

BSC 4931: Senior Seminar; Section U12

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Office Hours: Tuesday/Thursday 1:30-4:30 pm Wednesday 1:30-3:30 pm  
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### **Course Description and Purpose**

The capstone seminar course for senior level biology and marine biology majors is designed to help you integrate a variety of skills that you should have acquired during your undergraduate studies. This will happen by selecting a topic and reviewing the literature on this topic and creating a professional scientific presentation to share your research. Reading and understanding scientific literature and developing public speaking skills will prepare you for interviews, graduate school and succeeding in the professional world.

### **Course Objectives**

To write a clear and fluent review of the literature that synthesizes current scientific knowledge, beginning with selecting a topic to completing an accurately cited (referenced) paper. You will then present your topic with the rest of the class in an oral presentation of a standard acceptable for a podium presentation at a scientific meeting or a job talk. You will also create (or edit) your Curriculum Vitae (and resume).

### **Course Themes**

Any biological topic that can be investigated using the resources available at "A Modern Zoo". I intend that we will visit our local zoo ZooMiami and also enjoy the opportunity to interact (virtually) with zoo professionals.

### **Learning Outcomes**

You will be able to:

1. Search the scientific literature for a specific topic
2. Distinguish between original research, review papers, and the popular press
3. Integrate experimental findings and scientific thought into a coherent, fluid and thoughtful review of the literature.
4. Give a professional presentation of your research and respond to questions raised by the audience.
5. Constructively critique oral presentations
6. Prepare (design and write) an effective CV or improve an existing one

## Textbook

None required. Online resources and recommended texts may be shared during the semester.

## Grading Scheme

Letter	Range%	Letter	Range%	Letter	Range%
A	90+	B	80 - 85	C	70 - 75
A-	88-90	B-	78-80	D	60 - 65
B+	86 - 88	C+	76- 78	F	59 or lower

## Distribution

1. Attendance 10%
2. Curriculum Vitae 5%
3. Seminar/Talk Attendance 5%
4. Presentation 30%
5. Research Paper 40%
6. ETS Major Field Test in Biology 5%
7. Class Activity 5%

**Presentations:** 10-12 minute oral presentation of the research paper with a 3-5 minute Q&A. The other students will complete anonymous evaluations of your presentation assessing content, effectiveness of presentation style, audio-visual aids and the ability to respond to questions. Evaluations (which will count as participation) will be made on a check sheet and submitted the day of the presentations. Participation will also consist of asking the presenter thoughtful questions.

**Research Paper:** Write a 10-12 page research paper based on the scientific literature using a minimum of 7 primary literature articles and maybe 2-3 review papers – minimum 10 citations. Your final submission will include the paper (properly referenced within the text) and a list of references.

1. Topic (2%).
2. General outline consisting of one page and five references (5%).
3. Detailed outline consisting of two-three pages (5%) and a list of references (3%).
4. Final paper (25%).

We will discuss the formatting of both references and in-text citations.

Font – 12 with 1.5 line spacing.

## Important Information

Before starting this course, please review the following pages:

- [Accessibility and Accommodation](#)
- [Academic Misconduct Statement](#)

## Course Calendar

August 20 Introductions, interests and talk about research topics.

August 27 Topics that are investigated "At the Modern Zoo"  
Electronic/database resources

September 03 FIU closed. No class. Labor Day.

September 10 Reading and interpreting scientific papers.

September 17 Reading and interpreting scientific papers

Weekend September 22/23 – Visit to Zoo Miami??

September 24 Reviewing and writing a CV and discussion of the ETS test

October 01 Creating an effective Presentation

October 08 Writing a scientific paper/giving a scientific talk

October 15 Eight mini-presentations

October 22 Eight mini-presentations

October 29 Presentations (4).

November 05 Presentations (4).

November 12 Observance of Veterans Day. FIU closed. No class

November 19 Presentations (4).

November 26 Presentations (4).

November 28 – Final papers due

December 03 ETS Major Field Test in Biology (Time and location TBA)

\*The professor reserves the right to change or modify the course calendar and syllabus at any time during the semester.

