

MICHIGAN STATE UNIVERSITY

March 12, 2015

MEMORANDUM

TO: Dr. Douglas Estray, Associate Provost for Undergraduate Education
and Dean of Undergraduate Studies

FROM: Dr. John Gaboury, Associate Provost for Academic Services

RE: Request to Phase Out and Discontinue the Bachelor of Science
Degree in Environmental Soil Science

For Transmittal to the University Committee on Undergraduate
Education (UCUE)

The request referenced above is being sent to the University Committee on Undergraduate Education (UCUE) in accordance with the *Bylaws for Academic Governance*, 4.4.

UCUE Response Requested:

Please ask the UCUE to consider the request referenced above and provide consultative commentary. Please mail the related materials referenced under the heading Attachments at the end of this memorandum to UCUE members.

After receiving UCUE's consultative response, the Provost will make a determination to discontinue or not to discontinue this program. If the Provost determines that the program will be discontinued, the request will be forwarded to the University Committee on Curriculum for deletion of curriculum and degree requirements.

If you have any questions, please call Joy Speas, University Curriculum Administrator at 5-8420.

Thank you.

Attachments:

1. Request to Discontinue an Academic Program form dated February 19, 2015: Bachelor of Science Degree in Environmental Soil Science and attachments.
2. Student Enrollments by Program; Student Awards by Programs (for the request referenced above).

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University Curriculum and Catalog

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COLLEGE OF AGRICULTURE AND NATURAL RESOURCES

1. Request to delete the curriculum and degree requirements for the **Bachelor of Science** degree in **Environmental Soil Science** in the Department of Plant, Soil and Microbial Sciences. The University Committee on Undergraduate Education (UCUE) will provide consultative commentary to the Provost after considering this request. The Provost will make a determination after considering the consultative commentary from the University Committee on Undergraduate Education.

No new students are to be admitted to the program effective Summer 2010. No students are to be readmitted to the program effective Summer 2010. Effective Spring 2015, coding for the program will be discontinued and the program will no longer be available in the Department of Plant, Soil and Microbial Sciences. Students who have not met the requirements for the Bachelor of Science degree in Environmental Soil Science through the Department of Plant, Soil and Microbial Sciences prior to Spring 2015 will have to change their major.

| | | |
|--|--|---------------------------|
| View a Program | | Main Menu |
| Joy Speas, RO | | Monday, 2/23/2015 |
| Program Name: Environmental Soil Science Degree: BS Sequence Number: 4 | | Program Request ID: 2939 |
| Effective Dates: Spring 2015 Status: Interim Initial Action: Deleted | | |
| Requested Date: 2/9/2015 3:18:14 PM | | |
| 1. Department/School/College: 02A16 Department of Plant, Soil and Microbial Sciences | | |
| 2. Name of Program: Environmental Soil Science | | |
| 3. Name of Degree: BS | | |
| 4. Type of Program: | | |
| 5. Effective Start Semester: Spring 2015 | | |
| Effective End date: Spring 2015 | | |
| Will the proposed change(s) have a negative impact on students? If so, which ones?: No | | |
| Describe impact and explain what accommodations will be made: No students are enrolled in the program, so no students will be impacted, and actions to accommodate are not needed. | | |
| Reason(s) for change(s): Moratorium has expired, and potential enrollments are not sufficient to request an extension. | | |
| DEPARTMENT LEVEL APPROVAL STATUS | | |
| Approved: Department of Plant, Soil and Microbial Sciences 2/19/2015 4:11:40 PM by Taylor Johnston for James Kells, Chairperson | | |
| COLLEGE LEVEL APPROVAL STATUS | | |
| Approved: College of Agriculture and Natural Resources 2/19/2015 4:14:03 PM by Kelly Millenbah for Kelly Millenbah, Associate Dean | | |

DEPARTMENT of PLANT, SOIL and MICROBIAL SCIENCES

James J. Kells, Chairperson

UNDERGRADUATE PROGRAMS

The department offers ^{an} ~~three~~ ⁱⁿ undergraduate majors: Crop and Soil Sciences, ~~Environmental Soil Science, and Plant Pathology.~~

The Crop and Soil Sciences major includes three concentrations: agronomic sciences, turfgrass management, and advanced studies. Each program is built on a broad educational base with a core of professional courses and sufficient electives to allow students and advisors to tailor individualized programs.

The department also offers undergraduate specializations in international agriculture, and sustainable agriculture and food systems, and a minor in agronomy.

~~ENVIRONMENTAL SOIL SCIENCE~~

Requirements for the Bachelor of Science Degree in Environmental Soil Science

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Science degree in Environmental Soil Science.

The University's Tier II writing requirement for the Environmental Soil Science major is met by completing all of the following courses: Crop and Soil Sciences 455 and 492. These courses are referenced in item 3.a. below.

Students who are enrolled in the Environmental Soil Science major may complete an alternative track in Integrative Studies in Biological and Physical Sciences that consists of the following courses: Biological Science 111 and Chemistry 141, 142, 161, and 162. The completion of Chemistry 161 and 162 satisfies the laboratory requirement. Biological Science 111 and Chemistry 141, 142, 161, and 162 may be counted toward both the alternative track and the requirements for the major referenced in item 3. below.

The completion of the College of Agriculture and Natural Resources mathematics requirement also satisfies the University mathematics requirement.

2. The requirements of the College of Agriculture and Natural Resources for the Bachelor of Science degree. Certain courses referenced in requirement 3. may be counted toward College requirements as appropriate. The completion of Mathematics 132 satisfies the College's mathematics requirement.

3. The following requirements for the major:

CREDITS
74 to 76

- a. All of the following courses (60 credits):
- | | | |
|---------|---|---|
| BMB 200 | Introduction to Biochemistry | 4 |
| BS 111 | Cells and Molecules | 3 |
| CE 280 | Principles of Environmental Engineering and Science | 3 |
| CEM 141 | General Chemistry | 4 |
| CEM 142 | General and Inorganic Chemistry | 3 |
| CEM 143 | Survey of Organic Chemistry | 4 |
| CEM 161 | Chemistry Laboratory I | 1 |
| CEM 162 | Chemistry Laboratory II | 1 |
| CEM 262 | Quantitative Analysis | 3 |
| CSS 192 | Professional Development Seminar I | 1 |
| CSS 210 | Fundamentals of Soil Science | 3 |
| CSS 330 | Soil Chemistry | 2 |
| CSS 340 | Applied Soil Physics | 2 |
| CSS 455 | Pollutants in the Soil Environment | 3 |
| CSS 470 | Soil Resources | 3 |
| CSS 492 | Professional Development Seminar II | 1 |
| EC 201 | Introduction to Microeconomics | 3 |
| GLG 201 | The Dynamic Earth | 4 |
| GLG 411 | Hydrogeology | 3 |
| MMG 301 | Introductory Microbiology | 3 |
| MMG 425 | Microbial Ecology | 3 |
| MTH 132 | Calculus I | 3 |
- b. One course from each of the following five groups (14 to 16 credits):
- | | | |
|-------------|--------------------------------------|---|
| (1) CE 485 | Landfill Design | 3 |
| CE 491 | Civil Engineering Design Project | 3 |
| (2) STT 200 | Statistical Methods | 3 |
| STT 201 | Statistical Methods | 4 |
| STT 231 | Statistics for Scientists | 3 |
| STT 421 | Statistics I | 3 |
| (3) ANS 427 | Environmental Toxicology and Society | 3 |
| PHM 450 | Introduction to Chemical Toxicology | 3 |
| (4) NSC 448 | Ecology, Law and Economics | 3 |
| RD 430 | Law and Resources | 3 |
| (5) CSS 110 | Computer Applications in Agronomy | 2 |
| CSE 101 | Computing Concepts and Competencies | 3 |

Students who pass a waiver examination for Computer Science and Engineering 101 will not be required to complete Computer Science and Engineering 101 or Crop and Soil Sciences 110.

Enrollments and Awards By Program Agriculture and Natural Resources

| Program - Description | Span | | FY05 | FY06 | FY07 | FY08 | FY09 | FY10 | FY11 | FY12 | FY13 | FY14 | Total | 10 yr Diff. | |
|---|-----------|-------------|------|------|------|------|------|------|------|------|------|------|-------|-------------|-----|
| 5377 - Sustain Tour&Protect Area Mgt | FS13- | Enrollments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 4 | |
| | | Awards | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 |
| | | % | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 75% | 75% | 75% |
| SPCU - Specialization Undergraduate | | | | | | | | | | | | | | | |
| 5279 - Natural Resource Recreation | FS06- | Enrollments | 0 | 0 | 1 | 1 | 2 | 3 | 6 | 6 | 6 | 12 | 37 | 12 | |
| | | Awards | 0 | 0 | 1 | 0 | 1 | 1 | 2 | 1 | 3 | 3 | 12 | 3 | |
| | | % | 0% | 0% | 100% | 0% | 50% | 33% | 33% | 17% | 50% | 25% | 32% | 25% | |
| 5333 - Sustainability | FS10-SS13 | Enrollments | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 28 | 35 | 27 | 108 | 27 | |
| | | Awards | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 6 | 4 | 17 | 4 | |
| | | % | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 25% | 17% | 15% | 16% | 15% | |
| <i>Crop & Soil Science</i> | | | | | | | | | | | | | | | |
| ADDU - Additional Major Undergraduate | | | | | | | | | | | | | | | |
| 0313 - Crop and Soil Sciences | FQ76-US13 | Enrollments | | | | | | | | | | | | 0 | |
| 0517 - Environmental Soil Science | FS00-SS10 | Enrollments | | | | | | | | | | | | 0 | |
| BS - Bachelor of Science | | | | | | | | | | | | | | | |
| 0312 - Crop and Soil Sciences | FQ76-US13 | Enrollments | 112 | 114 | 107 | 101 | 92 | 80 | 88 | 104 | 117 | 33 | 948 | -79 | |
| | | Awards | 17 | 33 | 28 | 24 | 27 | 20 | 20 | 21 | 23 | 5 | 218 | -12 | |
| | | % | 15% | 29% | 26% | 24% | 29% | 25% | 23% | 20% | 20% | 15% | 23% | 0% | |
| 5248 - Crop and Soil Sciences | US06-US13 | Enrollments | 0 | 0 | 25 | 69 | 94 | 115 | 137 | 121 | 102 | 0 | 663 | 0 | |
| | | Awards | 0 | 0 | 0 | 0 | 23 | 43 | 49 | 66 | 67 | 50 | 298 | 50 | |
| | | % | 0% | 0% | 0% | 0% | 24% | 37% | 36% | 55% | 66% | 0% | 45% | 0% | |
| 0314 - Crop and Soil Sciences - Second Degree | FQ76-US13 | Enrollments | 4 | 4 | 3 | 4 | 6 | 6 | 5 | 4 | 4 | 2 | 42 | -2 | |
| | | Awards | 0 | 1 | 0 | 1 | 1 | 0 | 2 | 0 | 1 | 1 | 7 | 1 | |
| | | % | 0% | 25% | 0% | 25% | 17% | 0% | 40% | 0% | 25% | 50% | 17% | 50% | |

Fiscal Year (FY) counts are distinct student counts within the Summer, Fall, and Spring terms.
e.g. FY07=distinct student count within Summer 06, Fall 06, and Spring 07.
If a student changed majors within the FY, he/she is counted under both majors.

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Enrollments and Awards By Program Agriculture and Natural Resources

| Program - Description | Span | | FY05 | FY06 | FY07 | FY08 | FY09 | FY10 | FY11 | FY12 | FY13 | FY14 | Total | 10 yr Diff. |
|---|-----------|-------------|------|------|------|------|------|------|------|------|------|------|-------|-------------|
| → 0516 - Environmental Soil Science | FS00-SS10 | Enrollments | 6 | 7 | 7 | 5 | 2 | 2 | 0 | 0 | 0 | 0 | 29 | -6 |
| | | Awards | 2 | 1 | 2 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 8 | -2 |
| | | % | 33% | 14% | 29% | 20% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 28% |
| 0518 - Environmental Soil Science - Second Degree | FS00-SS10 | Enrollments | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| | | Awards | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| | | % | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% |
| DUAL - Dual Major | | | | | | | | | | | | | | |
| 9812 - Crop and Soil Sciences | FQ76-US13 | Enrollments | | | | | | | | | | | | 0 |
| MNUN - Minor Undergraduate | | | | | | | | | | | | | | |
| 5332 - Agronomy | US10-US13 | Enrollments | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 28 | 48 | 24 | 123 | 24 |
| | | Awards | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 10 | 8 | 2 | 21 | 2 |
| | | % | 0% | 0% | 0% | 0% | 0% | 0% | 4% | 36% | 17% | 8% | 17% | 8% |
| MS - Master of Science | | | | | | | | | | | | | | |
| 0330 - Crop and Soil Sciences | FQ76-US13 | Enrollments | 29 | 18 | 13 | 13 | 24 | 24 | 21 | 27 | 26 | 12 | 207 | -17 |
| | | Awards | 6 | 9 | 2 | 2 | 4 | 7 | 3 | 7 | 8 | 1 | 49 | -5 |
| | | % | 21% | 50% | 15% | 15% | 17% | 29% | 14% | 26% | 31% | 8% | 24% | -12% |
| 5310 - Plant Breed, Genet&Biotech-CSS | FS09-US13 | Enrollments | 0 | 0 | 0 | 0 | 0 | 5 | 7 | 5 | 3 | 1 | 21 | 1 |
| | | Awards | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 0 | 7 | 0 |
| | | % | 0% | 0% | 0% | 0% | 0% | 20% | 29% | 40% | 67% | 0% | 33% | 0% |
| 0320 - Plant Breeding & Genetics-CSS | WQ84-US09 | Enrollments | 9 | 5 | 4 | 3 | 5 | 3 | 2 | 2 | 0 | 0 | 33 | -9 |
| | | Awards | 1 | 3 | 2 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 9 | -1 |
| | | % | 11% | 60% | 50% | 0% | 20% | 0% | 0% | 50% | 0% | 0% | 27% | -11% |
| NOPD - No Degree - Post Doctoral | | | | | | | | | | | | | | |
| 0322 - Plant Breeding & Genetics-CSS | WQ84-US09 | Enrollments | | | | | | | | | | | | 0 |

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If a student changed majors within the FY, he/she is counted under both majors.

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