Eastern Illinois University
New Course Proposal
GEG 3310, Introduction to Biogeography

Please check one:  ☑ New course  ☐ Revised course

PART I: CATALOG DESCRIPTION

1. Course prefix and number, such as ART 1000:  GEG 3310
2. Title (may not exceed 30 characters, including spaces):  Introduction to Biogeography
3. Long title, if any (may not exceed 100 characters, including spaces):  N/A
4. Class hours per week, lab hours per week, and credit [e.g., (3-0-3)]:  3-0-3
5. Term(s) to be offered:  ☑ Fall  ☐ Spring  ☐ Summer  ☐ On demand
6. Initial term of offering:  ☑ Fall  ☐ Spring  ☐ Summer  Year:  2010
7. Course description (not to exceed four lines):
   An introduction to the geographic distribution of terrestrial and aquatic organisms and the modifications of these distributions created and altered by both physical and human activities over various spatial and temporal scales. Specific attention is given to contemporary geographic issues affecting changes to both human and natural systems, their linkages, and consequences.

8. Registration restrictions:
   a. Identify any equivalent courses (e.g., cross-listed course, non-honors version of an honors course).  None
   b. Prerequisite(s), including required test scores, courses, grades in courses, and technical skills. Indicate whether any prerequisite course(s) MAY be taken concurrently with the proposed/revised course.  None
   c. Who can waive the prerequisite(s)?
      ☐ No one  ☑ Chair  ☐ Instructor  ☐ Advisor  ☐ Other (Please specify)
   d. Co-requisites (course(s) which MUST be taken concurrently with this one):  None
   e. Repeat status:
      ☑ Course may not be repeated.
      ☐ Course may be repeated to a maximum of ________ hours or ________ times.
   f. Degree, college, major(s), level, or class to which registration in the course is restricted, if any:  None
   g. Degree, college, major(s), level, or class to be excluded from the course, if any:  None

9. Special course attributes [cultural diversity, general education (indicate component), honors, remedial, writing centered or writing intensive]  None

10. Grading methods (check all that apply):  ☑ Standard letter  ☐ C/NC  ☐ Audit  ☐ ABC/NC (“Standard letter”—i.e., ABCDF--is assumed to be the default grading method unless the course description indicates otherwise.)

11. Instructional delivery method:
   ☑ lecture  ☐ lab  ☐ lecture/lab combined  ☐ independent study/research
   ☐ internship  ☐ performance  ☐ practicum or clinical  ☐ study abroad  ☐ other
PART II: ASSURANCE OF STUDENT LEARNING

1. List the student learning objectives of this course:

   a. describe how living organisms function on the planet
   b. describe the geographic distributions of features and organisms on the planet
   c. critically analyze decisions that humans make and how those decisions impact the environment
   d. interpret how different organisms may react differently based on various spatial and temporal scales
   e. discuss that we live on a dynamic planet that is always changing
   f. develop a research proposal into a professional-style poster presentation

   a. If this is a general education course, indicate which objectives are designed to help students achieve one or more of the following goals of general education and university-wide assessment: N/A
      • EIU graduates will write and speak effectively.
      • EIU graduates will think critically.
      • EIU graduates will function as responsible citizens.

   b. If this is a graduate-level course, indicate which objectives are designed to help students achieve established goals for learning at the graduate level: N/A
      • Depth of content knowledge
      • Effective critical thinking and problem solving
      • Effective oral and written communication
      • Advanced scholarship through research or creative activity

2. Identify the assignments/activities the instructor will use to determine how well students attained the learning objectives:

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<tr>
<th>Learning Objectives</th>
<th>4 Exams</th>
<th>10 QOD’s</th>
<th>Proposal</th>
<th>Presentation</th>
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3. Explain how the instructor will determine students’ grades for the course:

   There will be 400 points allocated for the semester:
   4 Exams; 3 @ 70, 1 @ 40 points (250 points)
   10 Questions of the Day @ 3 points (30 points)
   1 Poster Proposal @ 20 points (20 points)
   1 Poster Presentation @ 100 points (100 points)

4. For technology-delivered and other nontraditional-delivered courses/sections, address the following: N/A
   a. Describe how the format/technology will be used to support and assess students’ achievement of the specified learning objectives:
   b. Describe how the integrity of student work will be assured:
   c. Describe provisions for and requirements of instructor-student and student-student interaction, including the kinds of technologies that will be used to support the interaction (e.g., e-mail, web-based discussions, computer conferences, etc.):
5. For courses numbered 4750-4999, specify additional or more stringent requirements for students enrolling for graduate credit. These include: N/A
   a. course objectives;
   b. projects that require application and analysis of the course content; and
   c. separate methods of evaluation for undergraduate and graduate students.

6. If applicable, indicate whether this course is writing-active, writing-intensive, or writing-centered, and describe how the course satisfies the criteria for the type of writing course identified. (See Appendix *) N/A

PART III: OUTLINE OF THE COURSE

Provide a week-by-week outline of the course’s content. Specify units of time (e.g., for a 3-0-3 course, 45 fifty-minute class periods over 15 weeks) for each major topic in the outline. Provide clear and sufficient details about content and procedures so that possible questions of overlap with other courses can be addressed. For technology-delivered or other nontraditional-delivered courses/sections, explain how the course content “units” are sufficiently equivalent to the traditional on-campus semester hour units of time described above.

Part 1

Week 1: Geography, Earth functions, and hierarchies of life
   - Taxonomy, Hierarchies
   - Physical geography, global climates & soils

Week 2: The physical environment and the distribution of life
   - Light, temperature, and moisture

Week 3: Biological interactions and the distributions of life
   - Predation and competition

Week 4: Disturbance
   - Fire, prairie and forests
   - Wind, tornadoes, hurricanes, blow downs
   - Flooding, natural and human induced

Exam 1

Part 2

Week 5: Communities, formations, and biomes
   - Regional analysis of the world’s biomes
   Proposal Presentations

Week 6: Changing continents and climates
   - Plate tectonics
   - past, current, and future continents & climate

Week 7: Dispersal, colonization, and invasion
   - Diffusion
   - invasive, introduced, exotic species

Week 8: Evolution, speciation, and extinction
   - geography of evolution
   - isolation, extinction

Exam 2

Part 3

Week 9: Realms, regions, and provinces: the biological subdivisions of the Earth
   - defining biogeographic regions
   - determining boundaries (Illinois ecoregions case study)

Week 10: Biogeography & human evolution
   - early humans
   - diffusion / expansion of modern humans
Week 11: Humans as a driving force
- Evolution
- Extinction

Week 12: Interpretation of biogeographic distributions
- Mapping regions
- Reconstructing history
Exam 3

Week 13: The geography of biological diversity
- Biological diversity
- Island biogeography
- Controls on diversity

Week 14: Biogeography and the conservation challenge
- Value of conservation
- Endangered species, sustainability
Poster presentations

Week 15: Poster presentations
Final Essay Exam

PART IV: PURPOSE AND NEED

1. Explain the department’s rationale for developing and proposing the course.

   With issues such as climate change and environmental sustainability at the forefront of today’s most pressing global issues, it is important to understand the connections between ecological systems and how humans are altering them. Biogeography helps us to understand these complex issues by placing biological processes within a geographic framework so students can understand how these processes vary by location and scale. Research on integrated human and natural systems such as biogeography helps provide valuable information on how we are changing the planet, how species on the planet are affected, and what it is we can do to help better understand and protect the environment.

   a. If this is a general education course, you also must indicate the segment of the general education program into which it will be placed, and describe how the course meets the requirements of that segment.

   b. If the course or some sections of the course may be technology delivered, explain why.

2. Justify the level of the course and any course prerequisites, co-requisites, or registration restrictions.

   The level of this course (3310) follows the organization of most upper-division geography courses taken by sophomores, juniors, and seniors. Topics covered in this course will integrate with and complement ideas introduced in other courses taught in Geography Program. No prerequisites or other restrictions.

3. If the course is similar to an existing course or courses, justify its development and offering. Biology offers a course entitled Biogeography (BIO 5366). However, Karen Gaines informed me that the overlap is minimal and offered some positive comments about GEG 3310.

   a. If the contents substantially duplicate those of an existing course, the new proposal should be discussed with the appropriate chairpersons, deans, or curriculum committees and their responses noted in the proposal.

   b. Cite course(s) to be deleted if the new course is approved. If no deletions are planned, note the exceptional need to be met or the curricular gap to be filled.
4. Impact on Program(s):

Biogeography, along with Natural Resource Conservation and Agricultural Geography will add a critical land use / ecosystem management dimension to the Environmental Studies Concentration already in place in the department. This course will be an approved elective in the Geography Major and Minor. Geography has no graduate program.

   a. For undergraduate programs, specify whether this course will be required for a major or minor or used as an approved elective.
   b. For graduate programs, specify whether this course will be a core requirement for all candidates in a degree or certificate program or an approved elective.

If the proposed course changes a major, minor, or certificate program in or outside of the department, you must submit a separate proposal requesting that change along with the course proposal. Provide a copy of the existing program in the current catalog with the requested changes noted.

PART V: IMPLEMENTATION

1. Faculty member(s) to whom the course may be assigned:

   Dr. Christopher Laingen or any other qualified faculty member of the Geography Program.

   If this is a graduate course and the department does not currently offer a graduate program, it must document that it employs faculty qualified to teach graduate courses. N/A

2. Additional costs to students: None

   Include those for supplemental packets, hardware/software, or any other additional instructional, technical, or technological requirements. (Course fees must be approved by the President’s Council.)

3. Text and supplementary materials to be used (Include publication dates):


PART VI: COMMUNITY COLLEGE TRANSFER

If the proposed course is a 1000- or 2000-level course, state either, "A community college course may be judged equivalent to this course" OR "A community college course will not be judged equivalent to this course." A community college course will not be judged equivalent to a 3000- or 4000-level course but may be accepted as a substitute; however, upper-division credit will not be awarded. N/A

PART VII: APPROVALS

Date approved by the department or school: Nov 4, 2009

Date approved by the college curriculum committee: December 11, 2009

Date approved by the Honors Council (if this is an honors course):

Date approved by CAA: January 21, 2010
*In writing-active courses*, frequent, brief writing activities and assignments are required. Such activities -- some of which are to be graded – might include five-minute in-class writing assignments, journal keeping, lab reports, essay examinations, short papers, longer papers, or a variety of other writing-to-learn activities of the instructor's invention. Writing assignments and activities in writing-active courses are designed primarily to assist students in mastering course content, secondarily to strengthen students' writing skills. In *writing-intensive courses*, several writing assignments and writing activities are required. These assignments and activities, which are to be spread over the course of the semester, serve the dual purpose of strengthening writing skills and deepening understanding of course content. At least one writing assignment is to be revised by the student after it has been read and commented on by the instructor. In writing-intensive courses, students' writing should constitute no less than 35% of the final course grade. In *writing-centered courses* (English 1001G, English 1002G, and their honors equivalents), students learn the principles and the process of writing in all of its stages, from inception to completion. The quality of students' writing is the principal determinant of the course grade. The minimum writing requirement is 20 pages (5,000 words).