FORMAT 7

Submit six copies and one copy and electronic copy to Governance/Faculty Senate Office

(e-mail electronic

REQUEST FOR [illegible] INTENSIVE DESIGNATOR

SUBMITTED BY:

Department: Biology | College/School: CNSM

[illegible] by: Barbara

The attached syllabus must also reflect the following basic elem WRITING INTENSIVE

Pl them directly on the syllab letter. (See Guidelines in this ma .)

B A research paper/proj

C Personal conference with the student at

APPROVALS

Date 12/19/2012

Signature

1. Course Information:

Metabolism and Biochemistry, BIOL 4XX (4)

Meeting Times: Tues 9:45 – 11:15 am, Life Sciences

Wed 2:15 – 5:00 pm

Prerequisites: BIOL 3XX, CHEM 105X, 106X.

2. Instructing Staff:

Ph.D., Associate Professor of Biology (Neurophysiology)

Office: Arctic Health Research Building

betaylor@alaska.edu

Office hour: 2-4pm or by appointment

Teaching Assistant, graduate student in biology

Office: Arctic Health Research Building

E-mail: astudent@alaska.edu

Office hours: TBA

3. Course Readings/Materials:

Blackboard [illegible]. Students are [illegible]

their university-assigned email address [illegible]@alaska.edu) on a regular basis.

a cor[illegible]tstone of current biology. Using this [illegible] will gain an [illegible]

conduct their own biology.

investigat[illegible] through th[illegible]

carbon, nitrogen, and lipid metabolism, structure an[illegible]

The goal of this course is to provide an understanding of

periods as well as during times they
data collected to date
Nov. 21
data blitz – presentation of

Blackboard Page. Several learning resources will be available on the course Blackboard Page:

a. A copy of the lecture slides will be posted just prior to class.

b. A manual for *C elegans* culture in the UAF laboratory will be posted.

c. Answers to the exam questions will be posted on Blackboard after the exams have been completed and graded.

d. The course Blackboard Page will contain links to other instructional and informative pages on biochemistry. Some of these will include practice quizzes and short movie clips, which are especially good learning aids.

e. A copy of this syllabus and the course calendar will be posted separately on Blackboard.

guidelines for acceptable and unacceptable behavior.

Honesty is a primary responsibility of you and every other UAF student. The following are common guidelines regarding academic integrity:

1. Students will not collaborate on any quizzes or exams that will contribute to their grade in a course, unless permission is granted by the instructor of the course. Only those materials permitted by the instructor may be used to assist in quizzes and exams.
2. Students will not represent the work of others as their own. A student will attribute the source of information not original with himself or herself (direct quotes or paraphrases) in compositions, theses and other reports.
3. No work submitted for one course may be submitted for credit in another course without the explicit approval of both instructors.

Alleged violations of the Code of Conduct will be reviewed in accordance with procedures specified in regent's policy, university regulations and UAF rules and procedures. For additional information and details about the Student Code of Conduct, contact the Dean of Student Services or web www.alaska.edu/bor/ or refer to the student handbook that is

10. Course Calendar (subject to change)

Principles of Metabolism and Biochemistry **Biology 303 Fall 2012**

Section I. *C elegans* a model for biological research

1. Sept. 5 Class introduction
2. Sept. 12 *C elegans* biology

Ecology of *Caenorhabditis* species, Kiontke et al 14pp

Intermediary metabolism, Braeckman et al 24pp

3. Sept. 19 Trends in *C elegans* research

Three recent reviews will be selected and pdfs posted on Blackboard

Section II. Molecular properties of biomolecules

Capstone Project in Biological Sciences

The intent of the Biological Sciences capstone project is to integrate a range of knowledge and skills learned in previous courses, including scientific knowledge, quantitative literacy, and communication skills, and to apply these products of the university education to a creative activity. For a biologist, a fundamental expression of applied knowledge, creativity, and

critical reasoning is to engage in scienti fic inquiry.

Rubric for Undergraduate Research in Metabolism and Biochemistry Capstone Project

Final Evaluation of Capstone Project by Course Instructors (=Research Supervisor)

To be completed by student

Student's name _____ Date _____

Capstone Project Title _____

_____

Research Supervisor _____

To be completed by Research Supervisor

	Yes (excellent)	Somewhat (adequate)	No (inadequate)
1. Does the capstone paper represent the student's own scientific research?			
2. Does the capstone paper make a compelling argument for the significance of the student's research within the context of the current literature?			
3. Does the capstone paper clearly articulate the student's research goals?			
4. Are the methods appropriate given the student's research agenda?			
5. Is the data analysis appropriate and accurate?			
6. Does the thesis skillfully interpret the results?			