ATTACHMENT 1C

ADD, CHANGE OR DELETE UNIT, PROGRAM REQUIREMENTS, OR ACADEMIC POLICIES

Complete this form consistent with the instructions in Academic Policy 1622.20. Use the form to add, change, or delete a program or unit or to change program policies. Proposed additions and changes must be consistent with Academic Policies 1100.40 and 1621.10 and any other policies which apply.

SECTION I: Approvals

Department / Program Chair	Date Submitted	Graduate Council Chair	Date
College Dean	Date	Faculty Senate Chair	Date
Honors College Dean	Date	Provost	Date
Core Curriculum Committee	Date	Board of Trustees Approval/Notification Date	
University Course and Programs Committee	Date	Arkansas Higher Education Coordinating Board Approval/Notification Date	
Vice Provost for Distance Education (for on-line programs)	Date		

SECTION II: Profile Data - Required Information and Name Change Information

Academic Unit: ☒ Major/Field of Study ☐ Minor ☐ Other Unit _____ ☐ Policy

Level: ☒ Undergraduate ☐ Graduate ☐ Law Effective Catalog Year 2014

Program changes are effective with the next available catalog. See Academic Policy Series 1622.20

Current Name **BSA, Environmental, Soil and Water Science**

College, School, Division **AFLS** Department Code **CSES**

Current Code (6 digit Alpha) **ESWSBS** Proposed Code (6 digit Alpha) _____
Prior approval from the Office of the Registrar is required.

☐ Interdisciplinary Program CIP Code **03.0104**
Prior assignment from Office of Institutional Research is required.

Proposed Name _____
When a program name is changed, enrollment of current students reflects the new name.

SECTION III: Add a New Program/Unit

☐ For new program proposals, complete Sections II and VII and use as a cover sheet for a full program proposal as described in 'Criteria and Procedures for Preparing Proposals for New Programs in Arkansas.' ADHE
http://www.adhe.edu/divisions/academicaffairs/Pages/academicaffairs.aspx

☐ Program proposal uses courses offered by another academic college, and that college dean's office has been notified. The signature of the dean of that academic college is required here: _____

SECTION IV: Eliminate an Existing Program/Unit

Code/Name _____ Effective Catalog Year _____

No new students admitted to program after Term: ___ Year: _____
Allow students in program to complete under this program until Term: ___ Year: _____

SECTION V: Proposed Changes to an Existing Program or Program Policies

Insert here a statement of the exact changes to be made: <u>Delete CSES 1011 Introduction to CSES and require ENSC 1001L Environmental Science Laboratory; Insert CSES 4553 Wetland Soils into the Environmental Science section of the Natural Resources Core.</u>

Check if either of these boxes apply and provide the necessary signature:

☐ Program change proposal adds courses offered by another academic college, and that college dean's office has been notified. The signature of the dean of that academic college is required here: _____

☐ Program change proposal deletes courses offered by another academic college, and that college dean's office has been notified. The signature of the dean of that academic college is required here: _____

Check all the boxes that apply and complete the required sections of the form:

☐ Change of Name and Code (Complete only sections I, II, V and VII.)

☒ Change Course Requirements: (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)

☐ Change Delivery Site/Method (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)

☐ Change Total Hours (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)

☐ Change in Program Policies

SECTION VI: Justification

Justify this change and state its likely effect on any other degree program (including those outside the school or college). Identify any program or program components (other than courses) to be eliminated if this program is implemented. (Program and course change forms must also be submitted for such related changes.)

<u>The CSES orientation course is being deleted in response to the creation of the unviersity-wide UNIV 1001 University Perspectives orientation course. We would like our all of ESWS students to complete the ENSC 1001L ENvironmental Science laboratory accompanying ENSC 1003 Environmental Science. Environmental Science is required and the laboratory has been strongly receommended to ESWS majors. This lab fulfills the exposure and orientation to environmental science that was accomplished in CSES 1011 while the students receive the orientation to college in UNIV 1001.</u>

<u>Wetland Soils is a new course emphasizing instrumentation and data interpretation of hydric soil indicators. This is a valuable skill for future soil scientists and a course that can be added with the addition of the expertise of a new faculty member in the CSES Dept.</u>

SECTION VII: Catalog Text and Format

In the box below, insert the current catalog text which is to be changed, with changes highlighted with the color yellow. Include all proposed changes identified in Section V. Only changes explicitly stated in Section V will be considered for approval by the University Course and Programs Committee, the Graduate Council and the Faculty Senate. If you are proposing a new program, give proposed text with all of the elements listed below. If you are proposing modified text, include these elements as appropriate.

Include the following elements, in order, in the catalog text for proposed undergraduate program(s) or program changes:

- State complete major/program name
- Briefly define or describe the major/program or discipline.
- Identify typical career goals or paths for graduates. (Optional)
- State admission requirements (if any) for entry or entry into upper/advanced level of major/program.
- Identify location in catalog of university, college/school, and department/program requirements which the student must meet in addition to hours in the major, but do not restate these requirements.
- State course requirements in the major and any allied areas, giving number of hours and specific courses; specify electives or elective areas and give numbers of hours and courses in elective pools or categories; identify any other course requirements.
- State any other requirements (required GPA, internship, exit exam, project, thesis, etc.).
- Identify name and requirements for each concentration (if any).
- Specify whether a minor or other program component is allowed or required and provide details.
- State eight-semester plan requirements

For minors, state requirements in terms of hours, required courses, electives, etc.

For graduate program/units, include elements (as needed) parallel to those listed for undergraduate programs above.

For Law School program/units, prepare text consistent with current catalog style.

For centers, prepare text consistent with current catalog style.

ENVIRONMENTAL, SOIL, AND WATER SCIENCE (ESWS)

Mary C. Savin
ESWS Coordinator
115 Plant Science Building
479-575-5740

Opportunities for employment and post-graduate study are numerous for graduates of the Department of Crop, Soil, and Environmental Sciences. Environmental, Soil, and Water Science graduates find jobs with environmental consulting companies, environmental education organizations, state agencies (e.g., Extension Service, Department of Environmental Quality, Health Department), federal agencies (e.g., Environmental Protection Agency, Natural Resources Conservation Service), municipalities and local environmental services (e.g., waste management and recycling, water and wastewater treatment facilities, parks and tourism departments), a wide variety of private businesses, and environmental research.

The Environmental, Soil, and Water Science major includes courses in areas such as environmental science, water quality, soil science, soil and water conservation, and the sustainable productivity of natural resources.

Requirements for a Major in Environmental, Soil, and Water Science (ESWS)

State minimum core and discipline specific general education requirements:
(Course work that meets state minimum core requirements is in **bold**.)

Communications (12 hours)
__ Choose from **English Core** course (6 hours) If exempt, see adviser for communication courses.
__ COMM 1313 Public Speaking
__ CSES 3023 or AGED 3142/3141L
U.S. History and Government (3 hours)
__ Choose from **U.S. History Core** courses (3 hours)
Mathematics and Statistics (9 hours)
__ **MATH 1203** College Algebra
__ MATH 1213 Plane Trigonometry (Higher level MATH is encouraged for students with an ACT of 26 or higher and considering graduate school.)
__ AGST 4023 Principles of Experimentation or STAT 2023 Biostatistics or STAT 2303 Principles of Statistics
Sciences (35 hours)
__ **BIOL 1543/1541L** Principles of Biology and lab
__ BIOL 2013/2011L General Microbiology and lab
__ BIOL 3863/3861L General Ecology and lab or ENSC 3223/3221L Ecosystem Assessment and lab
__ CSES 1203 Introduction to Plant Sciences
__ **CHEM 1103/1101L** University Chemistry I and lab
__ **CHEM 1123/1121L** University Chemistry II and lab
__ CHEM 2613/2611L Organic Physiological Chemistry and lab or CHEM 3603/3601L Organic Chemistry I and lab
__ **GEOL 1113/1111L** General Geology and lab
__ **PHYS 2013/2011L** College Physics I and lab
Fine Arts and Humanities (6 hours)
__ Choose from **Fine Arts, Humanities Core** courses
Social Sciences (9 hours)
__ Choose from **Social Sciences Core** courses
ESWS Requirements (29-30 hours)
Environmental Science Core (11 hours)
__ ~~CSES 1011 Introduction to CSES~~
__ CSES 2203/2201L Soil Science and lab
__ ENSC 1003/1001L Environmental Science and lab
__ ENSC 3003 Introduction to Water Science
Soil Science Core (3-4 hours)
__ CSES 3214 Soil Resources with lab component
__ CSES 4224 Soil Fertility with lab component
__ CSES 4253 Soil Classification and Genesis with lab component
__ ENSC 4263 Environmental Soil Science
Water Science Core (3 hours)
__ ENSC 4023 Water Quality
__ GEOG 3333 Oceanography

__ GEOL 4033 Hydrogeology with lab component

Natural Resources Core (Choose 12 hours from the following 2 groups)

Environmental Science

__ AGME 3153 Surveying in Agriculture and Forestry
__ CSES 2013 Pest Management
__ CSES 355V Soil Profile Descriptions
__ CSES 462V Internship
__ CSES 4553 Wetland Soils
__ ENSC 3103 Plants & Environmental Restoration
__ ENSC 3263 Environmental Soil and Water Conservation
__ ENSC 3603 GIS for Environmental Science
__ ENSC 4034 Analysis of Environmental Contaminants with lab component
__ ENSC 4401 Professional Certification Preparation
__ GEOG 3003 Conservation of Natural Resources
__ GEOS 3543 Geographic Information Science

Environmental Studies (maximum of 6 hours)

__ AGEC 3413 Principles of Environmental Economics
__ AGEC 3503 Agricultural Law
__ AGEC 3523 Environmental and Natural Resource Law
__ ENSC 3933 Environmental Ethics
__ RSOC/SOCI 4603 Environmental Sociology

General Electives (16-17 hours)

120 Total hours

Environmental, Soil, and Water Science B.S.A.

Eight-Semester Degree Program

Students wishing to follow the degree plan should see page 40 in the Academic Regulations chapter for university requirements of the program.

Fall Semester Year 1	
3	ENGL 1013 Composition I (If exempt, see adviser for communication courses.)
4	ENSC 1003/1011L Environmental Science and lab
	UNIV 1001 University Perspectives
4	Science University Core – BIOL 1543/1541L Principles of Biology and lab
3	Social Sciences University Core Elective
3	Fine Arts/Humanities University Core Elective
17	**Semester hours**
Spring Semester Year 1	
3	ENGL 1023 Composition II (If exempt, see adviser for communication courses.)
3	History University Core Elective
3	CSES 1203 Introduction to Plant Sciences
3	Social Sciences University Core Elective
3	MATH 1203 (pre-requisite for CHEM 1103)
15	**Semester hours**
Fall Semester Year 2	
3	General Elective
4	GEOL 1113/1111L General Geology and lab
4	Science University Core – CHEM 1103/1101L Chemistry I and lab
3	COMM 1313 Public Speaking
3	MATH 1213 or higher if ACT of 26 or higher (prerequisite for PHYS 2013)
17	**Semester hours**
Spring Semester Year 2	
4	CHEM 1123/1121L Chemistry II and lab
3	Fine Arts/Humanities University Core Elective
3	Social Sciences University Core Elective
3	ENSC 3003 Introduction to Water Science
3	General Elective (Could apply elective toward a minor)
16	**Semester hours**
Fall Semester Year 3	
4	CSES 2203/2201L Soil Science and lab

4	PHYS 2013/2011L College Physics I and lab
3	Water Science or Natural Resources Core
3-4	General Electives as AFLS Broadening Electives (Could apply toward a minor) or CHEM 3601/3601L
14-15	**Semester hours**
Spring Semester Year 3	
4	BIOL 2013/2011L General Microbiology and lab
3-4	CHEM 2613/2611L Organic Physiological Chemistry and lab or General Elective
3-4	Natural Resources Core
3-4	Water Science or Soil Science Core (For Water Science: Recommended: ENSC 3003; Soil Science: Pre-at least CSES 2203)
13-16	**Semester hours**
Fall Semester Year 4	
3	CSES 3023 Colloquium or AGED 3142 & AGED 3141L
4	ENSC 3223/3221L Ecosystems Assessment and lab or BIOL 3863/3861L General Ecology and lab
3	Statistics or Natural Resources Core
3-4	Soil Science or Natural Resources Core
3	Natural Resources Core or General Elective (Could apply elective toward a minor)
16-17	**Semester hours**
Spring Semester Year 4	
3	Natural Resources Core or General Elective
3-4	Statistics or Natural Resources Core
3	General Elective or Natural Resources Core
3	General Elective as Broadening Elective (Could apply toward a minor)
12-13	**Semester hours**
120	**Total Hours**

SECTION VIII: Action Recorded by Registrar's Office

PROGRAM INVENTORY/DARS

PGRM _____ SUBJ _____ CIP _____ CRTS _____

DGRE _____ PGCT _____ OFFC&CRTY VALID _____

REPORTING CODES

PROG. DEF. _____ REQ. DEF.

Initials ____ Date _____

Distribution

Notification to:
(1) College (2) Department (3) Admissions (4) Institutional Research (5) Continuing Education (6) Graduate School
(7) Treasurer (8) Undergraduate Program Committee

8/19/13