approval net needed by unucl or senate - already a WI course. Contact I Grounts Maron Sowa Email Address ssowa@iup.edu Proposing Dental mentions Tho cherinstry

REQUEST FOR APPROVAL TO USE W-DESIGNATION

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	I. Writing Summary	
	The BIOC 480/490 sequence is proposed (together) as a writing-intensive course. The segmence is taught every year and is required for the BS BIOC degree. It is taken by senior	
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	BIOC majors. This writing intensive sequence is seen as an opportunity for students to practice professional levels of scientific communication - reading scientific naners, writing	
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· -	up procedures, communicating and interpreting/critiquing the results of other scientists, producing scientific publications, and effectively presenting a seminar.	
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II. Course Syllabus

SYLLABUS OF RECORD FOR BIOC 480 (W) BIOCHEMISTRY SEMINAR I

I. CATALOG DESCRIPTION

COURSE TITLE: BIOC 480 Biochemistry Seminar I

NUMBER OF CREDITS: 1 cr (1c-01-1cr)

PREQUISITES:

BIOC 302, 312

thought. Oral and written reports on assigned readings, library, or laboratory research. Guest lecturers. The combination of BIOC 480-490 counts as one writing-intensive course.

II. COURSE OBJECTIVES

BIOC 480/490 serve together as one writing-intensive course. In the first semester, students will gain experience in reading and evaluating biochemical research reports from the literature. This process will involve written assignments as well as leading and participating in group discussions. Students will also attend and evaluate scientific seminars presented by various speakers.

Form the Basis of Journal Club Assignments 6. ___Journal Club Presentations/Written Handouts

4 hours

7.	Writing Assignment 9:	Review of Effective	Scientific
	Communication		

1 hour

8. Writing Assignment 10: Choosing a Topic for your Seminar/Research Paper

1 hour

9. Terminating Activity Scheduled during final exam period

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Writing Assignments 1 -10

50%

Participation in Class Discussions	20%
Journal Club	20%
Seminar Reports	10%
Total	100%

V. EXAMPLE GRADING SCALE

Grade scale for the course is the standard one for the University: A = 90-100%; B = 80-89%; C = 70-79%; D = 60-69%; F < 60%

VI: <u>UNDERGRADUATE COURSE ATTENDANCE POLICY</u>

The attendance policy for this course will be consistent with the university undergraduate

- 1. The ACS Style Guide: A Manual for Authors and Editors, Third Edition, Dodd, J.S., Ed.; American Chemical Society: Washington, DC, 2006
- 2. Biochemistry The Molecular Basis of Cell Structure and Function, A.L. Lehninger, Worth
- 3. "Chemisomotic Coupling in Energy Transduction: A Logical Development of Biochemical Knowledge" P. Mitchell, *Bioenergetics* 3:5-24, 1972.
- 4. The Chemist's Code of Conduct, American Chemical Society, Washington, DC, 1994.
- 5. "Coupling of phosphorylation to electron and hydrogen transfer by a chemi-osmotic type of mechanism." P. Mitchell, *Nature* 191:144-148, 1961.
- 6. The Immortal Life of Henrietta Lacks, Rebecca Skloot, Crown Publishers 2010.
- 7. "Rapid and sensitive method for the quantitation of microgram quantities of protein utilizing the principle of protein-dye binding", Bradford, M.M. Anal. Biochem. 72: 248-254, 1976.

Sample Assignment 1:

Writing a step-by-step laboratory procedure from a published reference. (25 points)

The skill to go from written word to experimental procedure is required for successful laboratory research.

Reference: <u>Bradford, M.M.</u> (1976), "Rapid and sensitive method for the quantitation of microgram quantities of protein utilizing the principle of protein-dye binding", *Anal. Biochem.* 72: 248-254. (attached)

This is a 'methods' paper and we will treat it as instructions on how to do a protein assay (which it actually is). Note that published methods also appear in the hard-cover 'Methods in Enzymology' a classic biochemistry reference updated regularly - currently there are at least 480

	Based on your reading of the reference, what cautions should you make when analyzing your data and results?
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	convenient kit. What analytical advantage(s) does BCA have over Bradford?
	Now pause and reflect on the current day kits available to do all types of laboratory procedures, and the fact that 1976 is a mere 35 years ago. How will things change 40 years from now (well within your life experience)?!
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	 Was the seminar at a level that you could understand it? Did the speaker field questions well?
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	Would you suggest any improvements?
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Ceminar 10	early represented (Date/location/speaker/subject) (0.2 points)
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Summary Chart for Writing Assignments*

	A. Writing Assig	gnments				
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CHECK LIST FOR WRITING-INTENSIVE PROPOSALS

The Liberal Studies Committee's Most Frequently Asked Questions, EL ALTE