Office of the Registrar FORM 40 REV. 11/09

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

DEPARTMENT EPICS	EFFECTIVE SE	SSION Spring 2010
NSTRUCTIONS: Please check the items below which		
1. New course with supporting 2. Add existing course offered 3. Expiration of a course 4. Change in course number 5. Change in course title 6. Change in course credit/type PROPOSED: Subject Abbreviation EPCS  Course Number 30201  Long Title Junior Participation in EPICS  Short Title  Abbreviated title will be entered by the Office of the	documents at another campus  EXISTING: Subject Abbreviation EPCS  Course Number	7. Change in course attributes (department head signature only)  8. Change in instructional hours  9. Change in course description  10. Change in semesters offered (department head signature only)  12. Transfer from one department to another  TERMS OFFERED Check All That Apply: Summer
CREDIT TYPE  1. Fixed Credit: Cr. Hrs. 2 2. Variable Credit Range:		JRSE ATTRIBUTES: Check All That Apply  6 Registration Approval Type Department Instructor 7 Variable Title 3 Honors 9 Full Time Privilege 10 Off Campus Experience  Cross-Listed Courses
Pract/Observ		
COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICT See Attached  *COURSE LEARNING OUTCOMES See Attached		Purdue Columbus site this course offering.
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 Affai	rs 17/2/2 All All All All All All All All All Al
/est Lafayette Department Head Date	West Lafayette College/School Dean	Date West Lafayette Registrar Date
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# **PURDUE UNIVERSITY**

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

DEPARTMENT	EPICS	<del></del>		EFFECTIVE SESS	ION Spring 2	010		
PROPOSED: Subject Abbreviation Course Number	New course     Add existing     Expiration of     Change in of     Change in of     Change in of	with supporting of grounse offered and grounse offered and grounse tourse rounse title course credit/type	t another campus <u>EXISTING:</u> Subject Abbreviation	EPCS	8. Change ii 9. Change ii 10. Change ii 11. Change i	n instructional hourn course description course requisites a semesters offered from one departme	n d (department head signature o	
Short Title			egistrar if omitted. (30 CHARACTER	CV IMO SE		Ft. Wayne Indianapolis	W. Lafayette	
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Indianapolis Departi	ment Head	Date	Indianapolis School Dean		Date			
North Central School	2 Ca	Date L 12-3-0		/ / / /	Date			<del></del>
st Lafayette Dep	artment Head	Date	West Lafayette College/Schoo	l Dean	Date W	est Lafayette Registrar		Date

TO:

The Engineering Faculty

FROM:

The EPICS Curriculum Committee

RE:

**New EPCS Course Numbers** 

The EPICS Curriculum Committee has approved the following new course number. This action is now submitted to the Engineering Faculty with a recommendation for approval.

#### **EPCS 302 JUNIOR PARTICIPATION IN EPICS**

Offered Fall and Spring, Summer by special arrangement. Credit 2. Prerequisite: Junior standing.

Course Description: Continuation of EPCS courses (see EPCS 101). The responsibilities of juniors include working with the seniors in the planning and organization of the project, contributing to the design process, problem solving by contributing expertise from their discipline, meeting with the customer, and the mentorship of sophomores and freshmen. EPCS 302 is offered for 2 credits. The EPICS procedures manual provides information on expected relative workload for EPCS 301 and EPCS 302 students. May be repeated for credit. May not be taken concurrently with EPCS 301.

## **REASON:**

The Engineering Projects in Community Service (EPICS) courses are currently offered under 18 different course numbers within 9 different disciplines. The new course numbers aim to reflect the multidisciplinary nature of the course while also easing the registration difficulties of multiple, co-listed course numbers. Each participating department /school would determine how their students' credits in EPICS count toward graduation requirements.

Normally Offered: Each Fall, Spring. Offered Summer by special arrangement.

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

Recommended Reference(s): None.

## **Course Outcomes:**

A student who successfully fulfills the course requirements with at least 3 credits of EPICS taken over 2 or more semesters will have demonstrated:

- 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 sessions on specific technical topics relevant to the projects.

## Lab Outline:

Week	Major Course Milestones
2	Semester Project Plan
3	Personal Semester 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.
15	Team Report; Review of Design Notebooks; Peer evaluation and self assessment
Final	Team Presentation

Office of the Registrar FORM 40 REV. 12/03

# PURDUE UNIVERSITY REQUEST FOR ADDITION, EXPIRATION, OR REVISION OF A COURSE

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North Central Department Hea	ad Date - 5 16 05	North Central Chancellor  West Lafayette School Dean	- 510	6/15	te Approved by Graduate Council	O L CO Date
Graduate Area Committee Co	onvener Date	Graduate Dean		Date We	est Lafayette Registrar	Date