New Undergraduate Course Approval Cover Form
Montana State University

This four-page form collects basic information about the proposed new course, provides information on the approval process, and includes all required approvals. Additional information (see INFO sheet) is also required as part of the New Course Packet.

Proposed New Course Information

Requested Rubric, Course Number, Core Designation (if needed):
Example: PHL 361 RH

Check here if "Special Topics" x91 course:

Course Title: Environment and Society
Abbreviated Course Title (≤ 30 chars): Env & Soc
First Semester to be Offered: Fall 2014
Submitted by: Jamie McEvoy
Submitter’s Contact Info: Phone, Email: 406-994-4069 jamie.mcevoy@montana.edu
Instructor: Dr. Jamie McEvoy
Department: Earth Sciences
College: Letters and Science

New Course Review Process

Instructor completes the New Course Packet, with Core information if a Core designation is requested.
Instructor checks for "equivalent" course in the MUS system and recommends a common or unique course number.
Department Head's signature indicates that course has been approved by the process within the Department.
The Chair of the College Curriculum Committee signs to indicate College academic approval.
The College Dean signs to indicate that adequate resources are available to offer the course. Supporting information (Dean's Statement) is typically required.
The New Course Packet (as PDF) is uploaded to the Provost's Office server for distribution to other committees.
Course requests are sent to Curriculum and Program Committee (CPC). Core reviews are sent to appropriate Core subcommittee. Committees work in parallel when possible to speed approval process. Special topics courses (x91) skip the CPC review (limited to two years.)
Provost's Office reviews the new course request. New courses are submitted to MUS for Common Course Number (CCN) review. Dean and Department informed upon approval.
Approved new course sent to Registrar for inclusion in the Catalog and Schedule of Classes

APPROVALS

Submitter * 1/19/14
Date
Department Head * 1/22/14
Date
Chair, College Curriculum Comm. 2/3/14
Date
Dean * 2/3/14
Date
Chair, Core Subcommittee (if app.) 2/3/14
Date
Chair, CPC 2/3/14
Date
Assoc Provost * 2/3/14
Date

Note: This diagram illustrates the typical flow path, but at any review step there can be a request for additional information or modifications. Careful review in early steps is the best way to speed the overall process. * Special topics courses (x91) require fewer signatures, but cannot be offered more than two times without committee review.
INFORMATION NEEDED FOR COMMON COURSE NUMBERING

The process for identifying a common course number for a new course is as follows:

1. Course learning outcomes are prepared for the new course.
2. The person submitting the new course request looks at the CCN website to see if a course with similar outcomes already exists in the MUS system.
   
   www.mus.edu/Qtools/CCN/ccn_default.asp
   
   - If a course exists with at least 80% of the same outcomes, the course is considered “equivalent” to the proposed new course, and the new course should use the existing rubric and course number.
   - If no “equivalent” course is found, the person submitting the new course request should identify a unique course number that has not been used by any other course in the MUS system.
3. The requested rubric and course number are submitted as part of the new course packet.
4. The Provost’s Office submits the learning outcomes and the requested rubric and course number to the MUS to have a course number assigned to the course. (This will typically be the requested course number, but it could be changed.)
5. The assigned common course number is reported back to the person submitting the new course request.

Requested Rubric, Course Number, Core Designation (if needed):

<table>
<thead>
<tr>
<th>Course Title:</th>
<th>GPHY 3XX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbrev. Course Title (≤ 30 char):</td>
<td>Environment and Society</td>
</tr>
<tr>
<td>Credits:</td>
<td>3</td>
</tr>
<tr>
<td>Department Offering Course:</td>
<td>Earth Sciences</td>
</tr>
<tr>
<td>College:</td>
<td>Letters and Science</td>
</tr>
</tbody>
</table>

Is this course “equivalent” to a course in the MUS System?: [ ] Yes [ ] No

Learning Outcomes for the Course:

✓ Be able to define the key aspects of seven different social science approaches to understanding environmental issues.

✓ Be able to compare the strengths and weaknesses of seven different social science approaches to understanding environmental issues.

✓ Be able to apply multiple social science approaches to evaluate a contemporary environmental issue from different perspectives.

✓ Communicate verbally and in writing about the key concepts in the course.

✓ Demonstrate critical reading and analytical skills related to course content.
INFORMATION REQUIRED BY THE REGISTRAR

The data needed to enter the new course into the MSU Catalog and Schedule of Classes is collected on this page. Once the new course has been approved, this page is automatically forwarded to the Registrar for data entry.

Assigned Rubric, Course Number, Core Designation (if needed):
GPHY 3XX

Course Title (for Catalog):
Environment and Society

Course Title (for Schedule of Classes, 30 characters, max.):
Environment and Society

First Semester to be Offered:
Fall 2014

Restricted Entry/Consent of Instructor Required:
☐ Yes ☐ No

Instructor’s GID (last 4 digits only):
3163

Department Offering Course:
Earth Sciences

College:
Letters and Science

Is the requested course number available? (x4155 to check):
☐ Yes ☐ No

Frequency of course offering:
☑ Annualy ☑ Alternate Years, starting 2014

Semester(s) offered (check all that apply):
☑ Summer ☑ Fall ☐ Spring

Summer Options (check all that apply):
☐ First 6 weeks ☐ Second 6 weeks ☐ 12 weeks

Credits by mode of instruction:
Lecture: 3
Seminar: ☐
Independent Study: ☐
Lab/Studio: ☐
Recitation/Discussion: ☐

TOTAL CREDITS: 3

Primary Mode(s) of Delivery:
☐ Face-to-face ☑ Web-Enhanced (small on-line comp.)
☐ On-Line Only ☐ Blended (significant on-line portion)

Time and Location – Call the Registrar’s Office at x4155 to find a time and location for the course:

Assigned Day(s):
☑ M ☑ Tu ☐ W ☑ Th ☐ F ☐ Sa ☐ Su

Assigned Time(s):

Assigned Building:

Assigned Room:

Capacity (room capacity, or enrollment “cap”):

Co- and Pre-Requisites – Courses numbered 200 and above are normally expected to have prerequisites. When listing multiple prerequisites, please separate courses with “and” if both are required, or “or” if only one is required.

Prerequisite(s): none

Co-Requisite(s): none

Course Description – Provide a course description of 40 words or less for the MSU Catalog.

This course introduces students to the study of relationships between people and the environment from a social science perspective. It explores the social causes and consequences of environmental change and examines different approaches to decision-making about environmental issues.
DEAN’S STATEMENT

The reviewing committees are being asked to take a closer look at the resources required for each proposed new course. In many cases new courses will replace existing courses and the new course request is effectively resource neutral, however that is not always the case. For example, a new elective course that would result in distributing an existing student population across a larger number of courses would represent a significant increase in expenditures for the new course, and no increase in total student credit hours. A funding mechanism for such a course would need to be identified. The Dean’s Statement is the place to document how the costs of the proposed new course will be covered.

This course should be revenue neutral. It will be part of a regular faculty member’s workload.

MMG 2/3/14
New Undergraduate Course Narrative
Montana State University
Updated August 23, 2012

Please provide the following information in narrative format. Substantive responses to all criteria are required. Although not required, a draft syllabus can also be helpful to the committee in understanding the details of the proposed course.

General Course Information
1. Requested Rubric, Course Number, and Core Designation (if any)
   > GPHY 3XX 329

2. Course Title
   > Environment and Society

3. Provide a general description of the course explaining the need for the course, its goals, and its overall structure. This is the most important part of the application and should offer a good sense of what students will experience by taking this class.

   > Course Description: This course introduces students to the study of relationships between people and the environment from a social science perspective, providing a context for thinking about the social causes and consequences of environmental change in different parts of the world. The course explores how and why human use of the environment has varied over time and space, analyzes different approaches to decision-making about environmental issues, and examines the relative roles of population growth, energy consumption, technology, culture, and institutions in causing and resolving contemporary environmental problems around the world.

Goals: Students who successfully complete this course will:

✓ Be able to define the key aspects of seven different social science approaches to understanding environmental issues.
✓ Be able to compare the strengths and weaknesses of seven different social science approaches to understanding environmental issues.
✓ Be able to apply multiple social science approaches to evaluate a contemporary environmental issue from different perspectives
✓ Communicate verbally and in writing about the key concepts in the course
✓ Demonstrate critical reading and analytical skills related to course content

Need: This course meets the needs of students from various social and physical sciences who are looking for an interdisciplinary approach to understanding contemporary environmental issues. It will provide students with some of the tools they need to work across disciplines and prepare them for a workforce that increasingly requires integrated teamwork to solve complex, multi-faceted challenges. It will
provide service to society by raising awareness of different ways to approach environmental issues and become better stewards of the environment and their community. The course also exposes students to environmental issues across the world, thus preparing students to learn, work, live and provide leadership in an increasingly globalized world. By addressing these needs, this course is in-line with the some of the key goals outlined in the MSU strategic plan (pgs 10-13). This course is sanctioned by the Institute on Ecosystems and is in-line with the Ioe’s mission of advancing integrated environmental science.

Structure: As a primary textbook, this course uses: Robbins, P., Hintz., J., and Moore, S.A. (2010). Environment and Society: A Critical Introduction. Supplemental readings and web-based activities are provided on D2L. The basic organization of this course is in two parts: 1) laying an analytical foundation for studying human-environmental relationships and 2) taking apart specific “objects of concern.” The first section introduces a wide range of approaches that social scientists use to study human-environmental relationships. The second section, which looks at “objects of concern” like carbon dioxide and bottled water, will consider actual impacts in the environments and human behaviors related to these objects. Together, the course content presents everyday environmental issues and poses diverse ways of analyzing these issues.

1. Based on what types of student work (e.g., tests, homework assignments, papers, performances, etc.) will grades be determined?

> Quizzes: To reinforce understanding of the material and to provide an indication to the instructor of how well students understand certain concepts, there will be a series of quizzes throughout the course.

Short Exercises: To facilitate synergies between the classroom and the “real world,” there will be a series of short exercises that build on course topics to help students apply what we learn to their own lives.

Term Paper: To explore human perceptions of major environmental issues, as well as to develop students’ ability to conduct in-depth research and communicate their findings in a clear and organized fashion, students will write one term paper.

Exams: To reinforce understanding of the material and to provide an indication to the instructor of how well students understand course material, there will be a series of exams throughout the course.

Participation: To encourage and reward active in-class participation, a portion of the final grade will be based on participation, including active discussion (e.g., asking or answering questions) and participation in in-class activities.

5. Provide a course content outline containing all major topics plus a brief description of the material to be covered under each major topic heading.

> Part 1 lays the analytical foundation for studying human-environmental relationships. Topics to be covered in this section include:
• **Population and Scarcity Approach:** Malthusian and neo-Malthusian approaches to understanding population and resource relationships, critiques of these approaches, exponential growth, the \( I=P*A*T \) model (Impact as a function of population, affluence and technology), carrying capacity, Kuznets curve, forest transition theory, green revolution, and demographic transition model

• **Markets and Commodity Approach:** The market response model, Jevon's paradox, Coase theorem, externalities, market failures, and market-based solutions to environmental problems (e.g., green taxes, cap and trade, green consumption)

• **Institutions and “Commons” Approach:** Game theory, tragedy of the commons, collective action, common property, institutions, seven key elements of successful commons management

• **Environmental Ethics Approach:** Environmental justice, stewardship, utilitarianism, conservation vs. preservation, wilderness, Leopold’s land ethic, deep ecology, intrinsic value

• **Risks and Hazards Approach:** Hazard, risk, uncertainty, risk perception, Douglas’ cultural theory of risk, the political economy of hazards

• **Political Economy Approach:** Overaccumulation, first and second contradictions of capitalism, production of nature, commodification of nature, Superfund site, spatial fix, globalization,

• **The Social Construction of Nature Approach:** Social constructionism, “wilderness” and “nature” as social constructs, narrative and discourse analysis, ideologies, Foucault’s power/knowledge

Part 2 looks at “objects of concern” like carbon dioxide and bottled water, will consider actual impacts in the environments and human behaviors related to these objects. For this course, these “critical objects of concern” are:

• Carbon Dioxide
• Trees
• Wolves
• Blood Tuna
• Bottled Water
• French Fries
• Ecotourism and Livelihoods

6. List required texts or other required references


Supplemental readings and links to web-based activities will change over time and will be available on D2L

7. What are the estimated enrollment and student credit hour (SCH) production?

\[ \text{SCH} = (\text{enrollment} \times \text{credits}) \]

> 30\*3 = 90 SCH (This course is to be offered alternative years, fall semester, as part of the elective choices for geography majors. The course will also be open to non-majors)
8. Will there be an enrollment cap that restricts enrollment below the level of student demand? If so, what is the enrollment cap and why is it necessary?

> No cap is expected for this course. Enrollment will only be limited by room/seat availability.

9. Will course be a "restricted enrollment" course? If so, why is restricted enrollment necessary?

> No, there will not be restricted enrollment. In fact, the strength of the course is its diversity and interdisciplinarity. The course is open to diverse perspectives from history, political science, sociology, and natural resources management. The theories and methods covered in this course can be applied across the social sciences and in resource management.

10. Describe how the success of the course will be evaluated? ("End of semester student evaluations" is not the answer to this question. How will the instructor determine if the learning outcomes are being met, and how will the department determine if the course is fulfilling its intended purpose?)

> The instructor, in coordination with head of the geography curriculum committee and the head of the Dept. of Earth sciences, will ensure that course learning outcomes are clearly articulated and that class activities (i.e., lectures, short exercises, quizzes, exams, and research paper) are aligned with these learning outcome goals. Success of the course will be measured, in part, by the students' ability to demonstrate the learning outcomes during class activities. The syllabus and a sampling of course activities will be reviewed by the head of the geography curriculum committee and the head of the Dept. of Earth sciences for formative feedback.

In addition, to the end-of-semester student evaluation, two student volunteers will be asked to serve as "course representatives." These course representatives will provide continuous feedback to the instructor on readings, assignments and conceptual understandings from the students' perspectives.

11. Is the instructor a member of the regular faculty (i.e., tenured or tenure track)? If so, please describe the instructor's qualifications, attach a vita, and provide a separate letter of support, signed by the department head (or appropriate unit director), addressing the instructor's qualifications to teach this course.

> Yes, the instructor is a tenure-track member of the regular faculty.

Level of Offering

12. Has the course been offered previously under 280/391 or 480/491? If so, when? Under what number? What was the enrollment? What level of students took the course?

> This course has not been previously offered at MSU. However, the instructor (Dr. Jamie McEvoy) has previously taught a similar course at the University of Arizona as an online course with enrollment of 19 students. The online course was offered as a 100-level course, but enrollment included all levels of students (freshmen to seniors).

13. Justify the level of course offering.
> The course will be offered at MSU at 300-level course because class activities require higher order thinking skills, such as evaluating, analyzing and synthesizing course material. This course is complementary to courses currently offered in geography which are offered at the 300 level (e.g., GPHY 322 Economic Geography, GPHY 325 Cultural Geography). This is in-line with the Earth Science’s departmental learning progression, which emphasizes analytic and synthetic skills at the junior level. Additionally, the course requires students to write a research paper, which requires research skills and critical reading skills.

**Relationship to other Courses, Curricula, and Departments**

14. Does this course build on or interrelate with other courses in your curriculum or related curriculum? If so, which ones?

> As part of an effort to expand the Department of Earth Sciences strength in geography, this course interrelates with several existing and newly proposed courses:

GPHY 121: Human Geography and GPHY 141: World Regional Geography provide an introduction to general concepts about the relationship between humans and the environment. However, these concepts are introduced at a more basic level. The proposed course (GPHY 3XX: Environment and Society) expands on some of the basic concepts and introduces additional concepts, as well as a variety of critiques of each concept.

GPHY 3XX: Vulnerability and Environmental Hazards (to be offered alternate falls, starting in 2015). This course examines the causes and consequences of environmental hazards from a social science perspective. Some of the social science principles overlap, however Vulnerability and Environmental Hazards focuses more on the concepts of vulnerability and risk perception. This course is also substantially different in terms of content, focusing primarily on environmental hazards (i.e., drought, floods, landslides, etc.) and technological hazards (i.e., nuclear power plants, oil spills, etc.).

GPHY 3XX: Energy Resources and Policy. This course focuses on improving energy literacy and evaluating different energy resource options. This course is being developed by a colleague in Earth Sciences. While the courses are complementary, they cover very different material and have different approaches and objectives.

GPHY 425 - Geographic Thought. This course builds on general concepts about the relationship between humans and the environment, which are covered in GPHY 141: World Regional Geography and GPHY 121: Human Geography. The proposed course (GPHY 3XX: Environment and Society) is complements this course by providing a human dimensions approach to understanding of environmental and natural resource issues, but is less broad than GPHY 425.

SOCI 470 – Environmental Sociology. While this course and the proposed course both address aspects of the human-environment relations, the content and course-level are distinct. Some concepts may overlap (e.g., environmental justice), this should provide a good reinforcement of this important topic. Otherwise, the foci of SOCI 470 is on the spatial and temporal arrangements of human population and a review of the contemporary environmental movement, which are not key components of the proposed course. Rather the proposed courses focuses on understanding the theories, assumptions and consequences of seven specific approaches for understanding environmental issues.

GPHY 491/591: Water and Society. This course was taught in Fall 2013 as a special topics course. Water and Society draws on literature from geography, environmental history, political economy,
political ecology, law and other disciplines, to guide students in developing an interdisciplinary theoretical and conceptual tool-kit to analyze and evaluate the complex relationships between water and society. Some of the social science concepts overlap. However, Environment and Society focuses on a seven social science perspectives, while Water and Society focuses on dominant paradigms in water resources management. The course differ in terms of content-area focus. Water and Society focuses on water resources, while Environment and Society considers a wider range of resources and environmental issues.

GPHY 5XX: Topics in Political Ecology. This graduate-level course will be offered in alternative spring semesters beginning in 2016. This course will include an introduction to the intellectual roots of political ecology and an overview of the basic theories and methods. The specific focus of the course will vary based on new developments in the field and student interests. While many of the social science principles overlap, the level of the course and breadth of material covered makes this a unique course.

15. Do the topics in the proposed course duplicate or reiterate those in other courses in this or any other department? If so, how do the coverage and educational experience differ and how is this duplication or reiteration justified? Also, what liaison (which is expected in cases of apparent overlap) has been conducted with other departments? Report reactions, both favorable and unfavorable.

> The broad goal of this course is similar to those of the above mentioned course, in that they all aim to enhance student understanding of human-environment relationships from a social science perspective. However, the specific social science concepts and theories that are covered in each course, as well as the level at which they are introduced, varies significantly. Additionally, the content area or topic of each courses differs significantly (e.g., water, energy, environmental hazards, contemporary environmental issues)

These courses are part of the Earth Sciences Geography curricula. With the addition of two new tenure-track resource geography faculty, there has been significant discussion and evaluation of the types of new courses that are necessary and relevant for students, both within our major, and within the MUS system at large. Within the department, there has been overwhelmingly strong support for the development of this course. Environment and Society is considered to be an important component of a geography education. Additionally, this course has been sanctioned by the MSU director of the Institute on Ecosystems.

I emailed the department heads of related disciplines, including Sociology, Political Science, History and Philosophy, Environmental Studies, and Land Resources and Environmental Sciences. This communication was intended to ensure that there is no duplication or reiteration of course topics. Additionally, given the interdisciplinary nature of the course, the communication was intended to make liaisons with departments so that interested students are made aware of the new course offering. I did not receive any negative feedback. Any overlap was noted as an opportunity to reinforce key concepts and was not noted to be of concern nor expected to cause conflict. In fact, I received a lot of positive feedback noting that these courses were synergistic with courses and majors in other departments and would be a welcome addition to the MSU curriculum that would provide students with additional options for completing their majors.
The SCH production of the proposed class is less than 1000. The SCH production is expected to come primarily from geography majors within our program. However, given the interdisciplinary nature of the course, it is anticipated that students from other departments who are interested in the intersection between human and natural systems might enroll in the course. This could include students from Sociology, Anthropology, Political Science, History and Philosophy, Environmental Studies, and Land Resources and Environmental Sciences. This course should provide more opportunities for students in related majors. The Department of Earth Sciences has long record of serving students in these related departments through our other geography classes.

Students Served

> The proposed course will serve both majors and non-majors. This course takes an interdisciplinary approach and is relevant to both social and physical science majors (see above). The disciplines to be served include Geography, Sociology, Anthropology, Political Science, History and Philosophy, Environmental Studies, and Land Resources and Environmental Sciences. In order to make the course relevant to students from various disciplines, the following efforts will be made: 1) the instructor will define and clarify terms and avoid the use of undefined social science ‘jargon’; 2) providing concrete examples by focusing on a broad range of objects of concern (e.g., carbon dioxide, trees, wolves, tuna, bottled water, french fries and ecotourism); 3) the assigned textbook draws on concepts, theories, and methods from across many disciplines; and 4) the final paper requires integration across these disciplines.

Resources

> No additional resources or fees will be required for this course.
> The primary source of information for this course will be the textbook, which students will purchase from the bookstore (Robbins, P., Hintz., J., and Moore, S.A. (2010). Environment and Society: A Critical Introduction).

Students will utilize existing library resources to write a final research paper. Additional case studies and supplemental learning material will come from journals that are currently available at the MSU library. Some activities will include the use of publically available websites (e.g., CIA World Factbook at https://www.cia.gov/library/publications/the-world-factbook/; US Census Bureaus at http://www.census.gov/; Population Reference Bureau at http://www.prb.org/Publications/Datasheets/2009/2009wpds.aspx). The instructor will ensure that the links are active at the beginning of each semester.

Other Supporting Material

> This course has been sanctioned by the MSU director of the Institute on Ecosystems, which supports and promotes this type of interdisciplinary course. Additionally, this course is in-line with MSU strategic plan by fostering student engagement and stewardship for the broader community. The interdisciplinary approach of the course should provide students with a set of skills that is needed for future leaders who can bridge both the social and environmental sciences to solve today’s most pressing environmental issues.