REQUEST FOR ADDITION OF NEW COURSE

PROPOSED COURSE DESCRIPTION

Rubric & No. AGRO 7010
Title Teaching Practicum

Short Title (≤ 19 characters) TEACHING PRACTICUM

Semester Hours of Credit 1

If combination course type, # hrs. of credit for
Lecture: Lab/Sem/Rec: 1

Repeat Credit Max. (if repeatable): 2 credit hours Graduate Credit? Yes No

Credit will not be given for this course and:

Course Type (Indicate hours in the appropriate course type.)
Lecture Lab Seminar Recitation Lec/Rec Lec/Sem Lec/Lab Res/Ind Clin/Prac Intern

Maximum enrollment per section: (use integer, e.g. 25 not 20-30) 10

Grading System: Letter Grade Pass/Fail Final Exam: Yes No

**(Attach justification if the proposed course will not hold a final exam during examination week.)**

Course Description:
(Concise catalog statement exactly as you wish it to appear in the General Catalog)

AGRO 7010 Teaching Practicum (1)
Also offered as EMS 7010 and HORT 7010.
Prereq: Graduate standing in Plant, Environmental and Soil Sciences and permission of department.
Students whose native language is not English must pass the Michigan Test of English proficiency or equivalent, and receive prior written approval by the student's major professor and the faculty teaching mentor. May be repeated once, for a maximum of 2 hours of credit.
Teaching practicum and learning experience through assisting a faculty member with a class. Responsibilities may include: preparing and conducting laboratories or lectures and grading assignments and exams.

BUDGET IMPACT (IF ANSWER TO ANY QUESTION IS "YES", ATTACH EXPLANATION.

If this course is approved, will additional staff be needed? Yes No

Will additional space, equipment, special library materials or other major expense be involved? Yes No

Academic Affairs Approval: (Date)

ATTACHMENTS (ATTACH THE FOLLOWING TO YOUR PROPOSAL)

JUSTIFICATION: Justification must explain why this course is needed and how it fits into the curricula. Will the course duplicate other courses?
SYLLABUS: Including 14 week outline of the subject matter; titles of text, lab manual, and/or required readings; grading scale and criteria.
(For 4000-level, specify graduate student grading criteria if requirements differ for graduate and undergraduate students.

APPROVALS

Department Faculty Approval Date 8/18/17
Department Chair Signature 8/23/17 (date)

Graduate Dean Signature (date)

Jennifer Neal jshepherd@lsu.edu
College Contact E-mail

College Faculty Approval Date 9/19/17

College Dean Signature (date)

Chair, FS C&C Committee (date)

Academic Affairs Approval (date)
## REQUEST FOR ADDITION OF NEW COURSE

**Department:** Plant, Environmental & Soil Sciences  
**College:** Agriculture  
**Date:** 8/7/17

### Course Information

<table>
<thead>
<tr>
<th>Rubric &amp; No.</th>
<th>EMS 7010</th>
<th>Title</th>
<th>Teaching Practicum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Title (≤ 19 characters)</td>
<td>T E A C H I N G P R A C T I C U M</td>
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</tr>
<tr>
<td>Semester Hours of Credit</td>
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<td></td>
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<td>If combination course type, # hrs. of credit for</td>
<td>Lecture: ____  Lab/Sem/Rec: ____</td>
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<tr>
<td>Repeat Credit Max. (if repeatable):</td>
<td>2 credit hours  Graduate Credit? X Yes  ____ No</td>
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<tr>
<td>Credit will not be given for this course and:</td>
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<tr>
<td>Course Type (Indicate hours in the appropriate course type.)</td>
<td></td>
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<tr>
<td>Lecture</td>
<td>Lab ____</td>
<td>Seminar</td>
<td>Recitation</td>
</tr>
</tbody>
</table>

Maximum enrollment per section: (use integer, e.g., 25 not 20-30) 10

**Grading System:**  
Letter Grade: __  Pass/Fail: ____  Final Exam: **Yes ____ No X**

**Course Description:**

(Provide course description exactly as you wish it to appear in the General Catalog)

EMS 7010 Teaching Practicum (1)

See AGRO 7010.

---

If this course is approved, will additional staff be needed? Yes ____ No X

Will additional space, equipment, special library materials or other major expense be involved? Yes ____ No X

Academic Affairs Approval: (Date)

---

**JUSTIFICATION:** Justification must explain why the course is needed and how it fits into the curricula. Will the course duplicate other courses? SYLLABUS: Including 14 week outline of the subject matter, titles of test, lab manual, and/or required readings; grading scale and criteria. (For 4000-level, specify graduate student grading criteria if requirements differ for graduate and undergraduate students.)

---

**Department Faculty Approval Date:** 8/18/17  
**College Faculty Approval Date:** 10/5/17

**Department Chair Signature:** 8/23/17  
**Graduate Dean Signature:** 10/5/17  
**College Contact:** jsherni1@isu.edu

**College Dean Signature:** 10/5/17  
**Chair, FS C&C Committee:** 10/5/17  
**Academic Affairs Approval:** 10/11/17
REQUEST FOR ADDITION OF NEW COURSE

Department: Plant, Environmental & Soil Sciences  
College: Agriculture

Date: 8/7/17

<table>
<thead>
<tr>
<th>Rubric &amp; No.</th>
<th>HORT 7010</th>
<th>Title</th>
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<tbody>
<tr>
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<td>Semester Hours of Credit</td>
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<td>If combination course type, # hrs. of credit for</td>
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<td>Lab/Sem/Rec: ____</td>
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<td>Repeat Credit Max. (If repeatable):</td>
<td>2 credit hours</td>
<td>Graduate Credit? Yes</td>
<td>No</td>
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<tr>
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Course Type (Indicate hours in the appropriate course type.)

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Lab</th>
<th>Seminar</th>
<th>Recitation</th>
<th>Lec/Rec</th>
<th>Lec/Sem</th>
<th>Lec/Lab</th>
<th>Res/Ind</th>
<th>Clin/Pract</th>
<th>Intern</th>
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</tbody>
</table>

Maximum enrollment per section: (Use integer, e.g. 25 not 20-30) 10

Grading System: Letter Grade Yes  No X

***(Attach justification if the proposed course will not hold a final exam during examination week.)***

Course Description:
(Provide catalog statement exactly as you wish it to appear in the General Catalog)

HORT 7010 Teaching Practicum (1)

See AGRO 7010.

If this course is approved, will additional staff be needed? Yes X No __

Will additional space, equipment, special library materials or other major expense be involved? Yes X No __

Academic Affairs Approval: (Date)

JUSTIFICATION: Justification must explain why this course is needed and how it fits into the curriculum. Will the course duplicate other courses? Syllabus: including 14 week outline of the subject matter; titles of text, lab manual, and/or required readings; grading scale and criteria
(For 4000-level, specify graduate student grading criteria if requirements differ for graduate and undergraduate students.)

Department Faculty Approval Date  8/13/17  
College Faculty Approval Date  10/6/17

Department Chair Signature  Jennifer Neal  jshern@lsu.edu

Graduate Dean Signature  Mike S. Massé  10/5/17

College Dean Signature  William R. Pilbeam

Chair, F5 C&C Committee  Jennifer Neal  jshern@lsu.edu

Academic Affairs Approval (Date)
Course request justification:

AGRO/EMS/HORT 7010 Teaching Practicum (1 hour)
Many of our School of Plant, Environmental and Soil Sciences M.S. and Ph.D. graduates work in formal or informal (extension) education. This class is designed to develop teaching expertise by providing graduate students in our School with instructional experiences and guidance from faculty mentors.
This class does not duplicate other courses on campus; it is designed specifically for students in our graduate program so that we can match graduate students to courses that best fit their expertise and provide appropriate guidance and evaluation.

No final exam explanation

AGRO 7010 Teaching Practicum (1 hour)
There will be no final exam for this class, as it is a practicum.
AGRO/EMS/HORT 7010 Teaching Practicum
Spring 2017  1 hour of credit

Instructor
Dr. Maud Walsh, 110 Sturgis Hall, 225-578-1211, evwals@lsu.edu, http://www.spess.edu. Please contact me by phone or email if you would like to make an appointment and specify your availability.

Enrollment
Enrollment in the class requires graduate standing in Plant, Environmental and Soil Sciences and permission of department. Students whose native language is not English must pass the Michigan Test of English proficiency or equivalent, and receive prior written approval by the student’s major professor and the faculty teaching mentor.

Course objective
This class is designed to develop teaching expertise by providing graduate students with instructional experiences and guidance from faculty mentors. The learning goals
- Students will learn to plan lectures or laboratories appropriate for the course they are teaching.
- Students will improve their public speaking skills.
- Students will learn to communicate with students of different backgrounds and levels of content knowledge.
- Students will learn to reflect on their observations and student performance to improve a class.

Course summary
Graduate students may receive 1 hour of credit per semester for up to 2 semesters for assisting in any lecture or lab class taught by a faculty member in the School of Plant, Environmental and Soil Sciences. Activities may include preparing and delivering presentations, meeting with student study groups, and assisting in developing and grading assignments and exams. For one hour of credit, the expected average time commitment per week for teaching activities, including preparation, is 6 hours. Permission of department is required for enrollment in the class—this will be granted only after approval of the proposal, described below.

Grading policy
Grades will be based on:
Proposal 20%
Mid-semester progress report 20%
Presentation to faculty and graduate students 20%
Final report 20%
Evaluation by supervising faculty member 20%

Final grades will be assigned a letter grade according to the scale below:
97-100 = A+; 93-96 = A; 90-92 = A-; 87-89 = B+; 83-86 = B; 80-82 = B-; 77-79 = C+; 73-76 = C; 70-72 = C-; 67-69 = D+; 63-66 = D; 60-62 = D-; 59 and below = F.

Proposal—due 1/22, the last day to drop classes without a W for the fall semester.
The proposal (1-2 pages) should discuss planned teaching activities and how they will improve your communication and instructional abilities. The proposal must be approved by the instructor in whose class you will assist and your major professor.
Midterm progress report—due 3/9
The 1-2 page progress report should summarize activities and reflect on successes and challenges encountered.

Presentation—to be scheduled during last two weeks of classes
The presentation for faculty and graduate students, to be given as part of the weekly department seminar series, should be 15-20 minutes. It should include an overview of your experiences and what you learned from them. You should also plan to engage the audience in a discussion of teaching challenges and strategies.

Final report—due 5/1
The final written report (3-5 pages) should explain, with examples, your job responsibilities, experiences, and reflections about how your experience will shape your future teaching.

Evaluation by supervising faculty member—due 5/1
Students will be evaluated in writing by the faculty member whom they are assisting. The evaluation may include comments on the graduate student’s communication skills, quality of preparation and organizational skills, dependability, respect for members of the class, and interest in improving their teaching.

Special needs
If you have a disability that may have some impact on your work in this class and for which you may require accommodations, please see a staff member in the Office of Disability Services (115 Johnston Hall or http://www.lsu.edu/students/disability/) so that such accommodations can be considered. Students that receive accommodation letters, please meet with me to discuss the provisions of those accommodations as soon as possible.

Commitment to Community
Louisiana State University is an interactive community in which students, faculty, and staff together strive to pursue truth, advance learning, and uphold the highest standards of performance in an academic and social environment. It is a community that fosters individual development and the creation of bonds that transcend the time spent within its gates. To demonstrate my pride in LSU, as a member of its community, I will:

• accept responsibility for my actions;
• hold myself and others to the highest standards of academic, personal, and social integrity;
• practice justice, equality, and compassion in human relations;
• respect the dignity of all persons and accept individual differences;
• respect the environment and the rights and property of others and the University;
• contribute positively to the life of the campus and surrounding community; and
• use my LSU experience to be an active citizen in an international and interdependent world.

The continued success of LSU depends on the faithful commitment by each community member to these, our basic principles. Adopted as a Statement of University Position on behalf of the Louisiana State University and Agricultural and Mechanical College Community on the fifth of May in the year 1995. http://www.lsu.edu/judicialaffairs/
Request for **CHANGING** an Existing Course

**PRESENT COURSE DESCRIPTION**

<table>
<thead>
<tr>
<th>Title</th>
<th>Environmental Instrumental Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester Hours of Credit</td>
<td>3</td>
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<tr>
<td>If combination course type, # hrs. of credit for</td>
<td>Lecture: 2</td>
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<tr>
<td>Repeat Credit Max. (if repeatable):</td>
<td>Lab/Sem/Rec: 2</td>
</tr>
<tr>
<td>Graduate Credit?</td>
<td>Yes ☒ No ☒</td>
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<tr>
<td>Credit will not be given for this course and:</td>
<td></td>
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<tr>
<td>Contact Hours Per Week: (Indicate hours in appropriate course type.)</td>
<td>Lecture 2 Lab 2 Seminar 2 Recitation 2 Intern 2 Res/Ind 2 Clin/Pract 2</td>
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<tr>
<td>Total Weekly Contact Hours:</td>
<td>4</td>
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<tr>
<td>Grading System: Letter Grade ☒ Pass/Fail ☒</td>
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<tr>
<td>Course Description: (Include course number, title, etc. as it appears in the General Catalog)</td>
<td>EMS 4040 (3) Prereq.: CHEM 1201, CHEM 1202, CHEM 1212, CHEM 2001. May not be taken for graduation credit. 2 hrs. lecture; 2 hrs. lab. Analysis of pollutants in the environment; development of analytical technique; sampling of different media including soil and water.</td>
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</tbody>
</table>

**PROPOSED COURSE DESCRIPTION**

<table>
<thead>
<tr>
<th>Title</th>
<th>Environmental Instrumental Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Title</td>
<td>ENVIRONMENTAL ANALYSIS</td>
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<tr>
<td>Semester Hours of Credit</td>
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<td>If combination course type, # hrs. of credit for</td>
<td>Lecture: 2</td>
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<tr>
<td>Repeat Credit Max. (if repeatable):</td>
<td>Lab/Sem/Rec: 2</td>
</tr>
<tr>
<td>Graduate Credit?</td>
<td>X Yes ☒ No ☒</td>
</tr>
<tr>
<td>Credit will not be given for this course and:</td>
<td></td>
</tr>
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<td>Contact Hours Per Week: (Indicate hours in appropriate course type.)</td>
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</tbody>
</table>

**THES QUESTIONS MUST BE ANSWERED COMPLETELY AND ACCURATELY OR PROPOSAL WILL BE RETURNED.**

Has this change been discussed with and approved by all departments/colleges affected? Yes ☒ No ☒ N/A ☒

Is this course included in any curricula, concentrations, or minors? Yes ☒ No ☒ If yes, please list on a separate sheet.

Is this course a prerequisite or corequisite for other courses? Yes ☒ No ☒ If yes, list courses; use separate sheet.

Is this course on the General Education list? Yes ☒ No ☒

**JUSTIFICATION/EXPLANATION:** Use separate sheet.

Note: IF COURSE IS OR WILL BE CROSS-LISTED, SEPARATE FORMS MUST BE SUBMITTED BY EACH DEPARTMENT

**APPROVALS**

- **Department Faculty Approval Date:** 9/15/17
- **College Faculty Approval Date:** 9/15/17
- **Graduate Dean Signature:** 10/5/17
- **College Dean Signature:** 9/15/17
- **Chm, F5 C&C Committee:** 10/16/17
- **Academic Affairs Approval:** 10/16/17

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**SPNESS**

**Course Rubric & Number:** EMS 4040

**College:** Agriculture

**Date:** Fall, 2017
Justification for giving graduate credit for EMS 4040

Many of the graduate students in the School of Plant, Environmental and Soil Sciences conduct research that requires an understanding of the underlying principles and techniques for environmental analyses, as well as hands-on training in the use of instrumentation. The course content will incorporate recent progress in soil and environmental analyses, and is appropriate for both graduate and undergraduate students.
Environmental Instrumental Analysis

EMS 4040

Fall 2017 Semester

Wednesday and Friday 2:40-4:30

Instructors: Jim Wang, Lewis Gaston, Lisa Fultz and Syam Dodla
School of Plant, Environmental and Soil Sciences
Phone: 578-1360; Email: jwang8@lsu.edu


Course Description:

The course reviews the major sources of environmental pollution, principles of sampling techniques, and instrumental analyses of different environmental matrices. Students will be introduced to major analytical instruments and methods used for sample characterization, and will learn to validate, analyze and report the data collected.

Course Objectives:

To develop a fundamental understanding of principles of sampling techniques and instrumentation analyses of pollutants in different environmental matrices and to gain a hands-on practice of major analytical instruments in environmental sample analysis. Students are also expected to learn general approach on the development of analytical procedure, quality control, and data processing and reporting.

Lecture and lab Topics:

I. Sources and Distribution of Environmental Pollution
II. Sampling and Sampling Statistics
III. Quality Assurance and Quality Control
IV. Sampling Preparation for Various Matrices
V. Analytical Instruments
   • Total C/N autoanalyzer
   • Microscopic analysis and plate counting
   • UV/Vis spectrometer
- Cold vapor atomic absorption spectrometry (CVAAS)
- ICP and ICP/MS
- Flow injection/Lachat
- Ion chromatography
- HPLC and HPLC/MS
- GC and pyrolysis-GC/MS
- Scintillation counter
- XRD and XRF
- X-ray absorption spectroscopy (XAS)
- FTIR

VI. Data Analysis, Interpretation and Reporting

Grading

<table>
<thead>
<tr>
<th></th>
<th>Undergraduate</th>
<th>Graduate</th>
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</thead>
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<tr>
<td>Mid-exam: Covering lecture materials and homework assignment</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>Final exam: Comprehensive, although focused on most recent material</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>Laboratory reports: Required for data collected from demonstrated instruments</td>
<td>40%</td>
<td>30%</td>
</tr>
<tr>
<td>Additional Project assignment for graduate students</td>
<td>0%</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Grade scale:  
A+  98-100%
A   93-97%
A-  90-92%
B+  86-89%
B   82-85%
B-  78-81%
C+  74-77%
C   70-73%
C-  66-69%
D+  61-65%
D   58-60%
D-  55-57%
F   <55%

Graduate students will be required to complete an additional project assignment besides laboratory reports required for undergraduate students. The additional project assignment will require experimental design and actual carryout of instrumentation analysis of an analyte followed by an in-depth project report. This project report will account for 10% of total grade for the course.
Make-up exams will be only available with a university-approved excuse. Make-up exams for any unexcused absence will be punitively difficult.

Academic Honesty

Academic dishonesty is strictly prohibited. Plagiarizing in laboratory reports also is cheating. If you are caught cheating, you will be received a grade of zero on the exam, assignment or laboratory report, and possibly face disciplinary action by the university.

Expectations

LSU's general policy states that for each credit hour, you (the student) should plan to spend at least two hours working on course related activities outside of class. Since this course is for three credit hours, you should expect to spend a minimum of six hours outside of class each week working on assignments for this course.

Other

The University is committed to making reasonable efforts to assist individuals with disabilities in their efforts to avail themselves of services and programs offered by the University. To this end, Louisiana State University will provide reasonable accommodations for persons with documented qualifying disabilities. If you have a disability and feel you need accommodations in this course, you must present a letter to me from Disability Services in 115 Johnston Hall, indicating the existence of a disability and the suggested accommodations.

Weekly Schedule:

Week 1: Sampling technique and preparation (Wang)
Week 2: Analytical quality assurance and control (Wang)
Week 3: Data interpretation and reporting (Wang)
Week 4: Microscopic analysis and microplate counting (Fultz)
Week 5: Total carbon/Nitrogen Autoanalyzer (Fultz)
Week 6: UV/Vis spectrometry (Gaston)
Week 7: Inductively coupled plasma (ICP) spectroscopy (Wang/Dodla)
Week 8:  Flow Injection/Latchet (Fultz)

Week 9:  Ion chromatography (IC) (Dodla/Fultz)

Week 10:  High performance liquid chromatography (HPLC) (Gaston)

Week 11:  Gas chromatography/Pyrolysis –Gas Chromatography/mass spectrometry (GC/Py-GC/MS) (Dodla/Fultz)

Week 12:  Scintillation counter (Gaston)

Week 13:  X-ray diffraction and fluoresce (XRD and XRF) (Wang)

Week 14:  X-ray absorption spectroscopy (XAS) (Wang)

Week 15:  Fourier transform infrared (FTIR) Spectroscopy (Wang)
REQUEST FOR ADDING, CHANGING, SUSPENDING OR DROPPING UNDERGRADUATE MINOR

Department: Plant, Environ. & Soil Sciences  
College: Agriculture  
Date: 8/24/17

Name of Minor: Environmental Management Systems

Has this change been discussed with and approved by all departments/colleges affected? Yes ( ) No ( ) N/A (X)

ATTACH JUSTIFICATION for all actions: Use separate sheet. 
ATTACH RESPONSE from any departments affected (i.e. any department whose course(s) are to be added).

ACTION (check appropriate box):

( ) ADDING: Show the entire new minor using catalog format. Use plain sheets and attach.

( ) CHANGING: List present catalog description which is to be changed (left column) and the changes proposed (right column). In proposed column use strikeout and bold to indicate deletions and additions. Explain all changes adequately on attachment.

( ) SUSPENDING: Provide an adequate explanation for suspending the minor on plain sheets and attach.

( ) DROPPING: Provide an adequate explanation for dropping the minor on plain sheets and attach.

<table>
<thead>
<tr>
<th>MINOR</th>
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<tbody>
<tr>
<td>TOTAL SEMESTER HOURS IN CURRENT MINOR:</td>
</tr>
<tr>
<td>Environmental Management Systems minor.</td>
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</tbody>
</table>

To graduate with a minor in environmental management systems, students must complete 18 hours consisting of EMS 1011, EMS 2011, EMS 3040, and EMS 3050, and 5 hours chosen from EMS 3045, EMS 4010, EMS 4020, EMS 4055, or EMS 4056.

Note: Some courses require prerequisites.

<table>
<thead>
<tr>
<th>MINOR</th>
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<tr>
<td>TOTAL SEMESTER HOURS IN PROPOSED MINOR:</td>
</tr>
<tr>
<td>Environmental Management Systems minor.</td>
</tr>
</tbody>
</table>

To graduate with a minor in environmental management systems, students must complete 18 hours consisting of EMS 1011, EMS 2011, EMS 3040, and EMS 3050, and 5 hours chosen from any 3000 or 4000 level EMS course. Note: Some courses require prerequisites. This minor is not available to students majoring in Environmental Management Systems.

APPROVALS:

Department Faculty Approval Date: 8/24/17  
Department Chair's Signature:  
Date: 8/24/17  
Chair, FS C & C Committee: 10/5/17

College Faculty Approval Date: 9/15/17  
College Dean's Signature: 9/15/17  
Academic Affairs Approval: 10/6/17

Contact Email: jsherw1@asu.edu
Justification for change in Environmental Management Systems (EMS) minor

We propose to expand the list of classes that will count for the EMS minor because EMS classes that are appropriate for students in the minor have been added to our course offerings and we anticipate that more will be added in the future. Listing EMS 3*** and EMS 4*** will provide flexibility as course offerings are expanded. To make things clear to students, we also added a statement that students majoring in Environmental Management Systems may not also minor in Environmental Management Systems.