New Course Request

Indiana University

Check Appropriate Boxes: Undergraduate credit [✓] Graduate credit [ ] Professional credit [ ]

1. School/Division School of Engineering and Technology 2. Academic Subject Code ECE

3. Course Number 21000 (must be cleared with University Enrollment Services) 4. Instructor: Eberhart

5. Course Title Sophomore Seminar

Recommended Abbreviation (Optional) Sophomore Seminar

(Limited to 32 Characters including spaces)

6. First time this course is to be offered (Semester/Year): Fall 2009

7. Credit Hours: Fixed at 1 or Variable from ________ to ________

8. Is this course to be graded S-F (only)? Yes [ ] No [✓]

9. Is variable title approval being requested? Yes [ ] No [✓]

10. Course description (not to exceed 50 words) for Bulletin publication:

A lecture series on ECE Department curriculum-related topics, electrical and computer engineering systems, skills, and career topics. C: ECE 20100.

11. Lecture Contact Hours: Fixed at 1 or Variable from ________ to ________

12. Non-Lecture Contact Hours: Fixed at 0 or Variable from ________ to ________

13. Estimated enrollment: 30 of which ______ percent are expected to be graduate students.

14. Frequency of scheduling: Spring/Fall Will this course be required for majors? Yes ______

15. Justification for new course: Faculty determined material covered in Senior Seminar was delivered too late in many cases.

16. Are the necessary reading materials currently available in the appropriate library? ______

17. Please append a complete outline of the proposed course, and indicate instructor (if known), textbooks, and other materials.

18. If this course overlaps with existing courses, please explain with which courses it overlaps and whether this overlap is necessary, desirable, or unimportant.

19. A copy of every new course proposal must be submitted to departments, schools, or divisions in which there may be overlap of the new course with existing courses or areas of strong concern, with instructions that they send comments directly to the originating Curriculum Committee. Please append a list of departments, schools, or divisions thus consulted.

Submitted by:

Department Chairman/Division Director

Date 4/16/09

Approved by:

Dean

Date 7/15/09

Dean of Graduate School (when required)

Date ________

Chancellor/Vice-President

Date ________

University Enrollment Services

Date ________

After School/Division approval, forward the last copy (without attachments) to University Enrollment Services for initial processing, and the remaining four copies and attachments to the Campus Chancellor or Vice-President.

UPS 724

University Enrollment Services Final—White; Chancellor/Vice-President—Blue; School/Division—Yellow; Department/Division—Pink; University Enrollment Services Advance—White
C. ECE 20100. A lecture series on ECE Department curriculum-related topics, electrical and computer engineering systems, skills, and career topics.
ECE 21000
Sophomore Seminar
Syllabus

This is one credit-hour course required to be taken by all electrical engineering and computer engineering students in their sophomore year. Co-requisite is ECE 20100. (This course replaces ECE 40000, Senior Seminar.)

Course Description: A lecture series on ECE Department curriculum-related topics, electrical and computer engineering systems, skills, and career topics.

Course Outcomes: Students will be introduced to a diverse spectrum of current topics relevant to the technical and career aspects of electrical and computer engineering. Examples of subjects are: group dynamics, entrepreneurship, being a consultant, the electric power industry, interviewing skills, communications, etc.

Course Policy

Grades will be partially based on attendance (an attendance sheet will be passed out at the beginning of each class period, and the student must initial it). A resume with a cover letter will be submitted by each student early in the semester. A career plan (3-5 pages in length, double-spaced) will be submitted in the middle of the semester. A report (6-7 pages in length, double-spaced, 11 or 12 point font) on one or more areas discussed in class will be submitted near the end of the semester. Plagiarism will not be tolerated. One unexcused absence is permitted.

Grading Policy: Grades will be based on the following table:

<table>
<thead>
<tr>
<th>Items that count toward your grade</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Attendance (15 class meetings, 2 points per meeting, if present) The attendance roster will be passed out for students’ signature at the beginning of the class. If you are more than 10 minutes late, you will get 1 point for attending.</td>
<td>30</td>
</tr>
<tr>
<td>2 Resume with cover letter (due February 15)</td>
<td>10</td>
</tr>
<tr>
<td>3 Career plan (due March 21)</td>
<td>20</td>
</tr>
<tr>
<td>4 Report (due April 25)</td>
<td>40</td>
</tr>
<tr>
<td>Total possible</td>
<td>100</td>
</tr>
</tbody>
</table>

Grading: The following “grade-point earned” system will be used:
A (100-96), A- (95-93), B+ (92-90), B (89-87), B- (86-84), C+ (83-81), C (80-77), C- (76-74), D (73-65) F (<65).
Lecture outline:

1) Danny King: BSEE an BSCmpE degree requirements, and creating a personal plan of study; academic honesty, plagiarism.
2) In-class essay assignment on a simple technical topic. Those who do not receive a passing grade receive tutoring and redo the assignment.
3) Gail Williams: Resume writing, cover letter writing, and interviewing
4) Josh Killey: Using career centers for job searches
5) Ed Berbari: Going to graduate school
6) ECE jobs: Mike Lowry, Delphi
7) ECE jobs: Paul Reising, being a consultant
8) Entrepreneurship: Bill Baldwin, building your own company
9) and 10) Group dynamics, including a group exercise moderated by OLS faculty
11) Thriving in the workplace environment: Greg Stutz, Precast Concrete Assoc.
12) ECE jobs: Dick Foltz, electric power industry
13) Karl Mayer, Eli Lilly, Agile software methods
14) TCM: Oral presentation skills for engineers
15) ECE jobs: Mark West, Raytheon

Ten of the above lectures (3-8, 11-13, 15) have been moved from ECE 40000 Senior Seminar. Two (9 and 14) has been moved from ECE 49200 Senior Design (there is only one group dynamics lecture period in ECE 49200). Lectures 1, 2, and 10 are “new.”

For several semesters it will be necessary to offer both ECE 40000 and ECE 21000. For these two semesters, the seniors will not attend lectures 1 and 2 as listed above, but will have other topics such as an additional speaker on starting your own company. (Two classrooms will be needed for each of these two weeks.)
Purdue School of Engineering & Technology
Course Outcomes and Assessment Data Sheet

This is an internal document to identify and record expected outcomes and anticipated assessment strategies for all courses taught within the School of Engineering and Technology. Submission of this form, as noted below, is required and must accompany all new course and course change requests. Copies of this form should also be retained within the department and kept on file with the outline or syllabus for each course.

Course Number: 21000  Course Title: Sophomore Seminar

Procedure:

1. First, identify all instructional outcomes expected for this course, and then select all ABET outcomes which are consistent with those anticipated objectives from TABLE 1 below.

<table>
<thead>
<tr>
<th>ENGINEERING - EAC Criteria #3</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>An ability to apply knowledge of mathematics, science and engineering.</td>
<td>a</td>
</tr>
<tr>
<td>An ability to design and construct experiments as well as to analyze and interpret data.</td>
<td>b</td>
</tr>
<tr>
<td>An ability to design a system, component, or process to meet desired needs.</td>
<td>c</td>
</tr>
<tr>
<td>An ability to function on multi-disciplinary teams.</td>
<td>d</td>
</tr>
<tr>
<td>An ability to identify, formulate and solve engineering problems.</td>
<td>e</td>
</tr>
<tr>
<td>An understanding of professional and ethical responsibility.</td>
<td>f</td>
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<tr>
<td>An ability to communicate effectively.</td>
<td>g</td>
</tr>
<tr>
<td>The broad education necessary to understand the impact of engineering solutions in global societal context.</td>
<td>h</td>
</tr>
<tr>
<td>A recognition of the need for and an ability to engage in life-long learning.</td>
<td>i</td>
</tr>
<tr>
<td>A knowledge of contemporary issues.</td>
<td>j</td>
</tr>
<tr>
<td>An ability to use the techniques, skills and modern engineering tools necessary for engineering practice.</td>
<td>k</td>
</tr>
</tbody>
</table>

2. Subsets for each of the six IUPUI Principles of Undergraduate Learning (PUL) are given on the reverse side in TABLE 2. Using a number corresponding to each ABET outcome identified from TABLE 1 above to select a column, place a “√” or “X” mark in the applicable TABLE 2 row(s) cell for each PUL. Courses will often address multiple ABET outcomes and ABET outcomes frequently will overlap more than one PUL subset. Thus, it is expected completed data sheets may contain marks in several cells thereby indicating the course simultaneously satisfies multiple Principles of Undergraduate Learning while fulfilling its intended ABET objective(s).

3. After completing TABLE 2, briefly define or explain how the course outcomes or objectives will be evaluated within the context of the departmental assessment program in the space below:

   A Course Outcomes Survey is completed by students to self-assess the outcomes of the course. A similar survey is completed by the faculty. Changes are made in the course's lower.

   Submitted by: Russell E. Eberhardt  Date: 3/19/08  Rated Items:

Assessment/Criteria & Outcomes: November 5, 1999