PURDUE UNIVERSITY
REQUEST FOR ADDITION, EXPIRATION, OR REVISION OF AN UNDERGRADUATE COURSE
(10000-40000 LEVEL)

DEPARTMENT: EPICS
EFFECTIVE SESSION: Fall 2010

INSTRUCTIONS: Please check the items below which describe the purpose of this request.

☐ 1. New course with supporting documents
☐ 2. Add existing course offered at another campus
☐ 3. Change in course number
☐ 4. Change in course title
☐ 5. Change in course credit/contact type
☐ 6. Change in course attributes (department head signature only)
☐ 7. Change in instructional hours
☐ 8. Change in course description
☐ 9. Change in course prerequisites
☐ 10. Change in course requirements
☐ 11. Change in semester offered (department head signature only)
☐ 12. Transfer from one department to another

PROPOSED:
Subject/Abbreviation: EPICS
Course Number: 10100

Existing:
Subject/Abbreviation: EPICS
Course Number: 10100

 TERMS OFFERED
☐ Summer ☐ Fall ☐ Spring

Campus/ES Involved:
☐ West Lafayette
☐ East Lakeshore
☐ North Central
☐ South Bend
☐ Kokomo

LONG TITLE: First Year Participation in EPICS
SHORT TITLE: First Yr Participation in EPICS

ABSTRACT (will be reviewed by the Office of the Registrar): [20 CHARACTERS ONLY]

COURSE ATTRIBUTES: Check All That Apply
☐ 1. Pass/No Pass Only
☐ 2. Satisfactory/Instructor Only
☐ 3. Program
☐ 4. Credit by Examination
☐ 5. Special Exam

CREDIT TYPE
1. Fixed Credit Cr. Hrs. 1
2. Variable Credit Range:
   Minimum Cr. Hrs. 1
   Maximum Cr. Hrs. 1

Schedule Type
☐ Lecture
☐ Recitation
☐ Presentation
☐ Laboratory
☐ Lab Prep
☐ Studio
☐ Distance
☐ Clinic
☐ Coop
☐ Independent Study
☐ Field Experience

CROSS-LISTED COURSES
☐ Cross-Listed Courses

PREREQUISITES:
Second semester freshman standing or permission of instructor.

See attached for course description

See attached for Course Description

COURSE LEARNING OUTCOMES

See attached

Office of the Registrar
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DEPARTMENT: EPICS
EFFECTIVE SESSION: Fall 2010

INSTRUCTIONS: Please check the items below which describe the purpose of this request:
1. New course with supporting documents
2. Add existing course offered at another campus
3. Explication of a course
4. Change in course number
5. Change in course title
6. Change in course credit/type
7. Change in course attributes (department head signature only)
8. Change in instructional hours
9. Change in course description
10. Change in course requisites
11. Change in semesters offered (department head signature only)
12. Transfer from one department to another

PROPOSED:
Subject Abbreviation: EPICS
Course Number: 10100

EXISTING:
Subject Abbreviation: EPICS
Course Number: 10100

TERMS OFFERED:
Check All That Apply:
- Summer
- Fall
- Spring

CAMPUS[ES] INVOLVED:
- Calumet
- Fort S
- Ft. Wayne
- Indianapolis
- N. Central
- Tech, statewide
- W. Lafayette

Long Title: First Year Participation in EPICS
Short Title: First Yr Participation in EPICS

CRedit TYPE
1. Fixed Credit Cr. Hrs.
2. Variable Credit Range:
   Minimum Cr. Hrs.:
   Maximum Cr. Hrs.:
3. Equivalent Credit:
   Yes
   No

COURSE ATTRIBUTES:
Check All That Apply:
1. Pass/No Pass Only
2. Satisfactory/Unsatisfactory Only
3. Repeatable
   Maximum Repeatable:
4. Credit by Examination
5. Special Fees

SCHEDULE TYPE:
- Lecture
- Redaction
- Recitation
- Laboratory
- Lab Prep
- Studio
- Distance
- Clinic
- Supervised
- Research
- Inst. Study
- Internship
- Other

Meetings Per Week:
- 5U
- 1

Weeks Offered:
- 1

% of Credit Offered:
- 100%
- 75%
- 50%
- 25%

Prerequisite: Second semester freshman standing or permission of instructor.

See attached for Course Description

COURSE LEARNING OUTCOMES
See attached

OFFICE OF THE REGISTRAR
TO: The Faculty of the College of Engineering

FROM: EPICS Curriculum Committee of the College of Engineering

RE: Change prerequisites and description: EPCS 10100 FIRST YEAR PARTICIPATION IN EPICS

The curriculum committee of the EPICS program has approved the following changes to an existing course. This action is now submitted to the Engineering Faculty with a recommendation for approval.

From: EPCS 10100 FRESHMAN PARTICIPATION IN EPICS

Sem. 1, 2 Lec 0, lab 2, Cr. 1. Prerequisite: Second semester freshman standing or permission of instructor.

Description: Together, Engineering Projects in Community Service (EPICS) courses (EPCS 10100, EPCS 20100, EPCS 30100, EPCS 30200, EPCS 40100, and EPCS 40200) create a vertical project track under which students work in multidisciplinary teams on long-term engineering-based design projects. Projects of at least one-year in duration are intended to solve real problems that are defined in consultation with "customers" from not-for-profit community and education organizations. EPICS courses are open to students from all disciplines; each student contributes expertise in his/her academic discipline. Each team consists of a mix of freshmen, sophomores, juniors, and seniors. Students are encouraged to participate in an EPICS project team for two or more semesters via enrollment in EPCS 10100 while a freshman, EPCS 20100 while a sophomore, EPCS 30100/30200 while a junior, and EPCS 40100/40200 while a senior. Freshman participating in EPCS 10100 gain insight into the specific project, and more generally, into the design and development process. They attend planning and reporting meetings with the customer and are expected to attend all team meetings. Under the mentorship of the team's juniors and seniors they perform
and report upon tasks consistent with their level of discipline expertise. May be repeated for credit.

To:

EPCS 10100  FIRST YEAR PARTICIPATION IN EPICS

Sem. 1, 2, Lec 0, Lab 2, Cr. 1, Prerequisite: Second semester first year engineering standing or permission of department.

Description: Together, Engineering Projects in Community Service (EPICS) courses create a vertical project track under which students work in multidisciplinary teams on long-term engineering-based design projects. Projects of at least one-year in duration are intended to solve real problems that are defined in consultation with "customers" from not-for-profit community and education organizations. EPICS courses are open to students from all disciplines; each student contributes expertise in his/her academic discipline. Each team consists of a mix of first year, sophomores, juniors, and seniors. Students are encouraged to participate in an EPICS project team for two or more semesters. First year students participating in EPCS 10100 gain insight into the specific project, and more generally, into the design and development process. They attend planning and reporting meetings with the customer and are expected to attend all team meetings. Under the mentorship of the team’s sophomores, juniors and seniors they perform and report upon tasks consistent with their level of discipline expertise. May be repeated for credit.

Reason: Change in prerequisite requirement. Change in title to reflect appropriate language

William Oakes, Director
EPICS Program
SUPPORTING DOCUMENTATION

Normally Offered: Each Fall, Spring. Offered Summer by special arrangement.
Recommended Reference(s): None.

Course Outcomes:

i. an ability to apply material from their discipline to the design of community-based projects
ii. an understanding of design as a start-to-finish process
iii. an ability to identify and acquire new knowledge as a part of the problem-solving/design process
iv. an awareness of the customer
v. an ability to function on multidisciplinary teams and an appreciation for the contributions from individuals from multiple disciplines
vi. an ability to communicate effectively with audiences with widely-varying backgrounds
vii. an awareness of professional ethics and responsibility
viii. an appreciation of the role that their discipline can play in social contexts

Lecture Outline:
Weeks Lectures

1-15 All EPICS students have a common lecture hour. Lecture topics include the design process, verbal and written communication, project management and planning, ethical and legal issues in engineering design, entrepreneurship, intellectual property, team dynamics and leadership and community involvement. Lectures are supplemented with session on specific technical topics relevant to the projects.
Lab Outline:
Week  Major Course Milestones
2    Semester Project Plan
3    Personal Goals
4    Project Charters (new projects); Project Demonstration (continuing projects); Review of Design Notebooks; Delivery Review of Projects to be Delivered Week 4.
5 - 6  Continued Progress on Projects and Project Documentation.
7    Internal Design Review; oral or poster presentation.
8    Peer evaluation and self assessment; Review of Design Notebooks.
9 – 10 Continued Progress on Projects and Project Documentation.
11   Project Design Review; Delivery Review of Projects to be Delivered Week 11.
12 – 14 Continued Progress on Projects and Project Documentation.
      Team Report; Review of Design Notebooks; Peer evaluation and self assessment
Final Team Presentation

Time Requirements (as noted from the course syllabus)

Lecture is 50 minutes each week, but attendance requirements vary based on the number of credit hours you are registered for and if you are a new or returning student to EPICS. There are 5 required lectures for new students, and two required lectures for returning students. Students enrolled for one (EPCS 101) credit hour must accumulate at least 5 lecture credits. Students taking two credit hours (EPCS 102) are required to have a semester total of 10 lecture credits. Students with a scheduling conflict with the Monday lecture of EPICS should notify their advisor or TA. A list of all scheduled lectures and more information about making up missed lectures can be found at the EPICS course website.

The typical expectations regarding time spent on EPICS are as follows. But like other courses on campus, you may need to spend more time than is typical to achieve a similar outcome:

2 credit hours (EPCS 102) = average 5 hours/week outside the lecture and lab on your EPICS project
1 credit hour (EPCS 101) = average 3.5 hours/week on your project for the 10 weeks when you don’t attend lecture