33-04

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

			(10	1000-40000 LEVE	L)			
DEPARTMENT	EPICS			EFFECTIVE SESSI	ON Spring 20)10		
\(STRUCTIONS:	Please check the ite	ms below which o	describe the purpose of this	request.				
	 New course w 	rith supporting of course offered a a course urse number urse title	documents It another campus	ents				
PROPOSED:			EXISTING:			l T	ERMS OFFERED	
Subject Abbreviation	n EPCS	20100	Subject Abbreviation	EPCS	20100	Summer	Check All That Apply:	✓ Spring
Long Title So	Title Sophomore Participation in EPICS Calumet N. Central Cont Ed Tech Statewide						1	
Short Title						Ft. Wayne Indianapolis	⊔ w.	Lafayette
Abb	reviated title will be entered	by the Office of the R	egistrar if omitted. (30 CHARACTER	RS ONLY)		ļ		1
1. Fixed Credit: Cr. 2. Variable Credit F Minimum Cr. (Check One) Maximum Cr. 3. Equivalent Credit Schedule Type Lecture Recitation Presentation Laboratory Lab Prep Studio 'ance ilc Experiential Research Ind. Study Pract/Observ COURSE DESCRIF See Attached	Range:	Meetings Per Week 1	1. Pass/Not Pass Only 2. Satisfactory/Unsatisfactory of the satisfactory of the satisf	Only 3	6 Registration A Dep: 7 Variable Title 8 Honors 9 Full Time Priv 10 Off Campus E	ilege experience	Instructor	ourses
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*COURSE LEARNII	NG OUTCOMES							
See Attached								
Calumet Departmen	nt Head	Date	Calumet School Dean		Date			
Fort Wayne Departn		Date	Fort Wayne School Dean		Date			
. On Traying Departit		Date	- OIL TRAYING GUILLOUI DEATH					
Indianapolis Depark	ment Head	Date	Indianapolis School Dean		Date			
North Central School	Dean - CC	Date 12-3	North Central Vice Chancellor		Date 13/16			
i Lafayette Depa	artment Head	Date	West Lafayette College/School	ol Dean	Date Wes	st 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 201 SOPHOMORE PARTICIPATION IN EPICS

Offered Fall and Spring, Summer by special arrangement. Credit 1. Prerequisite: Sophomore standing.

Course Description: Continuation of EPCS courses (see EPCS 101). Sophomores participating in EPCS 201 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 and report upon tasks consistent with their level of discipline expertise. May be repeated for credit.

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