Intro to Statistical Programming-SAS
	<b>16</b>		<b>16</b>
<b>JUNIOR YEAR</b>			
<b>Fall Semester</b>	<b>Credits</b>		<b>Spring Semester</b>
			<b>Credits</b>
BUS 320, 360, 370, MIE 305, 310, 330 <sup>13</sup>	6		BUS 320, 360, 370, MIE 305, 310, 330 <sup>13</sup>
(take two)			(take two)
Advanced Writing <sup>15</sup>	3		Concentration course <sup>19</sup>
Communications <sup>8</sup> or Humanities <sup>9</sup>	3		Free Electives <sup>17</sup>
Free electives <sup>17</sup>	3		
	<b>15</b>		<b>15</b>
<b>SENIOR YEAR</b>			
<b>Fall Semester</b>	<b>Credits</b>		<b>Spring Semester</b>
			<b>Credits</b>
Concentration courses <sup>18</sup> (take two)	6		MIE 480 Business Policy & Strategy
Interdisciplinary Perspectives <sup>18</sup>	2		Concentration course <sup>19</sup>
Humanities <sup>9</sup>	3		Free Electives <sup>17</sup>
Free Elective <sup>17</sup>	4		
	<b>15</b>		<b>12</b>
<b>Minimum Credit Hours Required for Graduation*</b>			<b>120</b>

GPA Graduation Requirements:

Overall GPA for all courses attempted at NC State must be 2.0 or higher; and  
Overall GPA for all BUS, MIE, and M courses attempted at NC State must be 2.0 or higher.

1. Students should take M 100 their first semester in the program.
2. Must be completed with "C-" or better.
3. 7 credit hours-include one laboratory course or course with a lab from the GEP Natural Sciences list.
4. MA 131 or MA 141 are encouraged for students who qualify and aspire to take additional calculus. For students completing MA 141, one credit of MA141 will count as free elective credit.
5. Unless a placement exam is successfully completed, students are required to complete FL\_ 201 – the third semester of a foreign language (through the intermediate level). Students will not receive credit for courses below 102 unless starting a language different from their high school proficiency. Students who place beyond FL\_201 and choose not to take a foreign language course will have satisfied the foreign language requirement but will not receive hour credit.
6. 1 hour of Health & Exercise Studies at the 100 level.
7. MA 242 may substitute.
8. COM 110, 112, or 211.
9. Choose two courses from the GEP Humanities list; Students must also take one course from the Poole College of Management Ethics list- MIE 306, PHI 214, 221, 312, 375 (no credit hour requirement); If a student takes a PHI course to satisfy the Ethics requirement, it may double-count as the second humanities course provided the first course was not also a PHI course.
10. ACC 200 may substitute
11. ARE 201 may substitute. The requirement must be met with C- or better.
12. ST 302, 361, 370 or 372 may substitute. The requirement must be met with C- or better.
13. BUS 320 has prerequisites of ACC 210 and EC 201. BUS 360 and MIE 330 have prerequisite of MIE 201.
14. Take one from the GEP Additional Breadth- Humanities/Social Sciences/Visual Performing Arts list.
15. ENG 331, 332, 333.
16. 1 hour of Health & Exercise Studies. (PEC, PEF, PEH, PEO and PES courses cannot be taken to satisfy this requirement.) (HES courses may be taken for credit or credit only.)
17. Some courses will not count as free electives, such as FL 101, or 105 (in the language in which proficiency requirement is met), or MA 101, 103, 105. (12 hours of free electives may be taken for credit only.)
18. Choose one course from the GEP Interdisciplinary Perspectives list. For students completing a three-credit IP course, one credit will count in free electives.
19. Students may concentrate in any of the following:
  - Finance – BUS 420 and 422; and two from BUS 425, 426, 428, 429
  - Information Technology – Two from BUS 440, 441, 442 and two from BUS 440, 441, 442, 443, 444, 449
  - Human Resources – MIE 434 and 438 and two from MIE 432, 435, 436, 439
  - Entrepreneurship – MIE 410, 412, 413 and one from MIE 411, 416, 418 or 419
  - Marketing – BUS 462 and three from BUS 460, 464, 465, 466, 467, 468
  - Operations/Supply Chain Mgmt – BUS 470, two from BUS 472, 474, 475 and one from BUS 472, 473, 474, 475, 479, ACC 420

\*Students must also complete as a part of their degree requirements one course from the GEP U.S. Diversity list (no credit hour requirement) and one course from the GEP Global Knowledge list (no credit hour requirement).

## CURRICULUM REQUIREMENTS

### Format B

<u>Degree/Plan Title:</u> B.S. Business Administration	<u>Plan SIS Code:</u>
Concentration/Subplan Title: BUS-Finance, Information Technology, Human Resources, Entrepreneurship, Marketing, Operations/Supply Chain Management	
<u>Subplan SIS Code:</u>	
<u>Indicate requirements status:</u> Current:                      Proposed: x <u>Proposed</u> Effective Semester: Summer 2017	
<u>New Degree Audit required?</u> (Y or N) Y	
<u>Critical Path Courses</u> - Identify using the code (CP) which courses are considered critical path courses which represent specific major requirements that are predictive of student success in a given program/plan. Place the (CP) next to the credit hours for the course.	

<b>MAJOR FIELD OF STUDY REQUIREMENTS:</b>		
<b><i>Required Courses/Groups/ Electives:</i></b>	<b><i>Credit Hours</i></b>	<b><i>GEP category, if applicable</i></b>
<b>Indicate if course or course groupings have a C-wall or MGPA requirement and which are considered Critical Path courses – indicate with (CP) next to applic. course.</b>		<b>List GEP category and hours satisfied by a Major requirement</b>
Math MA 121 or 131 or 141 (C- or better); MA 114 (MA 114 or 242)	6	Mathematics (6 hours)
Major (non- ACC/BUS/MIE) Advanced Writing (ENG 331, 332, 333)	3	Advanced Communication (3 hours)
EC 201 (EC 201 or ARE 201) (C- or better)	3	Social Sciences (3 hours)
EC 202	3	
PSY 200	3	Social Sciences (3 hours)
FL 201	3	
Communication/Speech (COM 110, 112, 211)	3	
ST 307	1	
Major (ACC/BUS/MIE) BUS/ST 350 (BUS/ST 350, ST 302, 361, 370, 372) (C- or better)	3	Technology Fluency (3 hours)
<b>BUS/ST 351</b>	3	
BUS 320	3	
BUS 340	3	Technology Fluency (3 hours)
BUS 360	3	
BUS 370	3	
MIE 201	3	Interdisciplinary Perspectives (3 hours)
MIE 305	3	
MIE 310	3	
MIE 330	3	
MIE 480	3	
ACC 210 (C- or better)	3	
<b>ACC 220 (or ACC 200)</b> (C- or better)	3	
<b><u>Concentration Courses/Groups/Electives:</u></b> Finance: BUS 420 and 422; and two from BUS 425, 426, 428, 429 Information Technology: Choose two from BUS 440, 441, 442; and two from BUS 440, 441, 442, 443, 444, 449 Human Resources: MIE 434 and 438; and two from MIE 432, 435, 436, 439 Entrepreneurship: MIE 410, 412, 413; and one from MIE 411, 416, 418 or 419 Marketing: BUS 462 and three from BUS 460, 464, 465, 466, 467,	12	

468 Operations/Supply Chain Management: BUS 470; and two from BUS 472, 474, 475; and one from BUS 472, 473, 474, 475, 479, ACC 420		
<b>Free Electives:</b> May not be MA 101, 103, 105, or FL 101 or 105 (in the language in which proficiency is met)	19	This assumes students complete a 2 hr Interdisciplinary Perspectives course
<b>Total credit hours under Major Field of Study:</b> <i>Minimum 27 hours required in program area.</i>	95 hours	
<b>COLLEGE REQUIREMENTS:</b>		
<b>Orientation Course(s):</b> M 100	1	U.S. Diversity Corequisite
<b>Other:</b> Ethics Corequisite One from the following: MIE 306, PHI 214, 221, 312, 375	0	
<b>Total credit hours under College Requirements:</b>	96 Hours	

<b><u>NCSU GENERAL EDUCATION PROGRAM REQUIREMENTS</u></b>		<b>At least one of the following must be listed:</b>
<i>Courses in the Major and/or Minor may also fulfill a General Education requirement; however, a GEP category may not be subset to require a specific course from the category list. Required courses must be listed in the Major/College requirements.</i>		1 Choose course(s) from the University Approved GEP course list for this category.
<i>Specific courses should not be listed in any of the fields below other than ENG 101.</i>		2 Minimum requirements are satisfied by Major/College course requirements.
<b>General Education Program Requirements:</b> <i>Minimum 39-40 hrs</i>		3 Major/College course requirement satisfies X credit hrs of this requirement. Remaining hours required must be chosen from the University Approved GEP course list for the category.
<b>Mathematical Sciences</b> (6 credits) (At least 1 course with MA or ST prefix) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>		4 Co-requisite is satisfied by a Major/College course requirement.
<b>Natural Sciences</b> (7 credits) (At least 1 lab course or course with a lab) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>		5 Choose course(s) from the University Approved GEP course lists for the Humanities/ Social Sciences/ Visual & Performing Arts.
<b>English 101 (C- or better required)</b> (4 credits)		6 Choose course(s) from the University Approved GEP course lists for Natural Sciences/Mathematical Sciences.
<b>Humanities</b> (6 credits) (Courses from two different disciplines) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>		<b>How will the GEP requirement be met?</b> (Choose applicable statement from 1-6 listed above)
<b>Social Sciences</b> (6 credits) (Courses from two different disciplines) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>		7 (Choose statement 1, 2 or 3) Minimum requirements are satisfied by Major/College course requirements.
<b>Additional Breadth</b> (3 credits) (Choose approach that is different from the approach of the Major) <i>Major/College requirements cannot satisfy this requirement and an AB course cannot be double-counted except in satisfying the Global Knowledge or U.S. Diversity co-requisites.</i>		8 (Choose statement 1, 2 or 3) Choose course(s) from the University Approved GEP course list for this category.
<b>Interdisciplinary Perspectives</b> (5 credits) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>		9 (Choose statement 1, 2 or 3) Choose course(s) from the University Approved GEP course list for this category.
<b>Health and Exercise Studies</b> (2 credits) (Including one Fitness and Wellness course)		10 (Choose statement 1, 2 or 3) Minimum requirements are satisfied by Major/College course requirements.
		11 (Choose statement 5 or 6) Choose course(s) from the University Approved GEP course lists for the Humanities/ Social Sciences/ Visual & Performing Arts.
		12 (Choose statement 1, 2 or 3) Major/College course requirement satisfies 3 credit hrs of this requirement. Remaining hours required must be chosen from the University Approved GEP course list for the category.

<b>Total credit hours needed to complete GEP that are <u>not</u> satisfied as part of the Major/College requirements.</b>	24 hours	
<b>GEP Co-Requisites:</b>		<i>Courses taken in the Major, GEP, or Minor may double-count to fulfill the co-requisites. Courses that satisfy the U.S. Diversity or Global Knowledge co-requisite are marked on course lists with a "USD" or "GK" indicator.</i>
<b>U.S. Diversity co-requisite</b> (USD)	n/a	13 <small>(Choose statement 1 of 4)</small> Co-requisite is satisfied by a Major/College course requirement.
<b>Global Knowledge co-requisite</b> (GK)	n/a	14 <small>(Choose statement 1 of 4)</small> Choose course(s) from the University Approved GEP course list for this category.
<b>Foreign Language Proficiency</b>	n/a	FL 201 required.
<b>The following requirements must be satisfied within the College/Program:</b>	X	Place an X in the credit hour box to indicate below that the requirement is <b>"Satisfied by College/Program Requirements"</b>
<b>Communication in the Major (Advanced Communication)</b>	X	Satisfied by College/Program Requirements
<b>Technology Fluency</b>	X	Satisfied by College/Program Requirements
<b>Total credit hours required to complete Degree:</b> Total must be within 120-128 credit hours.	120 Total hours	<b>As applicable, indicate here the overall GPA requirement for degree completion including course completion.</b>





## MEMO

Date: April 13, 2017  
To: Dr. Barbara Kirby, Associate Vice Provost, Academic Programs & Services  
From: Dr. Tamah Morant, Associate Dean, Management  
Subject: Changes to the Business Analytics Honors Program

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The Poole College of Management proposes a minor change to the admissions requirements for the Business Analytics Honors Program as well as a change to one of the required courses for the program.

### ADMISSIONS REQUIREMENTS

The Business Analytics Honors Program currently has the following as its admissions requirements:

*Admission to this program is competitive and based on prior academic achievement. The program is open only to Poole College of Management students who have completed BUS 340H, BUS 350H, and have a 3.25 or better overall GPA.*

BUS 350H is not being offered in the near future, so we are proposing to add another option for students, a B+ or above in BUS/ST 350, which should reflect sufficient mastery of the content to succeed in the Honors Program. The new admissions requirements are proposed to read as follows (changes are highlighted):

*Admission to this program is competitive and based on prior academic achievement. The program is open only to Poole College of Management students who have completed BUS 340H, either BUS 350H or BUS/ST 350 with a B+ or above, and have a 3.25 or better overall GPA.*

We would like these new admissions requirements to be effective FA17.

### GRADUATION REQUIREMENTS

Additionally, the Business Analytics Honors Program proposed a change to one of the courses required for the program. Currently, in addition to the admissions prerequisites, students are required to take BUS 443H, BUS 458H, and BUS 459H. BUS 443H is being amended by the Business Administration Department to return to its original intent. Business Administration has proposed a new course, BUS 351 – Predictive Analytics for Business, that closely resembles the version of BUS 443H required for the Honors Program. Consequently, we propose to amend the requirements for the program to include the honors version of BUS 351, and delete BUS 443H, effective SP18. Requirements for the program will be as outlined below (changes highlighted):

*In addition to the two prerequisites, applicants must successfully complete:*



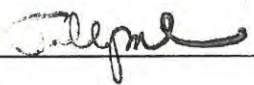
*~~BUS 443H | Business Analytics~~ BUS 351H | Predictive Analytics for Business*

*BUS 458H | Analytics: From Data to Decisions*

*BUS 459H\* | Business Analytics Practicum*

*\*Students may substitute other honors-level practicum courses containing analytics content with program-level approval.*

**ENDORSED BY:**

	4-19-17
CHAIR, COLLEGE COURSES & CURRICULA COMMITTEE	DATE
	4/19/17
DEPARTMENT HEAD, ACCOUNTING	DATE
	4/19/17
COLLEGE DEAN	DATE

**APPROVED BY:**

_____ CHAIR, UNIVERSITY COURSES & CURRICULA COMMITTEE	DATE
_____ DEAN OF UNDERGRADUATE ACADEMIC PROGRAMS	DATE

NORTH CAROLINA STATE UNIVERSITY

HONORS PROGRAM ACTION FORM

DEPARTMENT/COLLEGE: Poole College of Management

TITLE OF PROGRAM: Business Analytics Honors Program

TYPE OF PROPOSAL:

New Program \_\_\_\_\_

Review \_\_\_\_\_

Revision in: \_\_\_\_\_

Admission Requirements  \_\_\_\_\_

Graduation Requirements  \_\_\_\_\_

Description \_\_\_\_\_

Discontinuation of Program \_\_\_\_\_

DATE OF LAST ACTION: \_\_\_\_\_

PROPOSED EFFECTIVE DATE: Fall 2017

ATTACH DOCUMENTS AS APPROPRIATE:

- Current Admissions Requirements
- Current Graduation Requirements
- \_\_\_\_\_ Current Catalog Description
- Proposed Revision (s) with Reasons
- \_\_\_\_\_ Number of Participants for last five years

CATALOG DESCRIPTION (limit to 150 words):

NAME OF PROGRAM DIRECTOR:

D. Scott Showalter, Professor of Practice, Department of Accounting

RECOMMENDED BY:

*[Signature]* 4/19/17  
 Department Head (if Departmental Program) Date

or

\_\_\_\_\_  
 College Honors Program Director (if College Program) Date

APPROVAL:

*[Signature]* 4-19-17  
 Chair, College Courses & Curricula Committee Or College Honors Program Committee Date

*[Signature]* 4/19/17  
 College Dean Date

\_\_\_\_\_  
 Chair, University Courses & Curricula Committee Date

\_\_\_\_\_  
 Dean, Division of Academic & Student Affairs (DASA) Date

APPROVED EFFECTIVE DATE: \_\_\_\_\_

## **Admission to the program**

Admission to this program is competitive and based on prior academic achievement. The program is open only to Poole College of Management students who have completed BUS 340H, either BUS 350H or BUS/ST 350 with a B+ or above, and have a 3.25 or better overall GPA.

If you are an interested undergraduate student and believe you meet the program requirements, please complete the Business Analytics Honors Program Application and follow the instructions for submission. Prospective applicants will be asked to submit an application and a degree audit. In the meantime, students interested in learning more about this new program are asked to send an email message to [business\\_analytics\\_honors@ncsu.edu](mailto:business_analytics_honors@ncsu.edu).

If you have already taken BUS 340 (non-honors) and/or BUS/ST 350 (non-honors) and performed well in those classes, or if you have taken ACC 340 but not BUS 340/340H, contact us at [business\\_analytics\\_honors@ncsu.edu](mailto:business_analytics_honors@ncsu.edu) to begin a discussion about alternatives.

## **Program requirements**

In addition to the two prerequisites, applicants must successfully complete:

~~BUS 443H | Business Analytics~~ BUS 351H | Predictive Analytics for Business

BUS 458H | Analytics: From Data to Decisions

BUS 459H\* | Business Analytics Practicum

\*Students may substitute other honors-level practicum courses containing analytics content with program-level approval.

# North Carolina State University

Department of Physics  
College of Sciences

Box 8202  
Raleigh, North Carolina 27695-8202  
(919) 515-7471  
David.Brown@ncsu.edu

J. David Brown  
Director of Undergraduate Programs

April 5, 2017

## MEMORANDUM

TO: University Course and Curriculum Committee  
FROM: David Brown, Director of Undergraduate Program, Department of Physics  
RE: Changes to the Physics BA curriculum (17PHYSBA)

**Proposed Effective Date:** Summer II semester, 2017

The Department of Physics proposes the following changes to the Physics BA degree:

1. Changes necessitated by the revision of COS100 to a 2 credit hour course satisfying interdisciplinary perspectives.
2. Replacing the "Introduction to Programming" requirement with the required course PY251.
3. Renaming the "Communication" requirement as "Advanced Writing".
4. Merging the "Chemistry/Basic Sciences" and "Technical Electives" categories.
5. Updating and correcting the course list for "Basic Science Electives".
6. Updating and correcting the course list for "Technical Electives".
7. Updating and correcting the course list for "Restricted Electives".
8. Updating and correcting the list of courses excluded from "Free Electives".

### **Justifications**

#### **1. Changes to COS100 and Technical Electives**

The College of Sciences orientation requirement was previously satisfied by either COS100 or E115, which were both 1 credit hour S/U graded courses. COS100 has been restructured as a 2 credit hour letter graded course that covers the orientation requirement as well as 2 credit hours of Interdisciplinary Perspectives. To bring our curriculum in line with the restructured COS100 course, we propose to:

- Replace the orientation requirement with the 2 credit hour, letter graded course COS100.
- Remove E115 as an option for orientation.
- Change the number of credit hours required for Interdisciplinary Perspectives from 5 to 3.
- Increase the Technical Electives requirement from 12 to 13 credit hours.

These changes will provide COS students with a more meaningful orientation experience, and allow them to complete 2 credit hours of Interdisciplinary Perspectives requirements. Students for whom COS100 is not a reasonable option (eg, internal or external transfer students) will be allowed to substitute 2 credit hours of interdisciplinary perspectives for the COS100 requirement. The increase in technical elective hours will keep the total number of credit hours required for the BA degree at 120. Beginning in Fall 2017, the PY department plans to revive the 1 credit hour technical elective course "Problem Solving in Physics" (taught as PY299 in Sp 2010, Sp 2011, Sp 2012 and Sp 2013) and to begin development of other 1 credit hour courses for physics majors.

## 2. Replacing Introduction to Programming with PY251

Currently the Introduction to Programming requirement can be satisfied by one of

- CSCS112, CSC116
- MA116
- PY251

The computer science department no longer offers CSC112, and CSC116 has all seats restricted to computer science and exploratory studies majors. The introductory programming courses CSC111 and CSC113 are also restricted, and generally unavailable to physics majors. MA116 is open to physics majors; however, this course is taught at a level that is not optimal for our students. Physics majors benefit from a rigorous programming course in preparation for advanced physics coursework and research. PY251 was developed specifically to fill this need. Thus, we propose to eliminate the "Introduction to Programming" requirement and replace it with the required course PY251, "Introduction to Scientific Computing."

## 3. Replacing the Requirement Title "Communication" with "Advanced Writing"

The Communication requirement is currently filled by one of

- ENG331, ENG332, ENG333

Students find the name of this requirement confusing, since there are no COM classes on the list. We propose to change the name of this category to "Advanced Writing".

## 4. Merging Chemistry/Basic Sciences with Technical Electives

The previous physics BA degree plan allowed for at most one passing grade below C- in each of four categories: Physics, Math/Statistics/Computing, Chemistry/Basic Sciences, and Technical Electives. These four categories consist of 29, 27, 7, and 12 credit hours of course requirements, respectively. The imbalance between the first two and last two categories effectively de-emphasizes the importance of Chemistry/Basic Sciences and Technical Electives courses. These courses, in fact, play an important role in the training of our students as physicists. We propose to strengthen our emphasis on these courses by modifying the curriculum to combine Chemistry/Basic Sciences and Technical Electives into a single category. We will allow a single passing grade below C- in each of the three categories: Physics, Math/Statistics/Computing, and Chemistry/Basic Sciences/Technical Electives.

## 5. Basic Sciences Electives

Basic sciences electives are intended to expose our students to a fundamental branch of science other than physics. They typically do not require prerequisites beyond courses that already meet a physics degree requirement. The current list of basic sciences electives consists of:

- BIO181, BIO183
- BME203
- CH201, CH202, CH203, CH204, CH220
- MEA200, MEA213, MEA214
- MSE200, MSE201, MSE203

MEA213 and MEA214 are no longer offered; in their place is the 4 credit hour course MEA215. We propose to update and expand the students' basic sciences options to the following courses:

- BIO165, BIO181, BIO183
- BME203
- CH201, CH202, CH203, CH204, CH220, CH222
- CHE205
- GN301
- MAE214
- MEA101, MEA110, MEA200, MEA210, MEA215, MEA220
- MSE200, MSE201, MSE203

- NE202
- PCC203
- TE200

This change increases the number of Basic Sciences Electives to 24. The impact on other departments should be minor. We have approximately 180 physics majors, so 180 physics majors/8 semesters  $\approx$  23 physics students per semester take a basic sciences course. With 24 course options, this represents about 1 student per course.

#### 6. Technical Electives

The current Technical Electives list has not been updated in many years, and contains a number of omissions and errors. We propose to define Technical Electives as courses at the 300 through 500 levels in science, mathematics, technology, engineering and in math and science education. More precisely, they are courses at the 300 through 500 levels with the following prefixes:

- AA, AES, ANS, AEC, BCH, BIO, BAE, BEC, BMA, BME, BBS, BIT, MBA, BUS, CHE, CH, CE, CBS, CSC, CS, EGR, ECO, EC, ECE, E, EGM, ENT, EA, ES, ET, FIM, FW, FS, FSA, FOR, GN, GIS, ECG, ID, ISE, LOG, MEA, MSE, EMS, MA, MAE, MES, MT, MB, NW, NE, NTR, OR, PSE, PY, PHY, PB, PP, PCC, PO, SSC, ST, SMT, TC, TE, TMS, TT, TOX, WPS, ZO,

Technical electives should not include courses that are required for the Physics BA degree and, in some cases, courses that are at the same or lower level than those required for the Physics BA degree. Thus, we propose to *exclude* the following courses from the Technical Electives list:

- MA302, MA303, MA331, MA341, MA405
- PY401, PY407, PY411, PY413, PY414, PY452, PY501, PY511, PY514, PY581, PY582

#### 7. Restricted Electives

The purpose of Restricted Electives is to add breadth to the physics BA degree, beyond technical disciplines. Currently, the list of Restricted Electives is drawn from the GEP Humanities list, GEP Social Sciences list, and GEP Visual and Performing Arts list. We would like to expand Restricted Electives to include courses from the College of Education and the College of Management. Specifically, we would like to add to the list of Restricted Electives courses at the 200 through 400 levels with the prefixes:

- ECD, ECI, ED, EDP, ELM, ELP, EMS, TED, TDE
- ACC, BUS, EC, M, MIE

We hope that the addition of Education courses will help encourage our Physics BA students to pursue a career in teaching, and in some cases to add a second major in Science Education. We hope that the addition of Management courses will support our students who plan to take their scientific training into the business world after graduation.

Consultation with Dean Ellen Vasu, College of Education (no response):

Dear Dean Vasu,

I am in the process of updating the Physics BA curriculum. One of the requirements for the physics BA is 6 credit hours of "Restricted Electives". The current list of Restricted Electives consists of the GEP lists for Humanities and Social Sciences. There are a few education courses on the list. I would like to expand the Restricted Electives to include most education courses. Ideally, we would like to see more of our physics BA students go into teaching. Hopefully, this will help make it easier for them to take education courses. It would also be easier for them to double major in physics and science education.

So my proposal is to expand the list of Restricted Electives to include all 200 through 400 level courses with the following prefixes:

ECD, ECI, ED, EDP, ELM, ELP, EMS, TED, TDE

Please let me know if you have any concerns with this proposal, or any suggestions for improvements.

Best wishes, David

Consultation with Dean Tamah Morant, Poole College of Management:

I see. Then yes, go ahead and include the 4xx courses with the understand that only those students who are also Poole majors will have access to these courses.

Best,  
Tamah

On Wed, Mar 22, 2017 at 2:57 PM, David Brown <david\_brown@ncsu.edu> wrote:  
Dear Tamah, thanks for your response.

Many of the courses that can be used for the physics BA and physics BS degrees are restricted to students in another major or another college. Our students can enroll in these courses only if they have a double major (or a perhaps a minor, or special permission). In particular, 400+ level College of Management courses are already, in effect, allowed to be used for the physics major as "Free Electives".

Best wishes, David

On Tue, Mar 21, 2017 at 3:56 PM, Tamah Morant <tcmorant@ncsu.edu> wrote:  
David,

Thank you for reaching out. Please feel free to include the 200 and 300 level courses on your list of restricted electives; we do not permit non-Poole students to enroll in 400 level courses in the college.

Just to let you know, certain of our courses don't open to non-Poole students until after classes start. Your students would have earlier access if they attempted to pursue the minor. Admission is not guaranteed, but that would provide another route and earlier access.

Tamah

On Mon, Mar 20, 2017 at 4:42 PM, David Brown <david\_brown@ncsu.edu> wrote:  
Dear Dean Morant,

I am in the process of updating the Physics BA curriculum. One of the requirements for the physics BA is 6 credit hours of "Restricted Electives". The current list of Restricted Electives consists of the GEP lists for Humanities and Social Sciences. There are a business courses on the list. I would like to expand the Restricted Electives to include most courses from the college of management. Hopefully, this will pave the way for more of our students to take their scientific training into the business world after graduation.

So my proposal is to expand the list of Restricted Electives to include all 200 through 400 level courses with the following prefixes:



ACC, BUS, EC, M, MIE

Please let me know if you have any concerns with this proposal, or any suggestions for improvements.

Best wishes, David

8. **Free Electives** The BA degree plan allows for 9 credit hours of Free Electives. The current list of courses that are excluded from use as a free elective consists of:

- BIO105, BIO106, BIO140, BIO141, BIO165
- CH100, CH101, CH111
- ENG101
- FLA101, FLC101, FLF101, FLG101, FLI101, FLJ101, FLN101, FLP101, FLR101, FLS101, FLS105
- GRK101
- LAT101
- MA101, MA103, MA103A, MA107, MA108, MA111, MA121, MA131, MA132, MA141, MA231, MA141, MA305
- PER101
- PY131, PY201, PY202, PY205, PY208, PY211, PY212

This list should serve to (i) prevent students from counting as a free elective a course that is designed for non-science majors, or is considered remedial for a physics major; (ii) prevent students from counting as a free elective a course that is required for the physics BA (to address cases in which the requirement has been previously satisfied by an approved substitution); and (iii) prevent students from counting as a free elective a course that is an anti-requisite for a required course (to address cases in which a student is able to enroll in such a course). With these purposes in mind, we propose to replace the current list with the following.

Courses intended for non-science majors and remedial courses:

- BIO105, BIO106, BIO120, BIO140, BIO141
- CH100, CH111
- ENG100
- FLA101, FLC101, FLF101, FLG101, FLI101, FLJ101, FLN101, FLP101, FLR101, FLS101, FLS105
- GRK101
- LAT101
- MA101, MA103, MA103A, MA105, MA107, MA108, MA111, MA114, MA132
- PER101
- PY131
- ST101

Courses required for the physics BA degree:

- CH101, CH102
- COS100
- ENG101
- MA141, MA241, MA242, MA341, MA401
- PY201, PY202, PY203, PY251, PY252, PY401, PY411, PY413, PY414, PY452

Courses that are anti-requisites for required courses:

- CH103, CH104
- MA121, MA131, MA151, MA152, MA205, MA231, MA303, MA331
- PY205, PY206, PY208, PY209, PY211, PY212, PY407

The restriction on foreign language courses should only apply to a language that the student has previously taken. On the Free Electives list in the degree audit, we would like to add the statement: "FL\*101 courses will be allowed for credit as a free elective if the language was not taken by the student in high school, was not used to meet foreign language proficiency, and is not the student's native language."

The new Free Electives list should help prevent students from accidentally or intentionally enrolling in a course that is not appropriate for a physics major, or is equivalent to one for which they have already received credit, and having that course count towards the Physics BA degree requirements.

Signatures:

 4/6/17  
 Head, Physics Date

 4/10/17  
 Chair, College Courses and Curricula Committee Date

 4/17/17  
 Dean, College of Sciences Date

\_\_\_\_\_  
 Chair, University Courses and Curricula Committee Date

\_\_\_\_\_  
 Dean, Academic and Student Affairs Date

Effective Date: \_\_\_\_\_

FORMAT A  
(SEMESTER-BY-SEMESTER CURRICULUM DISPLAY)

Indicate display status: Current: Proposed: X Proposed Effective Semester: 2177

Degree/Plan Title: Bachelor of Arts in Physics Concentration/Subplan Title: n/a

Plan SIS Code: 17PHYSBA Subplan SIS Code: n/a

New Degree Audit required? (Y or N) Y

**Critical Path Courses** - Identify using the code (CP) which courses are considered critical path courses which represent specific major requirements that are predictive of student success in a given program/plan. Place the (CP) next to the credit hours for the course.

FRESHMAN YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
PY201 University Physics I <sup>1</sup>	4 (CP)	PY202 University Physics II <sup>1</sup>	4 (CP)
MA141 Calculus I <sup>1,2</sup>	4 (CP)	MA241 Calculus II <sup>1,2</sup>	4 (CP)
<del>CH 101 Chemistry—A Molecular Science<sup>3</sup></del>	<del>3</del>	<del>Basic Sciences Elective<sup>1,2</sup></del>	<del>3</del>
<del>CH102 General Chemistry Laboratory<sup>3</sup></del>	<del>1</del>	CH101 Chemistry - A Molecular Science <sup>3</sup>	3
ENG101 Academic Writing and Research <sup>H</sup>	4	CH102 General Chemistry Laboratory <sup>3</sup>	1
HES_*** Health & Exercise Studies <sup>E</sup>	1	GEP Humanities Elective <sup>C</sup>	3
<del>Orientation Course (COS100 or E115)</del>	<del>1</del>	<del>HES_*** Health &amp; Exercise Studies Course<sup>E</sup></del>	<del>1</del>
COS100 Science of Change	2		
	<b>Total:</b>		<b>Total: 15</b>
	<del>17</del> 15		
SOPHOMORE YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
PY203 University Physics III <sup>1,3</sup>	4 (CP)	PY411 Mechanics I <sup>1</sup>	3 (CP)
PY251 Introduction to Scientific Computing <sup>2</sup>	3	PY252 Instrumentation Instrumental and Data Analysis <sup>1</sup>	2
MA242 Calculus III <sup>1,2</sup>	4 (CP)	MA341 Applied Differential Equations I <sup>1,2</sup>	3
<del>Introduction to Programming<sup>1,4</sup></del>	<del>3</del>	<del>GEP Humanities Elective<sup>E</sup></del>	<del>3</del>
<del>Restricted Elective<sup>8</sup></del>	<del>3</del>	GEP Social Sciences Elective <sup>D</sup>	3
HES_*** Health & Exercise Studies <sup>E</sup>	1	Technical Elective <sup>3,9</sup>	1
<del>Course<sup>E</sup></del>	<del>1</del>	Free Elective	3
<del>Free Elective</del>	<del>3</del>		
	<b>Total: 15</b>		<b>Total: 14-15</b>
JUNIOR YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
PY414 Electromagnetism I <sup>1</sup>	3	<del>PY413 Thermal Physics<sup>1</sup></del>	<del>3</del>
MA405 Linear Algebra <sup>1,2</sup>	3	PY401 Quantum Physics I <sup>1</sup>	3
<del>Communication<sup>7</sup></del>	<del>3</del>	Computing/Numerical Methods <sup>1,6,2,7</sup>	3
Advanced Writing <sup>6</sup>	3	Statistics <sup>1,5,2,5</sup>	3
GEP Interdisc. Perspectives <sup>6</sup>	3	<del>Restricted Elective<sup>9</sup></del>	<del>3</del>
<del>GEP Additional Breadth HSS-VPA<sup>F</sup></del>	<del>3</del>	<del>GEP Interdisc. Perspectives<sup>6</sup></del>	<del>2-3</del>
Technical Elective <sup>3,9</sup>	3	GEP Humanities Elective <sup>C</sup>	3
		Technical Elective <sup>3,9</sup>	3
	<b>Total: 15</b>		<b>Total: 14-15 15</b>
SENIOR YEAR			

FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
PY452 Advanced Physics Lab <sup>1</sup>	3	<del>PY401 Quantum Physics I<sup>1</sup></del>	<del>3</del>
Basic Sciences Elective <sup>3,4</sup>	3	PY413 Thermal Physics <sup>1</sup>	3
<del>Restricted Elective<sup>9</sup></del>	<del>3</del>	<del>GEP Social Sciences Elective<sup>P</sup></del>	<del>3</del>
GEP Social Sciences Elective <sup>P</sup>	3	GEP Additional Breadth HSS-VPA <sup>F</sup>	3
Technical Elective <sup>1-8 3,8</sup>	3	Technical Elective <sup>1-8 3,8</sup>	3
<del>Technical Elective<sup>1-8</sup></del>	<del>3</del>	<del>Technical Elective<sup>1-8</sup></del>	<del>3</del>
Free Elective	3	Restricted Elective <sup>8</sup>	3
		Free Elective	3
	Total: 15		Total: 15
Minimum Credit Hours Required for Graduation*: 120			

### Major/Program Footnotes:

1. At most one grade below a C- is permitted in each of the four categories: Physics, Mathematics/Statistics/Computing, Chemistry/Basic Science, and Technical Electives.

2. Basic Science elective—Select one: BIO181, BIO183, CH201 and 202, CH220, CH221 and 222, MEA200, MEA213 and MEA214, MSE200, MSE201, or MSE203.

3. Students may substitute PY407 for PY203. Students who elect to take PY407 must also take the lab section of PY203.

4. Introduction to Programming—select from MA116, CSC112, CSC114, CSC116, PY251.

5. Statistics course must be at the 300 level or above.

6. Computing/Numerical Methods—select from MA427, MA428, MA402, CSC302, PY525.

7. Communication—select from ENG331, ENG332, or ENG333.

8. Technical Electives are courses at the 300 level or above in physical, mathematical and biological sciences, and in engineering.

9. Select courses from GEP Humanities list, GEP Social Sciences list, and GEP Visual and Performing Arts list.

1. At most one grade below C- is permitted in the Physics category.

2. At most one grade below C- is permitted in the Math/Statistics/Computing category.

3. At most one grade below C- is permitted in the Chemistry/Basic Sciences/Technical Electives category.

4. Basic Sciences: select from BIO165, BIO181, BIO183, BME203, CH201, CH202, CH203, CH204, CH220, CH222, CHE205, GN301, MAE214, MEA101, MEA110, MEA200, MEA210, MEA215, MEA220, MSE200, MSE201, MSE203, NE202, PCC203, TE200

5. Statistics course must be at the 300 level or above.

6. Advanced Writing: select from ENG331, ENG332, ENG333.

7. Computing/Numerical Methods: select from CSC302, CSC427, CSC428, MA402, MA427, MA428, PY525.

8. Restricted Electives: select courses from the GEP Humanities list, GEP Social Sciences list, GEP Visual and Performing Arts list, and from courses at the 200 level or above in Education or Management.

9. Technical Electives are courses at the 300 level or above in science, mathematics, technology, engineering, and in math and science education.

### \*General Education Program (GEP) requirements and GEP Footnotes:

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied.

University approved GEP course lists for each of the following categories can be found at <http://www.ncsu.edu/uap/academic-standards/gep/courselists/index.html>.

- A. **Mathematical Sciences** (6 credit hours - one course with MA or ST prefix)  
Choose from the University approved GEP Mathematical Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **MA141, MA241**
- B. **Natural Sciences** (7 credit hours - include one laboratory course or course with a lab)  
Choose from the University approved GEP Natural Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **PY201, CH101**
- C. **Humanities** (6 credit hours selected from two different disciplines/course prefixes)  
Choose from the University approved GEP Humanities course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **none**
- D. **Social Sciences** (6 credit hours selected from two different disciplines/course prefixes)  
Choose from the University approved GEP Social Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **none**
- E. **Physical Education/Healthy Living** (2 credit hours - at least one 100-level Fitness and Wellness Course)  
Choose from the University approved GEP Physical Education/Healthy Living course list.

F. **Additional Breadth** - (3 credit hours to be selected from the following checked University approved GEP course lists)

Humanities/Social Sciences/Visual and Performing Arts

G. **Interdisciplinary Perspectives** (5-6 credit hours)

Choose from the University approved GEP Interdisciplinary Perspectives course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **COS100**

H. **Introduction to Writing** (4 credit hours satisfied by completing ENG 101 with a C- or better )

The following **Co-Requisites** must be satisfied to complete the General Education Program requirements:

I. **U.S. Diversity** (USD)

Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite. The following course(s) completed as part of the Major requirements may fulfill this requirement: **none**

J. **Global Knowledge** (GK)

Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite. The following course(s) completed as part of the Major requirements may fulfill this requirement: **none**

K. **Foreign Language proficiency** - Proficiency at the FL\_102 level is required for graduation.



<p><del>CH220, BIO181, BIO183, MEA200, MEA213/214, MSE200, MSE201, MSE203)</del></p> <p><b>Technical Electives</b>  <del>GRP401— Technical Electives (Any course at the 300 level or above in the physical, mathematical, and biological sciences, in engineering, and in mathematics and science education.)</del></p> <p><b>Chemistry/Basic Sciences/Technical Electives*</b>          CH101 Chemistry - A Molecular Science          CH102 General Chemistry Laboratory          Basic Sciences (BIO165, BIO181, BIO183, BME203, CH201, CH202, CH203, CH204, CH220, CH222, CHE205, GN301, MAE214, MEA101, MEA110, MEA200, MEA210, MEA215, MEA220, MSE200, MSE201, MSE203, NE202, PCC203, TE200)          Technical Electives (Any course at the 300 through 500 levels with prefix:          AA, AES, ANS, AEC, BCH, BIO, BAE, BEC, BMA, BME, BBS, BIT, MBA, BUS, CHE, CH, CE, CBS, CSC, CS, EGR, ECO, EC, ECE, E, EGM, ENT, EA, ES, ET, FIM, FW, FS, FSA, FOR, GN, GIS, ECG, ID, ISE, LOG, MEA, MSE, EMS, MA, MAE, MES, MT, MB, NW, NE, NTR, OR, PSE, PY, PHY, PB, PP, PCC, PO, SSC, ST, SMT, TC, TE, TMS, TT, TOX, WPS, ZO ,          excluding:          MA302, MA303, MA331, MA341, MA405 , PY401, PY407, PY411, PY413, PY414, PY452, PY501, PY511, PY514, PY581, PY582)</p> <p><del>At most one grade below C- is permitted in each of the above categories.</del></p> <p>*At most one passing grade below C- is allowed in each of the three categories: Physics, Math/Statistics/Computing, and Chemistry/Basic Sciences/Technical Electives.</p> <p><b>Communication:</b>  <del>GRP 120, ENG331, ENG332, or ENG333</del>  <del>This Advanced Writing course may not be used to satisfy the Humanities GEP requirements.</del></p> <p><b>Advanced Writing</b> (ENG331, ENG332, ENG333)</p> <p><b>Restricted Electives</b> (courses from GEP Humanities GEP Social Science and GEP Visual and Performing Arts lists, and courses at the 200 through 400 levels with prefix: ECD, ECI, ED, EDP, ELM, ELP, EMS, TED, TDE, ACC, BUS, EC, M, MIE)</p>	<p>12</p> <p>3 1 3</p> <p>13</p> <p>3</p> <p>3</p> <p>6</p>	<p>Natural Sciences (3 credits)</p>
<p><b>Concentration Courses/Groups/Electives:</b></p>		
<p><b>Free Electives:</b></p>	<p>9</p>	
<p><b>Total credit hours under Major Field of Study:</b></p>	<p>93 94 hours</p>	

<b>Minimum 27 hours required in program area.</b>		
<b>COLLEGE REQUIREMENTS:</b>		
<b>Orientation Course(s):</b> COS100	± 2	Interdisciplinary Perspectives (2 hrs)
<b>Other:</b>		
<b>Total credit hours under College Requirements:</b>	2 Hours	

<b><u>NCSU GENERAL EDUCATION PROGRAM REQUIREMENTS</u></b>		<b><u>At least one of the following must be listed:</u></b>
<p><i>Courses in the Major and/or Minor may also fulfill a General Education requirement; however, a GEP category <u>may not be subset</u> to require a specific course from the category list. Required courses must be listed in the Major/College requirements.</i></p> <p><b>Specific courses should not be listed in any of the fields below other than ENG 101.</b></p>		<ol style="list-style-type: none"> <li>1 Choose course(s) from the University Approved GEP course list for this category.</li> <li>2 Minimum requirements are satisfied by Major/College course requirements.</li> <li>3 Major/College course requirement satisfies <b>X</b> credit hrs of this requirement. Remaining hours required must be chosen from the University Approved GEP course list for the category.</li> <li>4 Co-requisite is satisfied by a Major/College course requirement.</li> <li>5 Choose course(s) from the University Approved GEP course lists for the Humanities/ Social Sciences/ Visual &amp; Performing Arts.</li> <li>6 Choose course(s) from the University Approved GEP course lists for Natural Sciences/Mathematical Sciences.</li> </ol>
<b>General Education Program Requirements:</b> Minimum 39-40 hrs	<i>Credit hours</i>	<i>How will the GEP requirement be met? (Choose applicable statement from 1-6 listed above)</i>
<b>Mathematical Sciences</b> (6 credits) (At least 1 course with MA or ST prefix) Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.		(Choose statement 1, 2 or 3)  2
<b>Natural Sciences</b> (7 credits) (At least 1 lab course or course with a lab) Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.		(Choose statement 1, 2 or 3)  2
<b>English 101 (C- or better required)</b> (4 credits)	4	ENG 101
<b>Humanities</b> (6 credits) (Courses from two different disciplines) Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.	6	(Choose statement 1, 2 or 3)  1
<b>Social Sciences</b> (6 credits) (Courses from two different disciplines) Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.	6	(Choose statement 1, 2 or 3)  1
<b>Additional Breadth</b> (3 credits) (Choose approach that is different from the approach of the Major) Major/College requirements cannot satisfy this requirement and an AB course cannot be double-counted except in satisfying the Global Knowledge or U.S. Diversity co-requisites.	3	(Choose statement 5 or 6)  5
<b>Interdisciplinary Perspectives</b> (5 credits) Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or	5 3	(Choose statement 1, 2 or 3)  3, COS100 (2 cr hrs)



U.S. Diversity co-requisites.			
<b>Health and Exercise Studies</b> (2 credits) (Including one Fitness and Wellness course)	2	Choose course(s) from the University Approved GEP course list for this category.	
<b>Total credit hours needed to complete GEP that are <u>not</u> satisfied as part of the Major/College requirements.</b>	<del>26</del> -24 hours		
<b>GEP Co-Requisites:</b>		<i>Courses taken in the Major, GEP, or Minor may double-count to fulfill the co-requisites. Courses that satisfy the U.S. Diversity or Global Knowledge co-requisite are marked on course lists with a "USD" or "GK" indicator.</i>	
<b>U.S. Diversity co-requisite (USD)</b>	n/a	(Choose statement 1 or 4) 1	
<b>Global Knowledge co-requisite (GK)</b>	n/a	(Choose statement 1 or 4) 1	
<b>Foreign Language Proficiency</b>	n/a	Proficiency at the FL_102 level required.	
<b>The following requirements must be satisfied within the College/Program:</b>		Place an <b>X</b> in the credit hour box to indicate below that the requirement is " <b>Satisfied by College/Program Requirements</b> "	
<b>Communication in the Major (Advanced Communication)</b>	X	Satisfied by College/Program Requirements	
<b>Technology Fluency</b>	X	Satisfied by College/Program Requirements	
<b>Total credit hours required to complete Degree: Total must be within 120-128 credit hours.</b>	120 Total hours	<b>As applicable, indicate here the overall GPA requirement for degree completion including course completion.</b>	

# North Carolina State University

Department of Physics  
College of Sciences

Box 8202  
Raleigh, North Carolina 27695-8202  
(919) 515-7471  
David\_Brown@ncsu.edu

J. David Brown  
Director of Undergraduate Programs

April 5, 2017

## MEMORANDUM

TO: University Course and Curriculum Committee  
FROM: David Brown, Director of Undergraduate Program, Department of Physics  
RE: Changes to the Physics BS curriculum (17PHYSBS)

Proposed Effective Date: Summer II semester, 2017

The Department of Physics proposes the following changes to the Physics BS degree:

1. Changes necessitated by the revision of COS100 to a 2 credit hour course satisfying interdisciplinary perspectives.
2. Replacing the "Introduction to Programming" requirement with the required course PY251.
3. Renaming the "Communication" requirement as "Advanced Writing".
4. Merging the "Chemistry/Basic Sciences" and "Technical Electives" categories.
5. Updating and correcting the course list for "Basic Sciences Electives".
6. Updating and correcting the course list for "Technical Electives".
7. Updating and correcting the list of courses excluded from "Free Electives".

### Justifications

#### 1. Changes to COS100 and Technical Electives

The College of Sciences orientation requirement was previously satisfied by either COS100 or E115, which were both 1 credit hour S/U graded courses. COS100 has been restructured as a 2 credit hour letter graded course that covers the orientation requirement as well as 2 credit hours of Interdisciplinary Perspectives. To bring our curriculum in line with the restructured COS100 course, we propose to:

- Replace the orientation requirement with the 2 credit hour, letter graded course COS100.
- Remove E115 as an option for orientation.
- Change the number of credit hours required for Interdisciplinary Perspectives from 5 to 3.
- Increase the Technical Electives requirement from 9 to 10 credit hours.

These changes will provide COS students with a more meaningful orientation experience, and allow them to complete 2 credit hours of Interdisciplinary Perspectives requirements. Students for whom COS100 is not a reasonable option (eg, internal or external transfer students) will be allowed to substitute 2 credit hours of interdisciplinary perspectives for the COS100 requirement. The increase in technical elective hours will keep the total number of credit hours required for the BS degree at 120. Beginning in Fall 2017, the PY department plans to revive the 1 credit hour technical elective course "Problem Solving in Physics" (taught as PY299 in Sp 2010, Sp 2011, Sp 2012 and Sp 2013) and to begin development of other 1 credit hour courses for physics majors.

## 2. Replacing Introduction to Programming with PY251

Currently the Introduction to Programming requirement can be satisfied by one of

- CSCS112, CSC116
- MA116
- PY251

The computer science department no longer offers CSC112, and CSC116 has all seats restricted to computer science and exploratory studies majors. The introductory programming courses CSC111 and CSC113 are also restricted, and generally unavailable to physics majors. MA116 is open to physics majors; however, this course is taught at a level that is not optimal for our students. Physics majors benefit from a rigorous programming course in preparation for advanced physics coursework and research. PY251 was developed specifically to fill this need. Thus, we propose to eliminate the "Introduction to Programming" requirement and replace it with the required course PY251, "Introduction to Scientific Computing."

## 3. Replacing the Requirement Title "Communication" with "Advanced Writing"

The Communication requirement is currently filled by one of

- ENG331, ENG332, ENG333

Students find the name of this requirement confusing, since there are no COM classes on the list. We propose to change the name of this category to "Advanced Writing".

## 4. Merging Chemistry/Basic Sciences with Technical Electives

The previous physics BS degree plan allowed for at most one passing grade below C- in each of four categories: Physics, Math/Statistics/Computing, Chemistry/Basic Sciences, and Technical Electives. These four categories consist of 38, 30, 7, and 10 credit hours of course requirements, respectively. The imbalance between the first two and last two categories effectively de-emphasizes the importance of Chemistry/Basic Sciences and Technical Electives courses. These courses, in fact, play an important role in the training of our students as physicists. We propose to strengthen our emphasis on these courses by modifying the curriculum to combine Chemistry/Basic Sciences and Technical Electives into a single category. We will allow a single passing grade below C- in each of the three categories: Physics, Math/Statistics/Computing, and Chemistry/Basic Sciences/Technical Electives.

## 5. Basic Sciences Electives

Basic sciences electives are intended to expose our students to a fundamental branch of science other than physics. They typically do not require prerequisites beyond courses that already meet a physics degree requirement. The current list of basic sciences electives consists of:

- BIO181, BIO183
- BME203
- CH201, CH202, CH203, CH204, CH220
- MEA200, MEA213, MEA214
- MSE200, MSE201, MSE203

MEA213 and MEA214 are no longer offered; in their place is the 4 credit hour course MEA215. We propose to update and expand the students' basic sciences options to the following courses:

- BIO165, BIO181, BIO183
- BME203
- CH201, CH202, CH203, CH204, CH220, CH222
- CHE205
- GN301
- MAE214
- MEA101, MEA110, MEA200, MEA210, MEA215, MEA220
- MSE200, MSE201, MSE203

- NE202
- PCC203
- TE200

This change increases the number of Basic Sciences Electives to 24. The impact on other departments should be minor. We have approximately 180 physics majors, so 180 physics majors/8 semesters  $\approx$  23 physics students per semester take a basic sciences course. With 24 course options, this represents about 1 student per course.

#### 6. Technical Electives

The current Technical Electives list has not been updated in many years, and contains a number of omissions and errors. We propose to define Technical Electives as courses at the 300 through 500 levels in science, mathematics, technology, engineering and in math and science education. More precisely, they are courses at the 300 through 500 levels with the following prefixes:

- AA, AES, ANS, AEC, BCH, BIO, BAE, BEC, BMA, BME, BBS, BIT, MBA, BUS, CHE, CH, CE, CBS, CSC, CS, EGR, ECO, EC, ECE, E, EGM, ENT, EA, ES, ET, FIM, FW, FS, FSA, FOR, GN, GIS, ECG, ID, ISE, LOG, MEA, MSE, EMS, MA, MAE, MES, MT, MB, NW, NE, NTR, OR, PSE, PY, PHY, PB, PP, PCC, PO, SSC, ST, SMT, TC, TE, TMS, TT, TOX, WPS, ZO,

Technical electives should not include courses that are required for the Physics BS degree and, in some cases, courses that are at the same or lower level than those required for the Physics BS degree. Thus, we propose to *exclude* the following courses from the Technical Electives list:

- MA302, MA303, MA305, MA331, MA341, MA401, MA405
- PY401, PY402, PY407, PY411, PY412, PY413, PY414, PY415, PY452, PY501, PY502, PY511, PY512, PY514, PY515, PY581, PY582

#### 7. Free Electives

The BS degree plan allows for 6 credit hours of Free Electives. The current list of courses that are excluded from use as a free elective consists of:

- BIO105, BIO106, BIO140, BIO141, BIO165
- CH100, CH101, CH111
- ENG101
- FLA101, FLC101, FLF101, FLG101, FLI101, FLJ101, FLN101, FLP101, FLR101, FLS101, FLS105
- GRK101
- LAT101
- MA101, MA103, MA103A, MA107, MA108, MA111, MA121, MA131, MA132, MA141, MA231, MA141, MA305
- PER101
- PY131, PY201, PY202, PY205, PY208, PY211, PY212

This list should serve to (i) prevent students from counting as a free elective a course that is designed for non-science majors, or is considered remedial for a physics major; (ii) prevent students from counting as a free elective a course that is required for the physics BS (to address cases in which the requirement has been previously satisfied by an approved substitution); and (iii) prevent students from counting as a free elective a course that is an anti-requisite for a required course (to address cases in which a student is able to enroll in such a course). With these purposes in mind, we propose to replace the current list with the following.

Courses intended for non-science majors and remedial courses:

- BIO105, BIO106, BIO120, BIO140, BIO141
- CH100, CH111
- ENG100

- FLA101, FLC101, FLF101, FLG101, FLI101, FLJ101, FLN101, FLP101, FLR101, FLS101, FLS105
- GRK101
- LAT101
- MA101, MA103, MA103A, MA105, MA107, MA108, MA111, MA114, MA132
- PER101
- PY131
- ST101

Courses required for the physics BS degree:

- CH101, CH102
- COS100
- ENG101
- MA141, MA241, MA242, MA341, MA401, MA405
- PY201, PY202, PY203, PY251, PY252, PY401, PY402, PY411, PY412, PY413, PY414, PY415, PY452

Courses that are anti-requisites for required courses:


- CH103, CH104
- MA121, MA131, MA151, MA152, MA205, MA231, MA303, MA305, MA331
- PY205, PY206, PY208, PY209, PY211, PY212, PY407

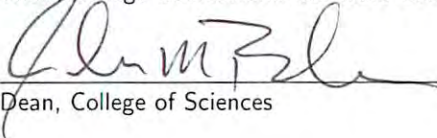
The restriction on foreign language courses should only apply to a language that the student has previously taken. On the Free Electives list in the degree audit, we would like to add the statement: "FL\*101 courses will be allowed for credit as a free elective if the language was not taken by the student in high school, was not used to meet foreign language proficiency, and is not the student's native language."

The new Free Electives list should help prevent students from accidentally or intentionally enrolling in a course that is not appropriate for a physics major, or is equivalent to one for which they have already received credit, and having that course count towards the Physics BS degree requirements.

Signatures:

 4/6/17  
\_\_\_\_\_  
Head, Physics Date

 4/10/17  
\_\_\_\_\_  
Chair, College Courses and Curricula Committee Date

 4/17/17  
\_\_\_\_\_  
Dean, College of Sciences Date

\_\_\_\_\_  
Chair, University Courses and Curricula Committee Date

\_\_\_\_\_  
Dean, Academic and Student Affairs Date

Effective Date: \_\_\_\_\_

FORMAT A  
(SEMESTER-BY-SEMESTER CURRICULUM DISPLAY)

Indicate display status: Current: Proposed: X Proposed Effective Semester: 2177

Degree/Plan Title: Bachelor of Science in Physics Concentration/Subplan Title: n/a

Plan SIS Code: 17PHYSBS Subplan SIS Code: n/a

New Degree Audit required? (Y or N) Y

**Critical Path Courses** - Identify using the code (CP) which courses are considered critical path courses which represent specific major requirements that are predictive of student success in a given program/plan. Place the (CP) next to the credit hours for the course.

FRESHMAN YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
PY201 University Physics I <sup>1</sup>	4 (CP)	PY202 University Physics II <sup>1</sup>	4 (CP)
MA141 Calculus I <sup>1,2</sup>	4 (CP)	MA241 Calculus II <sup>1,2</sup>	4 (CP)
<del>CH 101 Chemistry - A Molecular Science<sup>1</sup></del>	<del>3</del>	<del>Basic Sciences Elective<sup>1,2</sup></del>	<del>3</del>
<del>CH102 General Chemistry Laboratory<sup>1</sup></del>	<del>1</del>	CH101 Chemistry - A Molecular Science <sup>3</sup>	3
ENG101 Academic Writing and Research <sup>H</sup>	4	CH102 General Chemistry Laboratory <sup>3</sup>	1
HES_*** Health & Exercise Studies <sup>E</sup>	1	GEP Humanities Elective <sup>C</sup>	3
<del>Orientation Course</del>	<del>1</del>	<del>HES_*** Health &amp; Exercise Studies Course<sup>E</sup></del>	<del>1</del>
COS100 Science of Change	2		
	<i>Total:</i>		<i>Total: 15</i>
	<del>17-15</del>		
SOPHOMORE YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
PY203 University Physics III <sup>1,3</sup>	4 (CP)	PY411 Mechanics I <sup>1</sup>	3 (CP)
PY251 Introduction to Scientific Computing <sup>2</sup>	3	PY413 Thermal Physics <sup>1</sup>	3
PY252 Instrumental and Data Analysis <sup>1</sup>	2	MA341 Applied Differential Equations I <sup>1,2</sup>	3
MA242 Calculus III <sup>1,2</sup>	4 (CP)	<del>Statistics<sup>1,5</sup></del>	<del>3</del>
<del>Introduction to Programming<sup>1,4</sup></del>	<del>3</del>	Basic Sciences <sup>3,4</sup>	3
<del>GEP Interdisc. Perspectives<sup>6</sup></del>	<del>2-3</del>	GEP Humanities Elective <sup>C</sup>	3
GEP Social Sciences Elective <sup>D</sup>	3		
	<i>Total:</i>		<i>Total: 15</i>
	<del>15-16</del> 16		
JUNIOR YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
PY412 Mechanics II <sup>1</sup>	3	PY401 Quantum Physics I <sup>1</sup>	3
PY414 Electromagnetism I <sup>1</sup>	3	PY415 Electromagnetism II <sup>1</sup>	3
MA401 Applied Differential Equations II <sup>1,2</sup>	3	MA405 Linear Algebra <sup>1,2</sup>	3
<del>Computing/Numerical Methods<sup>1,6</sup></del>	<del>3</del>	Computing/Numerical Methods <sup>2,7</sup>	3
<del>GEP Interdisc. Perspectives<sup>6</sup></del>	<del>3</del>	Technical Elective <sup>3,8</sup>	1
Statistics <sup>2,5</sup>	3	<del>Communication<sup>7</sup></del>	<del>3</del>
Advanced Writing <sup>6</sup>	3	HES_***Health & Exercise Studies <sup>E</sup>	1
	<i>Total: 15</i>		<i>Total:</i>
			<del>13</del> 14

SENIOR YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
PY402 Quantum Physics II <sup>1</sup>	3	PY452 Advanced Physics Lab <sup>1</sup>	3
<del>GEP Additional Breadth HSS-VPA<sup>F</sup></del>	<del>3</del>	GEP Social Sciences Elective <sup>D</sup>	3
<del>GEP Social Sciences Elective<sup>P</sup></del>	<del>3</del>	GEP Additional Breadth HSS-VPA <sup>F</sup>	3
GEP Interdisc. Perspectives <sup>G</sup>	3	Technical Elective <sup>1-8 3,8</sup>	3
Technical Elective <sup>1-8 3,8</sup>	3	<del>Technical Elective<sup>1-8</sup></del>	<del>3</del>
Technical Elective <sup>3,8</sup>	3	Free Elective	3
Free Elective	3		
	Total: 15		Total: 15
Minimum Credit Hours Required for Graduation*: 120			

### Major/Program Footnotes:

- ~~1. At most one grade below a C is permitted in each of the four categories: Physics, Mathematics/Statistics/Computing, Chemistry/Basic Science, and Technical Electives.~~
- ~~2. Basic Science elective—Select one: BIO181, BIO183, CH201 and 202, CH220, CH221 and 222, MEA200, MEA213 and MEA214, MSE200, MSE201, or MSE203.~~
- ~~3. Students may substitute PY407 for PY203. Students who elect to take PY407 must also take the lab section of PY203.~~
- ~~4. Introduction to Programming—select from MA116, CSC112, CSC114, CSC116, or PY251.~~
- ~~5. Statistics course must be at the 300 level or above.~~
- ~~6. Computing/Numerical Methods—select from MA427, MA428, MA402, CSC302, PY525.~~
- ~~7. Communication—select from ENG331, ENG332, or ENG333.~~
- ~~8. Technical Electives are courses at the 300 level or above in physical, mathematical and biological sciences, and in engineering.~~

1. At most one grade below C- is permitted in the Physics category.
2. At most one grade below C- is permitted in the Math/Statistics/Computing category.
3. At most one grade below C- is permitted in the Chemistry/Basic Sciences/Technical Electives category.
4. Basic Sciences: select from BIO165, BIO181, BIO183, BME203, CH201, CH202, CH203, CH204, CH220, CH222, CHE205, GN301, MAE214, MEA101, MEA110, MEA200, MEA210, MEA215, MEA220, MSE200, MSE201, MSE203, NE202, PCC203, TE200
5. Statistics course must be at the 300 level or above.
6. Advanced Writing: select from ENG331, ENG332, ENG333.
7. Computing/Numerical Methods: select from CSC302, CSC427, CSC428, MA402, MA427, MA428, PY525.
8. Technical Electives are courses at the 300 level or above in science, mathematics, technology, engineering, and in math and science education.

### \*General Education Program (GEP) requirements and GEP Footnotes:

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied.

University approved GEP course lists for each of the following categories can be found at <http://www.ncsu.edu/uap/academic-standards/gep/courselists/index.html>.

- A. **Mathematical Sciences** (6 credit hours - one course with MA or ST prefix)  
Choose from the University approved GEP Mathematical Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **MA141, MA241**
- B. **Natural Sciences** (7 credit hours - include one laboratory course or course with a lab)  
Choose from the University approved GEP Natural Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **PY201, CH101**
- C. **Humanities** (6 credit hours selected from two different disciplines/course prefixes)  
Choose from the University approved GEP Humanities course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **none**
- D. **Social Sciences** (6 credit hours selected from two different disciplines/course prefixes)  
Choose from the University approved GEP Social Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **none**
- E. **Physical Education/Healthy Living** (2 credit hours - at least one 100-level Fitness and Wellness Course)  
Choose from the University approved GEP Physical Education/Healthy Living course list.
- F. **Additional Breadth** - (3 credit hours to be selected from the following checked University approved GEP course lists)  
 Humanities/Social Sciences/Visual and Performing Arts



**G. Interdisciplinary Perspectives** (5-6 credit hours)

Choose from the University approved GEP Interdisciplinary Perspectives course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **COS100**

**H. Introduction to Writing** (4 credit hours satisfied by completing ENG 101 with a C- or better )

The following **Co-Requisites** must be satisfied to complete the General Education Program requirements:

**I. U.S. Diversity** (USD)

Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite. The following course(s) completed as part of the Major requirements may fulfill this requirement: **none**

**J. Global Knowledge** (GK)

Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite. The following course(s) completed as part of the Major requirements may fulfill this requirement: **none**

**K. Foreign Language proficiency** - Proficiency at the FL\_102 level is required for graduation.



<p><b>Chemistry/Basic Sciences</b>  <del>CH101, CH102</del>  <b>GRP301—Basic Sciences Electives</b> (<del>CH201/202, CH220, BIO181, BIO183, MEA200, MEA213/214, MSE200, MSE201, MSE203</del>)</p> <p><b>Technical Electives</b>  <b>GRP401—Technical Electives</b> (Any course at the 300-level or above in the physical, mathematical, and biological sciences, in engineering, and in mathematics and science education.)</p> <p><b>Chemistry/Basic Sciences/Technical Electives*</b>  CH101 Chemistry – A Molecular Science  CH102 General Chemistry Laboratory  Basic Sciences (BIO165, BIO181, BIO183, BME203, CH201, CH202, CH203, CH204, CH220, CH222, CHE205, GN301, MAE214, MEA101, MEA110, MEA200, MEA210, MEA215, MEA220, MSE200, MSE201, MSE203, NE202, PCC203, TE200)  Technical Electives (Any course at the 300 through 500 levels with prefix:  AA, AES, ANS, AEC, BCH, BIO, BAE, BEC, BMA, BME, BBS, BIT, MBA, BUS, CHE, CH, CE, CBS, CSC, CS, EGR, ECO, EC, ECE, E, EGM, ENT, EA, ES, ET, FIM, FW, FS, FSA, FOR, GN, GIS, ECG, ID, ISE, LOG, MEA, MSE, EMS, MA, MAE, MES, MT, MB, NW, NE, NTR, OR, PSE, PY, PHY, PB, PP, PCC, PO, SSC, ST, SMT, TC, TE, TMS, TT, TOX, WPS, ZO ,  excluding:  MA302, MA303, MA305, MA331, MA341, MA401, MA405 , PY401, PY402, PY407, PY411, PY412, PY413, PY414, PY415, PY452, PY501, PY502, PY511, PY512, PY514, PY515, PY581, PY582)</p> <p><del>At most one grade below C- is permitted in each of the above categories.</del></p> <p>*At most one passing grade below C- is allowed in each of the three categories: Physics, Math/Statistics/Computing, and Chemistry/Basic Sciences/Technical Electives.</p> <p><b>Communication:</b>  <b>GRP 120+ ENG331, ENG332, or ENG333</b>  <del>This Advanced Writing course may not be used to satisfy the Humanities GEP requirements.</del></p> <p><b>Advanced Writing</b> (ENG331, ENG332, ENG333)</p>	<p>4 3 9 3 1 3 10 3 3</p>	<p>Natural Sciences (3 credits)</p>
<p><b>Concentration Courses/Groups/Electives:</b></p>		
<p><b>Free Electives:</b></p>	<p>6</p>	
<p><b>Total credit hours under Major Field of Study:</b>  <b>Minimum 27 hours required in program area.</b></p>	<p>93 94 hours</p>	

<b>COLLEGE REQUIREMENTS:</b>		
<b>Orientation Course(s):</b> COS100	± 2	Interdisciplinary Perspectives (2 hrs)
<b>Other:</b>		
<b>Total credit hours under College Requirements:</b>	2 Hours	

<b><u>NCSU GENERAL EDUCATION PROGRAM REQUIREMENTS</u></b>		<b><u>At least one of the following must be listed:</u></b>
<p><i>Courses in the Major and/or Minor may also fulfill a General Education requirement; however, a GEP category may not be subset to require a specific course from the category list. Required courses must be listed in the Major/College requirements.</i></p> <p><b>Specific courses should not be listed in any of the fields below other than ENG 101.</b></p>		<ol style="list-style-type: none"> <li>1 Choose course(s) from the University Approved GEP course list for this category.</li> <li>2 Minimum requirements are satisfied by Major/College course requirements.</li> <li>3 Major/College course requirement satisfies <b>X</b> credit hrs of this requirement. Remaining hours required must be chosen from the University Approved GEP course list for the category.</li> <li>4 Co-requisite is satisfied by a Major/College course requirement.</li> <li>5 Choose course(s) from the University Approved GEP course lists for the Humanities/ Social Sciences/ Visual &amp; Performing Arts.</li> <li>6 Choose course(s) from the University Approved GEP course lists for Natural Sciences/Mathematical Sciences.</li> </ol>
<b>General Education Program Requirements:</b> Minimum 39-40 hrs	Credit hours	How will the GEP requirement be met? <b>(Choose applicable statement from 1-6 listed above)</b>
<b>Mathematical Sciences</b> (6 credits) <b>(At least 1 course with MA or ST prefix)</b> Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.		(Choose statement 1, 2 or 3)  2
<b>Natural Sciences</b> (7 credits) <b>(At least 1 lab course or course with a lab)</b> Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.		(Choose statement 1, 2 or 3)  2
<b>English 101 (C- or better required)</b> (4 credits)	4	ENG 101
<b>Humanities</b> (6 credits) <b>(Courses from two different disciplines)</b> Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.	6	(Choose statement 1, 2 or 3)  1
<b>Social Sciences</b> (6 credits) <b>(Courses from two different disciplines)</b> Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.	6	(Choose statement 1, 2 or 3)  1
<b>Additional Breadth</b> (3 credits) <b>(Choose approach that is different from the approach of the Major)</b> Major/College requirements cannot satisfy this requirement and an AB course cannot be double-counted except in satisfying the Global Knowledge or U.S. Diversity co-requisites.	3	(Choose statement 5 or 6)  5
<b>Interdisciplinary Perspectives</b> (5 credits) Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.	± 3	(Choose statement 1, 2 or 3)  3, COS100 (2 cr hrs)

<b>Health and Exercise Studies</b> <i>(2 credits)</i> <i>(Including one Fitness and Wellness course)</i>	2	Choose course(s) from the University Approved GEP course list for this category.
<b>Total credit hours needed to complete GEP that are <u>not</u> satisfied as part of the Major/College requirements.</b>	<del>26</del> 24 hours	
<b>GEP Co-Requisites:</b>		<i>Courses taken in the Major, GEP, or Minor may double-count to fulfill the co-requisites. Courses that satisfy the U.S. Diversity or Global Knowledge co-requisite are marked on course lists with a "USD" or "GK" indicator.</i>
<b>U.S. Diversity co-requisite (USD)</b>	n/a	<i>(Choose statement 1 or 4)</i> 1
<b>Global Knowledge co-requisite (GK)</b>	n/a	<i>(Choose statement 1 or 4)</i> 1
<b>Foreign Language Proficiency</b>	n/a	Proficiency at the FL_102 level required.
<b>The following requirements must be satisfied within the College/Program:</b>		Place an <b>X</b> in the credit hour box to indicate below that the requirement is " <b>Satisfied by College/Program Requirements</b> "
<b>Communication in the Major (Advanced Communication)</b>	X	Satisfied by College/Program Requirements
<b>Technology Fluency</b>	X	Satisfied by College/Program Requirements
<b>Total credit hours required to complete Degree: Total must be within 120-128 credit hours.</b>	120 Total hours	<b>As applicable, indicate here the overall GPA requirement for degree completion including course completion.</b>

SIGNATURE PAGE

CURRICULA ACTION FOR 16FLLBA 16FLLGSCI

RECOMMENDED BY:

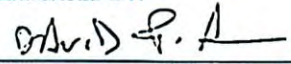


29 Mar 2017

\_\_\_\_\_  
HEAD, DEPARTMENT/PROGRAM

\_\_\_\_\_  
DATE

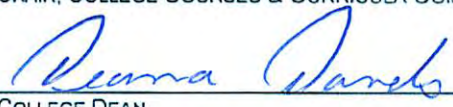
ENDORSED BY:



18 April 2017

\_\_\_\_\_  
CHAIR, COLLEGE COURSES & CURRICULA COMMITTEE

\_\_\_\_\_  
DATE



4/25/17

\_\_\_\_\_  
COLLEGE DEAN

\_\_\_\_\_  
DATE

APPROVED BY:

\_\_\_\_\_  
CHAIR, UNIVERSITY COURSES & CURRICULA COMMITTEE

\_\_\_\_\_  
DATE

\_\_\_\_\_  
CHAIR, COUNCIL ON UNDERGRADUATE EDUCATION

\_\_\_\_\_  
DATE

\_\_\_\_\_  
DEAN, DIVISION OF ACADEMIC AND STUDENT AFFAIRS (DASA)

\_\_\_\_\_  
DATE

APPROVED EFFECTIVE DATE \_\_\_\_\_

September 12, 2016

To: University Curriculum Committee

From: Department of Foreign Languages & Literatures (FLL)

Re: Revision of Error for German Studies Major Concentration

The German Science and Technology curriculum (Plan SIS Code: 16FLLBA / Subplan SIS Code: 16FLLGSCI) is supposed to have a two-course (6 credits) Social Science requirement. The current Formats A & B need to be corrected as follows.

Replace:

**3. Social Sciences:** Choose four 3-credit hour courses (12 credit hours total) from the CHASS approved lists in at least three of the following areas: ANT, ARE, EC, PS, PSY, and SOC. Also ENG 210, GEO/SOC 220, or STS 402. Six (6) credit hours must be taken from the GEP Social Sciences list.

With:

**3. Social Sciences:** Choose two 3-credit hour courses (6 credit hours total) from the approved university GEP Social Science list from two different disciplines.

The correct requirement was mistakenly changed when FLL merged its majors into one major in 2014 with different concentrations. This major had special permission from the College of Humanities & Social Sciences for two social science courses to support double majors in the College of Engineering. It appears that a clerical error was made during the transition. Formats A & B have been revised to reflect this correction; the degree audit also needs to be corrected.

FORMAT A  
(SEMESTER-BY-SEMESTER CURRICULUM DISPLAY)

Indicate display status: Current: Proposed: **X** Proposed Effective Semester: **2171**

Degree/Plan Title: **Foreign Languages and Literatures Technology**

Concentration/Subplan Title: **German Studies: Science and**

Plan SIS Code: 16FLLBA

Subplan SIS Code: **16FLGSCI**

New Degree Audit required? (Y or N) N

Critical Path Courses - Identify using the code (CP) which courses are considered critical path courses which represent specific major requirements that are predictive of student success in a given program/plan. Place the (CP) next to the credit hours for the course.

FRESHMAN YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
ENG 101 Academic Writing & Research <sup>F</sup>	4	FLG 202 or FLG 212 <sup>4</sup>	3 (CP)
FLG 201 Intermediate German I <sup>4</sup>	3 (CP)	History I <sup>1</sup>	3
GEP Natural Science <sup>B</sup>	3	GEP Mathematical Science <sup>A</sup>	3
GEP Mathematical Science <sup>A</sup>	3	GEP Natural Science with lab <sup>B</sup>	4
Free Elective <sup>7</sup>	3	Free Elective <sup>7</sup>	3
	<i>Total: 16</i>		<i>Total: 16</i>
SOPHOMORE YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
Departmental Elective <sup>8</sup>	3	Departmental Elective <sup>8</sup>	3
History II <sup>1</sup>	3	FLG Advised Elective <sup>9</sup>	3
Social Science <sup>3</sup>	3	Philosophy <sup>5</sup>	3
Arts & Letters <sup>9</sup>	3	Social Science <sup>3</sup>	3
Free Elective <sup>7</sup>	3	Free Elective <sup>7</sup>	3
	<i>Total: 15</i>	Health and Exercise Studies <sup>C</sup>	1
			<i>Total: 16</i>
JUNIOR YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
FLG 320 Introduction to German Literature <sup>2</sup>	3	(best semester to study abroad) <sup>13</sup>	
FLG Advised Elective <sup>9</sup>	3	Advised Elective <sup>12</sup>	3
GEP Additional Breadth: Math/Natural Sci <sup>D</sup>	3	FLG 499 <sup>13</sup>	3
Free Elective <sup>7</sup>	6	Free Electives <sup>7</sup>	6
Health and Exercise Studies <sup>C</sup>	1		
	<i>Total: 16</i>		<i>Total: 12</i>
SENIOR YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
Advised Electives <sup>10</sup>	3	FLG 492 Senior Seminar	3
GEP Interdisciplinary Perspectives <sup>E</sup>	3	FLG German Literature Elective <sup>2, 11</sup>	3
Free Electives <sup>7</sup>	10	GEP Interdisciplinary Perspectives <sup>E</sup>	2
		Free Electives <sup>7</sup>	7
	<i>Total: 16</i>		<i>Total: 15</i>
Minimum Credit Hours Required for Graduation: 122 <sup>G, H, I</sup>			

**Major/Program Footnotes:** Please consult the CHASS Key Points, the "Handbook for Foreign Language Majors" and the Degree Audits for detailed information.

- 1. History I and II:** (6 credit hours selected from two groups: History I and History II) Choose from the CHASS approved History I and History II course list
- 2. Literature I and II:** (6 credit hours are met with German major Literature courses)
- 3. Social Sciences:** Choose two 3-credit hour courses (6 credit hours total) from the approved GEP Social Science list from two different disciplines.



- 4. Foreign Language:** Completion of FL 201. (All students must take the NCSU Proficiency Test upon entering CHASS. Students who take FL 101 will not receive graduation credit for the course unless it is in a language other than the one used to fulfill the 201 language requirement.)
- 5. Philosophy.** Choose any 3-credit PHI course on the GEP-Humanities list.
- 6. Arts and Letters.** Choose from the **College** approved Arts & Letters course list.
- 7. Free Electives.** Any course except MA 101, FL\_ 101, FLS 105, LAT 101, GRK 101, and PER 101. Only 12 credit hours of free electives may be taken for credit only (S/U).
- 8. Language & Culture Core (9 hours).** Courses with a strong focus on building German language skills within cultural contexts: **C- or better is required in these courses.** Please consult your degree audit for the required prerequisites and the list of electives.
- 9. Advised Electives (6 hours):** Courses with a primary focus on German/Austrian/Swiss and European culture and civilization, including courses from other departments. **C- or higher is required in these courses.** Please consult your degree audit for the required prerequisites and the list of electives.
- 10. Literature Elective (3 hours).** Courses with a focus on German Literature. **C- or higher is required in these courses.** Please consult your degree audit for the required prerequisites and the list of electives.
- 11. Study Abroad/Internship Abroad:** It is required that all German Studies students participate in at least one regular semester of study abroad or internship (3-4 months minimum) in a German-speaking country. Please note that no more than 15 hours of transfer credit (from study abroad or from other US institutions which are not a part of UNC-Online) may be applied towards the core courses in German Studies (core: required courses, departmental electives, FLG electives I and II, and advised electives I and II). FLG 499 is an internship course with up to 6 credits. For students who choose study abroad instead of an internship, FLG 499 serves as a placeholder for transfer credits from the study abroad semester. Students in the Science and Technology concentration who study abroad must take a 3 credit course related to their other major, taught in German.

**\*General Education Program (GEP) requirements and GEP Footnotes: (restore all standard GEP footnotes)**

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied.

University approved GEP course lists for each of the following categories can be found at

<http://www.ncsu.edu/uap/academic-standards/gep/courselists/index.html>.

- A. Mathematical Sciences (6 credit hours – one course with MA or ST prefix)**  
Choose from the University approved GEP Mathematical Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement:
- B. Natural Sciences (7 credit hours – include one laboratory course or course with a lab)**  
Choose from the University approved GEP Natural Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement:
- C. Humanities (6 credit hours selected from two different disciplines/course prefixes)**  
Choose from the University approved GEP Humanities course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **History 1 and Philosophy requirements**
- D. Social Sciences (6 credit hours selected from two different disciplines/course prefixes)**  
Choose from the University approved GEP Social Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: **Social Sciences requirement**
- E. Physical Education/Healthy Living (2 credit hours – at least one 100-level Fitness and Wellness Course)**  
Choose from the University approved GEP Physical Education/Healthy Living course list.
- F. Additional Breadth - (3 credit hours to be selected from the following checked University approved GEP course lists)**  
\_\_\_\_ Humanities/Social Sciences/Visual and Performing Arts or **X** Mathematical Sciences/Natural Sciences/Engineering
- G. Interdisciplinary Perspectives (5-6 credit hours)**  
Choose from the University approved GEP Interdisciplinary Perspectives course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement:
- H. Introduction to Writing (4 credit hours satisfied by completing ENG 101 with a C- or better )**

The following **Co-Requisites** must be satisfied to complete the General Education Program requirements:

- I. U.S. Diversity (USD)**  
Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite. The following course(s) completed as part of the Major requirements may fulfill this requirement:
- J. Global Knowledge (GK)**  
Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved

*GEP course lists as meeting the Global Knowledge (GK) co-requisite. The following course(s) completed as part of the Major requirements may fulfill this requirement:*

**Foreign Language proficiency** - Proficiency at the FL\_102 level is required for graduation.



<p>AFS 275 or 276, HI 207, 214, 215, 216, 232, 233, 263, 264, 270, 275, 276</p> <p><b>History II</b> (<i>Req: 000019313; GRP 502</i>) - A 200-level survey course covering our own or a similar culture required. Choose one 3-credit hour course from the College-approved History 2 list HI 205, 208, 210, 221, 222, 251, 252, 253, 254</p> <p><b>Philosophy</b> (<i>Req: 000019316; GRP 511</i>) - Any PHI course on the approved GEP-Humanities list PHI 205, 210, 214, 221, 300, 301, 302, 305, 309, 310, 312, 313, 325, 330, 331, 332, 333, 340, 375, 376, 401, 420, 425, 440, 447, PSY 425, STS 325</p> <p><b>Arts and Letters</b> (<i>Req: 000019317; GRP 523</i>) – Choose one three credit hour course from the College approved Arts and Letters list. ADN 111, 112, 202, 212, 219, 272, 273, 281, 311, 384, 386, 414, AFS 230, 260, 375, ARC 140, ARS 251, 252, 259, 306, 351, 353, CLA 210, COM 321, 364, 374, 411, D 231, DAN 272, 295, ENG 282, 375, 492, FL 216, FLF 318, FLG 318, FLS 360, GD 203, 303, HA 201, 202, 203, 240, 298, 395, 401, 404, 410, 498, HI 240, 320, 402, 407, 408, IDS 496, LAR 444, MUS 180, 200, 201, 202, 205, 206, 230, 260, 306, 310, 315, 320, 330, 350, 360, REL 200, 210, 230, 298, 309, 311, 312, 314, 317, 320, 323, 327, 331, 332, 333, 334, 340, 350, 383, 402, 408, 412, 413, 471, 473, 482, 489, 491, 496, 498, SOC 309, STS 471, THE 203, 233, 303, 323, 334, 340, WGS 472, 473</p> <p><b>Social Science</b> (<i>Req: 000019692; GRP 541</i>) (Choose <b>two</b> different disciplines) <b>Anthropology</b> - ANT 251, 252, 253, 254, 261, 295, 310, 315, 325, 330, 345, 346, 351, 354, 370, 371, 374, 389, 395, 411, 412, 416, 419, 421, 424, 427, 431, 433, 444, 450, 460, 464, 475, 483, 495, 496, 498, FLJ 351, HI 587, SOC 261, WGS 444 <b>Agricultural Economics</b> -ARE 201, 201A, 215, 260, 301, 303, 304, 306, 309, 311, 312, 321, 323, 332, 336, 345, 404, 412, 413, 433, 444, 490, 492, 493, 494, 495, EC 301, 336, 436 <b>Economics</b> – ARE 301, 336, EC 201, 202, 205, 301, 302, 305, 336, 337, 348, 351, 377, 404, 410, 413, 431, 436, 437, 449, 451, 452, 474, 480, 490, 491, 495, 498 <b>Psychology</b> – AFS 345, EDP 304, 476, 582, ISE 540, PHI 425, 525, PSY 200, 230, 240, 241, 242, 243, 307, 311, 312, 313, 340, 345, 360, 370, 376, 400, 406, 410, 411, 416, 420, 425, 430, 431, 436, 470, 475, 491, 495, 498, 499, , WGS 406 <b>Multidisciplinary</b> – ENG 210, GEO 220, SOC 220, STS 402</p>	<p>3</p> <p>3</p> <p>3</p> <p>6</p> <p>21</p>	<p>Humanities (3)</p> <p>Social Sciences (6)</p>
<p><b>Total credit hours under College Requirements:</b></p>	<p>21</p>	

<b><u>NCSU GENERAL EDUCATION PROGRAM REQUIREMENTS</u></b>		<b>At least one of the following must be listed:</b>
<p><i>Courses in the Major and/or Minor may also fulfill a General Education requirement; however, a GEP category <u>may not be subset</u> to require a specific course from the category list. Required courses must be listed in the Major/College requirements.</i></p> <p><i>Specific courses should not be listed in any of the fields below other than ENG 101.</i></p>		<ol style="list-style-type: none"> <li>1 Choose course(s) from the University Approved GEP course list for this category.</li> <li>2 Minimum requirements are satisfied by Major/College course requirements.</li> <li>3 Major/College course requirement satisfies <b>X</b> credit hrs of this requirement. Remaining hours required must be chosen from the University Approved GEP course list for the category.</li> <li>4 Co-requisite is satisfied by a Major/College course requirement.</li> <li>5 Choose course(s) from the University Approved GEP course lists for the Humanities/ Social Sciences/ Visual &amp; Performing Arts.</li> <li>6 Choose course(s) from the University Approved GEP course lists for Natural Sciences/Mathematical Sciences.</li> </ol>
<b>General Education Program Requirements:</b> <i>Minimum 39-40 hrs</i>	<i>Credit hours</i>	<i>How will the GEP requirement be met? (Choose applicable statement from 1-6 listed above) (Choose statement 1, 2 or 3)</i>
<b>Mathematical Sciences</b> (6 credits) (At least 1 course with MA or ST prefix) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	<b>6</b>	Choose course(s) from the University Approved GEP course list for this category.
<b>Natural Sciences</b> (7 credits) (At least 1 lab course or course with a lab) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	<b>7</b>	Choose course(s) from the University Approved GEP course list for this category.
<b>English 101 (C- or better required)</b> (4 credits)	<b>4</b>	<b>ENG 101</b>
<b>Humanities</b> (6 credits) (Courses from two different disciplines) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	<b>X</b>	<b>Minimum requirements are satisfied by Major/College course requirements.</b>
<b>Social Sciences</b> (6 credits) (Courses from two different disciplines) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	<b>X</b>	<b>Minimum requirements are satisfied by Major/College course requirements.</b>
<b>Additional Breadth</b> (3 credits) (Choose approach that is different from the approach of the Major) <i>Major/College requirements cannot satisfy this requirement and an AB course cannot be double-counted except in satisfying the Global Knowledge or U.S. Diversity co-requisites.</i>	<b>3</b>	<b>Choose course(s) from the University Approved GEP course lists for Natural Sciences/Mathematical Sciences.</b>
<b>Interdisciplinary Perspectives</b> (5-6 credits) <i>Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</i>	<b>5</b>	<b>Choose course(s) from the University Approved GEP course list for this category</b>
<b>Health and Exercise Studies</b> (2 credits) (Including one Fitness and Wellness course)	<b>2</b>	<b>Choose course(s) from the University Approved GEP course list for this category</b>
<b>Total credit hours needed to complete GEP that are <u>not</u> satisfied as part of the Major/College requirements.</b>	<b>27</b>	
<b>GEP Co-Requisites:</b>		<i>Courses taken in the Major, GEP, or Minor may double-count to fulfill the co-requisites. Courses that satisfy the U.S. Diversity or Global Knowledge co-requisite are marked on course lists with a "USD" or "GK" indicator. (Choose statement 1 or 4)</i>
<b>U.S. Diversity co-requisite</b> (USD)	n/a	Choose course(s) from the University Approved GEP course list for this category. (Choose statement 1 or 4)
<b>Global Knowledge co-requisite</b> (GK)	n/a	<b>Satisfied by Major requirement</b>
<b>Foreign Language Proficiency</b>	n/a	Proficiency at the FL_102 level required.
<b>The following requirements must be satisfied within the College/Program:</b>		Place an X in the credit hour box to indicate below that the requirement is "Satisfied by College/Program Requirements"
<b>Communication in the Major (Advanced Communication)</b>	<b>X</b>	Satisfied by College/Program Requirements
<b>Technology Fluency</b>	<b>X</b>	Satisfied by College/Program Requirements

<b>Total credit hours required to complete Degree:</b> Total must be within 120-128 credit hours.	122	As applicable, indicate here the overall GPA requirement for degree completion including course completion: 2.0 overall GPA.
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# Current

## Foreign Language and Literatures (BA): German Studies Science Technology (16FLLBA-16FLLGSCI)

Semester Display Effective Date: 8.2014

### FRESHMAN YEAR

Fall Semester	Credit	Spring Semester	Credit
ENG 101 Academic Writing & Research <sup>F</sup>	4	FLG 202 or FLG 212 <sup>4</sup>	3
FLG 201 Intermediate German I <sup>4</sup>	3	History I <sup>1</sup>	3
GEP Natural Science <sup>B</sup>	3	GEP Mathematical Science <sup>A</sup>	3
GEP Mathematical Science <sup>A</sup>	3	GEP Natural Science with Lab <sup>B</sup>	4
Free Elective <sup>7</sup>	3	Free Elective <sup>7</sup>	3
	<b>16</b>		<b>16</b>

### SOPHOMORE YEAR

Fall Semester	Credit	Spring Semester	Credit
Departmental Elective <sup>8</sup>	3	Departmental Elective <sup>8</sup>	3
History II <sup>1</sup>	3	FLG Advised Electives I <sup>9</sup>	3
Social Science <sup>3</sup>	3	Philosophy <sup>5</sup>	3
Arts & Letters <sup>5</sup>	3	Social Science <sup>3</sup>	3
Free Elective <sup>7</sup>	3	Free Elective <sup>7</sup>	3
	<b>15</b>	Health and Exercise Studies <sup>C</sup>	1
			<b>16</b>

### JUNIOR YEAR

Fall Semester	Credit	Spring Semester	Credit
FLG 320 Introduction to German Literature <sup>2</sup>	3	(Best Semester to Study Abroad) <sup>13</sup>	3
FLG Advised Elective <sup>9</sup>	3	Advised Electives I <sup>10</sup>	3
GEP Additional Breadth: Math/Natural Sci <sup>D</sup>	3	FLG 499 <sup>13</sup>	6
Free Electives <sup>7</sup>	6	Free Electives <sup>7</sup>	
Health and Exercise Studies <sup>C</sup>	1		<b>12</b>
	<b>16</b>		

### SENIOR YEAR

Fall Semester	Credit	Spring Semester	Credit
Advised Electives <sup>10</sup>	3	FLG 492 Senior Seminar	3
GEP Interdisciplinary Perspectives <sup>B</sup>	3	FLG German Literature Elective <sup>2,11</sup>	3
		GEP Interdisciplinary Perspectives <sup>E</sup>	2

Free Electives <sup>7</sup>	10	Free Electives <sup>7</sup>	7
	16		15

Minimum Credit Hours Required for Graduation<sup>G,H,I</sup>: 122

**Major/Program Footnotes:** Please consult the CHASS Key Points, the “Handbook for Foreign Language Majors” and the Degree Audits for detailed information.

1. **History I and II:** (6 credit hours selected from two groups: History I and History II) *Choose from the CHASS approved History I and History II course list.*
2. **Literature I and II:** (6 credit hours are met with German major Literature courses)
3. **Social Sciences:** *Choose four 3-credit hour courses (12 credit hours total) from the CHASS approved lists in at least three of the following areas: ANT, ARE, EC, PS, PSY, SOC. Also ENG 210, GEO/SOC 220, or STS 402. Six (6) credit hours must be taken from the GEP Social Sciences list.*
4. **Foreign Language:** *Completion of FL 201.* (All students must take the NCSU Proficiency Test upon entering CHASS. Students who take FL 101 will not receive graduation credit for the course unless it is in a language other than the one used to fulfill the 201 language requirement.)
5. **Philosophy.** *Choose any 3-credit PHI course on the GEP-Humanities list.*
6. **Arts and Letters.** *Choose from the CHASS approved Arts & Letters course list.*
7. **Free Electives.** *Any course except MA 101, FL\_101, FLS 105, LAT 101, GRK 101, and PER 101. 101-level foreign-language courses can be used as free electives if they are in languages other than the language the student uses to fulfill major language requirement. Only 12 credit hours of free electives may be taken for credit only (S/U).*
8. **Departmental Elective:** (3 hours). Courses with a strong focus on building German language skills within cultural contexts: **C- or better is required in these courses.** Please consult with your degree audit for the required prerequisites and the list of electives.
9. **FLG Advised Electives I:** (6 hours). Courses with a primary focus on German/Austrian/Swiss and European culture and civilization. **C- or better is required in these courses.** Please consult with your degree audit for the required prerequisites and the list of electives.
10. **Advised Electives I:** (3 hours): Courses with a primary focus on German/Austrian/Swiss and European culture and civilization, including courses from other departments. **C- or better is required in these courses.** Please consult with your degree audit for the required prerequisites and the list of electives.
11. **FLG German Literature Elective:** (3 hours). Courses with a primary focus on German Literature. **C- or better is required in these courses.** Please consult with your degree audit for the required prerequisites and the list of electives.
12. **Advised Electives II:** (3 hours). Courses with a primary focus on German/Austrian/Swiss or European artifacts. **C- or better is required in these courses.** Please consult with your degree audit for the required prerequisites and the list of electives.
13. **Study Abroad/Internship Abroad.** It is required that all German Studies students participate in at least one regular semester of study abroad or internship (3-4 months minimum) in a German-speaking country. Please note that no more than 15 hours of transfer credit (from study abroad or other US Institutions which are not a part of UNC-Online) may be applied towards core courses in German Studies (core: required courses, departmental electives, FLG electives I and II, and advised electives I and II). FLG 499 is an internship course with up to 6 credits. For students who choose study abroad instead of an internship, FLG 499 serves as a placeholder for transfer credits from the study abroad semester. Students in the Science and Technology concentration who study abroad must take a 3 credit course related to their other major, taught in German.

**\*General Education Program (GEP) requirements and GEP Footnotes:**

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied. University approved GEP course lists for each of the following categories can be found at <http://oucc.dasa.ncsu.edu/general-education-program/>.

- A. **Mathematical Sciences** (6 credit hours-one course with MA or ST prefix)  
*Choose from the University approved GEP Mathematical Sciences course list.*
- B. **Natural Sciences** (7 credit hours-include one laboratory course or course with a lab)  
*Choose from the University approved GEP Natural Sciences course list.*
- C. **Health and Exercise Studies** (2 credit hours-at least one 100-level Fitness and Wellness Course)  
*Choose from the University approved GEP Health and Exercise Studies course list.*
- D. **Additional Breadth** (3 credit hours to be selected from the following checked University approved GEP course lists):  
Mathematical Sciences/Natural Sciences/Engineering.
- E. **Interdisciplinary Perspectives** (5-6 credit hours)  
*Choose from the University approved GEP Interdisciplinary Perspectives course list.*
- F. **Introduction to Writing** (4 credit hours satisfied by completing ENG 101 with a C- or better)

The following Co-Requisites must be satisfied to complete the General Education Program requirements:



**G. U.S. Diversity (USD)**

*Choose from the University approved GEP US. Diversity course list or choose a course identified on the approved GEP course lists as meeting the US. Diversity (USD) co-requisite.*

**H. Global Knowledge (GK)**

*Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite.*

**I. Foreign Language Proficiency-** Proficiency at the FL\_102 level is required for graduation.

SIGNATURE PAGE

CURRICULA ACTION FOR 16IDSBA 16IDSWGS

RECOMMENDED BY:

BL Kelly 4.18.17  
HEAD, DEPARTMENT/PROGRAM DATE

ENDORSED BY:

RL 4/18/2017  
CHAIR, COLLEGE COURSES & CURRICULA COMMITTEE DATE

Ken Davis 4/25/17  
COLLEGE DEAN DATE

APPROVED BY:

\_\_\_\_\_  
CHAIR, UNIVERSITY COURSES & CURRICULA COMMITTEE DATE

\_\_\_\_\_  
CHAIR, COUNCIL ON UNDERGRADUATE EDUCATION DATE

\_\_\_\_\_  
DEAN, DIVISION OF ACADEMIC AND STUDENT AFFAIRS (DASA) DATE

APPROVED EFFECTIVE DATE \_\_\_\_\_

NC STATE UNIVERSITY

Campus Box 7107  
Raleigh, NC 27695-7107

919.515-7518  
<https://ids.chass.ncsu.edu/>

**MEMORANDUM**

Date: April 3, 2017

To: NCSU University Courses and Curricula Committee

From: Craig C. Brookins

Director, Interdisciplinary Studies Degree Programs



Re: Curricular Action: Courses to be added to disciplinary groupings for WGS curricular plan

Plan/Subplan name: **Interdisciplinary Studies/Women's and Gender Studies;  
Women's and Gender Studies Minor**

SIS code: **16IDSBA\_16IDSWGS;  
16WGM**

Please add the following courses to departmental electives as indicated below. Additional, please add these three courses to elective options for the minor.

1. **WGS/REL 473/573 Religion, Gender, and Reproductive Technologies**
  - a. To be listed under "Concentration Area Advanced.
2. **WGS 330 Women and Health**
  - a. To be listed under "Concentration Area."
3. **WGS 220 Men and Masculinity**
  - a. To be listed under "Concentration Area."

Reason for the change: **Our IDSWGS majors and 16WGM minors have been taking these courses for some time. The impact of the revision will be to provide students with more options to fulfill major/minor requirements.**

**Revision approval has been received for the cross-listed course (WGS/REL 473/573) from the Department of Philosophy and Religion.**

Proposed effective date for title change: **2171**

**Re: 16IDSBA IDSWGS**

1 message

David Austin &lt;david\_austin@ncsu.edu&gt;

Mon, Apr 3, 2017 at 10:59 AM

To: Hope Ziglar &lt;hziglar@ncsu.edu&gt;

Cc: Scott Despain &lt;despain@ncsu.edu&gt;, "Garval, Michael" &lt;garval@ncsu.edu&gt;

Because Karey Harwood, the instructor for REL/WGS 473/573 and the director of WGS is in P&RS, it would have been reasonable for Professor Bookins to assume there'd be no problem (though he might have checked with the department head). In any case, my department has no objection.

David.

On Mon, Apr 3, 2017 at 9:09 AM, Hope Ziglar &lt;hziglar@ncsu.edu&gt; wrote:

Hello Dr. Austin,

Please see the attached. Has your department been consulted with regards to adding REL/WGS 473/573 to major electives for the WGS program?

—

Hope Ziglar  
Student Services Manager  
College of Humanities and Social Sciences  
North Carolina State University  
106 Caldwell Hall  
919 513-1831 Voice  
919 515 9419 Fax

—

David F. Austin <david\_austin@ncsu.edu>  
Associate Professor of Philosophy and Associate Head  
Department of Philosophy and Religious Studies,  
Chair, H&SS Undergraduate Committee - Course and Curriculum Actions, 2014-2017  
Box 8103  
101 Lampe Dr  
North Carolina State University  
Raleigh, NC 27695-8103  
(919) 515-6333  
FAX (office): 919-513-4351  
Withers Hall 340B  
<http://wolfware.ncsu.edu>  
<http://www4.ncsu.edu/~n51ls801/homepage.html>

""All electronic mail messages in connection with State business which are sent to or received by this account are subject to the NC Public Records Law and may be disclosed to third parties." Further information regarding public records can be found on the Office of General Counsel's website: <https://generalcounsel.ncsu.edu/legal-topics/records/public-records/>.

**FORMAT A**  
**(SEMESTER-BY-SEMESTER CURRICULUM DISPLAY)**

Indicate display status: Current: Proposed: X Proposed Effective Semester: 06/2017

Degree/Plan Title: BA Interdisciplinary Studies Concentration/Subplan Title: Women's and Gender Studies

Plan SIS Code: 16IDSBA Subplan SIS Code: 16IDSWG

New Degree Audit required? (Y or N) N

Critical Path Courses - Identify using the code (CP) which courses are considered critical path courses which represent specific major requirements that are predictive of student success in a given program/plan. Place the (CP) next to the credit hours for the course.

FRESHMAN YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
ENG 101 Academic Writing & Research <sup>H</sup>	4	WGS Disciplinary Grouping <sup>10</sup>	3
WGS 200 <sup>I</sup>	3	Literature I <sup>3</sup>	3
GEP Math <sup>A</sup>	3	GEP Social Science <sup>D,7</sup>	3
GEP Social Science <sup>D,7</sup>	3	GEP Math <sup>A</sup>	3
HESF 1** Fitness & Wellness <sup>E</sup>	1	GEP Health & Exercise Studies <sup>E</sup>	1
		Free Elective <sup>9</sup>	3
	<i>Total:14</i>		<i>Total:16</i>
SOPHOMORE YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
WGS 210 <sup>G</sup>	3	WGS Disciplinary Grouping <sup>10</sup>	3
FLx 201 <sup>K,8</sup>	3	Literature II <sup>4</sup>	3
Social Science <sup>7</sup>	3	Philosophy <sup>C,5</sup>	3
GEP Natural Lab Science <sup>B</sup>	4	Social Science <sup>7</sup>	3
GEP Interdisciplinary Perspectives <sup>G</sup>	2-3	Natural Science <sup>B</sup>	3
	<i>Total:15-16</i>		<i>Total:15</i>
JUNIOR YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
WGS 300	3	WGS Concentration Area Elective <sup>10</sup>	3
Arts & Letters <sup>6</sup>	3	History 1 <sup>C,1</sup>	3
GEP Additional Breadth (MS/NS) <sup>F</sup>	3	Free Electives <sup>9</sup>	9
Free Electives <sup>9</sup>	7		
	<i>Total:16</i>		<i>Total:15</i>
SENIOR YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
WGS 310 <sup>10</sup>	3	WGS 492	3
WGS Concentration Area Advanced Req <sup>12</sup>	3	WGS Concentration Area Advanced Req <sup>11</sup>	3
History <sup>11</sup>	3	Free Elective <sup>9</sup>	9
Free Electives <sup>9</sup>	7		
	<i>Total:16</i>		<i>Total:15</i>
<b>Minimum Credit Hours Required for Graduation<sup>J, K, 12, 13</sup> : 122</b>			

**Major/Program Footnotes:**

1. GRP 501 History I - One 3-credit course required from the College-approved History I course list (a 200-level survey course covering a culture significantly different from our own, i.e., ancient or non-Western).
2. GRP 502 History II - One 3-credit course required from the College-approved History II course list (a 200-level survey course covering our own or a similar culture, i.e., United States or other Western Culture).
3. GRP 503 Literature I - One 3-credit hour course required from the College-approved Literature I list (a survey course covering literature outside the U.S. and prior to the 20th century).
4. GRP 504 Literature II One 3-credit hour course required from the College-approved Literature II list (any course that meets the Literature I requirement, or a course in American or Twentieth Century Literature, or an upper division survey course or literature course in a period, genre, or major figure in English, a foreign language in English translation, or the original foreign language).
5. GRP 511 Philosophy - Any PHI course on the approved GEP-Humanities list.
6. Arts and Letters -One 3-credit hour course is required from the College-approved Arts & Letters course list.

7. GRP 541 and 542 Social Sciences – Twelve (12) credit hours required from three different disciplines, six (6) must be on GEP-Social Sciences list.
8. Completion of FLx 201, or comparable proficiency as demonstrated by examination.
9. Free Electives – Only 12 credit hours of free electives may be taken for credit only (S/U).
10. Area Concentration Requirement:
  - a. The internship course, WGS 310, is required of all students.
  - b. Disciplinary Groupings – Students select two (2) courses from two (2) different groups:
    - Group 1 – COM 332, 467, ENG/WGS 305, 327, 362, 410
    - Group 2 – ANT/WGS 444, PS/WGS 306, 418, PSY/WGS 406, SOC/WGS 204, 304, 407
    - Group 3 – HI 423, 477, HI/WGS 447, 448, MUS/WGS 360, REL/WGS 472
  - c. WGS Concentration Area Elective – Students select one (1) course from the following  
WGS [add WGS]220, 224, 293, [add WGS] 330, 370, 393, 493, ANT/WGS 444, COM/WGS 362, ENG/WGS 305, 327, 410, HI/WGS 447, 448, MUS/WGS 360, PS/WGS 306, 418, PSY/WGS 406, REL/WGS 472
11. Area Concentration Advanced Requirement – Six (6) credit hours of area concentration courses at the 400-level are required from the following. Other courses may fulfill this requirement with the approval of the academic advisor.  
WGS 493, ANT/WGS 444, ENG/WGS 410, HI/WGS 447, 448, PS/WGS 418, PSY/WGS 406, REL/WGS 472, [add REL/WGS] 473, SOC/WGS 407, COM 467, HI 412, 423, 477
12. All courses in the departmental requirements must be passed with a grade of C- or better.
13. Minimum major and cumulative GPA of 2.0 required for graduation.

\* **General Education Program (GEP) requirements and GEP Footnotes:**

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied.

University approved GEP course lists for each of the following categories can be found at <http://www.ncsu.edu/uap/academic-standards/gep/courselists/index.html>.

- A. **Mathematical Sciences** (6 credit hours – one course with MA or ST prefix)  
*Choose from the University approved GEP Mathematical Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement:*
- B. **Natural Sciences** (7 credit hours – include one laboratory course or course with a lab)  
*Choose from the University approved GEP Natural Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement:*
- C. **Humanities** (6 credit hours selected from two different disciplines/course prefixes)  
*Choose from the University approved GEP Humanities course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement:*
- D. **Social Sciences** (6 credit hours selected from two different disciplines/course prefixes)  
*Choose from the University approved GEP Social Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement:*
- E. **Physical Education/Healthy Living** (2 credit hours – at least one 100-level Fitness and Wellness Course)  
*Choose from the University approved GEP Physical Education/Healthy Living course list.*
- F. **Additional Breadth** - (3 credit hours to be selected from the following checked University approved GEP course lists)  
\_\_\_\_\_ Humanities/Social Sciences/Visual and Performing Arts or X Mathematical Sciences/Natural Sciences/Engineering
- G. **Interdisciplinary Perspectives** (5-6 credit hours)  
*Choose from the University approved GEP Interdisciplinary Perspectives course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: WGS 210*
- H. **Introduction to Writing** (4 credit hours satisfied by completing ENG 101 with a C- or better )

The following Co-Requisites must be satisfied to complete the General Education Program requirements:

- L. **U.S. Diversity (USD)**  
*Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite. The following course(s) completed as part of the Major requirements may fulfill this requirement: WGS 200*
- I. **Global Knowledge (GK)**  
*Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite. The following course(s) completed as part of the Major requirements may fulfill this requirement:*
- K. **Foreign Language proficiency** - Proficiency at the FL\_102 level is required for graduation.

# CURRICULUM REQUIREMENTS

## Format B

<u>Degree/Plan Title:</u> BA/Interdisciplinary Studies	<u>Plan SIS Code:</u> 16IDSBA
<u>Concentration/Subplan Title:</u> Women's & Gender Studies	<u>Subplan SIS Code:</u> 16IDSWGS
<u>Indicate requirements status:</u> Current:                      Proposed: X	<u>Proposed Effective Semester:</u> 06/2017
<u>New Degree Audit required?</u> (Y or N) N	
<u>Critical Path Courses</u> - Identify using the code (CP) which courses are considered critical path courses which represent specific major requirements that are predictive of student success in a given program/plan. Place the (CP) next to the credit hours for the course.	

<b>MAJOR FIELD OF STUDY REQUIREMENTS:</b>	<b>Credit Hours</b>	<b>GEP category, if applicable</b>
<b><i>Required Courses/Groups/ Electives:</i></b>		
Indicate if course or course groupings have a C-wall or MGPA requirement and which are considered Critical Path courses – indicate with (CP) next to applic. course.		List GEP category and hours satisfied by a Major requirement
<p><b>MGPA must be 2.0 or higher</b> <b>C- or better required</b></p> <p><b>WGS 200</b> Introduction to Women's Studies                      3  <b>WGS 300</b> Feminist Theories    3  <b>WGS 310</b> Women &amp; Gender Studies Internship                      3  <b>WGS 492</b> Theory Women's Studies                                      3  <b>WGS 210</b> Women &amp; Gender in Science and Technology                      3</p> <p><b>Disciplinary Groupings</b> (Requirement 000032983)  <i>Language, Literature &amp; Communication</i> – (Max Units Allowed: 3)            COM 332, 362, 467, ENG 305, 327, 410, WGS 293, 305, 327, 362, 410, 493  <i>SOC, ANT, PSY, PS and Soc Wrk</i> – (Max Units Allowed: 3)            ANT 444, PS 306, 418, PSY 406, SOC 204, 304, 407, WGS 204, 293, 304, 306, 406, 407, 418, 444, 493  <i>Hist, Phi, Rel, and Music</i> – (Max Units Allowed: 3)            HI 423, 447, 448, 477, MUS 360, REL 472, WGS 293, 360, 447, 448, 472, 493</p> <p><b>Concentration Area Advanced</b> (Requirement 000033056)                      6            ANT 444, COM 467, ENG 410, HI 412, 423, 447, 448, 477, PS 418, PSY 406, REL 472, [add REL] 473, SOC 407, WGS 406, 407, 410, 418, 444, 447, 448, 472, [add WGS] 473, 493</p> <p><b>Concentration Area Elective</b> (Requirement 000032984)                      3            ANT 444, COM 332, 362, 467, ENG 305, 327, 410, HI 412, 423, 447, 448, 477, MUS 360, PS 306, 418, PSY 406, REL 472, SOC 204, 304, 407, WGS 204, [add WGS] 220, 293, 304, 305, 327, [add WGS] 330, 360, 362, 370, 406, 407, 410, 418, 444, 447, 448, 472, 493            Advisor approved substitutions allowed.</p>		<p>US Diversity co-req</p> <p>Interdisciplinary Perspectives (3 hr)</p>
<b><u>Concentration Courses/Groups/Electives:</u></b>		
<p><b>Free Electives: (12 Hr S/U Limit)</b>            Select any courses except the following:            FLA 101, FLC 101, FLF 101, FLG 101, FLI 101, FLJ 101, FLN 101, FLP 101, FLR 101, FLS 101, FLS 105, GRK 101, LAT 101, MA 101, PER 101</p>	35	

<b>Total credit hours under Major Field of Study:</b> <i>Minimum 27 hours required in program area.</i>	65	
<b>COLLEGE REQUIREMENTS:</b>		
<b><u>Orientation Course(s):</u></b>		
<p><b>Other:</b></p> <p><b>GRP 501 History I</b> - A 200-level survey course covering a culture significantly different from our own, i.e., pre-industrial or non-Western required. Choose one 3-credit hour course from the college-approved History 1 list. AFS 275 or 276, HI 207, 214, 215, 216, 232, 233, 263, 264, 270, 275, 276</p> <p><b>GRP 502 History II</b> - A 200-level survey course covering our own or a similar culture required. Choose one 3-credit hour course from the college-approved History 2 list HI 205, 208, 210, 221, 222, 251, 252, 253, 254</p> <p><b>GRP 503 Literature I</b> - A survey course covering literature outside the U.S. and prior to the 20th century required. Choose one 3-credit hour course from the college-approved Literature 1 list. <b>CLA 210, 320, ENG 219, 220, 221, 222, 251, 261 or 262 (but not both), FL 219, 220, 221, or 222, FLF 301, FLG 320, 325, FLJ 342, 344, FLR 303, FLS 340, 341, 342, 351, HON 202 Inquiry, Discovery and Literature, HON 293 Honors Special Topics-Literature</b></p> <p><b>GRP 504 Literature II</b> - Any course that meets the Literature I requirement, or a course in American or Twentieth Century Literature, or an upper division survey course or literature course in a period, genre, or major figure in English, a foreign language in English translation, or the original foreign language required. Choose one 3-credit hour course from the college-approved Literature list. <b>List A - AFS 248, 349, 448, CLA 210, 320, ENG 207, 208, 209, 219, 220, 221, 222, 223, 224, 232, 233, 246, 248, 249, 251, 252, 261, 262, 265, 266, 267, 305, 349, 362, 363, 369, 370, 371, 372, 373, 376, 377, 380, 382, 385, 390, 392, 393, 394, 398, 399, 406, 407, 420, 439, 448, 449, 451, 452, 452, 460, 462, 463, 464, 465, 468, 469, 470, 471, 476, 486, 487, FL 219, 220, 223, 224, 246, 392, 393, 394, 406, 407, FLN 301, 302, 401, WGS 305</b> <b>List B - ENG 219, 220, 221, 223, 224, 246, 392, 393, 394, 406, FL 219, 220, 221, 222, 223, 224, 246, 392, 393, 394, 406, 407, FLF 302, 414, 492, FLG 320, 323, 325, FLJ 342, 344, 345, FLN 301, 302, 401, FLR 303, 304, FLS 340, 341, 342, 343, 351, 352, 353, 492, HON 202 Inquiry, Discovery and Literature, HON 293 Honors Special Topics-Literature</b></p> <p><b>GRP 509 Foreign Language 201</b> FLA 201, FLC 201, FLF 201, FLG 201, FLI 201, FLJ 201, FLN 201, FLP 201, FLR 201, FLS 201, 212, GRK 201, LAT 201, or PER 201</p> <p><b>GRP 511 Philosophy</b> - Any PHI course on the approved GEP-Humanities list <b>PHI 205, 210, 214, 221, 300, 301, 302, 305, 309, 310, 312, 313, 325, 330, 331, 332, 333, 340, 375, 376, 401, 420, 425, 440, 447, PSY 425, STS 325</b></p>	<p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p>	<p>Humanities (3 hrs)</p> <p>Humanities (3 hr)</p>



<p><b>GRP 512 Arts and Letters</b> – Choose one three credit hour course from the college approved Arts and Letters list.  <b>ADN</b> 111, 112, 202, 212, 219, 272, 273, 281, 311, 384, 386, 414, <b>AFS</b> 230, 260, 375, <b>ARC</b> 140, <b>ARS</b> 251, 252, 259, 306, 351, 353, <b>CLA</b> 210, <b>COM</b> 321, 364, 374, 411, <b>D</b> 231, <b>DAN</b> 272, 295, <b>ENG</b> 282, 375, 492, <b>FL</b> 216, <b>FLF</b> 318, <b>FLG</b> 318, <b>FLS</b> 360, <b>GD</b> 203, 303, <b>HA</b> 201, 202, 203, 240, 298, 395, 401, 404, 410, 498, <b>HI</b> 240, 320, 402, 407, 408, <b>IDS</b> 496, <b>LAR</b> 444, <b>MUS</b> 180, 200, 201, 202, 205, 206, 230, 260, 306, 310, 315, 320, 330, 350, 360, <b>REL</b> 200, 210, 230, 298, 309, 311, 312, 314, 317, 320, 323, 327, 331, 332, 333, 334, 340, 350, 383, 402, 408, 412, 413, 471, 473, 482, 489, 491, 496, 498, <b>SOC</b> 309, <b>STS</b> 471, <b>THE</b> 203, 233, 303, 323, 334, 340, <b>WGS</b> 472, 473</p> <p><b>GRP 541 &amp; 542 Social Science (3 Different)</b>  <b>Anthropology</b> - <b>ANT</b> 251, 252, 253, 254, 261, 295, 310, 315, 325, 330, 345, 346, 351, 354, 370, 371, 374, 389, 395, 411, 412, 416, 419, 421, 424, 427, 431, 433, 444, 450, 460, 464, 475, 483, 495, 496, 498, <b>FLJ</b> 351, <b>HI</b> 587, <b>SOC</b> 261, <b>WGS</b> 444  <b>Agricultural Economics</b> -<b>ARE</b> 201, 201A, 215, 260, 301, 303, 304, 306, 309, 311, 312, 321, 323, 332, 336, 345, 404, 412, 413, 433, 444, 490, 492, 493, 494, 495, <b>EC</b> 301, 336, 436  <b>Economics</b> – <b>ARE</b> 301, 336, <b>EC</b> 201, 202, 205, 301, 302, 305, 336, 337, 348, 351, 377, 404, 410, 413, 431, 436, 437, 449, 451, 452, 474, 480, 490, 491, 495, 498  <b>Psychology</b> – <b>AFS</b> 345, <b>EDP</b> 304, 476, 582, <b>ISE</b> 540, <b>PHI</b> 425, 525, <b>PSY</b> 200, 230, 240, 241, 242, 243, 307, 311, 312, 313, 340, 345, 360, 370, 376, 400, 406, 410, 411, 416, 420, 425, 430, 431, 436, 470, 475, 491, 495, 498, 499, , <b>WGS</b> 406  <b>Multidisciplinary</b> – <b>ENG</b> 210, <b>GEO</b> 220, <b>SOC</b> 220, <b>STS</b> 402</p>	<p>3</p> <p>12</p>	<p>Social Science (6 hrs)</p>
<p><b>Total credit hours under College Requirements:</b></p>	<p>Hours</p>	

<p><b><u>NCSU GENERAL EDUCATION PROGRAM REQUIREMENTS</u></b></p> <p><i>Courses in the Major and/or Minor may also fulfill a General Education requirement; however, a GEP category <u>may not be subset</u> to require a specific course from the category list. Required courses must be listed in the Major/College requirements.</i></p> <p><i>Specific courses should not be listed in any of the fields below other than ENG 101.</i></p>		<p><b>At least one of the following must be listed:</b></p> <ol style="list-style-type: none"> <li>1 Choose course(s) from the University Approved GEP course list for this category.</li> <li>2 Minimum requirements are satisfied by Major/College course requirements.</li> <li>3 Major/College course requirement satisfies <u>X</u> credit hrs of this requirement. Remaining hours required must be chosen from the University Approved GEP course list for the category.</li> <li>4 Co-requisite is satisfied by a Major/College course requirement.</li> <li>5 Choose course(s) from the University Approved GEP course lists for the Humanities/ Social Sciences/ Visual &amp; Performing Arts.</li> <li>6 Choose course(s) from the University Approved GEP course lists for Natural Sciences/Mathematical Sciences.</li> </ol>
<p><b>General Education Program Requirements:</b>                  Minimum 39-40 hrs</p>	<p>Credit hours</p>	<p><i>How will the GEP requirement be met?</i>  <b>(Choose applicable statement from 1-6 listed above)</b></p>
<p><b>Mathematical Sciences</b> (6 credits)                  (At least 1 course with MA or ST prefix)                  Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</p>	<p>6</p>	<p>(Choose statement 1, 2 or 3)                  Choose course(s) from the University Approved GEP course list for this category.</p>
<p><b>Natural Sciences</b> (7 credits)                  (At least 1 lab course or course with a lab)                  Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</p>	<p>7</p>	<p>(Choose statement 1, 2 or 3)                  Choose course(s) from the University Approved GEP course list for this category.</p>
<p><b>English 101</b> (C- or better required) (4 credits)</p>	<p>4</p>	<p>ENG 101</p>
<p><b>Humanities</b> (6 credits)                  (Courses from two different disciplines)                  Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.</p>	<p>X</p>	<p>(Choose statement 1, 2 or 3)                  Minimum requirements are satisfied by Major/College course requirements.</p>

<b>Social Sciences</b> (Courses from <i>two different</i> disciplines) Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.	( 6 credits)	X	<small>(Choose statement 1, 2 or 3)</small> Minimum requirements are satisfied by Major/College course requirements.
<b>Additional Breadth</b> (Choose approach that is <i>different</i> from the approach of the Major) Major/College requirements cannot satisfy this requirement and an AB course cannot be double-counted except in satisfying the Global Knowledge or U.S. Diversity co-requisites.	(3 credits)	3	<small>(Choose statement 5 or 6)</small> Choose course(s) from the University Approved GEP course list for this category.
<b>Interdisciplinary Perspectives</b> Course(s) in the Major may double-count to satisfy this requirement and also satisfy either the Global Knowledge or U.S. Diversity co-requisites.	( 5 credits)	2	<small>(Choose statement 1, 2 or 3)</small> Major/College course requirement satisfies <u>3</u> credit hrs of this requirement. Remaining hours required must be chosen from the University Approved GEP course list for the category.
<b>Health and Exercise Studies</b> (Including one <i>Fitness and Wellness</i> course)	(2 credits)	2	Choose course(s) from the University Approved GEP course list for this category.
<b>Total credit hours needed to complete GEP that are <u>not</u> satisfied as part of the Major/College requirements.</b>		24	
<b>GEP Co-Requisites:</b>			<b>Courses taken in the Major, GEP, or Minor may double-count to fulfill the co-requisites. Courses that satisfy the U.S. Diversity or Global Knowledge co-requisite are marked on course lists with a "USD" or "GK" indicator.</b>
<b>U.S. Diversity co-requisite</b>	(USD)	n/a	<small>(Choose statement 1 or 4)</small> Co-requisite is satisfied by a Major/College course requirement.
<b>Global Knowledge co-requisite</b>	(GK)	n/a	<small>(Choose statement 1 or 4)</small> Choose course(s) from the University Approved GEP course list for this category.
<b>Foreign Language Proficiency</b>		n/a	Proficiency at the FL_102 level required.
<b>The following requirements must be satisfied within the College/Program:</b>			Place an X in the credit hour box to indicate below that the requirement is <b>"Satisfied by College/Program Requirements"</b>
<b>Communication in the Major (Advanced Communication)</b>		X	Satisfied by College/Program Requirements
<b>Technology Fluency</b>		X	Satisfied by College/Program Requirements
<b>Total credit hours required to complete Degree:</b> Total must be within 120-128 credit hours.		122	<b>As applicable, indicate here the overall GPA requirement for degree completion including course completion.</b>

# Current

## Interdisciplinary Studies (BA): Women's and Gender Studies (16IDSBA-16IDSWGS)

Semester Display Effective Date: 6.2015

### FRESHMAN YEAR

Fall Semester	Credit	Spring Semester	Credit
ENG 101 Academic Writing & Research <sup>H</sup>	4	WGS Disciplinary Grouping <sup>11</sup>	3
WGS 200 <sup>1</sup>	3	Literature I <sup>3</sup>	3
Mathematics <sup>A,10</sup>	3	Social Science <sup>D,7</sup>	3
Social Science <sup>D,7</sup>	3	Mathematics <sup>A,10</sup>	3
HESF 1** Fitness & Wellness <sup>E</sup>	1	GEP Health and Exercise Studies <sup>E</sup>	1
		Free Elective <sup>9</sup>	3
	<b>14</b>		<b>16</b>

### SOPHOMORE YEAR

Fall Semester	Credit	Spring Semester	Credit
WGS 210 <sup>G</sup>	3	WGS Disciplinary Grouping <sup>11</sup>	3
FL 201 or 212 <sup>K,8</sup>	3	Literature II <sup>4</sup>	3
Social Science <sup>7</sup>	3	Philosophy <sup>5,C</sup>	3
Natural Science <sup>8</sup>	4	Social Sciences <sup>7</sup>	3
GEP Interdisciplinary Perspectives Req <sup>G</sup>	2-3	Natural Science <sup>B</sup>	3
	<b>15-16</b>		<b>15</b>

### JUNIOR YEAR

Fall Semester	Credit	Spring Semester	Credit
WGS 300	3	WGS Concentration Area Elective <sup>11</sup>	3
Arts & Letters <sup>6</sup>	3	History <sup>C,1</sup>	3
GEP Add. Breadth Req <sup>F</sup> (MS/NS/E)	3	Free Elective <sup>9</sup>	3
Free Elective <sup>9</sup>	3	Free Elective <sup>9</sup>	3
Free Elective <sup>9</sup>	3	Free Elective <sup>9</sup>	3
Free Elective <sup>9</sup>	1		
	<b>16</b>		<b>15</b>

### SENIOR YEAR

Fall Semester	Credit	Spring Semester	Credit
WGS 310 <sup>11</sup>	3	WGS 492	3
WGS Concentration Area Advanced Req <sup>12</sup>	3	WGS Concentration Area Advanced Req <sup>12</sup>	3
History II <sup>2</sup>	3	Free Elective <sup>9</sup>	3
Free Elective <sup>9</sup>	3	Free Elective <sup>9</sup>	3
Free Elective <sup>9</sup>	3	Free Elective <sup>9</sup>	3
Free Elective <sup>9</sup>	1		
	<b>16</b>		<b>15</b>

Minimum Credit Hours Required for Graduation <sup>\*13,14</sup>:

122

#### Major/College Footnotes:

1. **History I.** Choose from the CHASS approved History I course list (Satisfies 3 hr GEP Humanities).
2. **History II.** Choose from the CHASS approved History II course list.
3. **Literature I.** Choose from the CHASS approved Literature I course list.

4. **Literature II.** Choose from the CHASS approved Literature II course list.
5. **Philosophy.** Any 3-credit hour PHI course on the GEP Humanities list (Satisfies 3 hr GEP Humanities).
6. **Arts and Letters.** Choose from the CHASS approved Arts and Letters course list.
7. **Social Sciences.** Choose four 3-credit hour courses (12 credit hours total) from the CHASS approved lists in at least three of the following areas: ANT, ARE, EC, PS, PSY, SOC. Also ENG 210, GEO/SOC 220, or STS 402. Six (6) credit hours must be taken from the GEP Social Sciences list. (Satisfies 6 hr GEP Social Sciences).
8. **Foreign Language.** Completion of FLx 201 or FLx 212, or comparable proficiency as demonstrated by examination. (All students must take the NCSU Proficiency Test upon entering CHASS. Students who take FL 101 and FL 102 will not receive graduation credit for these courses unless they are in a language other than the one use to fulfill eh 201 language requirement).
9. **Free Electives.** Any course except MA 101, FL\_101, FLS 105, LAT 101, GRK 101, and PER 101. 101-level foreign language courses can be used as free electives if they are in a language other than the language the student uses to fulfill major language requirement. Only 12 credit hours of free electives may be taken for credit only (S/U).
10. **Math.** Six (6) credit hours are to be chosen from the GEP Mathematics list.

**11. Area Concentration Requirement:**

- a. The internship courses, WGS 310, is required of all students.
- b. **Disciplinary Groupings-Students select two (2) courses from two (2) different groups:**

Group 1. COM 332, COM 467; ENG/WGS 305, 327, 462, 410.

Group 2. ANT/WGS 444, PS/WGS 306, 418; PSY/WGS 406, SOC/WGS 204, 304, 407.

Group 3. HI 423, HI 477; HI/WGS 447, 448; MUS/WGS 360; REL/WGS 472.

- c. **WGS Concentration Area Elective-Students select 1 course from the following:** WGS 224, 293, 370, 393, 493; WGS/ANT 444, WGS/COM 362, WGS/ENG 305, 327, 410; WGS/HI 447, 448; WGS/MUS 360; WGS/PS 305, 418; WGS/PSY 406, WGS/REL 472, WGS/SOC 204, 304, 407; COM 332, 467; HI 412, 423, 477. Other courses may be used to fulfill this requirement with the approval of academic advisor.

**12. Area Concentration Advanced Requirement:**

- a. Six (6) hours of area concentration courses at the 400-level are required from the following: WGS 493, WGS/ANT 444, WGS/ENG 410, WGS/HI 447, 448; WGS/PS 418, WGS/PSY 405, WGS/REL 472, WGS/SOC 407, COM 467, HI 412, HI 423, 477. Other courses may be used to fulfill this requirement with the approval of academic advisor.

13. All courses in the major must be passed with a grade of C- or better.

14. Minimum cumulative GPA of 2.0 is required for graduation.

**General Education Program (GEP) requirements and GEP Footnotes:**

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied, <http://oucc.dasa.ncsu.edu/general-education-program/>.

**A. Mathematical Sciences (6 credit hours-one course with MA or ST prefix)**

*Choose from the University approved GEP Mathematical Sciences course list.*

**B. Natural Sciences (7 credit hours-include one laboratory course or course with a lab)**

*Choose from the University approved GEP Natural Sciences course list.*

**C. Humanities (6 credit hours selected from two different disciplines/course prefixes)**

*Choose from the University approved GEP Humanities course list.*

**D. Social Sciences (6 credit hours selected from two different disciplines/course prefixes)**

*Choose from the University approved Social Sciences course list.*

**E. Health and Exercise Studies (2 credit hours-at least one 100-level Fitness and Wellness Course)**

*Choose from the University approved Health and Exercise Studies course list.*

**F. Additional Breadth (3 credit hours to be selected from the following):**

**Mathematical Sciences/Natural Sciences/Engineering**

**G. Interdisciplinary Perspectives (5-6 credit hours)**

*Choose from the University approved Interdisciplinary Perspectives course list.*

**H. Introduction to Writing (4 credit hours satisfied by completing ENG 101 with a C- or better)**

The following co-requisites must be satisfied to complete the General Education Program requirements:

**I. U.S. Diversity (USD)**

*Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite. The following course completed as part of the Major requirements may fulfill this requirement: WGS 200*

**J. Global Knowledge (GK)**

*Choose from the University approved Global Knowledge course list.*

**K. Foreign Language Proficiency**-Proficiency at the FL\_102 level is required for graduation.

SIGNATURE PAGE

CURRICULA ACTION FOR 16LIM LINGUISTICS MINOR

RECOMMENDED BY:



HEAD, DEPARTMENT/PROGRAM

4/18/17

DATE

ENDORSED BY:



CHAIR, COLLEGE COURSES & CURRICULA COMMITTEE

4/18/2017

DATE



COLLEGE DEAN

4/25/17

DATE

APPROVED BY:

\_\_\_\_\_  
CHAIR, UNIVERSITY COURSES & CURRICULA COMMITTEE DATE

\_\_\_\_\_  
CHAIR, COUNCIL ON UNDERGRADUATE EDUCATION DATE

\_\_\_\_\_  
DEAN, DIVISION OF ACADEMIC AND STUDENT AFFAIRS (DASA) DATE

APPROVED EFFECTIVE DATE \_\_\_\_\_

NC STATE UNIVERSITY

Dr. Jason Miller  
Department of English  
Tompkins Hall #243  
Box 8105  
Raleigh, NC 27695-8105  
jason\_miller@ncsu.edu

**To:** University Courses and Curricula Committee  
**From:** Jason Miller, Associate Head, Director of Undergraduate Studies, English  
**Date:** March 30, 2017  
**Re:** Updates to ADA display: Linguistics minor

The Department of English is requesting a change to the ADA display that would update and reflect all recent (and approved) changes to courses that can be used to count towards the Linguistics minor. This includes both courses that have already been added and courses that have already been dropped. The only substantive change is allowing FL 201 to fulfil the language requirement to avoid the minor essentially becoming an 18 credit hour minor.

The following information should appear in appropriate places and be reflected on the ADA:

### Requirements

- Completion of 15 credit hours of designated courses, all at the 200 level or above.
- At least 3 courses must be above the 200 level.
- Must also complete the study of a foreign language through the 201 level.
- Must have an overall GPA of 2.0 in the minor and may count no course lower than a 'C-'.
- At least 9 hours must be taken in residency at NC State.
- Transfer credits must be evaluated by Dr. Reaser, regardless of their disposition by any other office of the University.
- A maximum of two courses may count for both a student's major and minor.

### Required Courses

One course each from Areas I-III and two courses from Area IV must be completed:

#### Area I

- ENG 210 Introduction to Language and Linguistics
- ENG 524 Introduction to Linguistics

#### Area II

- ENG 298 Special Projects in English (where relevant)
- ENG 324 Modern English Syntax
- ENG 325 Spoken and Written Traditions of American English Dialects
- ENG 326 History of English
- ENG 327 Language and Gender
- ENG 328 Language and Writing
- FLS 333 The Sounds of Spanish

### Area III

- ANT 254 Language and Culture
- COM 315 Phonetics
- COM 335 Language Development
- FL 424/524 Linguistics for ESL Professionals
- PHI 331 Philosophy of Language
- PHI 425 Introduction to Cognitive Science
- SOC 207 Sociology of Language [Course currently going through approval process]

### Area IV (two courses)

- ENG 491 Honors Seminar (where relevant)
- ENG 494 Special Topics in Linguistics
- ENG 498 Special Topics in English (where relevant)
- ENG 523 Language Variation Research Seminar
- ENG 525 Variety in Language
- ENG 527 Critical Discourse Analysis
- ENG 528 Sociophonetics
- ENG 532 Narrative Analysis
- ENG 533 Bilingualism and Language Contact
- ENG 534 Quantitative Analysis in Sociolinguistics
- ENG 536 Research Methods in Phonology
- ENG 584 Studies in Linguistics
- ENG 722 Linguistics and Literacy
- FL 508 Second Language Acquisition Research: Interlanguage Development
- FLF 502 Variety in Language: French
- FLF 503 Issues in the Acquisition of L1 and L2 French
- FLS 402 Introduction to Spanish Linguistics
- FLS 405 Spanish-English Comparative Grammar
- FLS 502 Linguistic Structure of Spanish
- FLS 503 Spanish Applied Linguistics
- FLS 504 Spanish Language Change and Variation
- FLS 509 Spanish Phonetics and Phonology
- FLS 515 History of Spanish
- One additional course from Area II

This revision brings the minor in Linguistics in line with the courses currently approved and being offered. No new “areas” have been created. The proposed effective date is August 15, 2017.



Current

## Linguistics (16LIM)

### Description

The Department of English offers a minor in Linguistics to N.C. State students, except LWR English majors. The minor is designed to investigate the structure and function of language as a cognitive and behavioral science. Five courses in designated areas of linguistics are required in the minor. Among students likely to be attracted to this minor are those who expect to pursue graduate study in linguistics, those interested in foreign languages or English as a second language, and those interested in communication sciences. No courses for the minor may be taken for S/U credit.

### Requirements

- Completion of 15 credit hours of designated courses, all at the 200 level or above.
- At least 3 courses must be above the 200 level.
- Must also complete the study of a foreign language through the ~~202~~<sup>201</sup> level.
- Must have an overall GPA of 2.0 in the minor and may count no course lower than a 'C-'.
- At least 9 hours must be taken in residency at NC State.
- Transfer credits must be evaluated by Dr. Reaser, regardless of their disposition by any other office of the University.
- Courses for the linguistics minor must be exclusive of all courses counting toward the major.
- A maximum of TWO (2) courses may be used (double-counted) towards both departmental major requirements and minor requirements.

### Required Courses

1 course from each Area needs to be completed:

#### Area I

- ENG 210 Introduction to Language and Linguistics
- ENG 524 Introduction to Linguistics

#### Area II - Add ENG 248, 326, 327, 328, FLS 333

- ENG 324 Modern English
- ENG 325 Spoken and Written Traditions of American English Dialects

#### Area III - Add ANT 254, FL 424/524, PHI 331, 425, SOC 207

- COM 315 Phonetics
- COM 335 Speech and Language Development

#### Area IV - Add ENG 448, 523, 527, 528, 532, 533, 534, 536, 584, 722, FL 508, FLF 502, 503, FLS 402, 405, 502, 503, 504, 509, 515 One additional course from Area II.

- ~~ANT 254 Language and Culture~~
  - ~~ENG 326 History of English~~
  - ~~ENG 327 Language and Gender~~
  - ENG 491 Honors Seminar (where relevant)
  - ENG 494 Special Topics in Linguistics
  - ENG 525 Variety in Language
- Drop From Area IV*

~~Area V~~ *Delete Area V completely*

- ~~PHI 331 Philosophy of Language~~
- ~~PHI 425 Introduction to Cognitive Science~~
- ~~CSC 523 Computational Linguistics~~
- ~~ENG 523 Language Variation Research Seminar~~
- ~~ENG 527 Critical Discourse Analysis~~
- ~~ENG 528 Language Change Research Seminar~~
- ~~ENG 532 Narrative Analysis~~
- An additional course from Areas 3 or 4

### **Elective Courses**

None

### **Admissions**

Students may declare their intention to complete the linguistics minor should consult with Dr. Jeffrey Reaser as listed below.

### **Certification**

Dr. Reaser will certify the minor prior to graduation. The minor must be completed no later than the semester in which the student expects to graduate from his or her degree program. Paperwork for certification should be completed no later than during the registration period for the student's final semester at NC State.

### **Contact Person**

*Dr. Jeffrey Reaser*  
*285 Tompkins Hall*  
*919.515.4176*  
[jlreaser@ncsu.edu](mailto:jlreaser@ncsu.edu)

**SIS Code: 16LIM**

TO: University Courses and Curricula Committee (UCCC)

DATE: March 20, 2017

FROM: Michael J. Pendlebury, Head, Philosophy & Religious Studies

SUBJECT: Updating Department-Managed Minors with PHI 347 Neuroscience and Philosophy and other minor updates

With the recent approval of the new course PHI 347 Neuroscience and Philosophy, (i) several lists of courses for departmental minors should be updated as shown below in **red**. In addition (ii) two courses that were dropped should be removed as indicated below; and (iii) with the recent hiring of a new faculty member covering LOG 4\*\* courses, the list of such courses must change and the requirements for the affected minor (Logic and Methodology) should reflect that change. (For current students, the change in wording will have no effect.) (iv) To be in sync with requirements for majors, all minors should have the same standard: a *C- or better* in the 15 hours required.

### **Cognitive Science (16CNM)**

<https://oucc.dasa.ncsu.edu/cognitive-science-16cnm/>

Elective Courses (9 credit hours)

- CSC 333 Automata, Grammars, and Computability (3cr)
- CSC 411 Introduction to Artificial Intelligence (3cr)
- ENG 210 Introduction to Language and Linguistics (3cr)
- ENG 324 Modern English Syntax (3cr)
- ENG 524 Introduction to Linguistics (3cr)
- ENG 525 Variety in Language (3cr)
- ENG 527 Discourse Analysis (3cr)
- LOG 335 Symbolic Logic (3cr)
- LOG 435 Advanced Logic and Metamathematics (3cr)
- LOG 437 Model Theoretic Semantics (3cr)
- PHI 331 Philosophy of Language (3cr)
- PHI 332 Philosophy of Psychology (3cr)
- **PHI 347 Neuroscience and Philosophy (3cr)**
- PHI 425 /PSY 425 Introduction to Cognitive Science (3cr)
- PHI 447 Philosophy, Evolution and Human Nature (3cr)
- PSY 340 Ergonomics (3cr)
- PSY 400 Perception (3cr)
- PSY 420 Cognitive Processes (3cr)
- PSY 430 Biological Psychology (3cr)
- BIO 488 Neurobiology (3cr)

[Consult with Psychology: "No problem." – email from Professor Adam Meade, 3/18/17, 1:06 PM]

**Logic and Methodology (16LOGM)** <https://oucc.dasa.ncsu.edu/logic-and-methodology-16logm/>

~~(B) One LOG 4\*\* course. The following are available:—~~

~~LOG 435 Advanced Logic and Metamathematics~~

~~LOG 437 Model Theoretic Semantics—~~

PHI 331

(B) One of the following:

• A 3-credit LOG 4\*\* course

• PHI 331

D: Two additional courses from the following:

- Any 3 hour LOG course (LOG 201, ~~LOG 435, LOG 437~~ LOG 4\*\*)
- PHI 331 Philosophy of Language
- PHI 333 Knowledge and Skepticism
- PHI 340 Philosophy of Science
- **PHI 347 Neuroscience and Philosophy (3cr)**
- PHI 440 The Scientific Method
- ~~PHI 445 Philosophy of Biology [Course dropped]~~
- PHI 447 Philosophy, Evolution, and Human Nature

**Ethics (16ETHM)** <https://oucc.dasa.ncsu.edu/ethics-16ethm/>

Elective Courses

Select one additional course from:

*The Elective Course list above or from the following:*

- ANT 420 Biological Bases for Human Social Behavior (3 cr)
- ENG (WGS) 327 Language and Gender (3 cr)
- GN 301 Genetics in Human Affairs (3 cr)
- HI (AFS) 455 History of the Civil Rights Movement (3 cr)
- MB 200 Microbiology and World Affairs (3 cr)
- PHI 310 Existentialism (3 cr)
- PHI 312 Philosophy of Law (3 cr)
- **PHI 347 Neuroscience and Philosophy (3cr)**
- PS 204 Problems of American Democracy (3 cr)
- PS 205 Law and Justice (3 cr)
- PS (WGS) 306 Gender and Politics in the United States (3 cr)
- PS 309 Equality and Justice in United States Law (3 cr)
- PS 361 Introduction to Political Theory (3 cr)
- PS (AFS) 409 Black Political Participation in America (3 cr)
- PS (WGS) 418 Gender, Law, and Policies (3 cr)
- PS 462 Seminar in Political Theory (3 cr)
- SOC (WGS) 304 Women and Men in Society (3 cr)
- SOC (AFS) 305 Racial and Ethnic Relations (3 cr)
- SOC (WGS) 407 Sociology of Sexuality (3 cr)
- SOC 428 Formal Institutions of Social Control (3 cr)
- STS 304 Ethical Dimensions of Progress (3 cr)

**Health, Medicine and Human Values (16HMM)**

<https://oucc.dasa.ncsu.edu/health-medicine-and-human-values-16hmm/>

Elective Courses (12 credit hours) (at least 2 course from each group required)

**Group I – Humanities and Social Sciences Perspective on Health and Medicine**

Must choose at least two (2) courses from the following:

- EC 437 Health Economics (3 cr) preq: EC/ARE 301 or EC 310

- HI 322 Rise of Modern Sciences (3 cr) OR HI 481 History of the Life Sciences (3 cr)
- PHI 221 Contemporary Moral Issues (3 cr) OR PHI 375 Ethics (3 cr) OR PHI 376 History of Ethics (3 cr) OR ~~PHI 415 Life Science Ethics (3)~~ [course dropped]
- **PHI 347 Neuroscience and Philosophy (3cr)**
- REL 473/573 Religion, Gender, and Reproductive Technologies (3 cr)
- SOC 381 Sociology of Medicine (3 cr) preq: 200 level Sociology OR SOC 465 Social Aspects of Mental Health (3 cr) preq: SOC 300.

### C-wall requirements for Minors

Minor	Current	Proposed: <b>C- or better</b>
<b>in Philosophy</b>	Students who take a Minor in Philosophy are required to complete with a grade of <del>C- or better</del> 15 hours of courses in selected fields in philosophy, ...	Students who take a Minor in Philosophy are required to complete with a grade of <b>C- or better</b> 15 hours of courses in selected fields in philosophy, ...
<b>in Religious Studies</b>	Students who take a Minor in Religious Studies are required to complete with a grade of <del>C- or better</del> fifteen hours of courses in selected fields of religious studies. ...	Students who take a Minor in Religious Studies are required to complete with a grade of <b>C- or better</b> fifteen hours of courses in selected fields of religious studies. ...
<b>in Cognitive Science</b>	Students who take a Minor in Cognitive Science must complete 15 hours of courses with a grade of <del>C- or better, ...</del>	Students who take a Minor in Cognitive Science must complete 15 hours of courses with a grade of <b>C- or better, ...</b>
<b>in Logic and Methodology</b>	Students who take a Minor in Logic and Methodology are required to complete with a grade of <del>C- or better 15 hours of courses (with an overall average of 2.0 in these courses).</del> ...	Students who take a Minor in Logic and Methodology are required to complete with a grade of <b>C- or better 15 hours of courses.</b> ...
<b>in Ethics</b>	Students who take a Minor in Ethics are required to complete with a grade of <del>C- or better</del> 15 hours of courses. ...	Students who take a Minor in Ethics are required to complete with a grade of <b>C-or better</b> 15 hours of courses. ...
<b>Health, Medicine, and Human Values</b>	Students who take a Minor in Health, Medicine, and Human Values are required to complete with a grade of <del>C- or better 15 hours of courses (with an overall average of 2.0 in these courses).</del> ...	Students who take a Minor in Health, Medicine, and Human Values are required to complete with a grade of <b>C- or better 15 hours of courses.</b> ...

SIGNATURE PAGE

CURRICULA ACTION FOR PHILOSOPHY MINORS (16CNM, 16LOGM, 16ETHM, 16HMM, 16PHM, 16RSM)

RECOMMENDED BY:



4/18/2017

HEAD, DEPARTMENT/PROGRAM

DATE

ENDORSED BY:



4/18/2017

CHAIR, COLLEGE COURSES & CURRICULA COMMITTEE

DATE



4/25/17

COLLEGE DEAN

DATE

APPROVED BY:

\_\_\_\_\_  
CHAIR, UNIVERSITY COURSES & CURRICULA COMMITTEE

DATE

\_\_\_\_\_  
CHAIR, COUNCIL ON UNDERGRADUATE EDUCATION

DATE

\_\_\_\_\_  
DEAN, DIVISION OF ACADEMIC AND STUDENT AFFAIRS (DASA)

DATE

APPROVED EFFECTIVE DATE \_\_\_\_\_