



University Courses & Curricula Committee 2019-2020

March 18, 2020
Talley Student Union 5101
12:45pm-2:45pm

Call to Order 12:45pm

- Welcome from Chair Rudi Seracino
- Remarks and Updates from OUCCAS/DASA
- Approval of UCCC February 26th 2020 Minutes
- Course and Curricular Business

Old Business

Old Business			
Presenter	Reviewers	Action	Type
Klesath	Rucker, Klesath, Carlson Welch	CH 102 General Chemistry Laboratory	Revisions: SLOs, eval methods, description

New Business

Consent Agenda		
ANT 346 Peoples and Cultures of Southeast Asia	Minor	Revisions: removed GEP status
BIO 105 Biology in the Modern World	Minor	Revisions: requisites, description
BIO 414 Cell Biology	Minor	Revision: removing PB crosslisting
BUS 443 Web Development for Business Applications	Minor	Revision: requisites
ECE/MAE 483 Engineering Entrepreneurship and New Product Development II	Minor	Revision: requisites
ENG 469 American Realism and Naturalism	Drop	Course being dropped
*FW 444/(544) Mammalogy	Minor	Revision: removing ZO crosslisting
HS 200 Home Horticulture	Minor	Revision: GEP information
NTR 490 Senior Capstone Experience in Nutrition	Minor	Revision: requisites
PRT 152 Introduction to Parks, Recreation and Tourism	Minor	Revision: year offering
BS in Industrial Engineering (14IEBS)	Minor	Revision: add CE 282 and MSE 355 to elective list
Sustainable Energy Minor (SEM)	Drop	Minor being dropped

College of Humanities and Social Sciences			
Presenter	Reviewers	Action	Type
Gruehn	Hessling, Klesath, Reynolds	ANT/IS 471/(571) Understanding Latina Migration	New Course
Gruehn	Merrill, Shah, Fitzpatrick	*ENG 451/(551) Chaucer	Revisions: SLOs, etc
Gruehn	Bruce, Carlson Welch, Reynolds	ENG 468 Studies in Nineteenth-Century American Literature	Revisions: SLOs, etc
Gruehn	Marshall, Domingue, Klesath	ENG 486 Shakespeare, The Earlier Plays	Revisions: SLOs, etc
Gruehn	Bruce, Hessling, Muse	*ENG 487 Shakespeare, The Later Plays	Revisions: SLOs, etc
Driscoll	Klesath, Merrill, Hessling	HI 369 Sexuality in U.S. History	New Course
Driscoll	Bruce, Schaffer, Reynolds	HI 375 Global History of Travel and Tourism	New Course
Driscoll	Simpson, Blank, Hessling	SOC 205 Jobs and Work	Revisions: SLOs, etc.
Driscoll	Muse, Shaffer, Carlson Welch	SOC/REL 309 Religion and Society	Revisions: SLOs, etc
Driscoll	Carlson Welch, Fitzpatrick, Marshall	World Literature (16WLM)	Revision

University College			
Presenter	Reviewers	Action	Type
Domingue	Klesath, Reynolds, Muse	SLC 350 Leadership and Negotiation	New Course
Domingue	Marshall, Krause, Rucker	Music Minor 24MUM	Revisions

College of Textiles			
Presenter	Reviewers	Action	Type
Krause	Rucker, Klesath, Carlson Welch	TT/NW 404/(504) Introduction to Nonwovens Products and Processes	Revisions: SLOSs, eval methods, description

College of Agriculture and Life Sciences			
Presenter	Reviewers	Action	Type
Bruce	Domingue, Rucker, Krause	AEE 323 Leadership Development in Agriculture and Life Sciences	Revisions: SLOs, eval methods
Bruce	Shah, Simpson, Hessling	HS 201 The World of Horticulture: Principles and Practices	Revisions: SLOs, eval methods
Bruce	Krause, Muse, Janca	HS 304 Ornamental Plant Identification	Revisions
Bruce	Schaffer, Reynolds, Klesath	Agricultural and Environmental Technology 11AGEVTBS	Revisions
Merrill	Carlson Welch, Marshall, Domingue	Agricultural and Environmental Technology: Agricultural Systems Management 11AGEVTBS-11AGEVTASM	Revisions
Merrill	Gruehn, Rucker, Blank	Agricultural and Environmental Technology: Agricultural Systems Management 11AGEVTBS-11AGEVTESM	Revisions
Merrill	Driscoll, Fitzpatrick, Janca	Agricultural and Environmental Technology Minor (11AEM)	Revisions

College of Sciences			
Presenter	Reviewers	Action	Type
Muse	Driscoll, Shah, Bruce	BIO 440 The Human Animal: An Evolutionary Perspective	Revisions: SLOs, eval methods, component type
Muse	Gruehn, Simpson, Merrill	CH 201 Chemistry- A Quantitative Science	Revisions: SLOs, eval methods, component type
Klesath	Fitzpatrick, Shaffer, Krause	CH 202 Quantitative Chemistry Laboratory	Revisions: SLOs, eval methods, component type

College of Natural Resources			
Presenter	Reviewers	Action	Type
Blank	Marshall, Domingue, Gruehn	Environmental First Year Program	New First Year Program
Blank	Rucker, Klesath, Carlson Welch	Environmental Sciences minor (15EVM)	Revisions

SLO= Student Learning Outcomes

***=Course Action Initiated Before October 1, 2019**

Discussion:

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.

SLO = Student Learning Outcomes



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University Courses and Curricula Committee

February 26, 2020
Electronically Hosted
Call to Order: 12:48 PM

Members Present: Chair Rudi Seracino, Marta Klesath (past chair), Kanton Reynolds, Melissa Merrill, Daniel Gruehn, Catherine Driscoll, Peter Hessling, Wendy Krause, Peggy Domingue, Rucker Rob, Annie Carlson Welch, Peter Janca, Gary Blank, Coleman Simpson, Spencer Muse, David Fitzpatrick, Tej Shah, Kristen Schaffer, Lisa Marshall, Katherine McKee (JB Proxy)

Members Absent: Jackie Bruce,

Guests: Tremain Brittian, Amanda Beller, Sarah Heckman, Karey Harwood, Walter Robinson, Bala Rao, Danny Monroe

Ex-Officio Members Present: Li Marcus, Lexi Hergeth, Tim Petty, Jordan Luzader

WELCOME AND INTRODUCTIONS

- **Remarks from Chair** - Welcomed the committee members and introduced the guests and proxies.
- **Remarks from OUCCAS/DASA**- Li let the committee know that we will be traveling immediately after the meeting for a conference.
- **Approval of the Minutes from February 12th 2020 – Approved Unanimously**
 - Discussion: Members Coleman Simpson moved to approve.

Old Business

- **BAE 486/(586) Aquacultural Engineering- Approved Unanimously**
Discussion: Member proxy Katherine McKee presented the new course action. Previously tabled at the 29 Oct. 2019 UCCC meeting. Updated information looks good based on the reviewers' comments.

NEW BUSINESS

- **Psychology (BA) General Psychology 16PSYCHBA-16PSYCHGEN - Approved Unanimously**
Discussion: Member Daniel Gruehn presented the curricular action. Member brought attention to the semester display having HES as 3 credit hours, which will impact the total credit hours, members indicated this is formatting but the column should still be 15, not 16 credit hours in the Spring semester of Freshman year.
- **Interdisciplinary Studies (BS) Women's and Gender Studies 16IDSBS-16WGSB - Approved Suggestion**
Discussion: Member Catherine Driscoll presented the curricular action. Member brought attention to the second sentence in the justification statement discussing the dual degree program and the college program and asked what the relationship between this concentration and the double degree program is, is the plan suggested supposed to provide the requirements between CHASS and COS. Guest Karey Harwood confirmed. Member and guest discussed that there has been a consult with some members of COS and there were concerns about combining the two degrees in terms of the workload for the students, specifically the foreign language requirement.
Members discussed that this isn't a double degree program, but the idea expressed in the justification statement for a double degree program is background for this Bachelor of Science program to have the WGS concentration.
This is not a double degree program, that is when the student would have a two degrees.
*Li provided definitions of dual degree, double degree, etc.
Member discussed double degrees and what happens with students who are in the scholarship program.
Suggestion to clarify the justification wording that this is not a double degree. This is a scholarship program that requires a double major.
- **HS 303 Ornamental Plant Identification I- Approved Pending**
Discussion: Member proxy Katherine McKee presented the course action. Member brought attention to the 5 lab hours and indicated there are 2 credit hours for a non-self-contained and 3 credit hour for a self-contained lab and asked if this should be 6 instead of 5. Motion to amend the motion to approve pending the clarification of a self-contained or non-self-contained lab and a clarification of 4 or 6 hours.
Member brought attention to the statement that students are responsible for providing their own transportation and asked if there should be an additional statement in lab safety. Since the statement is present this is within regulations.
- **HS 357 Landscape Grading and Drainage- Approved Pending with Suggestions**
Discussion: Member Melissa Merrill presented the course action. Member indicated that there are inconsistencies in

the syllabus and CIM, there are 17 weeks in the syllabus and the evolution in grading, a test is 25% in CIM and the participation grade in the syllabus isn't specified but attendance is graded in the CIM record. The final exam/ final presentation are reversed in CIM and the syllabus.

Participation in the syllabus should potentially indicate attendance. Motion to amend the motion to pending the resolution of the participation grade (changing participation to attendance) and a suggestion to put ranges in CIM. If it isn't their intent to change participation to attendance then the course will return to the committee.

Cost of textbook is required and is added to the pending action.

➤ **Certificate in Regulatory Science in Agriculture - Approved Pending**

Discussion: Member Melissa Merrill presented the course action. Member brought attention to the academic requirements with a total of 9 credits of required course courses, this should be 6, not 9. Member brought attention to page 5 where the wrong title is used. Motion to amend the motion to approve pending the updated paperwork with the correct credit hours and certificate title are provided.

➤ **BEC 425/(525) Molecular Biology for Biomanufacturing - Approved Pending with Suggestions**

Discussion: Member Lisa Marshall presented the course action. Member brought attention to the lab credit hours being 2 for an 8-week course and the contact hour lab section is 5. Guest Bala Rao explained that this is the number of contact hours for the week. Both he and guest Danny Monroe explained that the lab contact hours are doubled during the week in order to be done in 8 weeks for a self-contained lab.

Member brought attention to schedule of topics, Li indicated the CIM instructions will be changed and guest indicated the schedule will be added. Member suggested making the evolution method consistent within the two documents, CIM has a limit to the number of dropdown options available. Suggestion to change "participation" to "attendance".

Motion to approve pending an update to the DRO statement.

Chair clarified a self-contained lab vs a non-self-contained lab. Members discussed how a hour is 50 minutes and tried to identify if 5 or 6 contact hours, meaning the calculation by minutes would be 5, but in CIM this would need to be 6 hours.

Members also indicated the outline in CIM should have 8 weeks as it is in the syllabus.

*Member indicated there should be a definition of participation and attendance. The committee indicated that participation is defined by the individual instructor and should identify how a student can achieve 100%. Attendance will be changed to participation in CIM and more details in the syllabus. Suggestion to include a range in CIM.

➤ **BEC 445/(545) Cell Line Development for Biomanufacturing- Approved Pending**

Discussion: Member Lisa Marshall presented the course action and approve pending the update to the DRO statement, providing the topic outline in CIM, and updating the contact hours and changing the evaluation method from attendance to participation and adding details in the syllabus.

➤ **CSC 116 Introduction to Computing - Java- Approved Unanimously**

Discussion: Member Lisa Marshall presented the course action.

➤ **CSC 297 Special Topics in Cybersecurity- Tabled**

Discussion: Member Lisa Marshall presented the new course action. Member asked if there should be a special topic student learning outcome. Suggestion to create a student learning outcome in CIM that indicates special topics in cybersecurity. Members suggested using ANS 495 as an example.

Member suggested putting more student evolution methods with other optional ranges from 0-100 and the topic outline needs to have a range of topics and weeks.

*Li explained that special topics

Motion to table the course in order for the course to provide learning outcomes, schedule of topics, and student evaluation methods, and changing the title to "Professional Topics in Cybersecurity".

➤ **CSC 471 Modern Topics in Cybersecurity- Tabled**

Discussion: Member Lisa Marshall presented the new course action. Member suggested providing clarification that the topics change each semesters in the CIM action. Members discussed that putting that the topics change semester by semester in the catalog description for students to be able to read during enrollment.

Members suggested a proforma syllabus instead of having to be determined in the syllabus.

Because this is a required course in the curricula there needs to be student learning outcomes, which this does.

Table to provide a syllabus with more detail and language about variation in topics in the evaluation methods and to add a statement that the topic will change by semester in the catalog description. Motion approved.

➤ **CSC 472 Cybersecurity Projects- Approved Pending**

Discussion: Member Kanton Reynolds presented the new course action. Member brought attention to the "noncontributing individuals" and indicated the first reason is in conflict with the late drop policy. Guest Karey Harwood

indicated she can remove this first option and change the information that the grade for the course would be a zero, this was the reason for the motion being amended to approved pending. Motion approved

- **MAE 413 Design of Mechanical Systems- Approved Pending**
Discussion: Member Kanton Reynolds presented the new course action pending the course length from 15 weeks to 16 weeks in CIM and the syllabus in the topic schedule.
- **MAE 415 Mechanical Engineering Design I- Approved with Suggestion**
Discussion: Member Kanton Reynolds presented the course action. Member suggested to extend the abbreviated title as this is what students will have displayed in their transcripts. Members asked for clarification that the commas in the requisites field indicates "and"s.
- **Computer Science Cybersecurity Concentration 14CSCBS-14SCSCYSEC - Approved Pending**
Discussion: Member Kanton Reynolds presented the new concentration action pending the approval of the tabled and pending courses previously discussed. The college of engineering can have up to 128 total credit hour in an exception to the 120 credit hour rule.
- **BIO 140 Survey of Animal Diversity- Approved Pending with Suggestions**
Discussion: Member Spencer Muse presented the course action. Member brought attention to the schedule of topics being 15.5 and amended the motion to approved pending. Members discussed if this should be amended because there are holidays.
Members indicated that parentheses would clarify the requisites and brought attention to the fact that BIO 350 is now ZO 350 and that ZO 150 does not exist as part of the pending motion. Member suggested providing a restrictive statement that Biology majors should not take this course.
Member brought attention to the statement that students who live more than 30 miles from campus may utilize a remote proctor that's approved by Delta and suggested removing the distance as a reason for a remote proctor.
- **MB 479/(579) Microbial Symbiosis & Microbiomes- Approved Unanimously**
Discussion: Member Spencer Muse presented the new course action.
- **MEA 260 Human Dimensions of Climate Change- Approved Unanimously**
Discussion: Member Spencer Muse presented the new course action.
- **MEA 468/(568) Aquatic Microbiology- Approved with Suggestion**
Discussion: Member Spencer Muse presented the course action. Member indicated that there appear to be 3-4 lab components in the course but that the component type indicates only lecture is used. Member suggested using lecture and lab as the component type, as there are not labs every week. There is a safety and risk option already in place for the lab portions.
Member brought attention to the late assignments and asked if there was an emergency would there be an exception. Member suggested adding a statement that there could be exceptions based on the university approved absences policy. Member suggested providing week time ranges in the syllabus and CIM instead of days. Member suggested using lecture and lab as the component type.
- **Applied Education 13EDGENBS - Approved Unanimously**
Discussion: Member Peter Hessling presented the curricula action.

Discussion:

Meeting adjourned: 2:42 PM

Respectfully submitted by Lexi Hergeth

Curriculum Action Memorandum

Removing an Option to a Curriculum

To: University Courses and Curriculum Committee
From: Edward P. Fitts Department of Industrial & Systems Engineering
College of Engineering

Affected Plans:

Bachelor of Science in Industrial Engineering (14IEBS)

Revisions:

Addition to Engineering Science Electives Options

We are requesting to add the following courses to the Engineering Science Elective options for 14IEBS:

CE 282 Hydraulics 3.

Prerequisite: C- or better in [CE 214](#); Corequisites: [MA 341](#) or [MA 305](#) or [ST 370](#).

Fluid properties; mass, energy and momentum conservation laws; dimensional analysis and modeling; laminar and turbulent flows; surface and form resistance; flow in pipes and open channels; elementary hydrodynamics; fluid measurements; characteristics of hydraulic machines. Credit will not be given for both [CE 282](#) and [MAE 308](#).

MSE 355 Electrical, Magnetic and Optical Properties of Materials 3.

Prerequisite: [PY 208](#) and [MA 341](#).

Fundamental treatment of the electronic properties of materials, including the electrical, magnetic and optical characteristics. The role of electrons, band structure, and Brillouin zones on the various classes of materials is discussed from the semiclassical and quantum mechanical viewpoints. Applications of these principles to specific technological devices are also covered.

We are also requesting removal of CE 313 as it is no longer offered to be replaced with CE 225.

Justification:

Edward P. Fitts Department of Industrial & Systems Engineering would like to provide additional options for their students in this curricular area. Currently ISE students take CE 214 as a requirement but there is only one additional CE course (now CE 225) to use as an Engineering Science Elective. Additionally, ISE students take MSE 200 as a required course but there are no Materials Science & Engineering courses offered as Engineering Science Electives for ISE students. This proposal would provide additional flexibility to our students to follow alternative course paths rather than being restricted to primarily MAE Engineering Science Electives.

Impact to the programs:

There is no foreseeable impact to other departments. Both CCEE & MSE were consulted via the College of Engineering Curriculum Council.

Proposed effective date for revision:

Spring 2020 - 2201

SIGNATURE PAGE

CURRICULUM ACTION FOR 14 IEBS

RECOMMENDED By:



HEAD, DEPARTMENT/ PROGRAM

DATE 2/25/2020


ENDORSED By:



CHAIR, COLLEGE COURSE & CURRICULA COMMITTEE

25 Feb 20

DATE



COLLEGE DEAN

2-27-2020

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 _____



Memorandum

To: University Courses and Curricula Committee

From: Dr. Gary B. Blank
Director of Undergraduate Programs
Department of Forestry and Environmental Resources

RE: Ending the Sustainable Energy Minor (SEM)

Date: 13 January 2020

Effectively immediately, the Department of Forestry and Environmental Resources wants officially to eliminate the Sustainable Energy Minor (SEM). DFER will allow students currently enrolled in SEM to complete the minor but will allow no new enrollments. We have unofficially been doing so for a while.

Originally constructed by a cross-college committee envisioning a broadly applicable framework allowing students from diverse curricula to fashion their own versions of the minor, SEM created chaos. The result was a mentoring abyss for the advisor saddled with the minor's management. When the environmental science program transferred to DFER, SEM moved from DASA to CNR (in October 2018) and this problem became our responsibility. We acted to reduce the endless consultations required by the SEM and stopped enrolling students until we could consider a better-structured minor. After considerable examination, Dr. Kern and I decided no reasonable plan could occur.


The Renewable Energy Minor exists, and is functioning quite well, so we see no reason to maintain the dysfunctional SEM.

Queries concerning this request should come to me at the following email address: gblank@ncsu.edu.

Approval Signatures:


Chair of the CNR Academic Affairs Committee

2-5-2020
Date


Dean of the College of Natural Resources

2-7-2020
Date

Chair, University Courses & Curricula Committee

Date

Dean, Undergraduate Academic Program

Date

To: University Courses and Curriculum Committee
From: Department of Foreign Languages and Literatures (FLL)
Date: October 1, 2019
Re: Revision of the World Literature minor (16 WLM)

This is to request that the current World Literature Minor be revised, with changes to title plus requirements for the minor and courses that can be used in the minor.

Justification: The current World Literature Minor is out of date, including courses that are no longer offered, and requirements that don't match the requirements of the College of Humanities and Social Science (CHASS), of which it is a part. As the proposed new title, "World Cultural Literacy" indicates, the revised minor will provide students with an opportunity to examine global perspectives in the humanities through a range of courses in different genres and selected disciplines. It is of particular interest to attract students from outside CHASS as well.

Dr Jason Swarts, Director of Undergraduate Programs and the Literature Committee in the Department of English have reviewed the revision of the minor as of 27 September 2019 and as of that date "the committee fully supports this revision."

The essential changes to requirements and course-work are as follows:

Requirements (15 credit hours)

- This minor is open to NC State students except English LLT majors
- Completion of 15 credit hours
- Students may transfer in no more than 6 hours of course-work toward the minor
- Must have an overall 2.0 GPA in the minor and may not count any course with a grade lower than a 'C-'
- A maximum of TWO (2) courses may be used (double counted) towards both departmental major requirements and minor requirements
- No courses for the minor may be taken for S/U credit

Courses (3 credit hours each)

- At least two courses at or above the 300 level
- At least one course at or above the 400 level (500-level courses approved with permission)
- One FLx language course at the 200 level or above may be counted
- Courses chosen from the World Cultural Literacy list or substitutions by permission

- One appropriate course from the disciplines of Art History, History, Music, and Philosophy and Religious Studies may be counted toward the minor. Choices must follow non Anglo-American parameters.

World Cultural Literacy Courses: CLA 210, FL 216, FL/ENG 219, FL/ENG 220, FL/ENG 221, FL/ENG 222, FL/ENG 223, FL/ENG 224, FL/ENG 246, ENG 255, FL/ENG 275, CLA 320, ENG 329, FL/ENG 392, FL/ENG 393, FL/ENG 394, ENG/AFS 349 FL/ENG 406, FL/ENG 407, ENG 466, ENG 492, FL 495, FL/ENG 539 (with permission)

Suggested related cultural courses: HA 201, 202, 298 (pre approval by minor advisor required) HI 207, 208, 209, 210, 214, 215, 216, 217, 263, 264, 270, 275, 276, 370, 371, 372, 373, 374, 370, 371, 374, 400 (pre approval required), PHI 300, 301, 302, 303, 310, 401 MUS 200, 201, 202, REL 210, 230, 311, 312, 317, 331, 332, 333, 334, 340, 350, 407, 408, 412, 413

World Cultural Literacy (16WCLM)

Description

In keeping with the University's mission to provide an international curriculum, the World Cultural Literacy minor offers N.C. State students (excluding English majors in Literature concentration) an opportunity to study literatures and cultures outside the Anglo-American tradition. Students will develop critical and analytical skills and enhance the global perspective essential in today's job market. The minor offers choices from a range of courses that include film, animation, illustrations, texts, lyrics, and popular cultural references. Readings are in English translation, but original texts supplied on request. Many World Cultural Literacy courses are cross-listed in the Department of Foreign Languages and Literatures and the English Department.

Requirements

- This minor is open to NC State students, except 16ENGLBA, 16ENGLLT (Literature concentration) majors.
- Completion of 15 credit hours.
- Students may transfer in no more than six (6) hours of course work toward the minor
- Must have an overall 2.0 GPA in the minor and may count no course grade lower than a 'C-'.
 • A maximum of TWO (2) courses may be used (double-counted) towards both departmental major requirements and minor requirements
- No courses for the minor may be taken for S/U credit

Courses (3 credit hours each)

- At least two (2) courses at or above the 300 level from approved list (6 credit hours)
- At least one (1) course at or above the 400 level from approved list (3 credit hours) *Note: enrollment in 500-level courses requires permission from minor advisor **and** home department of the course.*
- Two (2) additional courses chosen from the approved course list (6 credit hours) including:
- One related course from the disciplines of Art History, History, Music, Philosophy and Religious Studies to be counted toward the minor. Choices must follow non-Anglo-American parameters. See suggested related cultural courses list below.

World Cultural Literacy Courses:

CLA 210 Classical Mythology

CLA 320 Masterpieces of Classical Literature

ENG 255 Beyond Britain Literature from the Colonies

ENG 329 Language and Globalization

ENG/AFS 349 African Literature in English
 ENG 466 Transatlantic Literature
 ENG 492 Topics in Film (*pre-approval by minor advisor required*)
 FL 216 Art and Society in France
 FL/ENG 219 Traditional Non Western Literature
 FL/ENG 220 Studies in Great World of Western Literature
 FL/ENG 221 Literature of the Western World I
 FL/ENG 222 Literature of the Western World II
 FL/ENG 223 Contemporary World Literature I
 FL/ENG 224 Contemporary World Literature II
 FL/ENG 246 Literature of the Holocaust
 FL/ENG 275 Literature and War
 FL/ENG 392 Major World Author
 FL/ENG 393 Studies in Literary Genre
 FL/ENG 394 Studies in World Literature
 FL/ENG 406 Modernism
 FL/ENG 407 Postmodernism
 FL 495 Special Topics in Foreign Languages and Literatures
 FL/ENG 539 Seminar in World Literature (*requires permission*)

Notes:

- No language courses are required, however, one FLx 200 level or above may count towards minor electives with approval.
- Courses to be chosen from the approved World Cultural Literacy courses list; however, the minor advisor may approve exceptions, dependent on course content.

Related Cultural Courses

HA 201 History of Art from Ancient Greece through the Renaissance
 HA 202 History of Art from the Renaissance through the 20th Century
 HA 298 Special Topics in Art History (*pre-approval by minor advisor required*)
 HI 207 Ancient Mediterranean World
 HI 208 The Middle Ages
 HI 209 From Renaissance to Revolution, the Origins of Modern Europe
 HI 210 Modern Europe 1815 to the Present
 HI 214 History and Archaeology of Ancient Latin America
 HI 215 Latin America to 1826
 HI 216 Latin America since 1826
 HI 217 Caribbean History
 HI 263 Asian Civilizations to 1800
 HI 264 Modern Asia: 1800 to Present
 HI 270 Modern Middle East
 HI 275 Introduction to History of South and East Africa
 HI 276 Introduction to History of West Africa
 HI 370 Modern Egypt
 HI 371 Modern Japan
 HI 374 Visual Culture of Modern South Asia

HI 400 level and above (*pre-approval by minor advisor required*)

MUS 200 Understanding Music: Global Perspectives

MUS 201 Introduction to Music Literature I

MUS 202 Introduction to Music Literature II

PHI 300 Ancient Philosophy

PHI 301 Early Modern Philosophy

PHI 302 19th Century Philosophy

PHI 303 Continental Philosophy After 1900

PHI 310 Existentialism

PHI 401 Kant's Critique of Pure Reason

REL 210 Religious Traditions of the World

REL 230 Asian Religions

REL 311 Introduction to the Old Testament

REL 312 Introduction to the New Testament

REL 317 Christianity

REL 331 The Hindu Tradition

REL 332 The Buddhist Traditions

REL 333 Chinese Religions

REL 334 Japanese Religions

REL 340 Islam

REL 350 Introduction to Judaism

REL 383 Religion, Globalism, and Justice

REL 407 Islamic History to 1798

REL 408 Islamic in the Modern World

REL 412 Advanced Readings in the Christian Gospels

REL 413 The Life and Letters of the Apostle Paul

Admissions

This minor is open to all NC State students, except English majors in the Literature concentration (16ENGLBA 16ENGLLLT). Once a student has started taking courses in the minor they should download a [Departmental Minor Declaration Form](#) and consult with the major advisor for approval of the minor program. After the student obtains the major advisor's signature, they meet with the minor advisor to develop a plan of study indicating required courses and expected dates of completion. A copy of the student's minor plan of study will be kept on file in the Department of Foreign Languages and Literatures.

Certification

Paperwork for certification should be completed no later than during the registration period for the student's final semester at NC State. Students should meet with the Coordinator of Advising, Ms. Susan Navey-Davis (919.515.9288, https://fll.chass.ncsu.edu/people/faculty_staff/navey, 321 Withers), to complete the final certification. Students will receive official recognition on their transcript for the completed minor.

Contact

Dr Meredith Fosque
418 Withers

919 513 7034
mgfosque@ncsu.edu (*best contact*)

SIS Code: 16WCLM

World Literature (16WLM) *Current*

Description

In keeping with the University's mission to provide an international curriculum, the World Literature minor offers N.C. State students an opportunity to broaden their perspectives on foreign cultures through the study of literature outside of the Anglo-American tradition. Students will also develop critical, analytical, and linguistic skills essential in today's job market. The minor offers choices from a range of courses in literature, in translation or in the original language, from Europe, Asia, Africa, and Latin America. World Literature courses are cross-listed in the Department of English and the Department of Foreign Languages and Literatures.

Requirements

- This minor is open to NC State students, except English majors in the Language, Writing and Rhetoric Concentration (16ENGLBA 16ENGLWR).
- Proficiency in foreign language at the FL 202, LAT 202, GRK 202 or above.
- Completion of 15 credit hours.
- Students may transfer in no more than six (6) hours of courses toward the minor.
- Must have an overall 2.0 GPA in the minor and may count no course grade lower than a 'C-'.
- A maximum of TWO (2) courses may be used (double-counted) towards both departmental major requirements and minor requirements.
- No courses for the minor may be taken for S/U credit.

Required Courses (3 credit hours)

- ENG/FL 221 Literature of the Western World I OR ENG/FL 222 Literature of the Western World II

Elective Courses (12 credit hours)

Group 1: Choose 1 course

- ENG (FL) 221 Literature of the Western World I
- ENG (FL) 222 Literature of the Western World II
- ENG (FL) 223 Contemporary World Literature I
- ENG (FL) 224 Contemporary World Literature II

Group 2: Choose 2 courses in

- ENG (FL) 394 Special Topics in World Literature or 1 course in ENG 496 Seminar in Literary Criticism

Group 3: Choose 1 course

- Any 300- or 400-level literature course outside of your major. See advisor about meeting this requirement.

Admissions and Certification

Students interested in declaring a minor in Technical and Scientific Communication should contact the minor coordinator listed below. The minor must be completed no later than the semester in which the student expects to graduate from his or her degree program.

Contact

Dr. Larysa A Mykyta
1911 Bldg 219, Box 8106
919.515.9314
lamfll@ncsu.edu
SIS Code: 16WLM

CURRICULUM REQUIREMENTS

Format B Minor Adapted

Minor Plan Title: World Literature World Cultural Literacy	Plan SIS Code: 16WLM 16WCLM
Concentration/Subplan Title: n/a	Subplan SIS Code: n/a
Indicate requirements status: Current: Proposed: X	Proposed Effective Semester: 2206
New Minor Audit required? (Y or N) Yes	
Critical Path Courses - Identify using the code (CP) which courses are considered critical path courses that 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.	

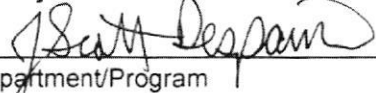
MINOR FIELD OF STUDY REQUIREMENTS:		
Required Courses/Groups/ Electives:	Credit Hours	Notes
<p>Indicate if course or course groupings have a C-wall or MGPA requirement and which are considered Critical Path courses – indicate with (CP) next to applic. course.</p> <p>C- or better required in courses counting towards the minor</p> <p>400-level Elective (Requirement: tbd) (See minor advisor for approved substitutions)</p> <p>ENG 406, 407, 466, 539, FL 406, 407, 495, 539, PHI 401, REL 407, 408, 412, 413, 539</p> <p>300-level Elective (Requirement: tbd) (See minor advisor for approved substitutions)</p> <p>AFS 349, CLA 320, ENG 329, 349, 392, 393, 394, 406, 407, 466, 539, FL 392, 393, 394, 406, 407, 495, 539, HI 370, 371, 374, PHI 300, 302, 303, 310, 401, REL 311, 312, 317, 331, 332, 333, 334, 340, 350, 383, 407, 408, 412, 413</p> <p>WCL Electives (Requirement: tbd) (See minor advisor for approved substitutions)</p> <p>List A – World Cultural Literacy AFS 349, CLA 210, 320, ENG 219, 220, 221, 222, 223, 224, 246, 255, 275, 329, 349, 392, 393, 394, 406, 407, 466, 539, FL 216, 219, 220, 221, 222, 223, 224, 246, 275, 392, 393, 394, 406, 407, 495, 539</p> <p>**List B – Related Cultural Courses HA 201, 202, 298, HI 207, 208, 209, 210, 214, 215, 216, 217, 263, 264, 270, 275, 276, 370, 371, 374, MUS 200, 201, 202, PHI 300, 302, 303, 310, 401, REL 210, 230, 311, 312, 317, 331, 332, 333, 334, 340, 350, 383, 407, 408, 412, 413</p> <p>**Only one related course (3 of 15 units) from this list may count towards minor. HA 201, 202, 298, HI 207, 208, 209, 210, 214, 215, 216, 217, 263, 264, 270, 275, 276, 370, 371, 374, MUS 200, 201, 202, PHI 300, 302, 303, 310, 401, REL 210, 230, 311, 312, 317, 331, 332, 333, 334, 340, 350, 383, 407, 408, 412, 413</p>	<p>3</p> <p>6</p> <p>6</p>	
<p>Total credit hours required to complete minor <i>Minimum 15 hours required</i></p>	15	

North Carolina State University
Routing for DASA or Graduate School Approval of Other Degree Program Actions


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

Completed Proposal

Endorsed By:

 10/23/2019
 Head, Department/Program Date

Recommended By:

 3/3/2020
 Chair, College Curriculum Committee Date

Endorsed By:

 3/4/2020
 College Dean Date

Proposal moves to Undergraduate or Graduate office for routing

Recommended By:

 Vice Provost, DELTA (if DE degree/certificate) Date

Recommended By:

 Chair, University Courses & Curricula Committee
 or Administrative Board of the Graduate School Date

Approved By:

 Dean, DASA or the Graduate School

**NORTH CAROLINA STATE UNIVERSITY
UNDERGRADUATE CURRICULUM ACTION FORM
Academic Minor**

DEPARTMENT(S):

_____ Music _____

TITLE OF THE MINOR:

_____ Music Minor (24MUM) _____

TYPE OF PROPOSAL:

New Minor:

Revision to Minor: X

Discontinuation:

PROPOSED EFFECTIVE DATE: _____ Spring 2020 _____ APPROVED EFFECTIVE DATE: _____

Justification: Within the past 3 years, course, policy, and procedural changes have been made to the Music Minor with Music faculty approval, and the current description does not reflect those changes. We are proposing revisions to the Music Minor that reflect current practice.

Statement of Academic Minor Program Objectives:

- a. Demonstrate knowledge of western and non-western music's cultural heritage, history, organization and structure.
- b. Demonstrate analytical skills necessary for identifying and listening to music from a variety of periods, styles and genres.
- c. Demonstrate ability to express ideas musically through vocal and instrumental performance.

Revision 1: To remove the History Track of the Music Minor, which has had no enrollment in recent years. Because students interested in music history may take the same electives in the General Studies track, we are requesting that the History track be eliminated.

Revision 2: To change the "Liberal Arts" designation to "General Studies," resulting from student confusion on the exact meaning and nature of "liberal arts" within the discipline of music.

Revision 3: To include new course options to the General Studies Track, approved by the department as electives in fulfillment of the designated track.

Revision 4: To update policies and procedures to reflect departmental practice over the past 3 years.

Below are 2 documents:

1. Proposed emendations to the current music minor description (red indicates additions; strikes indicate deletions)
2. A final copy of the proposed music minor description (with emendations removed).

REQUIRED SIGNATURES:


 2/10/2020

Head, Department/Program
Date

 2/10/2020

Chair, College Curriculum Committee
Date

OTHER REQUIRED SIGNATURES AS NEEDED:

 2/13/20

College Dean
Date

Chair, University Courses & Curricula Committee
Date

Dean, Division of Academic and Student Affairs (DASA)
Date

Amended description

Description

The Music Minor is a 20-credit hour curriculum designed for undergraduate students who wish to engage in the study of music through one of **three** curricular **tracks**: (1) Performance, (2) Composition, ~~(3) History~~, and (3) **Liberal Arts General Studies**. Students take four required courses (8 credit hours) in music theory, aural skills, class piano, and Western music history, and an additional 12 credit hours of required courses and electives in their area of specialization.

General Requirements for the Music Minor:

- A total of 20 hours is required for the Music Minor.
- A maximum of 6 transfer credit hours may be applied to the Music Minor, as approved by the Music Minor Advisor and ~~Director of Music~~ **Department Head**.
- A grade of C- or better is required in each course used toward the minor.
- No course for the minor may be taken for S/U credit.
- For students majoring in Arts Studies-Music, a maximum of one 3-credit course may be used (double-counted) toward both departmental major requirements and minor requirements.
- Certain courses allow for a placement test or audition; students who test out of a course must make up those credits by taking another approved MUS course.
- **MUS 120: Introduction to Music Theory is a prerequisite for MUS 103: Theory and Musicianship I and does not count toward completion of the 20 hours required for the music minor. Students may elect to take the Music Theory Placement Test to test into MUS 103.**
- ~~Formal admission to the Music Minor is granted upon the completion and processing of a Minor Declaration~~
https://studentservices.ncsu.edu/forms/registrar/declare_minor.pdf

Required courses

For all **Tracks (8 required credit hours):**

MUS 103: ~~Music Theory and Musicianship I~~ (3 cr)

MUS 104: **Theory and Musicianship Lab I** (1 cr)

MUS 107: Class Piano I (1 cr), required for students in the ~~Liberal Arts~~ **General Studies** and Composition, ~~and History Tracks only~~

MUS 207: Class Piano II (1 cr), required for students in the Performance **Track**. However, performance students who test out must take MUS 154.

MUS 202: Introduction to Music Literature II (3 cr)

Performance **Track (12 additional credit hours):**

~~MUS 204: Aural Skills II (1 cr), required only for performance minors who have tested out of MUS 207~~

MUS 193: Applied Music I (2 semesters at 1 cr each semester) (2 cr)

MUS 293: Applied Music II (2 semesters at 1 cr each semester) (2 cr)

MUS 393: Recital (1 cr)

MUS XXX: Ensemble (4 semesters at 1 cr each semester) (4 cr). Piano minors fulfill this requirement by taking 2 semesters of ensembles (2 cr) and MUS 208 (Piano Pedagogy) (2 cr).

MUS XXX: One 3-hour advised elective (3 cr)

Composition **Track (12 additional credit hours):**

MUS 153: ~~Music Theory and Musicianship II~~ (3 cr)

MUS 154: **Theory and Musicianship Lab II** (1cr)

MUS 320: Music of the 20th Century (3 cr)

One of the following options:

- MUS 305: Music Composition (3 cr)

- MUS/ARS 306: Music Composition with Computers (3 cr)
- MUS 270 and 370: Songwriting using Digital Audio Workstations *and* Intermediate Songwriting using Digital Audio Workstations (each 2 cr). Note that this option provides 1 additional free elective cr. Students must take both courses, or take one of MUS 270 or 370 and another of MUS 305 or 306.

MUS 498: Independent Study in Music (2 cr) (1 additional free elective cr if the composition is performed publicly)

~~History Track~~ (12 additional credit hours):

~~MUS 201: Introduction to Music Literature I (3 cr)~~
~~MUS 203: Music Theory II (3 cr)~~
~~MUS 204: Aural Skills II (optional) (1 free elective cr)~~

Electives: Choose 2 electives from the following list:

~~MUS 200: Understanding Music: Global Perspectives (3 cr)~~
~~MUS 206: America's Music (3 cr)~~
~~MUS 230: Introduction to African-American Music (3 cr)~~
~~MUS 260: History of Jazz (3 cr)~~
~~MUS 310: Music of the 17th and 18th Centuries (3 cr)~~
~~MUS 315: Music of the 19th Century (3 cr)~~
~~MUS 320: Music of the 20th Century (3 cr)~~
~~MUS 330: Survey of Musical Theater (3 cr)~~
~~MUS 350: Music of Asia (3 cr)~~
~~MUS/WGS 360: Women in Music (3 cr)~~
~~MUS 210: Intro Popular Music 1950s-1970s (3 cr)~~
~~MUS 211: Intro Popular Music 1980s-present (3 cr)~~

~~Liberal Arts~~ General Studies Track (12 additional credit hours):

MUS 200: Understanding Music: Global Perspectives (3 cr)

Electives: Choose 9 credit hours of electives from the following list; two courses must be 3 credit hours each:

MUS XXX: Ensemble (up to 3 semesters at 1cr each semester) (1-3 cr)
MUS 150: Vocal Techniques (1 cr)
MUS 201: Introduction to Music Literature I (3 cr)
MUS 153: Music Theory II and Musicianship (3 cr)
MUS 154: Theory and Musicianship Lab II (1 cr)
MUS 105: Introduction to Music in Western Society (3 cr)
MUS 206: America's Music (3 cr)
MUS 207: Class Piano II (1 cr)
MUS 210: Introduction to Popular Music 1950s-1970s (3 cr)
MUS 211: Introduction to Popular Music 1980s-present (3 cr)
MUS/AFS 230: Introduction to African-American Music (3 cr)
MUS 240: Introduction to the Music Industry (3 cr)
MUS/AFS 260: History of Jazz (3 cr)
MUS 270: Songwriting using Digital Audio Workstations (2 cr)
MUS 305: Music Composition (3 cr)
MUS/ARS 306: Music Composition with Computers (3 cr)
MUS 310: Music of the 17th and 18th Centuries (3 cr)
MUS 315: Music of the 19th Century (3 cr)
MUS 320: Music of the 20th Century (3 cr)
MUS 330: Survey of Music Theater (3 cr)
MUS 350: Music of Asia (3 cr)
MUS/WGS 360: Women in Music (3 cr)
MUS 370: Intermediate Songwriting using Digital Audio Workstations (2 cr)

Admissions and Certification of Minor

For all students:

- Students may apply for the Music Minor electronically via the [Music Minor Application](#) or in person at the Music Department Office, 203 Price Music Center. Based on their chosen track, students will be assigned the appropriate minor advisor, who will then schedule a meeting to discuss a plan of study and the expectations established for the minor.
- For students in the Performance Track, admission is through a preliminary audition. Upon recommendation, students are assigned an advisor and applied instructor and enroll in MUS 193. The jury exam at the end of their first semester of MUS 193 determines eligibility for continuation in the Performance Track.
- For students in the Composition and ~~Liberal Arts~~ General Studies Tracks, ~~formal~~ admission to the Music Minor is granted upon the completion and processing of a [Minor Declaration Form](#).
- During each semester's registration period, students must schedule an appointment with their minor advisor to have their plan of study reviewed. This should take place before students meet with their Academic Advisor and enroll for the following semester's courses.

Performance ~~Track~~ Requirements:

- ~~• During each registration period, students must schedule an appointment with their minor advisor to have their plan of study reviewed. This should take place before students meet with their Academic Advisor and enroll for the following semester's courses.~~
- ~~• At the end of each semester, students must participate in a Performance Jury as a measure of their progress in the Performance Track.~~
- Students preparing to enter their *second* semester of MUS 193 must first pass the Music Theory Placement Test or enroll concurrently in MUS 120.
- Students who have not taken any of MUS 103, MUS 104, or MUS 202 by the end of their second semester of MUS 193 must enroll concurrently in one of these courses during their *first* semester of MUS 293.
- ~~• At the end of their second semester of MUS 293, students will present a Pre-recital Jury to assure sufficient progress toward the recital. If approved, the minor advisor will then enroll the student in MUS 393.~~
- ~~• Students must complete a Recital Jury approximately six weeks before their scheduled graduation recital.~~

Composition ~~Track~~ Requirement:

- Students must enroll in MUS 498 (Independent Study in Music) during the registration period preceding the final semester of the minor. At this time, a [Course Agreement](#) contract is completed by the student and the student's applied composition instructor. The goals and timeline for completing the composition project should be approved by the student's minor advisor.

Certification

The Music Department ~~Head or their designee~~ will certify the Music 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 the registration period prior to the student's final semester at NC State.

Contact Person/Music Minor Advisor

Dr. Daniel Monek
203 Price Music Center
919.515.1692
dgmonek@ncsu.edu

Final copy

Description

The Music Minor is a 20-credit hour curriculum designed for undergraduate students who wish to engage in the study of music through one of three curricular tracks: (1) Performance, (2) Composition, and (3) General Studies. Students take four required courses (8 credit hours) in music theory, aural skills, class piano, and Western music history, and an additional 12 credit hours of required courses and electives in their area of specialization.

General Requirements for the Music Minor:

- A total of 20 hours is required for the Music Minor.
- A maximum of 6 transfer credit hours may be applied to the Music Minor, as approved by the Music Minor Advisor and Department Head.
- A grade of C- or better is required in each course used toward the minor.
- No course for the minor may be taken for S/U credit.
- For students majoring in Arts Studies-Music, a maximum of one 3-credit course may be used (double-counted) toward both departmental major requirements and minor requirements.
- Certain courses allow for a placement test or audition; students who test out of a course must make up those credits by taking another approved MUS course.
- MUS 120: Introduction to Music Theory is a prerequisite for MUS 103: Theory and Musicianship I and does not count toward completion of the 20 hours required for the music minor. Students may elect to take the Music Theory Placement Test to test into MUS 103.

Required courses

For all Tracks (8 required credit hours):

MUS 103: Theory and Musicianship I (3 cr)

MUS 104: Theory and Musicianship Lab I (1 cr)

MUS 107: Class Piano I (1 cr), required for students in the General Studies and Composition Tracks only.

MUS 207: Class Piano II (1 cr), required for students in the Performance Track. However, performance students who test out must take MUS 154.

MUS 202: Introduction to Music Literature II (3 cr)

Performance Track (12 additional credit hours):

MUS 193: Applied Music I (2 semesters at 1 cr each semester) (2 cr)

MUS 293: Applied Music II (2 semesters at 1 cr each semester) (2 cr)

MUS 393: Recital (1 cr)

MUS XXX: Ensemble (4 semesters at 1 cr each semester) (4 cr). Piano minors fulfill this requirement by taking 2 semesters of ensembles (2 cr) and MUS 208 (Piano Pedagogy) (2 cr).

MUS XXX: One 3-hour advised elective (3 cr)

Composition Track (12 additional credit hours):

MUS 153: Theory and Musicianship II (3 cr)

MUS 154: Theory and Musicianship Lab II (1 cr)

MUS 320: Music of the 20th Century (3 cr)

One of the following options:

- MUS 305: Music Composition (3 cr)
- MUS/ARS 306: Music Composition with Computers (3 cr)
- MUS 270 and 370: Songwriting using Digital Audio Workstations and Intermediate Songwriting using Digital Audio Workstations (each 2 cr). Note that this option provides 1 additional free elective cr. Students must take both courses, or take one of MUS 270 or 370 and another of MUS 305 or 306.

MUS 498: Independent Study in Music (2 cr) (1 additional free elective cr if the composition is performed publicly)

General Studies Track (12 additional credit hours):

MUS 200: Understanding Music: Global Perspectives (3 cr)

Electives: Choose 9 credit hours of electives from the following list; two courses must be 3 credit hours each:

MUS XXX: Ensemble (up to 3 semesters at 1cr each semester) (1-3 cr)

MUS 105: Introduction to Music in Western Society (3 cr)

MUS 150: Vocal Techniques (1 cr)

MUS 153: Theory and Musicianship II (3 cr)

MUS 154: Theory and Musicianship Lab II (1 cr)

MUS 201: Introduction to Music Literature I (3 cr)

MUS 206: America's Music (3 cr)

MUS 207: Class Piano II (1 cr)

MUS 210: Introduction to Popular Music 1950s-1970s (3 cr)

MUS 211: Introduction to Popular Music 1980s-present (3 cr)

MUS/AFS 230: Introduction to African-American Music (3 cr)

MUS 240: Introduction to the Music Industry (3 cr)

MUS/AFS 260: History of Jazz (3 cr)

MUS 270: Songwriting using Digital Audio Workstations (2 cr)

MUS 305: Music Composition (3 cr)

MUS/ARS 306: Music Composition with Computers (3 cr)

MUS 310: Music of the 17th and 18th Centuries (3 cr)

MUS 315: Music of the 19th Century (3 cr)

MUS 320: Music of the 20th Century (3 cr)

MUS 330: Survey of Music Theater (3 cr)

MUS 350: Music of Asia (3 cr)

MUS/WGS 360: Women in Music (3 cr)

MUS 370: Intermediate Songwriting using Digital Audio Workstations (2 cr)

Admissions and Certification of Minor

For all students:

- Students may apply for the Music Minor electronically via the [Music Minor Application](#) or in person at the Music Department Office, 203 Price Music Center. Based on their chosen track, students will be assigned the appropriate minor advisor, who will then schedule a meeting to discuss a plan of study and the expectations established for the minor.
- For students in the Performance Track, admission is through a preliminary audition. Upon recommendation, students are assigned an advisor and applied instructor and enroll in MUS 193. The jury exam at the end of their first semester of MUS 193 determines eligibility for continuation in the Performance Track.
- For students in the Composition and General Studies Tracks, admission to the Music Minor is granted upon the completion and processing of a [Minor Declaration Form](#).
- During each semester's registration period, students must schedule an appointment with their minor advisor to have their plan of study reviewed. This should take place before students meet with their Academic Advisor and enroll for the following semester's courses.

Performance Track Requirements:

- Students preparing to enter their *second* semester of MUS 193 must first pass the Music Theory Placement Test or enroll concurrently in MUS 120.
- Students who have not taken any of MUS 103, MUS 104, or MUS 202 by the end of their second semester of MUS 193 must enroll concurrently in one of these courses during their *first* semester of MUS 293.

Composition Track Requirement:

- Students must enroll in MUS 498 (Independent Study in Music) during the registration period preceding the final semester of the minor. At this time, a Course Agreement contract is completed by the student and the student's applied composition instructor. The goals and timeline for completing the composition project should be approved by the student's minor advisor.

Certification

The Music Department Head or their designee will certify the Music 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 the registration period prior to the student's final semester at NC State.

Contact Person/Music Minor Advisor

Dr. Daniel Monek
203 Price Music Center
919.515.1692
dgmonek@ncsu.edu



College of Agriculture and Life Sciences
Department of Biological & Agricultural Engineering
bae.ncsu.edu

Campus Box 7625
Raleigh, NC 27695-7625
P: 919.515.6760
E: Andy_Hale@ncsu.edu

January 17, 2020

MEMORANDUM

TO: Dr. Lisa Zapata
Interim Vice Chancellor of the Division of Academic and Student Affairs

FROM: S. Andrew Hale, Ph.D. *S.A. Hale*
Professor and Undergraduate Coordinator,
Biological and Agricultural Engineering

SUBJECT: Minor Curriculum Revision to the B.S. in Biological and Agricultural Engineering
Technology (11AGEVTBS, effective summer 1, 2011)

Effective Fall 2020, the department of Biological and Agricultural Engineering requests the following changes to the B.S. in Biological and Agricultural Engineering Technology (11AGEVTBS, effective summer 1, 2011).


1. Add ALS 303 as an option paired with ALS 103 in fall of the freshman year. This was previously approved, but is listed incorrectly on the 8-semester display.
2. Remove CSC 200 and AEE 226 from fall of the freshman year. These course options will be replaced with a new course designed specifically for this program in another semester.
3. Add BAET 200 to fall of the sophomore year. This course new computing course replaces the CSC 200 or AEE 226 course options.
4. Move ARE 201 from the fall of the sophomore year to spring of the sophomore year. This and subsequent course semester changes are necessary to accommodate the addition of BAET 200 and free electives in the fall, sophomore semester.
5. Add 2 credits of free electives to fall of the sophomore year.
6. Move the GEP Social Science from spring of the sophomore year to fall of the freshman year.
7. Move BAET 323 from fall of the junior year to spring of the junior year.
8. Move ST 350 from spring of the junior year to fall of the junior year.
9. Add BAET 333 to the spring of the junior year. This course is being removed as an elective and changed to a requirement.
10. Delete the Group A, B or C elective from the spring, junior semester, allowing BAET 333 to be added.
11. Add BAET 450 to the senior, spring semester as the curriculum capstone course.

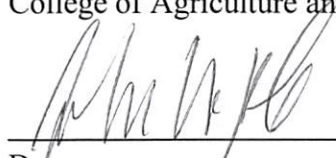
12. Remove the Ag Systems Elective to allow the addition of BAET 450
13. Eliminate the senior, spring semester Free Elective. It moved to the fall, sophomore semester.
14. Correct the program footnotes and numbers.

RECOMMENDED BY:

 2/3/2020
Head, Biological & Agricultural Date
RECOMMENDED BY:

APPROVED BY:

 6 Feb 2020
Chair, Courses and Curricula Committee Date
College of Agriculture and Life Sciences

 2/16/2020
Dean, Date
College of Agriculture and Life Sciences

Chair, University Courses and Date
Curricula Committee

Dean, Date
Division of Academic and Student Affairs

APPROVED EFFECTIVE DATE: _____

FORMAT A
(SEMESTER-BY-SEMESTER CURRICULUM DISPLAY)

Indicate display status: Current: Proposed: X Proposed Effective Semester: Spring 2020

Degree/Plan Title: B. S. in Biological and Agricultural Engineering Technology

Concentration/Subplan Title: n/a

Plan SIS Code: 11AGEVTBS

Subplan SIS Code: n/a

New Degree Audit required? (Y or N) Yes

~~Text to be deleted~~

Text to be added

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
ALS 103	Intro. Topics in ALS	1	CH 101	Chem - A Molecular Science ^B	3 (cp)
	Freshman Trans & Diversity in ALS or		CH 102	General Chemistry I Lab ^B	1 (cp)
ALS 303	Transfer Trans & Diversity in ALS		MA 131	Calc. for Life & Mgt. Sc. A ^A	3 (cp)
BIO 181	Introductory Biology I ^B	4 (cp)		GEP Humanities Requirement ^C	3
CSC 200	Intro. To Computers & Uses of	3	GC 120	Found. of Graphics	3
	AEE-226 Comp. Apps in Ag and Ext. Ed.⁴		HES_ ***	Health & Exercise Studies Course ^E	1
	GEP Social Science Elective ^D	3	BAE 100	Intro to BE & BAET	1
ENG 101	Academic Writing & Research ^H	4			15
MA 114	Intro. Finite Math ^A	3 (cp)			
		15			
Sophomore Year					
Fall Semester		Credits	Spring Semester		Credits
BAET 200	Computer Applications in BAET	2 (cp)		GEP Interdisciplinary Persp. Elec. ^G	3
BAET 201	Shop Processes & Mgmt.	3		Physical Science Elective. ²¹	4 (cp)
PY 211	College Physics I ^B	4 (cp)		Group A,B or C Elective ³²	3
ARE 201	Intro. Agri. Res. Econ.⁹	3	ARE 201	Intro. Agri. Res. Econ. ^D	3 (cp)
SSC 200	Soil Science ^B	3 (cp)	HES_ ***	Health & Exercise Studies Course ^E	1
SSC 201	Soil Science Lab	1 (cp)			14
	Free Elective	2			
		15			
Junior Year					
Fall Semester		Credits	Spring Semester		Credits
BAET 323	Water Management	3	BAET 323	Water Management	3 (cp)
BAET 343	Electrical Systems	4 (cp)	BAET 332	Management of Animal Environments	4 (cp)
ST 350	Econ. & Bus. Stat. ^A	3	BAET 333	Processing BAE Products	3 (cp)
	Agri. and Resou. Econ. Elective ⁴³	3	ST 350	Econ. & Bus. Stat.^A	3
	Group A,B or C Elective ³²	3		BAET AES Elective ⁵⁴	3
	Communications Elective ⁶⁵	3		Group A,B or C Elective³	3
		16		Agri. and Resou. Econ. Elective ⁴³	3
					16
Senior Year					
Fall Semester		Credits	Spring Semester		Credits
BAET 432	Agri. & Env. Safety & Health	3 (cp)	BAET 450	BAET Capstone	3 (cp)
	BAET AES Elective ⁵⁴	3		BAET AES Elective ⁵⁴	3
AEE 323	Leadership Development in ALS	3		Group A,B or C Elective ³²	3
	Group A,B or C Elective ³²	3		GEP Additional Breadth Requirement ^F	3
	GEP Humanities Requirement ^C	3		GEP Interdisciplinary Persp. Elec. ^G	2
		15		Free Elective	1
					14

Major/Program Footnotes:

¹Choose between CSC 200 and AEE 226.

²Choose between (CH 201 and 202) or PY 212.

³Group A, B and C electives can emphasize agricultural, environmental or business areas and effectively used for a minor.

⁴Choose from ARE 303, ARE 304, ARE 306, ARE 309, ARE 311, ARE 312, ARE 321 and ARE (EC 336).

⁵Choose between AES 333, 411, 435, 443, BAE 325 and GIS 410.

⁶Choose from ENG 331, ENG 332 and ENG 333.

¹Choose between (CH 201 and 202) or PY 212.

²Group A, B and C electives can emphasize agricultural, environmental or business areas and effectively used for a minor.

³Choose from ARE 303, ARE 304, ARE 306, ARE 309, ARE 311, ARE 312, ARE 321 and ARE (EC 336).

⁴Choose between BAET 411, 435, 443, BAE 325 and GIS 280.

⁵Choose from ENG 331, ENG 332 and ENG 333.

⁶Major GPA must be 2.0 or higher 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: **MA 114, MA 131**
 - 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, BIO 181, PY 211, SSC 200**
 - 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: **ARE 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.
 - 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 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.

CURRICULUM REQUIREMENTS

Format B

Degree/Plan Title: Biological and Agricultural Engineering Technology		
Plan SIS Code: 11AVTBS		
Concentration/Subplan Title:	Subplan SIS Code:	
Indicate requirements status: Current:	Proposed: X	<u>Proposed</u> Effective Semester: Spring 2020
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.		

~~Text to be deleted~~ Text to be Added

MAJOR FIELD OF STUDY REQUIREMENTS:		
Required Courses/Groups/ Electives:	Credit Hours	GEP category, if applicable
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
<u>Communications Elective</u> COM 110, ENG 331, ENG 332 or ENG 333	3	Advanced Writing and Speaking (3 hours)
<u>Mathematical Sciences</u> MA 114, MA 131, ST 350	9 (cp)	Mathematics (6 hours)
<u>Natural and Physical Sciences</u> CH 101, CH 102 PY 211 BIO 181 SSC 200, SSC 201	4 (cp) 4 (cp) 4 (cp) 4 (cp)	Natural Sciences (7 hours)
<u>Physical Science Elective</u> CH 201 and CH 202, or PY 212	4 (cp)	
<u>AES Major</u> BAE 100 BAET 200 BAET 201 BAET 323 BAET 332 BAET 333 BAET 343 BAET 432 BAET 450 GC 120 ARE 201 AEE 323	1 2 (cp) 3 3 (cp) 4 (cp) 3 (cp) 4 (cp) 3 (cp) 3 (cp) 3 3 3	Social Sciences (3 hours)
<u>ARE Electives</u> ARE 303, ARE 304, ARE 306, ARE 309, ARE 311, ARE 312, ARE 321 or ARE(EC 336)	6	
<u>Concentration Courses/Groups/Electives:</u> BAE 325, BAET 333 , BAET 411, BAE 435, BAET 443, or GIS 410 280 CALS Group A, B or C Electives	12 9 15 12	

Free Electives:	2	
Total credit hours under Major Field of Study: <i>Minimum 27 hours required in program area.</i>	96 hours	
COLLEGE REQUIREMENTS:		
Orientation Course(s): ALS 103 or 303	1	
Other:		
Total credit hours under College Requirements:	1 Hours	

<u>NCSU GENERAL EDUCATION PROGRAM REQUIREMENTS</u>		At least one of the following must be listed:
<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"> 1 Choose course(s) from the University Approved GEP course list for this category. 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.
General Education Program Requirements: <i>Minimum 39-40 hrs</i>	Credit hours	How will the GEP requirement be met? (Choose applicable statement from 1-6 listed above)
Mathematical Sciences (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	Minimum requirements are satisfied by Major/College course requirements.
Natural Sciences (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	Minimum requirements are satisfied by Major/College course requirements.
English 101 (C- or better required) (4 credits)	4	ENG 101
Humanities (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 course(s) from the University Approved GEP course list for this category.
Social Sciences (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	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.
Additional Breadth (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 course(s) from the University Approved GEP course list for this category.
Interdisciplinary Perspectives (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	Choose course(s) from the University Approved GEP course list for this category.
Health and Exercise Studies (2 credits) (Including one Fitness and Wellness course)	2	Choose course(s) from the University Approved GEP course list for this category.
Total credit hours needed to complete GEP that are <u>not</u> satisfied as part of the Major/College requirements.	23 hours	
GEP Co-Requisites:		<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>

U.S. Diversity co-requisite	(USD)	n/a	Choose course(s) from the University Approved GEP course list for this category.
Global Knowledge co-requisite	(GK)	n/a	Choose course(s) from the University Approved GEP course list for this category.
Foreign Language Proficiency		n/a	Proficiency at the FL_102 level required.
The following requirements must be satisfied within the College/Program:			Place an X in the credit hour box to indicate below that the requirement is "Satisfied by College/Program Requirements"
Communication in the Major (Advanced Communication)		X	Satisfied by College/Program Requirements
Technology Fluency		X	Satisfied by College/Program Requirements
Total credit hours required to complete Degree: Total must be within 120-128 credit hours.	120 Total hours		As applicable, indicate here the overall GPA requirement for degree completion including course completion.

NC STATE

Andy Hale <hale@ncsu.edu>

Proposed Changes to the BAET Curricula

Sarah Heckman <sesmith5@ncsu.edu>

Mon, Jun 17, 2019 at 10:52 AM

To: Andy Hale <hale@ncsu.edu>

Cc: Travis Park <tdpark@ncsu.edu>

Andy,

Thank you for sharing the BAET curriculum revisions. The Department of Computer Science has no feedback on the actions. Good luck with the creation of the new BAET 200 course!

Sarah

On Thu, Jun 13, 2019 at 3:10 PM Andy Hale <hale@ncsu.edu> wrote:

Dear Sarah and Travis,

BAE is currently preparing curriculum revisions for the B.S. in Biological and Agricultural Engineering Technology program and its Ag Systems Management and Environmental Systems Management concentration. As part of this revision, we will be introducing BAET 200, Computer Applications in BAET. This is a specialized introductory computing course designed for this program which would replace the current option of CSC 200 or AEE 226. We would appreciate any feedback your department might have concerning these changes. Copies of the curriculum action proposals have been included for your review.

Thanks!

Andy

--

S. Andrew Hale, Ph.D.
Professor, Undergraduate Coordinator and Associate Head
Department of Biological and Agricultural Engineering
108 D.S. Weaver Labs
North Carolina State University
Raleigh, NC 27695-7625
Phone: (919) 515-6760
FAX: (919) 515-7760
Andy_Hale@ncsu.edu
Appointment Calendar
<http://www.bae.ncsu.edu/people/faculty/hale/>

--

All electronic mail messages in connection with State business sent to or received by this account are subject to the NC Public Records Law and may be disclosed to third parties.

--

Sarah Heckman, PhD
Teaching Associate Professor
Department of Computer Science
North Carolina State University

sarah_heckman@ncsu.edu
<http://www4.ncsu.edu/~sesmith5/>

North Carolina State University Mail - Proposed Changes to the BAET Curricula
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may be disclosed to third parties.

NC STATE

Andy Hale <hale@ncsu.edu>

BAET Curriculum Changes

3 messages

Andy Hale <hale@ncsu.edu>

Fri, Jan 31, 2020 at 2:27 PM

To: David Parish <dwparish@ncsu.edu>

Dave,

As part of the redevelopment program for BAET, we are currently changing the curriculum include a new computing course, BAET 200 and capstone course, BAET 250. Copies of the curriculum actions are attached for your review. Do these actions need to be approved by the COE curriculum committee, or can we handle things through a consultation?

Thanks for your thoughts.

Andy

--

S. Andrew Hale, Ph.D.
Director of Undergraduate Programs, Professor and Associate Head
Department of Biological and Agricultural Engineering
108 D.S. Weaver Labs
North Carolina State University
Raleigh, NC 27695-7625
Phone: (919) 515-6760
FAX: (919) 515-7760
Andy_Hale@ncsu.edu
[Appointment Calendar](#)
<http://www.bae.ncsu.edu/people/faculty/hale/>

All electronic mail messages in connection with State business sent to or received by this account are subject to the NC Public Records Law and may be disclosed to third parties.

4 attachments**BAET Minor Revision-8-19-V1.1.docx**
35K**BAET Revision-EnvSys-8-19-V1.2.docx**
29K**BAET Revision-AgSys-8-19-V1.2.docx**
29K**BAET Revision-No Conc-8-19-V1.2.docx**
29K

David Parish <dwparish@ncsu.edu>

Fri, Jan 31, 2020 at 2:35 PM

To: Andy Hale <hale@ncsu.edu>

Andy,

I don't think they need us since these come directly under CALS. What do you think?
We can still show them at CCC anyway but I don't think they need our approval.

Dave

[Quoted text hidden]

--

David W. Parish, PhD.
Assistant Dean
Undergraduate Academic Affairs
College of Engineering
North Carolina State University
Raleigh, NC 27695-7904
Phone: (919) 515-3263
Fax (919) 515-7908/7108
Email: dwparish@ncsu.edu

Andy Hale <hale@ncsu.edu>
To: David Parish <dwparish@ncsu.edu>

Fri, Jan 31, 2020 at 3:11 PM

Yes, I agree.

Thanks,
Andy

[Quoted text hidden]

January 17, 2020

MEMORANDUM

TO: Dr. Lisa Zapata
Interim Vice Chancellor of the Division of Academic and Student Affairs

FROM: S. Andrew Hale, Ph.D. *S.A. Hale*
Professor and Undergraduate Coordinator,
Biological and Agricultural Engineering

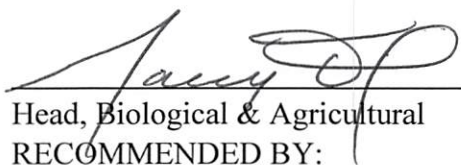
SUBJECT: Minor Curriculum Revision to the B.S. in Agricultural and Environmental Technology:
Agricultural Systems Management (11AGEVTBS-11AGEVTASM, effective spring, 2019).

Effective Fall 2020, the department of Biological and Agricultural Engineering requests the following changes to the B.S. in Biological and Agricultural Engineering Technology: Agricultural Systems Management (11AGEVTBS-11AGEVTASM, effective spring, 2019).


1. Add ALS 303 as an option paired with ALS 103 in fall of the freshman year. This was previously approved, but is listed incorrectly on the 8-semester display.
2. Remove CSC 200 and AEE 226 from fall of the freshman year. This course option will be replaced with BAET 200 in another semester.
3. Add BAET 200 to fall of the sophomore year.
4. Move ARE 201 from the fall of the sophomore year to spring of the sophomore year. This and subsequent course semester changes are necessary to accommodate the addition of BAET 200 and free electives in the fall, sophomore semester.
5. Add SSC 201 to the fall, sophomore semester. This will strengthen students' science background.
6. Add 1 credit of Free Electives to fall of the sophomore year.
7. Move the GEP Social Science from spring of the sophomore year to fall of the freshman year.
8. Move BAET 323 from fall of the junior year to spring of the junior year.
9. Move BAE 325 and ST 350 from spring of the junior year to fall of the junior year.
10. Add BAET 333 to the spring of the junior year. This course is being changed from an elective to a degree requirement.
11. Delete the Group A, B or C elective from the spring, junior semester, allowing BAET 333 to be added.

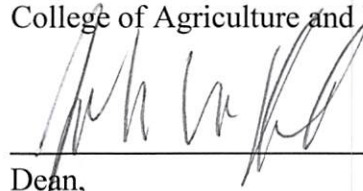
12. Add BAET 450 to the senior, spring semester as the curriculum capstone course. Make space for this addition by removing the Environmental Systems Elective.
13. Correct the program footnotes and numbers.

RECOMMENDED BY:

 2/13/2020
Head, Biological & Agricultural Date
RECOMMENDED BY:

APPROVED BY:

 6 Feb 2020
Chair, Courses and Curricula Committee Date
College of Agriculture and Life Sciences

 2/16/2020
Dean, Date
College of Agriculture and Life Sciences

Chair, University Courses and Date
Curricula Committee

Dean, Date
Division of Academic and Student Affairs

APPROVED EFFECTIVE DATE: _____

FORMAT A
(SEMESTER-BY-SEMESTER CURRICULUM DISPLAY)

Indicate display status: Current: Proposed: X Proposed Effective Semester: Spring 2020

Degree/Plan Title: B. S. in Biological and Agricultural
Engineering Technology

Concentration/Subplan Title:
Agricultural Systems Management

Plan SIS Code: 11AGEVTBS

Subplan SIS Code: 11AGEVTASM

New Degree Audit required? (Y or N) Yes

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Text to be added

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

Freshman Year					
Fall Semester		Credits	Spring Semester		Credits
ALS 103	Intro. Topics in ALS Freshman Trans & Diversity in ALS or	1	CH 101	Chem - A Molecular Science ^B	3 (cp)
			CH 102	General Chemistry I Lab ^B	1 (cp)
ALS 303	Transfer Trans & Diversity in ALS		MA 131	Calc. for Life & Mgt. Sc. A ^A	3 (cp)
BIO 181	Intro Biology I ^B	4 (cp)		GEP Humanities Requirement ^C	3
CSC 200	Intro. To Computers & Uses or	3	GC 120	Found. of Graphics	3
AEE 226	Comp. Apps in Ag and Ext. Ed.⁴		HES_ ***	Health & Exercise Studies Course ^E	1
	GEP Social Science Elective ^D	3	BAE 100	Intro to Bio Eng	1
ENG 101	Academic Writing & Research ^H	4			15
MA 114	Intro. Finite Math ^A	3 (cp)			
		15			

Sophomore Year					
Fall Semester		Credits	Spring Semester		Credits
BAET 200	Computer Applications in BAET	2		GEP Interdisciplinary Persp. Elec. ^G	3
BAET 201	Shop Processes & Mgmt.	3		Physical Science Elective. ²¹	4 (cp)
PY 211	College Physics I ^B	4 (cp)		Group A,B or C Elective ³²	3
ARE 201	Intro. Agri. Res. Econ.^D	3		GEP Social Science Elective^D	3
SSC 200	Soil Science ^B	3 (cp)	ARE 201	Intro. Agri. Res. Econ. ^D	3 (cp)
SSC 201	Soil Science Lab ^B	1		Phys Ed/ Healthy Living Elective ^E	1
	Free Elective	1			14
		14			

Junior Year					
Fall Semester		Credits	Spring Semester		Credits
BAET 323	Water Management	3	BAET 323	Water Management	3 (cp)
BAET 343	Electrical Systems	4 (cp)	BAET 332	Management of Animal Environments	4 (cp)
BAE 325	Introductory Geomatics	3	BAE 325	Introductory Geomatics	3
ST 350	Econ. & Bus. Stat. ^A	3	BAET 333	Processing BAET Products	3 (cp)
	Communications Elective ⁵⁴	3	ST 350	Econ. & Bus. Stat.^A	3
	Agri. and Resou. Econ. Elective ⁴³	3		Group A,B or C Elective ³²	3
		16		Agri. and Resou. Econ. Elective ⁴³	3
					16

Senior Year					
Fall Semester		Credits	Spring Semester		Credits
BAET 432	Agri. & Env. Safety & Health	3 (cp)	BAET 450	BAET Capstone	3 (cp)

AEE 323	Leadership Development in ALS	3	BAE 435	Precision Agriculture	3
	GEP Interdisciplinary Persp. Elec. ^G	2	BAET 411	Agri. Mach. & Power Units	4
	GEP Humanities Requirement ^C	3		Environmental Systems Elective⁶	3
	Group A,B or C Elective ^{3,2}	3		Group A,B or C Elective ^{3,2}	3
		14		GEP Additional Breadth Requirement ^F	3
					16

Minimum Total Credit Hours Required for Graduation = 120^{L, J, K, 5}

Major/Program Footnotes:

¹Choose between CSC 200 and AEE 226.

²Choose between (CH 201 and 202) or PY 212.

³Group A, B and C electives can emphasize agricultural, environmental or business areas and effectively used for a minor.

⁴Choose from ARE 303, ARE 304, ARE 306, ARE 309, ARE 311, ARE 312, ARE 321 and ARE (EC 336).

⁵Choose between AES 333, 411, 435, 443, BAE 325 and GIS 280.

⁶Choose from ENG 331, ENG 332 and ENG 333.

¹Choose between (CH 201 and 202) or PY 212.

²Group A, B and C electives can emphasize agricultural, environmental or business areas and effectively used for a minor.

³Choose from ARE 303, ARE 304, ARE 306, ARE 309, ARE 311, ARE 312, ARE 321 and ARE (EC 336).

⁴Choose from ENG 331, ENG 332 and ENG 333.

⁵Major GPA must be 2.0 or higher 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: **MA 114, MA 131**
- 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, BIO 181, PY 211, SSC 200**
- 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: **ARE 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.
- 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 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.

CURRICULUM REQUIREMENTS

Format B

<u>Degree/Plan Title:</u> Biological and Agricultural Engineering Technology		
<u>Plan SIS Code:</u> 11AVTBS		
Concentration/Subplan Title: 11AGEVTASM		Subplan SIS Code: Spring 2019
<u>Indicate requirements status:</u> Current:	Proposed: X	<u>Proposed</u> Effective Semester: Spring 2020
<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.		

~~Text to be deleted~~ Text to be Added

MAJOR FIELD OF STUDY REQUIREMENTS:		
<i>Required Courses/Groups/ Electives:</i>	<i>Credit Hours</i>	<i>GEP category, if applicable</i>
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
<u>Communications Elective</u> COM 110, ENG 331, ENG 332 or ENG 333	3	Advanced Writing and Speaking (3 hours)
<u>Mathematical Sciences</u> MA 114, MA 131, ST 350	9 (cp)	Mathematics (6 hours)
<u>Natural and Physical Sciences</u> CH 101, CH 102 PY 211 BIO 181 SSC 200, SSC 201	4 (cp) 4 (cp) 4 (cp) 4 (cp)	Natural Sciences (7 hours)
<u>Physical Science Elective</u> CH 201 and CH 202, or PY 212	4 (cp)	
<u>AES Major</u> BAE 100 BAET 200 BAET 201 BAET 323 BAET 332 BAET 333 BAET 343 BAET 432 BAET 450 GC 120 ARE 201 AEE 323	1 2 (cp) 3 3 (cp) 4 (cp) 3 (cp) 4 (cp) 3 (cp) 3 (cp) 3 3 3	Social Sciences (3 hours)
<u>ARE Electives</u> ARE 303, ARE 304, ARE 306, ARE 309, ARE 311, ARE 312, ARE 321 or ARE(EC 336)	6	
<u>Concentration Courses/Groups/Electives:</u> BAE 325, BAET 411, BAE 435	12 10	
CALS Group A, B or C Electives	15 12	

Free Electives:	1	
Total credit hours under Major Field of Study: <i>Minimum 27 hours required in program area.</i>	96 hours	
COLLEGE REQUIREMENTS:		
Orientation Course(s): ALS 103 or 303	1	
Other:		
Total credit hours under College Requirements:	1 Hours	

<u>NCSU GENERAL EDUCATION PROGRAM REQUIREMENTS</u> <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> <i>Specific courses should not be listed in any of the fields below other than ENG 101.</i>		<u>At least one of the following must be listed:</u> 1 Choose course(s) from the University Approved GEP course list for this category. 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.
General Education Program Requirements: <i>Minimum 39-40 hrs</i>	Credit hours	How will the GEP requirement be met? (Choose applicable statement from 1-6 listed above)
Mathematical Sciences (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	Minimum requirements are satisfied by Major/College course requirements.
Natural Sciences (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	Minimum requirements are satisfied by Major/College course requirements.
English 101 (C- or better required) (4 credits)	4	ENG 101
Humanities (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 course(s) from the University Approved GEP course list for this category.
Social Sciences (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	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.
Additional Breadth (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 course(s) from the University Approved GEP course list for this category.
Interdisciplinary Perspectives (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	Choose course(s) from the University Approved GEP course list for this category.
Health and Exercise Studies (2 credits) (Including one Fitness and Wellness course)	2	Choose course(s) from the University Approved GEP course list for this category.
Total credit hours needed to complete GEP that are <u>not</u> satisfied as part of the Major/College requirements.	23 hours	
GEP Co-Requisites:		<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>

U.S. Diversity co-requisite	(USD)	n/a	Choose course(s) from the University Approved GEP course list for this category.
Global Knowledge co-requisite	(GK)	n/a	Choose course(s) from the University Approved GEP course list for this category.
Foreign Language Proficiency		n/a	Proficiency at the FL_102 level required.
The following requirements must be satisfied within the College/Program:			Place an X in the credit hour box to indicate below that the requirement is "Satisfied by College/Program Requirements"
Communication in the Major (Advanced Communication)		X	Satisfied by College/Program Requirements
Technology Fluency		X	Satisfied by College/Program Requirements
Total credit hours required to complete Degree: Total must be within 120-128 credit hours.	120 Total hours		As applicable, indicate here the overall GPA requirement for degree completion including course completion.

NC STATE

Andy Hale <hale@ncsu.edu>

Proposed Changes to the BAET Curricula

Sarah Heckman <sesmith5@ncsu.edu>

Mon, Jun 17, 2019 at 10:52 AM

To: Andy Hale <hale@ncsu.edu>

Cc: Travis Park <tdpark@ncsu.edu>

Andy,

Thank you for sharing the BAET curriculum revisions. The Department of Computer Science has no feedback on the actions. Good luck with the creation of the new BAET 200 course!

Sarah

On Thu, Jun 13, 2019 at 3:10 PM Andy Hale <hale@ncsu.edu> wrote:

Dear Sarah and Travis,

BAE is currently preparing curriculum revisions for the B.S. in Biological and Agricultural Engineering Technology program and its Ag Systems Management and Environmental Systems Management concentration. As part of this revision, we will be introducing BAET 200, Computer Applications in BAET. This is a specialized introductory computing course designed for this program which would replace the current option of CSC 200 or AEE 226. We would appreciate any feedback your department might have concerning these changes. Copies of the curriculum action proposals have been included for your review.

Thanks!

Andy

--

S. Andrew Hale, Ph.D.
Professor, Undergraduate Coordinator and Associate Head
Department of Biological and Agricultural Engineering
108 D.S. Weaver Labs
North Carolina State University
Raleigh, NC 27695-7625
Phone: (919) 515-6760
FAX: (919) 515-7760
Andy_Hale@ncsu.edu
Appointment Calendar
<http://www.bae.ncsu.edu/people/faculty/hale/>

--

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--

Sarah Heckman, PhD
Teaching Associate Professor
Department of Computer Science
North Carolina State University

sarah_heckman@ncsu.edu
<http://www4.ncsu.edu/~sesmith5/>

NC STATE

Andy Hale <hale@ncsu.edu>

Proposed Changes to the BAET Curricula

Travis Park <tdpark@ncsu.edu>
To: Andy Hale <hale@ncsu.edu>

Wed, Jun 19, 2019 at 10:39 PM

Andy,

In AHS, we're OK with the change. Thank you for checking.

Thank you,

Travis

Travis Park
Associate Professor
NC Teach Ag Coordinator
Editor, *Career and Technical Education Research*

Agricultural and Human Sciences

NC State University
Campus Box 7607 NCSU
1 Lampe Drive, 216 Ricks Hall
Raleigh, NC 27695-7607

t: 919.515.9441
f: 919.513.1169
m: 919.802.2219

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Dear Sarah and Travis,

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Thanks!
Andy

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North Carolina State University Mail - Proposed Changes to the BAET Curricula
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may be disclosed to third parties.

NC STATE

Andy Hale <hale@ncsu.edu>

BAET Curriculum Revision

David Crouse <crouse@ncsu.edu>

Thu, Jun 13, 2019 at 3:30 PM

To: Andy Hale <hale@ncsu.edu>

Happy to welcome the students into SSC 201. Its tough these days for students to get the lecture (200) and lab (201) scheduled in the same semester. In any given semester, there are 250 combined seats in the combined SSC 220-001 + SSC 200-601 and only 144 seats in the combined 6 sections of SSC 201. Wish I could add two more SSC 201 sections per semester, but we don't have the teaching bandwidth to do it (not enough graduate student TAs these days). The lab is constructed so it works fine in a later semester, as long as you've had SSC 200 first (concurrent is the ideal).

David

Dr. David Crouse

Director of Undergraduate Programs and
Alumni Distinguished Undergraduate Professor
Crop and Soil Sciences

go.ncsu.edu/recruits

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On Thu, Jun 13, 2019 at 3:02 PM Andy Hale <hale@ncsu.edu> wrote:

David,

BAE would like to add SSC 201 as a course requirement for the B.S. in Biological and Agricultural Engineering Technology - Ag Systems Management Concentration and would appreciate any feed back your department has concerning this change. Based on current enrollment levels, we expect this to only add 10 students per year to the course. A copy of the proposed course action has been added for your review.

Thanks,
Andy

--
S. Andrew Hale, Ph.D.
Professor, Undergraduate Coordinator and Associate Head
Department of Biological and Agricultural Engineering
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--

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NC STATE

Andy Hale <hale@ncsu.edu>

BAET Curriculum Changes

3 messages

Andy Hale <hale@ncsu.edu>

Fri, Jan 31, 2020 at 2:27 PM

To: David Parish <dwparish@ncsu.edu>

Dave,

As part of the redevelopment program for BAET, we are currently changing the curriculum include a new computing course, BAET 200 and capstone course, BAET 250. Copies of the curriculum actions are attached for your review. Do these actions need to be approved by the COE curriculum committee, or can we handle things through a consultation?

Thanks for your thoughts.
Andy

--

S. Andrew Hale, Ph.D.
Director of Undergraduate Programs, Professor and Associate Head
Department of Biological and Agricultural Engineering
108 D.S. Weaver Labs
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4 attachments**BAET Minor Revision-8-19-V1.1.docx**
35K**BAET Revision-EnvSys-8-19-V1.2.docx**
29K**BAET Revision-AgSys-8-19-V1.2.docx**
29K**BAET Revision-No Conc-8-19-V1.2.docx**
29K

David Parish <dwparish@ncsu.edu>

Fri, Jan 31, 2020 at 2:35 PM

To: Andy Hale <hale@ncsu.edu>

Andy,
I don't think they need us since these come directly under CALS. What do you think?
We can still show them at CCC anyway but I don't think they need our approval.
Dave

[Quoted text hidden]

--

David W. Parish, PhD.
Assistant Dean
Undergraduate Academic Affairs
College of Engineering
North Carolina State University
Raleigh, NC 27695-7904
Phone: (919) 515-3263
Fax (919) 515-7908/7108
Email: dwparish@ncsu.edu

Andy Hale <hale@ncsu.edu>
To: David Parish <dwparish@ncsu.edu>

Fri, Jan 31, 2020 at 3:11 PM

Yes, I agree.


Thanks,
Andy

[Quoted text hidden]

January 17, 2020




MEMORANDUM

TO: Dr. Lisa Zapata
Interim Vice Chancellor of the Division of Academic and Student Affairs

FROM: S. Andrew Hale, Ph.D. 
Professor and Undergraduate Coordinator,
Biological and Agricultural Engineering


SUBJECT: Minor Curriculum Revision to the B.S. in and Biological and Agricultural Engineering
Technology: Environmental Systems Management (11AGEVTBS-11AGEVTESM, effective
summer 1, 2011)

Effective Fall 2020, the department of Biological and Agricultural Engineering requests the following changes to the B.S. in Biological and Agricultural Engineering Technology: Environmental Systems Management (11AGEVTBS-11AGEVTESM, effective spring, 2011).


1. Add ALS 303 as an option paired with ALS 103 in fall of the freshman year. This was previously approved, but is listed incorrectly on the 8-semester display.
2. Remove CSC 200 and AEE 226 from fall of the freshman year. This course option will be replaced with BAET 200 in another semester.
3. Add BAET 200 to fall of the sophomore year.
4. Move ARE 201 from the fall of the sophomore year to spring of the sophomore year. This and subsequent course semester changes are necessary to accommodate the addition of BAET 200 and free electives in the fall, sophomore semester.
-  5. Add 2 credits of Free Electives to fall of the sophomore year.
-  6. Move the GEP Social Science from spring of the sophomore year to fall of the freshman year.
-  7. Move BAET 323 from fall of the junior year to spring of the junior year.
8. Move ST 350 from spring of the junior year to fall of the junior year.
9. Add BAET 333 to the spring of the junior year. This course is being changed from an elective to a degree requirement.
10. Change the course number for GIS 410 to GIS 280. This course was previously renumbered.
11. Delete the Group A, B or C elective from the spring, junior semester, allowing BAET 333 to be added.

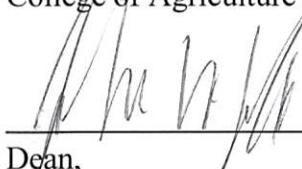
12. Add BAET 450 to the senior, spring semester as the curriculum capstone course. Make space for this addition by removing the Ag Systems Elective.
13. Correct the program footnotes and numbers.

RECOMMENDED BY:

 2/3/2020
Head, Biological & Agricultural Date
RECOMMENDED BY:

APPROVED BY:

 6 Feb 2020
Chair, Courses and Curricula Committee Date
College of Agriculture and Life Sciences

 2/16/2020
Dean, Date
College of Agriculture and Life Sciences

Chair, University Courses and Date
Curricula Committee

Dean, Date
Division of Academic and Student Affairs

APPROVED EFFECTIVE DATE: _____

FORMAT A
(SEMESTER-BY-SEMESTER CURRICULUM DISPLAY)

Indicate display status: Current: Proposed: X Proposed Effective Semester: Spring 2020

Degree/Plan Title: B. S. in Biological and Agricultural Engineering
Technology

Concentration/Subplan Title:
Environmental Systems Management

Plan SIS Code: 11AGEVTBS

Subplan SIS Code: 11AGEVTESM

New Degree Audit required? (Y or N) Yes

~~Text to be deleted~~
Text to be added

Critical Path Courses - Identify using the code (CP) which courses are considered critical path courses which represent specific

Freshman Year					
Fall Semester		Credits	Spring Semester		Credits
ALS 103	Intro. Topics in ALS Freshman Trans & Diversity in ALS or	1	CH 101	Chem - A Molecular Science ^B	3 (cp)
			CH 102	General Chemistry I Lab ^B	1 (cp)
ALS 303	Transfer Trans & Diversity in ALS		MA 131	Calc. for Life & Mgt. Sc. A ^A	3 (cp)
BIO 181	Intro Biology I ^B	4 (cp)		GEP Humanities Requirement ^C	3
CSC 200	Intro. To Computers & Uses or	3	GC 120	Found. of Graphics	3
	AEE 226 Comp. Apps in Ag and Ext. Ed.¹		HES_ ***	Phys Ed/ Healthy Living Elective ^E	1
	GEP Social Science Elective ^D	3	BAE 100	Intro to Bio Eng	1
ENG 101	Academic Writing & Research ^H	4			15
MA 114	Intro. Finite Math ^A	3 (cp)			
		15			
Sophomore Year					
Fall Semester		Credits	Spring Semester		Credits
BAET 200	Computer Applications in BAET	2	ARE 201	Intro. Agri. Res. Econ. ^D	3 (cp)
BAET 201	Shop Processes and Mgmt	3		GEP Interdisciplinary Persp. Elec. ^G	3 (cp)
PY 211	College Physics I ^B	4 (cp)		Physical Science Elective. ²¹	4
ARE 201	Intro. Agri. Res. Econ.^D	3		Group A,B or C Elective ³²	3
SSC 200	Soil Science ^B	3 (cp)		GEP Social Science Elective^D	3
SSC 201	Soil Science Lab	1 (cp)	HES_ ***	Phys Ed/ Healthy Living Elective ^E	1
	Free Elective	2			14
		15			
Junior Year					
Fall Semester		Credits	Spring Semester		Credits
BAET 323	Water Management	3 (cp)	BAET 323	Water Management	3 (cp)
BAE 325	Introductory Geomatics	3	BAET 332	Management of Animal Environments	4 (cp)
BAET 343	Electrical Systems	4 (cp)	BAET 333	Processing BAET Products	3 (cp)
ST 350	Econ. & Bus. Stat. ^A	3	GIS 410280	Introduction to GIS	3
	Agri. and Resou. Econ. Elective ⁴³	3	ST 350	Econ. & Bus. Stat.^A	3
	Group A,B or C Elective ³²	3		Agri. and Resou. Econ. Elective ⁴³	3
		16		Group A,B or C Elective³	3
					16
Senior Year					
Fall Semester		Credits	Spring Semester		Credits
BAET 432	Agri. & Env. Safety & Health	3 (cp)	BAET 450	BAET Capstone	3 (cp)
BAET 443	Environ. Restor. Implementation	3		Ag Systems Elective	3
AEE 323	Leadership Dev. Agri.	3		Group A,B or C Elective ³²	3

GEP Humanities Requirement ^C	3	Group A,B or C Elective ^{3,2}	3
Communications Elective ^{5,4}	3	GEP Interdisciplinary Persp. Elec. ^G	2
	15	GEP Additional Breadth Requirement ^F	3
		Free Elective	1
			14

Minimum Total Credit Hours Required for Graduation = 120^{I, J, K, 5}

Major/Program Footnotes:

¹ Choose between CSC 200 and AEE 226.

² Choose between (CH 201 and 202) or PY 212.

³ Group A, B and C electives can emphasize agricultural, environmental or business areas and effectively used for a minor.

⁴ Choose from ARE 303, ARE 304, ARE 306, ARE 309, ARE 311, ARE 312, ARE 321 and ARE (EC 336).

⁵ Choose between AES 333, 411, and BAE 435.

⁶ Choose from ENG 331, ENG 332 and ENG 333.

¹ Choose between (CH 201 and 202) or PY 212.

² Group A, B and C electives can emphasize agricultural, environmental or business areas and effectively used for a minor.

³ Choose from ARE 303, ARE 304, ARE 306, ARE 309, ARE 311, ARE 312, ARE 321 and ARE (EC 336).

⁴ Choose from ENG 331, ENG 332 and ENG 333.

⁵ Major GPA must be 2.0 or higher 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: **MA 114, MA 131**
 - 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, BIO 181, PY 211, SSC 200**
 - 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: **ARE 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.
 - 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 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.

CURRICULUM REQUIREMENTS

Format B

Degree/Plan Title: Biological and Agricultural Engineering Technology Plan SIS Code: 11AVTBS		
Concentration/Subplan Title: 11AGEVTESM		Subplan SIS Code: Summer 1, 2011
Indicate requirements status: Current:	Proposed: X	<u>Proposed</u> Effective Semester: Spring 2020
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.		

~~Text to be deleted~~ Text to be Added

MAJOR FIELD OF STUDY REQUIREMENTS:		
Required Courses/Groups/ Electives:	Credit Hours	GEP category, if applicable
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
<u>Communications Elective</u> COM 110, ENG 331, ENG 332 or ENG 333	3	Advanced Writing and Speaking (3 hours)
<u>Mathematical Sciences</u> MA 114, MA 131, ST 350	9 (cp)	Mathematics (6 hours)
<u>Natural and Physical Sciences</u> CH 101, CH 102 PY 211 BIO 181 SSC 200, SSC 201	4 (cp) 4 (cp) 4 (cp) 4 (cp)	Natural Sciences (7 hours)
<u>Physical Science Elective</u> CH 201 and CH 202, or PY 212	4 (cp)	
<u>AES Major</u> BAE 100 BAET 200 BAET 201 BAET 323 BAET 332 BAET 333 BAET 343 BAET 432 BAET 450 GC 120 ARE 201 AEE 323	1 2 (cp) 3 3 (cp) 4 (cp) 3 (cp) 4 (cp) 3 (cp) 3 (cp) 3 3 3	Social Sciences (3 hours)
<u>ARE Electives</u> ARE 303, ARE 304, ARE 306, ARE 309, ARE 311, ARE 312, ARE 321 or ARE(EC 336)	6	
<u>Concentration Courses/Groups/Electives:</u> BAE 325, BAET 443, GIS 280	12 9	
CALS Group A, B or C Electives	15 12	

Free Electives:	2	
Total credit hours under Major Field of Study: <i>Minimum 27 hours required in program area.</i>	96 hours	
COLLEGE REQUIREMENTS:		
Orientation Course(s): ALS 103 or 303	1	
Other:		
Total credit hours under College Requirements:	1 Hours	

<u>NCSU GENERAL EDUCATION PROGRAM REQUIREMENTS</u> <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> <i>Specific courses should not be listed in any of the fields below other than ENG 101.</i>		At least one of the following must be listed: 1 Choose course(s) from the University Approved GEP course list for this category. 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.
General Education Program Requirements: <i>Minimum 39-40 hrs</i>	Credit hours	How will the GEP requirement be met? (Choose applicable statement from 1-6 listed above)
Mathematical Sciences (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	Minimum requirements are satisfied by Major/College course requirements.
Natural Sciences (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	Minimum requirements are satisfied by Major/College course requirements.
English 101 (C- or better required) (4 credits)	4	ENG 101
Humanities (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 course(s) from the University Approved GEP course list for this category.
Social Sciences (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	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.
Additional Breadth (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 course(s) from the University Approved GEP course list for this category.
Interdisciplinary Perspectives (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	Choose course(s) from the University Approved GEP course list for this category.
Health and Exercise Studies (2 credits) (Including one Fitness and Wellness course)	2	Choose course(s) from the University Approved GEP course list for this category.
Total credit hours needed to complete GEP that are <u>not</u> satisfied as part of the Major/College requirements.	23 hours	
GEP Co-Requisites:		<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>

U.S. Diversity co-requisite (USD)	n/a	Choose course(s) from the University Approved GFP course list for this category.
Global Knowledge co-requisite (GK)	n/a	Choose course(s) from the University Approved GFP course list for this category.
Foreign Language Proficiency	n/a	Proficiency at the FL_102 level required.
The following requirements must be satisfied within the College/Program:		Place an X in the credit hour box to indicate below that the requirement is "Satisfied by College/Program Requirements"
Communication in the Major (Advanced Communication)	X	Satisfied by College/Program Requirements
Technology Fluency	X	Satisfied by College/Program Requirements
Total credit hours required to complete Degree: Total must be within 120-128 credit hours.		
120 Total hours		As applicable, indicate here the overall GPA requirement for degree completion including course completion.

NC STATE

Andy Hale <hale@ncsu.edu>

Proposed Changes to the BAET Curricula

Sarah Heckman <sesmith5@ncsu.edu>

Mon, Jun 17, 2019 at 10:52 AM

To: Andy Hale <hale@ncsu.edu>

Cc: Travis Park <tdpark@ncsu.edu>

Andy,

Thank you for sharing the BAET curriculum revisions. The Department of Computer Science has no feedback on the actions. Good luck with the creation of the new BAET 200 course!

Sarah

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Thanks!

Andy

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S. Andrew Hale, Ph.D.

Professor, Undergraduate Coordinator and Associate Head

Department of Biological and Agricultural Engineering

108 D.S. Weaver Labs

North Carolina State University

Raleigh, NC 27695-7625

Phone: (919) 515-6760

FAX: (919) 515-7760

Andy_Hale@ncsu.edu

Appointment Calendar

<http://www.bae.ncsu.edu/people/faculty/hale/>

--

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--

Sarah Heckman, PhD

Teaching Associate Professor

Department of Computer Science

North Carolina State University

sarah_heckman@ncsu.edu<http://www4.ncsu.edu/~sesmith5/>

NC STATE

Andy Hale <hale@ncsu.edu>

Proposed Changes to the BAET Curricula

Travis Park <tdpark@ncsu.edu>
To: Andy Hale <hale@ncsu.edu>

Wed, Jun 19, 2019 at 10:39 PM

Andy,

In AHS, we're OK with the change. Thank you for checking.

Thank you,

Travis

Travis Park
Associate Professor
NC Teach Ag Coordinator
Editor, *Career and Technical Education Research*

Agricultural and Human Sciences

NC State University
Campus Box 7607 NCSU
1 Lampe Drive, 216 Ricks Hall
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On Thu, Jun 13, 2019 at 3:10 PM Andy Hale <hale@ncsu.edu> wrote:
Dear Sarah and Travis,

BAE is currently preparing curriculum revisions for the B.S. in Biological and Agricultural Engineering Technology program and its Ag Systems Management and Environmental Systems Management concentration. As part of this revision, we will be introducing BAET 200, Computer Applications in BAET. This is a specialized introductory computing course designed for this program which would replace the current option of CSC 200 or AEE 226. We would appreciate any feedback your department might have concerning these changes. Copies of the curriculum action proposals have been included for your review.

Thanks!
Andy

--

S. Andrew Hale, Ph.D.
Professor, Undergraduate Coordinator and Associate Head
Department of Biological and Agricultural Engineering
108 D.S. Weaver Labs
North Carolina State University
Raleigh, NC 27695-7625
Phone: (919) 515-6760
FAX: (919) 515-7760
Andy_Hale@ncsu.edu
[Appointment Calendar](#)
<http://www.bae.ncsu.edu/people/faculty/hale/>

--

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or received by this account are subject to the NC Public Records Law and
may be disclosed to third parties.

NC STATE

Andy Hale <hale@ncsu.edu>

BAET Curriculum Changes

3 messages

Andy Hale <hale@ncsu.edu>

Fri, Jan 31, 2020 at 2:27 PM

To: David Parish <dwparish@ncsu.edu>

Dave,

As part of the redevelopment program for BAET, we are currently changing the curriculum include a new computing course, BAET 200 and capstone course, BAET 250. Copies of the curriculum actions are attached for your review. Do these actions need to be approved by the COE curriculum committee, or can we handle things through a consultation?

Thanks for your thoughts.
Andy

--

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4 attachments

BAET Minor Revision-8-19-V1.1.docx
35K



BAET Revision-EnvSys-8-19-V1.2.docx
29K



BAET Revision-AgSys-8-19-V1.2.docx
29K



BAET Revision-No Conc-8-19-V1.2.docx
29K

David Parish <dwparish@ncsu.edu>

Fri, Jan 31, 2020 at 2:35 PM

To: Andy Hale <hale@ncsu.edu>

Andy,
I don't think they need us since these come directly under CALS. What do you think?
We can still show them at CCC anyway but I don't think they need our approval.
Dave

[Quoted text hidden]

--

David W. Parish, PhD.
Assistant Dean
Undergraduate Academic Affairs
College of Engineering
North Carolina State University
Raleigh, NC 27695-7904
Phone: (919) 515-3263
Fax (919) 515-7908/7108
Email: dwparish@ncsu.edu

Andy Hale <hale@ncsu.edu>
To: David Parish <dwparish@ncsu.edu>

Fri, Jan 31, 2020 at 3:11 PM

Yes, I agree.


Thanks,
Andy

[Quoted text hidden]

August 1, 2019

MEMORANDUM

TO: Dr. Lisa Zapata
Vice Chancellor of the Division of Academic and Student Affairs

FROM: S. Andrew Hale, Ph.D. 
Professor and Undergraduate Coordinator,
Biological and Agricultural Engineering

SUBJECT: Revisions to the Agricultural and Environmental Technology Minor (11AEM, effective fall, 1997)

Effective Fall 2020, the department of Biological and Agricultural Engineering requests the following changes to the minor in Agricultural and Environmental Technology (11AGEVTBS, effective fall, 1997). These revisions are needed to maintain consistency with recent curriculum updates.

1. Change the program name from Agricultural and Environmental Technology to Biological and Agricultural Engineering Technology (BAET). This change is consistent with a recent change in the undergraduate degree.
2. Change the minor curriculum code from 11AEM to 11BAET.
3. The following courses should be removed from the elective list.
 - BAE 442 Systems Approach to Agricultural and Environmental Issues
 - BAE 578 Agricultural Waste Management
4. The following courses should be added to the elective list.
 - BAET 443 Environmental Restoration Implementation
 - BAET 325 Introductory Geomatics
 - BAET 435 Precision Agriculture Technology
5. Change the course prefix from AES to BAET for the following courses: 201, 323, 332, 333, 343, and 432.
6. The wording changes indicated in the attached document should be made for consistency.


RECOMMENDED BY:

 2/3/2020

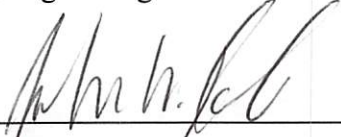
Head, Biological & Agricultural Date

RECOMMENDED BY:

APPROVED BY:

 6 Feb 2020

Chair, Courses and Curricula Committee Date
College of Agriculture and Life Sciences

 2/16/2020

Dean, Date
College of Agriculture and Life Sciences

Chair, University Courses and Date
Curricula Committee

Dean, Date
Division of Academic and Student Affairs

APPROVED EFFECTIVE DATE: _____

~~Agricultural And~~ ~~Environmental~~ Biological and Agricultural Engineering Technology (11~~AEM~~BAET)

Description

The BAET minor is offered to students interested in the application of engineering technology analysis in agricultural and environmental systems that utilize machinery, agricultural structures, food and feed processing, soil, water and waste management, electrical power and controls, and agricultural safety and health technology. It allows majors in other programs to understand engineering technology for equipment, materials, resources, processes, and facilities utilized in their major area of study, and be knowledgeable in the application of technology for managing environmental issues, impacts, and monitoring. ~~The undergraduate academic minor in Agricultural and Environmental Technology is offered to students interested in the application of engineering technology analysis in agricultural and environmental systems that utilize machinery, agricultural structures, food and feed processing, soil and water and waste management, electrical power and controls, and agricultural safety and health technology. This program allows majors in other areas to understand engineering technology for equipment, materials, resources, processes and facilities utilized in their major area of study, and be knowledgeable in the application of technology for managing environmental issues, impacts and monitoring.~~

Requirements

- Completion of a minimum of 15 credit hours.
- Open to all students at NC State except students majoring in ~~Agricultural and Environmental~~ Biological and Agricultural Engineering Technology (BAET).
- The program is flexible in order for students to be able to emphasize the area of their interest.

Required Course (3 credit hours)

Select 1 of the following courses:

- BAET AES 323 Water Management
- BAET AES 332 Management of Animal Environments
- BAET AES 432 Agricultural and Environmental Safety and Health

Elective Courses (12 credit hours)

- BAET AES 201 Shop Processes and Management
- BAET AES 323 Water Management
- BAET AES 332 Management of Animal Environments

- BAET AES 333 Processing Agricultural Products
- BAET AES 343 Agricultural Electrification
- BAET AES 411 Agriculture Machinery and Power Units (formerly BAE 311)
- BAET AES 432 Agricultural and Environmental Safety and Health
- BAET 443 Environmental Restoration Implementation
- BAE 325 Introductory Geomatics
- BAE 435 Precision Agriculture Technology
- ~~BAE 442 Systems Approach to Agricultural and Environmental Issues~~
- ~~BAE 578 Agricultural Waste Management~~

Admissions

Students who plan to minor in Agricultural and Engineering Technology should contact Dr. Crowell Bowers for consultation and approval. Admission to the minor requires a cumulative grade point average of 2.0 or higher. Students should contact the Biological and Agricultural Engineering Undergraduate Coordinator to inquire about adding the minor no later than the registration period for the student's final semester at NC State. A minor advisor will be assigned to all of the students enrolled.

Certification

~~Dr. Bowers 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. The~~ minor should be declared as soon as the student decides to pursue it. Minor coursework must be completed no later than the semester in which the student expects to graduate from his or her 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

S. Andrew Hale, Ph.D.
 108 Weaver Labs
 919.515.6760
andy_hale@ncsu.edu

SIS Code: 11AEMBAET

NC STATE

Andy Hale <hale@ncsu.edu>

BAET Curriculum Changes

3 messages

Andy Hale <hale@ncsu.edu>

Fri, Jan 31, 2020 at 2:27 PM

To: David Parish <dwparish@ncsu.edu>

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Andy Hale <hale@ncsu.edu>
To: David Parish <dwparish@ncsu.edu>

Fri, Jan 31, 2020 at 3:11 PM

Yes, I agree.

Thanks,
Andy

[Quoted text hidden]

Routing for On-Campus Approval of the Request to Establish for a New Degree Program

Proposed Program Title: Environmental First Year Program, Undeclared

Degree Type (circle one): Bachelor's / Master's / Doctoral

Proposed Effective Date: Fall 2020 Program Contact: Dr. Megan Lupek

Proposed CIP Code (see <https://nces.ed.gov/ipeds/cipcode/default.aspx?v=55>): _____

Routing Action: Indicate date when the following occurs

Completed Request to Establish

12/14/19 Department Head endorses*

2/5/2020 College Curriculum Committee (undergraduate or graduate) recommends*

2/7/2020 College Dean endorses*

Request to Establish moves to Undergraduate or Graduate office for routing

_____ Recommended by Vice Provost, DELTA, if applicable*

_____ Associate Deans Council **or** Graduate Operations Council informed

_____ University Courses & Curriculum Committee **or** Administrative Board of the Graduate School recommends

_____ Dean (Graduate School or DASA) approves*

Request to Establish moves to the Executive Vice Chancellor and Provost's office for routing

_____ Substantive Change Review Team (SCRT) determines nature of change

_____ Executive Vice Chancellor and Provost approves*

_____ Chancellor's Cabinet recommend

_____ Chancellor approves*

_____ Vice Provosts informed

_____ University Council informed

_____ Board of Trustees subcommittees recommend

_____ Submitted to UNC System Office by Provost's Office

_____ Letter sent to SACSCOC after final System approval, if applicable

* Signature is required on the signature page for the action

North Carolina State University
Routing for On-Campus Approval of the Request to Establish for a New Degree Program

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

Completed Request to Establish

Endorsed By:

Head, Department/Program

Date

Megan Link

2-6-2020

Recommended By:

Chair, College Curriculum Committee

Date

Sam Laffin

2-5-2020

Endorsed By:

College Dean

Date

Melissa Rosegrilli

2/7/2020

Request to Establish moves to Undergraduate or Graduate office for routing

Recommended By:

Vice Provost, DELTA (if DE degree/certificate)

Date

Recommended By:

Chair, University Courses & Curricula Committee
or Administrative Board of the Graduate School

Date

Approved By:

Dean, DASA or the Graduate School

Date

Request to Establish moves to the Executive Vice Chancellor and Provost's office for routing

Approved By:

Executive Vice Chancellor and Provost

Date

Approved By:

Chancellor



MEMO

14 December 2019

To: Dr. Bret Smith, Associate Vice Provost, Academic Programs & Services

From: Dr. Megan Lupek, Director, Environmental First Year (ENVFY) Program

Subject: Environmental First Year Program, undergraduate *Undeclared* major

Overview. The Environmental First Year (ENVFY) Program proposes to add an undeclared undergraduate major option effective Fall 20--. Growing numbers of entering students arrive at NC State with strong interest in the environment and sustainability but undecided about a particular major. The Environmental First Year (ENVFY) Program provides a framework that raises the visibility of environmental programs at the University and the fertile ground necessary for first-year students to make a smooth transition into an appropriate major.

Rationale. NC State University is home to outstanding academic and research programs centered on themes of energy, environment, and sustainability. Such programs embody the history of our land grant, forestry, sea grant, and space missions. The comprehensive scope of academic programming on environmental topics at NC State University includes course work from 10 academic departments; all, to varying degrees, offer courses and curricula relevant to contemporary environmental scholarship.

After several years piloting and developing the environmental first year program, we know many first year students do not have clear ideas about choices available to them or about how the numerous academic degrees on environmental topics differ in content, graduation requirements, and paths for careers and graduate study. We have also learned that some students drawn to study environmental issues do not have math and science aptitudes fitting rigorous curricular requirements in some programs. Forcing all students to have a declared major interest while exploring the environmental panoply of choices constrains the desired flexibility

NC State University should create a framework that allows undecided students to explore the wide range of environmental academic programming available to them. Through *ENVFY Undeclared*, students may become familiar with environmentally related programming. We expect them to develop working relationships with students and faculty who take diverse approaches to the study of environmental issues. Students enrolling in this program will complete a two-semester sequence that leads them to environmental degree programs. Completing the first year of study in the new ENVFY will allow students to make better choices about which undergraduate degree they pursue, while not adding time to their degrees.

Proposed new name and code: Environmental First Year Program – Undeclared (15ENVFYUD)

The distinction of an undeclared major is important for clarity to incoming students, since students in admitted majors are also included in the ENVFY Program. Therefore, the ENVFY Program could have both students in admitted majors from several departments as well as students in CNR Undeclared and ENVFY Undeclared. This proposed option will communicate explicitly that the students in the undeclared major must matriculate into their chosen major at the end of their first year.

Format of the Degree Audit:

We would like to request that the degree audit have two semesters (labeled Fall Semester and Spring Semester) along with a list of GEP courses that are required in addition to what is included in the first two semesters. It should include...

<u>Fall Semester</u>	<u>Spring Semester</u>	<u>GEP</u>
ENV 101	Economics Elective ³	
ENV 100	ES 100 or FW 221 or GEP Elective ⁴	Mathematical Sciences (3 credits)
ENG 101 or Elective	ENG 101 or Elective ¹	Humanities Elective (6 credits)
MA Placement ²	CH 101	Global Knowledge co-requisite
Natural Science Elective ⁴	CH 102	Interdisciplinary Perspectives (5 credits)*
HESF 100-level	HES ***	US Diversity co-requisite
		Social Sciences Elective (3 credits)*
		Additional Breadth (3 credits)*

¹ English and communications can be taken either semester

² Math course should be based on placement results

³ Any of the following: ARE 201, EC 201, EC 205 or NR 219

⁴ Select course based on projected major choice

Format A and Format B documents with the new plan are attached.

Environmental First Year - Undeclared: (15ENVFYUD)

FRESHMAN YEAR

Fall Semester	Credits		Spring Semester ⁺	Credits
ENV 101 Exploring the Environment ¹	2		Economics Elective ⁴	3
ENV 100 Student Success in ENVFY	1		ENG 101 Academic Writing & Research ² or Elective after consultation with advisor	3-4
ENG 101 Academic Writing & Research ² or Elective after consultation with advisor	3-4		CH 101 Chemistry – A Molecular Science	3
Math Placement ³	3-4		CH 102 General Chemistry Lab	1
Natural Science Elective ⁴	4		ES 100 or FW 221 or GEP Elective ⁴	3
HESF 1** Health & Exercise Studies Course	1		HES *** Health & Exercise Studies Course ⁶	1
	14-16			14-15

NOTES:

Students will CODA into the major of their choice during their spring semester.

1. Students will take ENV 101 and ENV 100 their first semester in the program.
2. Must be completed with "C-" or better.
3. Math placement results (MA 131 or MA 141 are encouraged for those who qualify and aspire to take additional calculus).
4. Course choice will depend on projected major.

CURRICULUM REQUIREMENTS

Format B

<u>Degree/Plan Title:</u> Environmental First Year Undeclared	<u>Plan SIS Code:</u> 15ENVFYUD
<u>Concentration/Subplan Title:</u> None	<u>Subplan SIS Code:</u>
<u>Indicate requirements status:</u> Current: Proposed: X <u>Proposed</u> Effective Semester: Fall 20--	
<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.	

MAJOR FIELD OF STUDY REQUIREMENTS:		
<i>Required Courses/Groups/ Electives:</i>	<i>Credit Hours</i>	<i>GEP category, if applicable</i>
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
Math MA 121 or 131 or 141 Major* ARE 201, EC 201, or EC 205 or NR 219 ES 100 or FW 221 *Depending on intended major	3 3 3 3	Mathematics (3 hours) Social Science (3 hours) Interdisciplinary Perspectives (3 hours)
<u>Concentration Courses/Groups/Electives:</u>	N/A	
<u>Free Electives:</u>		
Total credit hours under Major Field of Study: <i>Minimum 27 hours required in program area.</i>	12 hours	
COLLEGE REQUIREMENTS:		
<u>Orientation Course(s):</u> ENV 101 ENV 100	3	
<u>Other:</u>		
Total credit hours under College Requirements:	3 Hours	

<p><u>NCSU GENERAL EDUCATION PROGRAM REQUIREMENTS</u></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>General Education Program Requirements: Minimum 39-40 hrs</p>		<p>At least one of the following must be listed:</p> <ol style="list-style-type: none"> 1 Choose course(s) from the University Approved GEP course list for this category. 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.
		<p>How will the GEP requirement be met? (Choose applicable statement from 1-6 listed above)</p>
<p>Mathematical Sciences (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></p>	3-4	<p>(Choose statement 1, 2 or 3) Major/College course requirement satisfies 3-4 credit hrs of this requirement. Remaining hours required must be chosen from the University Approved GEP course list for the category.</p>
<p>Natural Sciences (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></p>	7	<p>(Choose statement 1, 2 or 3) Minimum requirements are satisfied by Major/College course requirements.</p>
<p>English 101 (C- or better required) (4 credits)</p>	4	ENG 101
<p>Humanities (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></p>	6	<p>(Choose statement 1, 2 or 3) Choose course(s) from the University Approved GEP course list for this category.</p>
<p>Social Sciences (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></p>	6*	<p>(Choose statement 1, 2 or 3) Choose course(s) from the University Approved GEP course list for this category. *COM 112, ARE 201, EC 201, or EC 205 or NR 219 may fulfill part of this requirement depending on intended major.</p>
<p>Additional Breadth (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></p>	3*	<p>(Choose statement 5 or 6) Choose course(s) from the University Approved GEP course list for this category. *COM 112, ARE 201, EC 201, or EC 205 or NR 219 may fulfill this requirement depending on intended major.</p>
<p>Interdisciplinary Perspectives (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></p>	5*	<p>(Choose statement 1, 2 or 3) Choose course(s) from the University Approved GEP course list for this category. *FW 221 or ES 100 may fulfill part of this requirement depending on intended major.</p>
<p>Health and Exercise Studies (2 credits) (Including one Fitness and Wellness course)</p>	2	Choose course(s) from the University Approved GEP course list for this category.
<p>Total credit hours needed to complete GEP that are not satisfied as part of the Major/College requirements.</p>	hours	
<p>GEP Co-Requisites:</p>		<p><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></p>
<p>U.S. Diversity co-requisite (XUSD)</p>	n/a	<p>(Choose statement 1 or 4) Choose course(s) from the University Approved GEP course list for this category.</p>

Global Knowledge co-requisite	(GK)	n/a	<i>(Choose statement 1 or 4)</i> Choose course(s) from the University Approved GEP course list for this category.
Foreign Language Proficiency		n/a	Proficiency at the FL_102 level required.
The following requirements must be satisfied within the College/Program:		X	Place an X in the credit hour box to indicate below that the requirement is "Satisfied by College/Program Requirements"
Communication in the Major (Advanced Communication)		X	Satisfied by College/Program Requirements after first year
Technology Fluency		X	Satisfied by College/Program Requirements after first year
Total credit hours required to complete Degree: Total must be within 120-128 credit hours.		N/A	As applicable, indicate here the overall GPA requirement for degree completion including course completion.

**NORTH CAROLINA STATE UNIVERSITY
UNDERGRADUATE CURRICULUM ACTION FORM
Academic Minor**

DEPARTMENT(S):
Forestry and Environmental Resources _____
TITLE OF THE MINOR:
Environmental Sciences _____

TYPE OF PROPOSAL:
New Minor: _____
Revision to Minor: X
Discontinuation: _____

PROPOSED EFFECTIVE DATE: August 2020 _____ APPROVED EFFECTIVE DATE: _____

ATTACHMENTS INCLUDED:

1. Statement of Justification
2. Statement of Academic Minor Program Objectives
3. List of Courses constituting the Proposed Minor
4. Catalog Description of Proposed Minor
5. Administration of the Minor (Contact information for Administrator of the Minor)
6. Requirements for Admission and Completion of the Minor
7. Statement on Other Departments Likely to be Affected and Summary of Consultations with those Departments
8. Optional: Projected Resources and Enrollment

REQUIRED SIGNATURES:

OTHER REQUIRED SIGNATURES AS NEEDED:

 (HESS) 2020 FEB 6

Head, Department/Program Date

 2-5-2020

Chair, College Curriculum Committee Date

 2/7/2020

College Dean Date

Chair, College Curriculum Committee Date

College Dean Date

Chair, University Courses & Curricula Committee Date

Dean, Division of Academic and Student Affairs (DASA) Date

Statement of Justification

The current Environmental Sciences minor lists all ES core courses, including Analysis of Environmental Issues (ES 400), which is restricted to ES majors. The number of ES courses and student enrollment has increased since the minor was revised in 2010. The ES courses are designed to introduce basic concepts of environmental sciences, improve interdisciplinary understanding of environmental sciences, and enhance analytical and communication skills. The proposed changes to the Environmental Sciences minor would allow students to select three of the five ES courses, allowing students more flexibility to choose the ES course best aligned with their interests. Students would also select two additional courses from the revised elective course list for ES minors.

Statement of Academic Minor Program Objectives

The Environmental Sciences minor allows students to connect the topics from their major to the compelling, contemporary issues that connect humans to the environment. The revised ES minor includes courses and content from all academic units to provide links between disciplines and to provide a foundation for analysis of environmental issues.

List of Courses constituting the Proposed Minor

Choose any three from the ES Courses:

ES 100: Introduction to Environmental Science

ES 113: Earth from Space

ES 200: Climate Change and Sustainability

ES 300: Energy and the Environment

ES 433: Biotechnology, Conservation, and Society

2 Courses from the list of elective courses

Elective Courses (6 credit hours)

Choose any two (2) courses from the list below; they do not need to be in the same group. Course substitutions may be made with minor advisor approval.

Group I - Biological Science

[MEA \(BIO\) 220](#) Marine Biology *This course has a prerequisite.

[FW \(BIO\) 221](#) Conservation of Natural Resources

[PB/BIO 360](#) Ecology *This course has a prerequisite.

[FOR 252](#) Introduction to Forest Science

Group II - Physical Science

[MEA 101](#) Geology I: Physical

and [MEA 110](#) Geology I: Laboratory

[MEA 130](#) Introduction to Weather and Climate

and [MEA 135](#) Introduction to Weather and Climate Laboratory

[MEA 140](#) Natural Hazards and Global Change

[SSC 200](#) Soil Science (4 cr) *This course has a prerequisite.

[MEA 200](#) Introduction to Oceanography

[CE 373](#) Fundamentals of Environmental Engineering *This course has a prerequisite.

Group III - Social Science

[IDS 201](#) Environmental Ethics

[NR/IDS 303](#) Humans and the Environment

[STS 322](#) Technological Catastrophes

[PS 320](#) U.S. Environmental Politics

[PS 336](#) Global Environmental Politics

[LAR 221](#) Introduction to Environment and Behavior for Designers.

Group IV - Advanced Courses

[MEA 300](#) Environmental Geology *This course has a prerequisite.

[SSC 361](#) Role of Soils in Environmental Management

[NR 460](#) Renewable Resources Policy and Management

[HI 440](#) American Environmental History *This course has a prerequisite.

[NR 406](#) Conservation of Biological Diversity *This course has a prerequisite.

[SOC 450](#) Environmental Sociology *This course has a prerequisite.

Catalog Description of Proposed Minor

The Environmental Science minor allows students to connect the topics from their major to the compelling, contemporary issues that connect humans to the environment. The minor includes courses and content from all academic units to provide links between disciplines and to provide a foundation for analysis of environmental issues.

Administration of the Minor (Contact information for Administrator of the Minor)

Erin Champion

eachampi@ncsu.edu

3136B Jordan Hall

919.513.2520

Requirements for Admission and Completion of the Minor

Any student with an interest in the Environmental Sciences minor should consult with the Minor Administrator to discuss their interest in the minor, course requirements and complete the required paperwork to declare the minor. Students must have a minimum grade point average of 2.0 to be admitted to the minor. The Environmental Sciences Committee will review the student's record and certify that the student has completed the requirements for the minor. 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.