

Senior Thesis (BIO 400) Course Syllabus

Spring Semester 2011

Course Description

This course culminates the process that began with Introduction to Scientific Research (BIO200). In the Senior Thesis course, senior Biology majors will organize and present their own previously obtained research data or proposal in two formats – a poster and a research paper or proposal. The course will emphasize presentation-enhancing computer software, technical aspects of scientific writing, and speaking before critical audiences. Publication-quality written reports describing the research project will be completed in the course. In addition, formal poster presentations of research data or proposals will be given for evaluation by Biology faculty as well as your research mentor.

Instructors (name, office, phone, email, meeting place)

Karl Kleiner	Wendy Boehmler	Jeffrey Thompson	Bradley Rehnberg	Bruce Smith	David Singleton
Annex 207	LS212	LS 233	LS 226	LS 236	LS 230
ext.: 1754	ext.: 6637	ext: 1946	ext.: 1262	ext: 1263	ext: 1280
kkleiner@ycp.edu	wboehmler@ycp.edu	jthomps@ycp.edu	brehnber@ycp.edu	bsmith@ycp.edu	dsinglet@ycp.edu
CH 302*	CH 102	CH 103*	Wolf 410	WOLF 314*	A200

* smart room

Textbook

NONE, however a Senior Thesis Course Packet is available on-line at:

<http://faculty.ycp.edu/~kkleiner/SeniorThesis/SeniorThesis.htm>

Student Scholarship Day URL <http://groups.ycp.edu/scholarsweek/>

Meeting Time & Place

Monday, 5:00 - 5:50 pm; See individual instructors above for place.

Grading Criteria

Progress Report	10%
Journal article presentation	10%
Poster Introduction	5%
Poster Template/Layout	5%
Poster Presentation for Bio. Dept	30%
Poster Presentation for Scholarship Day	Mandatory
Written Report/Paper	40%

90-100 %	4.0	75-79.99%	2.5	Below 60%	0
85-89.99 %	3.5	70-74.99 %	2.0		
80-84.99 %	3.0	60-69.99 %	1.0		

Progress Report

During the second and third class periods of Senior Thesis you will be giving your progress report in front of two class sections and two instructors. The Progress Report is now a graded activity! It is possible to earn a '0' on your Progress Report and still enter Senior Thesis. However, if you earn a low score on your Progress Report, you will be required to provide a second presentation in front of a full faculty panel. The date for all second presentations will be on Friday, February 11th, time and place to be announced. Successfully entering into Senior Thesis after a satisfactory second presentation will not change the grade of your first Progress Report.

Attendance Policy

Because we only meet once a week for 50 minutes, attendance in all BIO 400 classes is **mandatory**. In addition, individual appointments with your specific thesis instructor should be promptly attended. There is much to be done and little time in which to do it! In the event of an emergency or dire personal tragedy, please notify your instructor immediately and be prepared to present written documentation of your absence. **One** unexcused absence or carelessly missed appointment will illustrate that a student is not yet prepared for the Senior Thesis experience. In this event, the student will be dismissed from the course with a grade of 0.

Writing Standards

York College recognizes the importance of effective communication in all disciplines and careers. Therefore students are expected to competently analyze, synthesize, organize and articulate course materials in papers and presentations. In addition, students should know and use senior-level communication skills, recognize the need for revision as part of their writing process, and employ standard conventions of English usage in both writing and speaking. Students may be asked to further revise assignments that do not demonstrate effective use of these communication skills.

Examinations

To assess the general knowledge of York College biology majors, a standardized biology exam called the Major Field Test generated by the Educational Testing Service (ETS) will be administered. A student's performance on this exam WILL NOT be part of the grading criteria for this course. It is merely an instrument to evaluate the overall knowledge of our Biology majors. Each Senior Thesis student is **required** to take this examination. **The test will be administered on Monday, April 4th (5:00 – 8:00 PM)**. It is **mandatory** that every Biology Senior Thesis student takes the Major Field Test during this time. Your Senior Thesis grades will be withheld until the MFAT is completed.

In addition, graduating seniors are required to complete an Exit Survey. If you are not graduating this semester, you must take the Exit Survey during the designated Senior Thesis time slot the semester that you do graduate.

Homework

For scheduled computer workshops, students will be expected to complete various homework exercises. These exercises will comprise a percentage of the student's final grade (see grading criteria).

Evaluation of Senior Thesis Poster Presentation

Poster evaluations by the student thesis mentor will be worth 50% of the poster grade. In addition, at least two faculty members, representing both the molecular and the organismal disciplines of our curriculum, will also evaluate the poster. Evaluations from all faculty other than the mentor will be worth 50% of the poster grade. Combined, the evaluations represent 30% of the final course grade. The evaluation criteria for the posters will be made available at a later date in the semester.

The Distinction Between Instructors and Mentors

Your Senior Thesis *instructor* is the faculty member who evaluates your progress and your final products (poster and paper) during BIO 400. Your Senior Thesis *mentor* is the faculty with whom you have developed a close working relationship while working on your Senior Thesis research/proposal before you have enrolled in BIO 400. Your instructor during BIO 400 need not be your mentor. If your mentor is one of the thesis instructors, he or she can fill both roles.

This syllabus is subject to revision by the instructors

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Spring Semester, 2011**

Date	Activity/Assignment	Meeting Place/ Instructor	% of Final Grade
Mon. 1/24	Group Meeting & Assignment of students to Senior Thesis Instructors	CH 302 All Faculty	
Mon. 1/31	Progress Report	TBA/2 instructors/	10%
Mon. 2/7	Progress Report	TBA/2 instructors	10%
Mon. 2/14	Journal Article Presentation	TBA/2 instructors	10%
Mon. 2/21	Journal Article Presentation	TBA/2 instructors	10%
Mon. 2/28	✧ Winter Break ✧		
Mon. 3/7	York College scientific writing format: Original Research vs. Research Proposal	Singleton/Kleiner CH 103/ CH 302	
Monday 3/14	Advice about posters and their presentation	Rehnberg, CH 302	
Mon. 3/21	Computer Workshop – Using Microsoft PowerPoint to create a poster	Thompson HUM 15	Poster Introduction (5%) Due to Instructor
Mon. 3/28	<i>Success After College Seminar</i>	West Campus Alumni Hall	
Mon. 4/4	Major Fields Test in Biology 5:00 – 8:00 pm	HUM 15	
Mon. 4/4	Poster Template Due to Instructor Clear through Mentor First	Individual instructors	5%
No formal class meetings after 4/4			
Friday 4/8	<i>Deadline for submitting abstracts for Scholarship Day</i> http://www.ycp.edu/academics/scholars.htm		
Fri. 4/15	<i>Deadline for Printing Posters at the Library</i>		
Mon. 4/25	Spring Vacation		
Week of 4/26– 4/29	Biology Department Senior Thesis Poster Session (Specific schedule TBA)	Life Science, 2 nd Floor Hallway	30%
Mon. 5/2	Student Scholarship Day	Campbell Hall	
Mon. 5/2	Written papers due		40%

**ACADEMIC INTEGRITY IN THE YORK COLLEGE
DEPARTMENT OF BIOLOGICAL SCIENCES**

Science and the teaching of science represent a search for truth and they rest on ethical behavior and intellectual honesty. As such, both the Department of Biological Sciences and York College of Pennsylvania unequivocally condemn academic dishonesty. Academic dishonesty is defined in the York College Student Handbook as cheating, plagiarism, fabricating research, falsifying academic documents, etc. and includes all situations where students make use of the work of others and claim such work as their own. Because the Department of Biological Sciences maintains high expectations for all students and is committed to stringent standards of academic integrity, we contend that all published information, in any form, must not be used unless rigorously paraphrased and properly cited. Moreover, all tests, projects, assignments, and lab reports require a solo effort unless specifically noted otherwise by the instructor. This means that the sharing of text, images, tables, figures, or data analyses with classmates is a breach of academic integrity. Furthermore, providing such information to others will be considered as dishonest as accepting or taking the information.

Work done in lab may involve partners, but the formal partnerships end when the laboratory period ends. At the end of a lab, each partner should leave with his or her group's protocols, hypotheses, data, and any information about procedural problems. Once the in-lab work is completed, the work shifts from a group effort to a solo effort. This does not mean that students shouldn't discuss lab concepts, problems, and general strategies and broad interpretations. Talking about science is healthy and is encouraged. And, it is understood that lab groups may obtain similar or identical quantitative data for a given project. In the end, however, data analyses and report writing as well as the overall presentation and interpretation of these data are to be done independently by the individual and not by the group.

If work submitted by two or more students appears unexplainably and unreasonably similar, or if credit for previously published information or ideas is not given through literature citation, academic dishonesty will be assumed. In this event, the instructor will provide written notification to the student, the Department Chair, and the Dean of Academic Affairs of the charge and the sanction. Documentation related to instances of academic dishonesty will be kept on file in the student's permanent record. If the academic dishonesty is the student's first offense, the instructor will have the discretion to decide on a suitable sanction up to a grade of 0 for the course. The faculty member may request that the Student Welfare Committee conduct a hearing and decide on the sanction, which can involve academic suspension or dismissal from the College, if the faculty member believes the offense to be of an extremely egregious nature.

If the Dean of Academic Affairs determines that the breach of academic integrity is the student's second offense, the Dean will provide written notification to the student, the instructor, and the Department Chair. The Student Welfare Committee will automatically conduct a hearing to review the charge and decide on an appropriate sanction, which will involve academic suspension or dismissal from the College. Students are not permitted to withdraw from a course in which they have been accused of academic dishonesty.

If questions about academic integrity arise, see the course instructor before completing and submitting your work. In addition, specific information about the York College of Pennsylvania Academic Integrity Policy can be found in the most recent edition of the Student Handbook.

Sign below:

Student's Name: (Please Print) _____

I, _____, have read this statement and the syllabus for this course and I understand and accept departmental and college expectations of academic integrity and ethical conduct.

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