

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

FID 57-10

DEPARTMENT EPICS EFFECTIVE SESSION Fall 2010 *SF 2011*

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

- | | |
|---|--|
| <input type="checkbox"/> 1. New course with supporting documents | <input type="checkbox"/> 7. Change in course attributes (department head signature only) |
| <input type="checkbox"/> 2. Add existing course offered at another campus | <input type="checkbox"/> 8. Change in instructional hours |
| <input type="checkbox"/> 3. Expiration of a course | <input checked="" type="checkbox"/> 9. Change in course description |
| <input type="checkbox"/> 4. Change in course number | <input checked="" type="checkbox"/> 10. Change in course requisites |
| <input checked="" type="checkbox"/> 5. Change in course title | <input checked="" type="checkbox"/> 11. Change in semesters offered (department head signature only) |
| <input type="checkbox"/> 6. Change in course credit/type | <input type="checkbox"/> 12. Transfer from one department to another |

PROPOSED:

Subject Abbreviation EPICS

EXISTING:

Subject Abbreviation EPICS

Course Number 10100

Course Number 10100

Long Title First Year Participation in EPICS

Short Title First Yr Participation in EPICS

Abbreviated title will be entered by the Office of the Registrar if omitted. (30 CHARACTERS ONLY)

TERMS OFFERED

Check All That Apply:

- Summer Fall Spring

CAMPUS(ES) INVOLVED

- Calumet N. Central
 Cont Ed Tech Statewide
 Ft. Wayne W. Lafayette
 Indianapolis

CREDIT TYPE

1. Fixed Credit: Cr. Hrs. 1
2. Variable Credit Range:
 Minimum Cr. Hrs. _____
 (Check One) To Or
 Maximum Cr. Hrs. _____
3. Equivalent Credit: Yes No

COURSE ATTRIBUTES: Check All That Apply

1. Pass/Not Pass Only
2. Satisfactory/Unsatisfactory Only
3. Repeatable
 Maximum Repeatable 6
4. Credit by Examination
5. Special Fees
6. Registration Approval Type
 Department Instructor
7. Variable Title
8. Honors
9. Full Time Privilege
10. Off Campus Experience

Schedule Type	Minutes Per Mtg	Meetings Per Week	Weeks Offered	% of Credit Allocated
Lecture	50	1	6	33%
Recitation				
Presentation				
Laboratory	100	1	16	67%
Lab Prep				
Studio				
Distance				
Clinic				
Experiential				
Research				
Ind. Study				
Pract/Observ				

Cross-Listed Courses

COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):

Prerequisite: Second semester freshman standing or permission of instructor.

See attached for Course Description

***COURSE LEARNING OUTCOMES**

See attached

Calumet Department Head _____ Date _____ Calumet School Dean _____ Date _____

Fort Wayne Department Head _____ Date _____ Fort Wayne School Dean _____ Date _____

Indianapolis Department Head _____ Date _____ Indianapolis School Dean _____ Date _____

North Central School Dean _____ Date _____ North Central Vice-Chancellor for Academic Affairs _____ Date _____

West Lafayette Department Head _____ Date _____ West Lafayette College/School Dean _____ Date _____ West Lafayette Registrar _____ Date _____

OFFICE OF THE REGISTRAR

10/5/10

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FFD 57-10

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Summer Fall Spring

Course Number 10100

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 Conf Ed Tech Statewide
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 2. Variable Credit Range:
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 (Check One) To Or
 Maximum Cr. Hrs. _____
 3. Equivalent Credit: Yes No

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 3. Repeatable
 Maximum Repeatable 6
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 5. Special Fees

COURSE ATTRIBUTES: Check All That Apply

6 Registration Approval Type Department Instructor
 7 Variable Title
 8 Honors
 9 Full Time Privilege
 10 Off Campus Experience

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See attached for Course Description

COURSE LEARNING OUTCOMES

See attached

Calumet Department Head _____ Date _____ Calumet School Dean _____ Date _____

Fort Wayne Department Head _____ Date _____ Fort Wayne School Dean _____ Date _____

Indianapolis Department Head _____ Date _____ Indianapolis School Dean _____ Date _____

North Central School Dean _____ Date _____ North Central Vice Chancellor for Academic Affairs _____ Date _____

West Lafayette Department Head _____ Date _____ West Lafayette College School Dean _____ Date _____

West Lafayette Registrar _____ Date _____

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. EPCS 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 attend all team meetings. Under the mentorship of the team's juniors and seniors they perform

APPROVED FOR THE FACULTY
OF THE SCHOOLS OF ENGINEERING
BY THE ENGINEERING
CURRICULUM COMMITTEE

ECC Minutes #22
Date 4/6/10
Chairman ECC R. Cipra

Engineering Faculty Document No. 57-10

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. EPCS 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.
Required Text(s): Service-Learning: Engineering in Your Community, Marybeth Lima and William Oakes, Great Lakes Press, 2004.
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