BIOLOGY 490 and 490A : SENIOR PROJECT: Fall 2007

John R. Thomlinson

Monday-Wednesday, 11:30 – 12:45 am, TBA. Prerequisite: Senior Standing

Text: Day, R.A. and B. Gastel. 2006. How to Write and Publish a Scientific Paper. 6th Ed. Greedwood Press, Westport, CT USA.

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Office Hours: M 1:00 – 3:00 pm, Tu 1:30 – 3:30 pm

This course is a capstone experience course that will capitalize on many of the skills developed by a student over his or her biology career at Dominguez Hills.

Attendance is required for each class session, because I firmly believe that education works best when everyone participates. I will allow three unexcused absences: after that, any absences must be approved by me in advance. Each additional unapproved absence will carry a charge of 2 percentage points. I encourage questions in class, and from time to time we will have discussion sessions on an assigned journal article. **READ** all assigned chapters before coming to class. I know that all of you have very full schedules, but you will gain much more from the class sessions if you have some background knowledge of the topics to be covered, and you will, I hope, have questions about specific areas. All assignments will be due one week from the day announced. I do not allow make-up work unless there are compelling reasons (medical emergency, etc).

Grades will be assigned on a standard scale:

94 - 100: A	73 - 76: C
90 - 93: A-	70 - 72: C-
87 - 89: B+	67 - 69: D+
83 - 86: B	60 - 66: D
80 - 82: B-	0 - 59: F
77 - 79: C+	

Points will be awarded as follows:

Exam:	10%
Assignments:	30%
Oral Presentation	30%
Term Paper:	30%

Academic Integrity: Cheating or plagiarism is subject to discipline as provided in Title 5, California Code of Regulations. See the University Catalog under Academic Integrity for further information. In particular, it is important to cite all your sources on assignments. If you have any questions on how to do that, please ask me.

CSUDH adheres to the Americans with Disabilities Act with respect to providing reasonable accommodations for students with temporary and permanent disabilities. To receive accommodation, students with disabilities must register with campus Disabled Student Services. For further information, access the University Catalog, Campus Services, Disabled Student Services.

Course Learning Objectives

At the successful completion of the class, the student will be able to:

Demonstrate a solid knowledge base in the following central areas of biology: biodiversity, cell biology, ecology, evolution, genetics, physiology

Analyze and interpret quantitative biological data using statistical methods;

Communicate scientific information through written work in a variety of formats, and through oral presentation

Discuss the relevance of scientific research to society from a historic and a modem perspective, including the ethical implications of scientific research and of new technology; and

Find, read, understand, critically evaluate, summarize, and use information in the scientific literature.

CLASS SCHEDULE

Day	Date	Class	Topics	Readings *
M	Aug 27	1	Introduction to the class	
W	Aug 29	2	Refresher on scientific literature	Chapter 1-6
M	Sep 3	--	**Labor Day**	
W	Sep 5	3	Dataset analysis	Chapter 16, 17
M	Sep 10	4	Dataset analysis	Chapter 16, 17
W	Sep 12	5	Overview of a scientific paper	Chapter 7-15
M	Sep 17	6	Overview of a scientific paper	
W	Sep 19	7	Analysis of a scientific paper	
M	Sep 24	8	Analysis of a scientific paper	
W	Sep 26	9	Writing a review paper	Chapter 23
M	Oct 1	10	Writing an op-ed piece	Chapter 24, 26
W	Oct 3	11	How to prepare oral presentations	Chapter 27
M	Oct 8	12	Poster presentations	Chapter 28
W	Oct 10	13	Writing style	Chapter 30-34
M	Oct 15	14	Writing style	
W	Oct 17	15	Writing style	
M	Oct 22	16	Oral presentations to class	
W	Oct 24	17	Oral presentations to class	
M	Oct 29	18	Writing a CV	
W	Oct 31	19	Writing a thesis	
M	Nov 5	20	Review of biological concepts	
W	Nov 7	21	Review of biological concepts	
M	Nov 12	--	**Veterans Day**	
W	Nov 14	22	**Exam – mock GRE**	
M	Nov 19	23	Writing a grant proposal	
W	Nov 21	24	Writing a grant proposal	
M	Nov 26	25	Discuss drafts	
W	Nov 28	26	Discuss drafts	
M	Dec 3	27	Science and society	
W	Dec 5	28	Science and society	

* Readings **must** be read **prior** to coming to class

The instructor reserves the right to change the schedule as necessary.