

BIOC 402 plus BIOC 502-DualList-2018-02-23

- 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*

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*	graduate-level, undergraduate-level
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Dual Listed Section

Undergraduate Course Prefix /Number	BIOC 402
Undergraduate Course Title	Advanced Biochemistry
Undergraduate Course Catalog Description	An examination of biochemical processes with a focus on metabolism. Central pathways are considered in detail, including regulatory mechanisms and hormonal signaling. Other selected processes and integration of mammalian metabolism are explored. Assumes an understanding of concepts relating to structure/function relationships for biomolecules, biological membranes, and signaling included in BIOC 301.
Graduate Course Prefix /Number	BIOC 502
Graduate Course Title	Advanced Biochemistry
Graduate Course Catalog Description	An examination of biochemical processes with a focus on metabolism. Central pathways are considered in detail, including regulatory mechanisms and hormonal signaling. Other selected processes and integration of mammalian metabolism are explored. Assumes an understanding of concepts relating to structure/function relationships for biomolecules, biological membranes, and signaling included in an introductory biochemistry course..
What is the Justification for Dual Listing these particular two course?	Advanced Biochemistry (CHEM 402) is a course taken juniors and seniors to satisfy the requirements of the Biochemistry and Chemistry BS degree programs. The Chemistry Department wishes to dual-list this course as CHEM 502, so that graduate students who have not yet taken a second semester of Biochemistry can meet their needs, and gain a knowledge base that would be appropriate for a Master's degree in Chemistry.. A letter of support from the Biochemistry/Cell & Molecular Biology Group is attached.
How will the	<i>Briefly explain how the course will be structured so that it meets the needs and appropriate level expectations of students.</i>

Lower Level Class

Exams

There will be three regular exams composed of short answer questions, essay-type questions, and problems generally similar to the end-of-chapter problems. Exam items may be drawn from readings or lecture topics. The final exam (100 points) will be the *ACS Biochemistry Exam*. Your highest three exam scores will be used in the grade calculation. Completion of the ACS exam is a required element of the course.

Pre-announced class activities

There will be five pre-announced class activities during the semester. The activities are described under "Learning Strategies for Biochemistry" on D2L. The dates for each activities are included in the "Learning Strategies". You will be given 10 min to complete the work. The objective of the activities is to encourage you to complete important memorization work as we begin the examination of various metabolic topics.

Pop-quizzes

Several pop-quizzes will be given during the class, the pop quizzes will not be announced in advance. There will be no make-up quiz if you miss the class. A sample pop-quiz is included in the "Learning Strategies".

Oral presentation of a review article

You will be assigned a review article related to metabolism by the instructor. All articles are obtainable free online via PubMed or journal websites. You should prepare a 15 minute PowerPoint presentation based on the review. In your presentation, you should:

- a) Provide necessary background information to explain the significance of the area of research.
- b) Explicitly connect the content of the review article to relevant course topics.
- c) Describe how the review article goes beyond what we learned on those topics.

As the time for your presentation is limited, it may be appropriate to focus only on certain aspects of the review ***It is strongly advised that you practice your presentation several times, beginning at least one week before your presentation date.*** A copy of your PowerPoint file must be submitted to the instructor by email on the day of your presentation. Audience participation in these informal presentations is encouraged.

Upper Level Class

Exams

There will be three regular exams composed of short answer questions, essay-type questions, and problems generally similar to the end-of-chapter problems. Exam items may be drawn from readings or lecture topics. The final exam (100 points) will be the *ACS Biochemistry Exam*. Your highest three exam scores will be used in the grade calculation. Completion of the ACS exam is a required element of the course.

Pre-announced class activities

There will be five pre-announced class activities during the semester. The activities are described under "Learning Strategies for Biochemistry" on D2L. The dates for each activities are included in the "Learning Strategies". You will be given 10 min to complete the work. The objective of the activities is to encourage you to complete important memorization work as we begin the examination of various metabolic topics.

Pop-quizzes

Several pop-quizzes will be given during the class, the pop quizzes will not be announced in advance. There will be no make-up quiz if you miss the class. A sample pop-quiz is included in the "Learning Strategies".

Written report and oral presentation

You will be assigned a topic related to metabolism by the instructor. You will carry out searches of the biochemical literature, and develop both a report and presentation based on this review of the original research. The assignment is a written report (minimum of 10 pages) and a 30-minute presentation based on the review. In both the report and presentation, you should:

- a) Provide necessary background information to explain the significance of the area of research.
- b) Explicitly connect the content of the review article to relevant course topics.
- c) Describe how the review article goes beyond what we learned on those topics.

As the time for your presentation is limited, it may be appropriate to focus only on the most salient aspects of the papers included in the report. *It is strongly advised that you practice your presentation several times, beginning at least one week before your presentation date.* A copy of your PowerPoint file must be submitted to the instructor by email on the day of your presentation. Audience participation in these informal presentations is encouraged.

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>