

UNIVERSITY CURRICULUM COMMITTEE

Proposal for New Course

1. Is this course being proposed for Liberal Studies designation? Yes ☐ No ☒
If yes, route completed form to Liberal Studies.
2. New course effective beginning what term and year? (ex. Spring 2008, Summer 2008) Spring 2008
[See effective dates schedule.](#)
3. College CENS 4. Academic Unit CENS
5. Course subject/catalog number CENS 480 6. Units 3
7. Co-convened with _____ 7a. Date approved by UGC _____
(Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented.)
8. Cross-listed with _____
(Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)
9. Long course title Research in Campus Sustainability
(max 100 characters including spaces)
10. Short course title (max. 30 characters including spaces) Campus Sustainability
11. Catalog course description (max. 30 words, excluding requisites).

Surveys major issues in sustainability facing universities and university communities. Students complete an original research project addressing a sustainability issue on the NAU campus or in the Flagstaff community.

12. Grading option: Letter grade ☐ Pass/Fail ☒ or Both ☐
(If both, the course may only be offered one way for each respective section.)
13. Is this a topics course? Yes ☐ No ☒
14. May course be repeated for *additional* units? yes ☒ no ☐
a. If yes, maximum units allowed? 6
b. If yes, may course be repeated for additional units in the same term? (ex. PES 100) yes ☐ no ☒
15. Please check **ONE** of the following that most appropriately describes the course:
- | | | | | |
|--|--|--|-----------------------------------|---|
| Lecture w/0 unit embedded lab ☐ | Lecture only ☐ | Lab only ☐ | Clinical ☐ | Research ☐ |
| Seminar ☐ | Field Studies ☐ | Independent Study ☐ | Activity ☐ | Supervision ☒ |
16. Prerequisites (must be completed **before** proposed course) CENS460 or permission of instructor
17. Corequisites (must be completed **with** proposed course) _____
18. If course has no requisites, will all sections of the course require *(If course has pre or co requisite, skip to question 19):*
- | | | |
|---|---|-------------------------------------|
| instructor consent ☐ | department consent ☐ | no consent ☐ |
|---|---|-------------------------------------|

19. Is the course needed for a plan of study (major, minor, certificate)? yes ☐ no ☒

Name of new plan? _____

Note: A new plan or plan change form must be submitted with this request.

20. Does course duplicate content of existing courses within or outside of your college? yes ☐ no ☒

If yes, list any courses this course may have duplicative material with and estimate percentage of duplication:

Please attach letters of support from each department whose course is listed above.

21. Will this course affect other academic plans, academic units, or enrollment? yes ☐ no ☒

If yes, explain in justification and provide supporting documentation from the affected departments.

22. Is a potential equivalent course offered at a community college (lower division only)? yes ☐ no ☒

If yes, does it require listing in the *Course Equivalency Guide*? yes ☐ no ☐

Please list, if known, the institution, subject/catalog number of the course. _____

23. Justification for new course, including unique features if applicable. (Attach proposed syllabus in the approved university format).

The course will be offered under the CENS prefix, which is intended for courses that address multiple academic disciplines within the College of Engineering and Natural Sciences. The course provides student with an overview of major issues in sustainability at typical colleges and universities. It offers a unique opportunity to develop and complete an original research project focussed on the NAU campus or Flagstaff community. Results of student projects will be incorporated, whenever possible, into actual NAU campus sustainability initiatives.

24. Names of current faculty qualified to teach this course Gary Deason, Gary Nabhan, Deb Larson, Bill Auberle, Bridget Bero, Steve Mead, George Koch, Tom Sisk, Rod Parnell, Bruce Hungate

25. If course will require additional faculty, space, or equipment, how will these requirements be satisfied? none

26. Will present library holdings support this course? yes ☒ no ☐

If the course being submitted for approval is NOT a LIBERAL STUDIES course, please go to step 42.

LIBERAL STUDIES ONLY

Contact name: _____

Contact email: _____

Dept. Chair name: _____

Dept. Chair email: _____

College Contact name : _____

College Contact email: _____

27. This course is a ☐ Single section ☐ Multi-section

28. List names of faculty who may teach this course: _____

29. Section enrollment cap: _____

If this course is being submitted for approval as a new LIBERAL STUDIES course, please complete questions 30-33.

OR

If this course is being submitted for approval as a new JUNIOR LEVEL WRITING course, please complete questions 37-38.

OR

If this course is being submitted for approval as a new SENIOR CAPSTONE course, please complete questions 39-41.

NEW LIBERAL STUDIES COURSE

30. Thematic Focus (check all that apply): *If a topics course, must apply to ALL sections.*

Environmental Consciousness ☐ Technology and Its Impact ☐ Valuing the Diversity of Human Experience ☐

31. Distribution Block (check one): *If a topics course, must apply to ALL sections.*

Aesthetic and Humanistic Inquiry ☐ Cultural Understanding ☐ Lab Science ☐

Science/Applied Science ☐ Social and Political Worlds ☐

32. Skills (check two): *If a topics course, must apply to ALL sections.*

Creative Thinking ☐ Critical Reading ☐ Effective Oral Communication ☐ Effective Writing ☐ Critical Thinking ☐

Ethical Reasoning ☐ Quantitative/Spatial Analysis ☐ Scientific Inquiry ☐ Use of Technology ☐

33. Is this a topics course? Yes ☐ No ☐

If YES, please complete questions 34-36. If NO, please go to question 42.

TOPICS COURSE ONLY

34. Identify the Student Learning Outcomes that will be found in ALL topic syllabi offered under this course number. _____

35. Explain by what method(s) Student Learning Outcomes will be assessed in ALL topic syllabi offered under this course number.

36. Please attach an example of a Topic Syllabus offered under this course number.

NEW JUNIOR LEVEL WRITING COURSE (refer to question 19)

37. To which degree programs offered by your department/academic unit does this proposal apply? _____
38. Do you intend to offer ABC 300 and ABC 300W? yes ☐ no ☐
If no, please submit a course delete form for the ABC 300.

GO TO question 42

NEW SENIOR CAPSTONE COURSE (refer to question 19)

39. To which degree programs offered by your department/academic unit does this proposal apply? _____
40. Does this proposal replace or modify an existing course or experience? yes ☐ no ☐
If yes, which course(s)? _____
41. Do you intend to offer ABC 400 and ABC 400C? yes ☐ no ☐
If no, please submit a course delete form for the ABC 400.

42. Approvals

Department Chair (if appropriate)	Date
Chair of college curriculum committee	Date
Dean of college	Date

For Committees use only

For Liberal Studies Committee	Date
Action taken: _____ Approved as submitted _____ Approved as modified	

For University Curriculum Committee	Date
Action taken: _____ Approved as submitted _____ Approved as modified	

College of Engineering and Natural Science

CENS 480: Undergraduate Research in Campus Sustainability

Spring, 2008

3 credit hours, T 5:30-8:00PM (tentative)

Dr. Gary B. Deason

P.O. 5765 ARD Building

Office Hours: M-Th 1-4PM

Prerequisite: CENS460 or permission of instructor

Description

This course offers students an opportunity to design and conduct an original research project focused on campus sustainability. The project will contribute to the NAU campus sustainability program by providing new data, insights or recommendations needed to advance more sustainable practices on campus.

Student Learning Expectations

1. Gain familiarity with major issues related to campus sustainability
2. Learn to identify and define a manageable research project
3. Gain experience writing an acceptable research proposal
4. Learn to conduct a research project using standard methods
5. Gain experience presenting a research project to an audience
6. Practice writing a research report
7. Benefit the campus sustainability program

Approach

Students will work with the instructor and with other NAU faculty and staff to identify and complete a research project during the semester. Projects may be pursued individually or with two persons. The class will meet weekly for discussion of readings related to key topics in campus sustainability, project proposals, updates on project progress, student presentations and to hear outside speakers involved in campus and community sustainability efforts.

1. Seminar format
2. Project-based
3. Limited to 12 students
4. Readings, discussions, and guest speakers.
5. Student project presentations, posters and reports

Required Texts

1. Creighton, Sarah Hammond, 1999. Greening the Ivory Tower, Cambridge, Mass: MIT Press.
2. The Center for Sustainable Environments. Northern Arizona University Campus Environmental Sustainability Plan. CSE, 2004.
3. The Center for Sustainable Environments. Northern Arizona University Campus Sustainability Report: September 2006. CSE, 2006.

Recommended Texts

1. Toor, Will and Havlick, Spenser. Transportation and Sustainable Campus Communities. Island Press, 2004.
2. Keniry, Julian. Ecodemia: Campus Environmental Stewardship at the Turn of the 21st Century. National Wildlife Federation, 1995.
3. Society for College and University Planning. Planning for Higher Education: Sustainability: Taking the Long View. The Journal of the Society of College and University Planning, Volume 31, no. 3, March-May, 2003.
4. Barlett, Peggy F. and Chase, Geoffrey W. Sustainability on Campus: Stories and Strategies for Change. Urban and Industrial Environments, 2003.

Outline by Week

1. Introduction to the course and the campus sustainability program.
Discussion of student interests.
2. What is sustainability? Can you measure it?
Discuss preliminary research ideas.
3. Present outlines of research proposals. Bring a copy for each class member.
4. Environmental management systems (EMS)
Preliminary research proposals due
5. Transportation and parking
Discuss revisions of proposals.
6. Energy and water
Final proposals due
7. Natural heritage and landscaping
8. Food and dining services
Final project revisions due.
9. Waste and recycling
10. Purchasing policies
11. Environmental communications
12. Discuss plans for presentations and final reports
13. Individual appointments. Prepare posters.
14. Present posters at undergraduate research fair.
15. Prepare final reports.
16. Research reports due at 5:30PM

Requirements and Grading

1. Complete an acceptable research proposal (20% of grade)
2. Complete the research project as defined in the proposal and submit a final report (50%)
3. Make a poster on your research project for the CENS undergraduate research fair in late April (20%)
4. Prepare for classes and participate in discussions (10%)

90%-100%	A
80%-90%	B
70%-80%	C
60%-70%	D
Below 60%	F

Course policy

1. Homework and class preparation must be completed for the class meeting in which it is due. No late homework will be accepted. This is because homework preparation is designed to contribute to class discussion.
2. Final project reports must be turned in at the time and date of the scheduled final exam. Completion of the project and project report counts in lieu of a final exam. If the final report is too late to meet university deadlines for grade submission, it will not be graded.
3. Up to 2 absences during the semester is permissible. Without a doctor's note, every 2 absences thereafter will result in a penalty of one letter grade.
4. Plagiarism or cheating will result in failure of the course.

University Policies

Please refer to additional university policies governing teaching and learning at:

<http://jan.ucc.nau.edu/academicadmin/plcystmt.html>

And to the following statement about classroom management in the NAU student handbook:

<http://www4.nau.edu/stulife/handbookmanagement.htm>



NORTHERN
ARIZONA
UNIVERSITY

CENTER FOR ENVIRONMENTAL
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Memo to: NAU University Curriculum Committee

Via College of Engineering and Natural Sciences Curriculum Committee

From: Rod Parnell, Director, Center for Environmental Sciences and Education

A handwritten signature in black ink that reads "Rod Parnell".

Date: October 16, 2006

Re: Proposal for new CENS courses in sustainability

The faculty of the Center for Environmental Sciences and Education strongly support the proposal for two new courses in sustainability to be offered as College-wide courses with the CENS prefix: CENS 460, Sustainability in Natural and Built Systems and CENS 480, Undergraduate Seminar and Research in Sustainability. These courses begin an important new initiative in cross-department studies in sustainability and will be very useful additions to our curricula in environmental sciences and environmental studies. The College-level course designation should help to create a more interdepartmental mix of students and faculty in these courses, a real asset to all our students.

The CENS 460 course does have some overlap with our ENV 330, but the redundant material will be very useful in setting the stage for more applied studies in 460.

The ENV / ENVSTU prerequisites for these proposed courses will not put significant pressure on the prerequisite courses. We in CESE really doubt anyone will take the prerequisites in order to take these CENS courses; rather they will take these courses because they already happen to have the prerequisites.

ENV 480 is the permanent course line for the ENV 499 seminar/research experience Gary Deason has been running for the past two years. It has been and will continue to be an excellent option for our students in completing their ENV 408 or 485 degree requirement. It will also be an option for students in the environmental studies program. Once this course is established, CESE will submit a program change form to formally allow the use of this course in fulfilling the undergraduate research, internship, or fieldwork experience required of all undergraduate environmental sciences and studies majors and minors.

Please contact me if you require further information.