

COURSE PROPOSAL FORM

For complete AGSC Course Requirements & Guidelines, please refer our website: <http://stars.troy.edu>

SECTION 1 - TO BE COMPLETED BY THE INSTITUTION SUBMITTING COURSE FOR APPROVAL

Name of Institution University of North Alabama

Course Prefix & Number ES 247 Course Title Sustainable Earth

Semester Credit Hours 4 Does course have a laboratory? YES NO

Is what general academic area is this course currently being offered at your institution? (Select one the following)

- Written Composition Humanities & Fine Arts Math & Science Social Science Other Area _____

Check all that apply:

- Initial submission
 Re-submission
 Course title/number change
 Course content change for previously approved course

Course Description (including prerequisites) as it appears in undergraduate catalog:

ES 247 (4) Sustainable Earth. This course explores historical and contemporary environmental issues in Earth science with an emphasis on human-environmental relationships and their influences on sustainability. Inquiry into regional and global issues in geoscience allows students to identify causes, effects, and potential solutions to problems. The course supports the development of geoscience literacy, informed by current scientific understanding of Earth, which is critical to the promotion of good stewardship, sound policy development, and the understanding of diverse perspectives, behaviors, and outcomes. Three class periods; one two hour laboratory per week. Prerequisite or concurrent enrollment: ES 131 or ES 133. Course fee: \$50.00

MUST ATTACH A HARD COPY OF A "REPRESENTATIVE" COURSE SYLLABUS TO THIS FORM

Contact information for person submitting proposal (name, position, mailing address, telephone number, and email address)

Brenda H. Webb, Ph.D., bhwebb@una.edu 2560765-4334 Box 5065 Department of Physics and Earth Science University of North Alabama One Harrison Plaza Florence, AL 35632-0001

Required Institution Signatures: Department Head/Chair Brenda H Webb Date 11-18-15
 College Dean Dr. Christopher Maynard, Associate Dean Date _____
 Academic VP or Provost John Shulel Date 11/18/15

Digitally signed by Dr. Christopher Maynard, Associate Dean
 DN: cn=Dr. Christopher Maynard, Associate Dean, o=University of North Alabama, ou=College of Arts and Sciences, email=c.maynard@una.edu, c=US
 Date: 2015.11.18 15:13:45Z

SECTION 2 - TO BE COMPLETED BY AGSC ACADEMIC COMMITTEE CHAIR

NAME OF ACADEMIC COMMITTEE: Geology and Earth Science

ACADEMIC COMMITTEE RECOMMENDATION: Recommended for AGSC Approval Not Recommended for AGSC Approval

VOTING RESULTS: 4 # of YES votes 0 # of NO votes 1 # not voting/abstaining

SELECTED AREA OF APPROVAL:

- AREA I - Written Composition
 AREA II - Humanities & Fine Arts
 AREA III - Math & Science
 AREA IV - Social Science

If NOT RECOMMENDED, please give explanation:

Committee Chair Signature Karl S. For Chair Date 1/29/15

SECTION 3 - TO BE COMPLETED BY AGSC CHAIR

AGSC APPROVAL:

- APPROVED
 NOT APPROVED
 TABBED

AGSC APPROVAL STAMP
more detailed syllabus (objectives)

IF TABBED, REASON WHY? _____

AGSC Chair: _____ Date _____

AFTER SECTION 1 (ABOVE) IS COMPLETE, MAIL FORM & COURSE SYLLABUS TO:
AGSC/STARS PROGRAM
1101 SOUTH BRUNDIDGE STREET
ELC BUILDING - SUITE 107
TROY UNIVERSITY
TROY, AL 36081
 THE STARS OFFICE STAFF WILL SEND OUT PROPOSAL TO THE APPROPRIATE COMMITTEE AND, IF RECOMMENDED FOR APPROVAL, WILL THEN BRING THE COURSE BEFORE THE AGSC FOR A FINAL VOTE.

UNA Course: ES 247 Sustainable Earth Syllabus

Faculty: Dr. Brenda H. Webb & Dr. Richard Statom

ES 247 (4) Sustainable Earth. This course explores historical and contemporary environmental issues in Earth science with an emphasis on human-environmental relationships and their influences on sustainability. Inquiry into regional and global environmental issues in geoscience allows students to identify causes, effects, and potential solutions to problems. The course supports the development of geoscience literacy, informed by current scientific understanding of Earth, which is critical to the promotion of good stewardship, sound policy development, and the understanding of diverse perspectives, behaviors and outcomes. Three class periods and one two hour laboratory, ES 247 L, meet weekly. Course Fees: \$50.00 Prerequisite or concurrent enrollment: ES 131 or ES 133 (Spring, Fall).

Text: Wright, R. & Boorse, D. (2014). *Environmental Science: Toward a Sustainable Future*. Pearson. Required 0321811291 and other selected readings

Learning Outcomes

Students will be able to effectively

1. Demonstrate critical thinking about the relationships within the framework of sustainability—environment, society, and economics;
2. Determine potential outcomes of decisions on the relationships of the spheres of Earth—systems of Earth;
3. Analyze and interpret current and historical decisions to determine a) cause and effect relationships from environmental, societal, and economic perspectives and b) identify potential solutions;
4. Provide scientifically based rationales for cultural influences on decisions made in regards to uses of resources; sustainability movement;
5. Explain the scientific community's role in reviewing data and communicating findings;
6. Demonstrate the ability to discriminate credible from non-credible science resources;
7. Provide evidence for long-term impacts of regional to global issues and solutions to the issues in the United States and globally for water, air, soils, humans, food production, human health, climate, and energy;
8. Discuss perspectives of different communities concerning authentic issues on the local environment, society, and economics;
9. Discuss the political and ethical connections to decisions made in regards to sustainability;
10. Critique and discuss the components necessary to build a sustainable community within the context of Earth's systems; and articulate an understanding;
11. Articulate a rationale for responsible citizenship.

Content

1. Earth's Systems: An Introduction to Relationships Geosphere, Atmosphere, Biosphere, Hydrosphere;
2. Great Challenges of Global Sustainability of Water, Food, Shelter, Climate, Energy, Communities;
3. Critical Thinking: Finding Good Science in the Context of Sustainability;
4. Identifying Credible and Multiple Resources: Understanding Data Trends;
5. Issues Involving Rivers, Lakes, and Oceans, Aral Sea, Southern California, Colorado River, Mississippi River, Three Gorges Dam, Cuyahoga River, TVA, Corps of Engineers, The Great Garbage Patch, Dead Zones, Petroleum Spills;
6. Effects of Climate and Weather Pattern Changes: Great Lakes, Dust Storms, Ogallala Aquifer Region, Everglades, Bangladesh, Montane Regions, Glaciers, Tundra, Oceans;
7. Effects of Vegetation Loss: An Inquiry into Global Biodiversity: Prairies, Forests; Alabama's Black Belt Soil Region and Agriculture Practices; Crops;
8. Earth's Natural Hazards and Humans: Mexico City, Portland, Philippines, Southeast Asia, North America;
9. Sustainability of Resources and Cultures: Historical and Current Issues India, Africa, Iceland, Ireland, U. S.--Native Americans, North, Central and South America;
10. State, Federal and International Laws

All Syllabi Provide ADA Statements and Title IX Statements; and Academic Honesty Statements.

Evaluation-- based on: multiple projects, exams, panel discussions, laboratory

A—90-100 B-80-89 C 70-79 D 60-69 F 59 and below