

## Senior Seminar BSC 4931–U06 (83536)

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Fall 2016, Wednesday – 2:00 – 3:15pm, GC283B

Office : OE 224

Office Hours: Mondays, 1:00 – 3:00pm

Tuesdays, 4:00 – 6:00pm

**Course Description:** A one-credit seminar course designed for senior biology and marine biology majors to develop (or further refine) skills in conducting scientific research and public speaking, and in preparation for advancement either to graduate school or job seeking. The general topic for the research paper is: **the issues that impact conserving threatened species/habitats/ecosystems and sustainably utilizing natural resources from modern perspectives (i.e. genetics, habitat preservation/management, ecological interactions).**

**Course Objectives:** To write a clear and articulate research paper, starting with choosing a topic to completing a properly cited paper. You will then share these results with the class in the form of an oral presentation worthy of a scientific meeting or job talk. In addition, you will write a Curriculum Vitae (~ *Resume*), as well as sharpen your interviewing skills.

### **Learning Outcomes:**

1. Be able to search the scientific literature in order to research a topic of interest, and to discern between original research, review papers and tertiary sources.
2. Be able to write a scientific paper in an appropriate style.
3. Be able to give a professional presentation of the research, respond to questions raised by the audience, and accept constructive criticism.
4. Be able to constructively critique oral presentations.
5. Increase understanding of how to write an effective *CV/Resume*.

**Textbook:** none required, but the following suggested:

- Jan Pechenik, *A Short Guide to Writing About Biology*, 7th ed., Pearson-Longman

**Grade Scheme:** A: 90-100

B+: 87-89

B: 80-86

C+: 77-79

C: 70-76

D: 60-69

F: <59

No curving, no rounding up.

**Grade Breakdown:**

- I. Attendance - 10%
- II. Curriculum Vitae/*Resume* - 5%
- III. Presentation - 25%
- IV. Research Paper - 45%
- V. ETS Major Field Test in Biology - 5%
- VI. Class Activities – 10%

**I. Attendance (10%):** Attendance is mandatory since this is a seminar course. Both your presence and in-class contributions are important. One excused absence is permitted (i.e. documented hospitalization, documented death in immediate family).

**II. Curriculum Vitae/*Resume* (5%):** A well thought out CV/*Resume* will be submitted and reviewed in class (and privately, if desired). Corrections and resubmission as necessary. Late submissions lose 1% per day.

**III. Presentation (25%):** This will be a 10-12 minute oral presentation of your research paper, with a 3-5 minute Q&A. Your peers will complete anonymous evaluations of your presentation and will assess areas such as: content, effectiveness of delivery, visual aids, and ability to answer questions. Only my evaluation will comprise your grade. Late submissions lose 5% per day it is late.

**IV. Research Paper (45%):** Write a 10-12 page research paper based on scientific literature (using primary literature and possibly 2-3 review papers for deeper understanding), minimum 10 citations. A minimum of 7 citations must be from 2010-present. Your final submission will include an abstract, the paper (properly referenced) and a list of references.

- topic (5%).....due 14 Sep.
- general outline of paper (1 page; 5%).....due 21 Sep.
- detailed outline of paper (2-3 pages) &  
list of references (3rd or 4th page; 5%) due 28 Sep.
- final paper (30%)..... due **day of your PPT talk**

Format references following: “**The American Journal of Botany**”

PRITCHARD, J. K., M. STEPHENS, AND P. DONNELLY. 2000. Inference of population structure using multilocus genotype data. *Genetics* 155: 945-959.

Within the text, cite as: (Pritchard et al., 2000). If it is two authors only, both last names are used: (Balcazar and Douge, 2011). A single author: (Inouye, 2014).

12pt font, double spaced, stapled, hard copy handed in at the beginning of class on the due date and on-line submission to **turnitin.com** at ‘end of semester’. Late submissions of hard copy paper lose 1% per day it is late. Failure to submit paper to **turnitin.com** will result in a 20% grade mark down.

***You are by no means allowed to recycle a paper you wrote for another class. If you do, this will count as a zero. This is to be an original piece of work.***

**V. ETS Major Field Test in Biology (5%):** Nationally scored exit exam for Biology and Marine Biology majors. It is a two-hour, multiple choice, on-line test graded by the Educational Testing Service that allows you to see how you rank nationally against your peers. Links for more information: [detailed description](#) and [sample test questions](#)

**VI. Class Activities (10%):** This will include any and all in-class activities that we perform, such as end of class quizzes on the material/discussion covered that day, and presentation evaluations.

**Personal Expectations:**

**Cell phone use** - There is none. No calls, no texting, no online video gaming/shopping/Amazon priming/Facebooking/YouTubing nothing. If you have some kind of emergency situation talk with me before class. Otherwise, no excuses. Turn it off.

**Be respectful** - There are 19 of us in this room. Everyone deserves (and is encouraged) to participate in our discussions. Please do not have side conversations - if you have something important to say, I would like everyone to benefit from your wisdom or question. If it is not important, save it for when you are out of class. When tempted, imagine how you would feel if I was having a conversation with your neighbor during your presentation...

**Academic Honesty** - Florida International University is a community dedicated to generating and imparting knowledge through excellent teaching and research, the rigorous and respectful exchange of ideas, and community service. All students should respect the right of others to have an equitable opportunity to learn and honestly demonstrate the quality of their learning. Therefore, all students are expected to adhere to a standard of academic conduct, which demonstrates respect for themselves, their fellow students, and the educational mission of the University. All students are deemed by the University to understand that if they are found responsible for academic misconduct, they will be subject to the Academic Misconduct procedures and sanctions, as outlined in the *Student Handbook*. In addition, any student found in violation of these academic standards, including any amount of plagiarism, will earn an automatic F and be reported to the Deans Office, no exceptions. Please see FIU's policy on academic honesty, as shown in the Academic Affairs Policies and Procedures Manual (<http://academic.fiu.edu/polman/sec2web.htm> - two-forty-four)

**Schedule of Classes\*\*:**

<b>DATE</b>	<b>WHAT'S HAPPENING</b>	<b>DUE DATES</b>
26 Aug.	Introduction, research topics	Select presentation dates
31 Aug.	Choosing your topic & researching w/ Web database resources (i.e. 'Web of Science')	
7 Sep.	How to interpret peer-reviewed Journal articles	
14 Sep.	Writing a science paper	Topic due (office/mailbox)
21 Sep.	Research Paper format & guidelines	General outline due
28 Sep.	Giving a science talk	Detailed outline due
5 Oct.	Student meetings to review 1 <sup>st</sup> drafts	American Journal of Botany paper 'hard-copy' due
12 Oct.	Presentations (x4)	Presenter's papers due
19 Oct.	Presentations (x4)	Presenter's papers due
26 Oct.	Presentations (x4)	Presenter's papers due
2 Nov.	Presentations (x4)	Presenter's papers due
9 Nov.	Presentations (x3)	Presenter's papers due
16 Nov.	Writing (CV)/Resume	
23 Nov.	Interview skills & mock sessions	
30 Nov.	Interview skills & mock sessions	CV/Resume due
7 Dec.	ETS Major Field Test in Biology - TBA	

**\*\*Syllabus and/or schedule is subject to change at professor's discretion.\*\***