CHEM 442 Advanced Physical Chemistry-CrsRvs-2018-02-16

• The workflow icon is no longer available. Please click on the Page Status after the orange circle icon near the page title. *

Form Information

(i) The page you originally access is the global template version. To access the template document that progresses through the workflow, please complete the following steps:

First Step: ONLY change the text in the [brackets] so it looks like this: CRIM 101 Intro to Criminology-CrsRvs-2015-08-10

• If DUAL LISTED list BOTH courses in the page title

Second Step: Click "SAVE" on bottom right

- DO NOT TYPE ANYTHING INTO THE FIRST PAGE OTHER THAN THE TEXT IN BRACKETS
- Please be sure to remove the Brackets while renaming the page

Third Step: Make sure the word <u>DRAFT</u> is in yellow at the top of the proposal

Fourth Step: Click on "EDIT CONTENTS" (*NOt* EDIT) and start completing the template. When exiting or when done, click "SAVE" (*NO* t Save Draft on bottom right

When ready to submit click on the workflow icon and hit approve. It will then move to the chair as the next step in the workflow. *Indicates a required field

Proposer*	Ronald See	Proposer Email*	rfsee@iup.edu
Contact Person*	Ronald See	Contact Email*	rfsee@iup.edu
Proposing Department/Unit*	Chemistry	Contact Phone*	7-4489

Course Level* undergraduate-level

Course Revisions

(Check all that apply; fill out categories below as specified; i.e. if only changing a course title, only complete Category A)

Category A:	Category B:
course_prefix_number_change course_title_change	 * Teacher Education: Please complete the Teacher Education section of this form (below) * Liberal Studies: Please complete the Liberal Studies section of this form (below) * Distance Education: Please complete the Distance Education section of this form (below)

Rationale for Proposed Changes (All Categories)

(A) Why is the course being revised /deleted:*

CHEM 342 is being changed to 442 to better reflect its status as an advanced and dual-listed course. The name is being changed to match the title of the graduate course.

(B) University Senate Summary of Rationale*	Please enter a single paragraph summary/rationale of changes or proposal for University Senate. Physical Chemistry II (now CHEM 342) is a course taken juniors and seniors to satisfy the requirements of the Chemistry BS degree, and it is an option for the chemistry elective requirement for the Pre-medical, Pre-pharmacy and Interdisciplinary tracks. The Chemistry Department wishes to change the number of the undergraduate course to CHEM 442, which will better reflect its status as an advanced and dual-listed course. The Chemistry Department also plans to dual-list this course as CHEM 542, so that graduate students who have not yet taken a second semester of Physical Chemistry can add to the enrollment of this course. The title of both the graduate and undergraduate courses will be "Advanced Physical Chemistry."
(C) Implications of the change on the program, other programs and the Students:*	Dual-listing this course should increase enrollment - CHEM 342 often has low enrollment, so additional students will be helpful and there will not be a need for for more than one section. No effect on students or other programs.

Current Course Information*	
	Category A
(D) Current Prefix*	СНЕМ
Proposed Prefix	СНЕМ
(E) Current Number*	342
Proposed Number	442
(F) Current Course Title*	Physical Chemistry II
Proposed Course Title	Advanced Physical Chemistry
(G) Prerequisite(s)	CHEM 341, MATH 225 (may be taken concurrently)
Proposed Prerequisite(s)	unchanged
(H) Current Catalog Description	In-depth exploration and applications of chemical thermodynamics, equilibria, kinetics, quantum mechanics, and spectroscopy.
Proposed Catalog Description	unchanged

If changing Category A, no further action required.

(I)Repeatable Course	
This is for a course that can be repeated	If YES, please complete the following:
Multiple times e.g. Internship	Number of Credits that May be Repeated:
	Maximum Number of Credits Allowed to be Repeated:
Proposed Repeatable Course	If YES, please complete the following: Number of Credits that May be Repeated:
	Maximum Number of Credits Allowed to be Repeated:
(J) Number of Credits	
	Class Hours per week:
	Lab Hours:
	Credits:
Proposed Number of Credits	Class Hours:Lab Hours:Credits:

(K) Current Course Student				
Learning Outcomes (SLOs)				
(L) Proposed Course Student	Note that the	he text box in t	he table expands	
Learning Outcomes (SLOs)	SLO #	Outcome	How outcome is assessed	
For each outcome, describe how	1			
he outcome will be achieved	2			_
	3			_
(M) Previous Brief Course Outline	As outlined	d by the federa	l definition of a "credit hour", the	following should be a consideration
(It is acceptable to copy	regarding s	student work -	For every one hour of classroom	n or direct faculty instruction,
from old syllabus)	there shou	ld be a minimu	m of two hours of out of class stu	tudent work.
(N) Brief Course Outline	As outlined by the federal definition of a "credit hour", the following should be a consideration			
	regarding s	student work -	For every one hour of classroom	n or direct faculty instruction,
(Give sufficient detail to communicate the	there shou	ld be a minimu	im of two hours of out of class stu	tudent work.
content to faculty across campus.				
It is not necessary to include				
specific				

Distance Education Section

- Complete this section only if adding Distance Education to a New or Existing Course

If Completing this Section,	NOTE: you must check this box if the Course has previously been approved for Distance Education
Check the Box to the Right:	
Course Prefix/Number	
Course Title	
Type of Proposal	See CBA, Art. 42.D.1 for Definition
Brief Course Outline	Give an outline of sufficient detail to communicate the course content to faculty across campus. It is not necessary to include specific readings, calendar or assignments As outlined by the federal definition of a "credit hour", the following should be a consideration regarding student work - For every one hour of classroom or direct faculty instruction, there should be a minimum of two hours of out of class student work.
	Rationale for Proposal (Required Questions from CBA)
How is/are the instructor(s) qualified	
in the Distance Education delivery	
method as well as the discipline?	

For each outcome in the course, describe	
how the outcome will be achieved using	
Distance Education technologies.	
How will the instructor- student and	
student-student interaction take place?	
(if applicable)	
How will student achievement be evaluated?	
How will academic honesty for tests	
and assignments be addressed?	

Liberal Studies Section

- Complete this section only for a new Liberal Studies course or Liberal Studies course revision

If Completing this Section,	NOTE: you must check this box if the Course/Program has previously been approved for Liberal Studies	
Check the Box to the Right:		

Liberal Studies Course Designations (Ch	neck all that apply)		
Learning Skills:			
Knowledge Area:			
Liberal Studies Elective	Please mark the designation(s) that apply - must meet at least one		
Expected Undergraduate Student	Map each course outcome to the appropriate EUSLOs tha apply. Fill in the course outcome number		
Learning Outcomes	See https://www.iup.edu/liberal/faculty-and-staff/euslos/ for additional information EUSLOs	regarding mapping	
(EUSLOs)			
Map the Course Outcome to the	Informed Learners demonstrate:	Course SLO #	
EUSLO's	the ways of modeling the natural, social and technical worlds		
	The aesthetic facets of human experience		
	the past and present from historical, philosophical and social perspectives		
		1	

 effective oral and written communication abilities ease with textual, visual and electronically-mediated literacies problem solving skills using a variety of methods and tools information literacy skills including the ablity to access, evaluate, interpret and use information from a variety of sources the ability to transform information into knowledge and knowledge into judgement and action the ability to work within complex systems and with diverse groups critical thinking skills including analysis, application and evaluation reflective thinking and the ability to synthesize information and ideas 	
 the interrelationships within and across disciplines Empowered Learners demonstrate: effective oral and written communication abilities ease with textual, visual and electronically-mediated literacies problem solving skills using a variety of methods and tools problem solving skills using a variety of methods and tools information literacy skills including the ability to access, evaluate, interpret and use information from a variety of sources the ability to transform information into knowledge and knowledge into judgement and action oritical thinking skills including analysis, application and evaluation reflective thinking and the ability to synthesize information and ideas Responsible Learners demonstrate: intellectual honesty concern for social justice civic engagement an understanding of the ethical and behavioral consequences of decisions 	
Empowered Learners demonstrate:I• effective oral and written communication abilitiesI• ease with textual, visual and electronically-mediated literaciesI• problem solving skills using a variety of methods and toolsI• information literacy skills including the ability to access, evaluate, interpret and use information from a variety of sourcesI• the ability to transform information into knowledge and knowledge into judgement and actionI• the ability to work within complex systems and with diverse groupsI• critical thinking skills including analysis, application and evaluationI• reflective thinking and the ability to synthesize information and ideassIResponsible Learners demonstrate:I• intellectual honestyI• civic engagementI• an understanding of the ethical and behavioral consequences of decisionsI	
 effective oral and written communication abilities effective oral and written communication abilities ease with textual, visual and electronically-mediated literacies problem solving skills using a variety of methods and tools information literacy skills including the ability to access, evaluate, interpret and use information from a variety of sources the ability to transform information into knowledge and knowledge into judgement and action the ability to work within complex systems and with diverse groups critical thinking skills including analysis, application and evaluation reflective thinking and the ability to synthesize information and ideas intellectual honesty concern for social justice civic engagement an understanding of the ethical and behavioral consequences of decisions 	
 ease with textual, visual and electronically-mediated literacies problem solving skills using a variety of methods and tools information literacy skills including the ability to access, evaluate, interpret and use informatoin from a variety of sources the ability to transform information into knowledge and knowledge into judgement and action the ability to work within complex systems and with diverse groups critical thinking skills including analysis, application and evaluation reflective thinking and the ability to synthesize information and ideas Responsible Learners demonstrate: intellectual honesty concern for social justice civic engagement an understanding of the ethical and behavioral consequences of decisions 	Course SLO #
 problem solving skills using a variety of methods and tools information literacy skills including the ablity to access, evaluate, interpret and use information from a variety of sources the ablity to transform information into knowledge and knowledge into judgement and action the ability to work within complex systems and with diverse groups critical thinking skills including analysis, application and evaluation reflective thinking and the ability to synthesize information and ideas Responsible Learners demonstrate: intellectual honesty concern for social justice civic engagement an understanding of the ethical and behavioral consequences of decisions 	
 information literacy skills including the ablity to access, evaluate, interpret and use information from a variety of sources the ablity to transform information into knowledge and knowledge into judgement and action the ability to work within complex systems and with diverse groups critical thinking skills including analysis, application and evaluation reflective thinking and the ability to synthesize information and ideas responsible Learners demonstrate: intellectual honesty concern for social justice civic engagement an understanding of the ethical and behavioral consequences of decisions 	
and use information from a variety of sources • the ability to transform information into knowledge and knowledge into judgement and action • the ability to work within complex systems and with diverse groups • the ability to work within complex systems and with diverse groups • critical thinking skills including analysis, application and evaluation • reflective thinking and the ability to synthesize information and ideas Responsible Learners demonstrate: • intellectual honesty • concern for social justice • civic engagement • an understanding of the ethical and behavioral consequences of decisions	
judgement and action • the ability to work within complex systems and with diverse groups • critical thinking skills including analysis, application and evaluation • reflective thinking and the ability to synthesize information and ideas Responsible Learners demonstrate: • intellectual honesty • concern for social justice • civic engagement • an understanding of the ethical and behavioral consequences of decisions	
 critical thinking skills including analysis, application and evaluation reflective thinking and the ability to synthesize information and ideas Responsible Learners demonstrate: intellectual honesty concern for social justice civic engagement an understanding of the ethical and behavioral consequences of decisions 	
 reflective thinking and the ability to synthesize information and ideas Responsible Learners demonstrate: intellectual honesty concern for social justice civic engagement an understanding of the ethical and behavioral consequences of decisions 	
Responsible Learners demonstrate: I • intellectual honesty I • concern for social justice I • civic engagement I • an understanding of the ethical and behavioral consequences of decisions I	
 intellectual honesty concern for social justice civic engagement an understanding of the ethical and behavioral consequences of decisions 	
concern for social justice civic engagement an understanding of the ethical and behavioral consequences of decisions	Course SLO #
civic engagement an understanding of the ethical and behavioral consequences of decisions	
 an understanding of the ethical and behavioral consequences of decisions 	
 an understanding of themselves and a respect for the identities, histories and cultures of others 	

	Marrativa on how th	an anuran will address the Salastad Catagony Contant	
How will each outcome be measured	Ivarrative on now th	ne course will address the Selected Category Content	
(note should mirror (L) Student Learning	Course SLO #	Assessment Tool to be used to measure the outcome	
Outcomes* (SLO) from the course	1		
proposal	2		
	3		
	·	·	
All Liberal Studies courses are required to include perspectives on cultures and have a supplemental reading.			
Please answer the following questions.			
Liberal Studies courses must include			
the perspectives and contributions			
of ethnic and racial minorities and			
of women whenever appropriate to			
the subject matter. Please explain			
how this course will meet this			
criterion.			
Liberal Studies courses require the			
reading and use by students of at			
least one non-textbook work of			
fiction or non-fiction or a collection			
of related articles. Please describe			
how your course will meet this			
criterion.			

Teacher Education Section

- Complete this section only for a new Teacher Education course or Teacher Education course revision

If Completing this Section, Check the Box to the Right:	NOTE: you must check this box if the Course/Program has previously been approved for Teacher Education related items
Course Designations:	
Key Assessments	
•	For both new and revised courses, please attach (see the program education coordinator): • The Overall Program Assessment Matrix • The Key Assessment Guidelines • The Key Assessment Rubric File Modified No files shared here yet. Drag and drop to upload or browse for files
Narrative Description of the	How the proposal relates to the Education Major
Required Content	

Please scroll to the top and click the Page Status if you are ready to take action on the workflow. Please submit an ihelp if you have any questions http://ihelp.iup.edu