

# CHEM 442 plus CHEM 542 Advanced Physical Chemistry-DualList-2019-04-15

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

Form Information



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 ***DRAFT*** 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**” (*not 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*

<b>Proposer*</b>	Ronald See	<b>Proposer Email*</b>	rfsee@iup.edu
<b>Contact Person*</b>	Ronald See	<b>Contact Email*</b>	rfsee@iup.edu
<b>Proposing Department/Unit*</b>	Chemistry	<b>Contact Phone*</b>	7-2361

<b>Course Level*</b>	graduate-level, undergraduate-level
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## Dual Listed Section

<b>Undergraduate Course Prefix /Number</b>	CHEM 442
<b>Undergraduate Course Title</b>	Advanced Physical Chemistry
<b>Undergraduate Course Catalog Description</b>	In-depth exploration and applications of chemical thermodynamics, equilibria, kinetics, quantum mechanics, and spectroscopy.
<b>Graduate Course Prefix /Number</b>	CHEM 542
<b>Graduate Course Title</b>	Advanced Physical Chemistry
<b>Graduate Course Catalog Description</b>	In-depth exploration and applications of chemical thermodynamics, equilibria, kinetics, quantum mechanics, and spectroscopy.

<p><b>What is the Justification for Dual Listing these particular two course?</b></p>	<p><i>Please address the pedagogical reasoning for why these classes can be combined. This should be more than just the content is the same.</i></p> <p>Physical Chemistry II (CHEM 442) is a course taken by juniors and seniors to satisfy the requirements of the Chemistry BS degree, and it is an option for the controlled elective requirement for the Pre-medical, Pre-pharmacy and Interdisciplinary tracks. The Chemistry Department wishes to dual-list this course as CHEM 542, so that graduate students who have not yet taken a second semester of Physical Chemistry can meet their needs.</p>
<p><b>How will the course be structured?</b></p>	<p><i>Briefly explain, how are you specifically maintaining the quality of education for each classification (level) of student in the class?</i></p> <p><b>Lower Level Class</b></p> <p>Evaluation consists of three lecture exams, regular quizzes and homework assignments, and a comprehensive final exam.</p> <p>Quizzes – 15%</p> <p>Assignments – 15%</p> <p>Semester Exams – 50%</p> <p>Final Exam - 20%</p> <p><b>Upper Level Class</b></p> <p>In addition to the undergraduate requirements, the graduate students will be required to use the chemical literature to research a topic from the course, and write a 10-page (minimum) paper giving the background and applications of the chosen topic. The undergraduate requirements will be worth 85% of the graduate grade, and the research paper will be worth 15% of the graduate grade.</p>

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