

# BIOL 6000 – Marine Biology

Summer 2013 Syllabus Meets: M F: 8:00 am – 10:50 am

**CATALOG DESCRIPTION:** An examination of coastal and oceanic organisms and the factors which structure marine systems.

## **COURSE OBJECTIVES:**

During this course, students will:

- a. Describe the physical characteristics and biodiversity of various marine habitats;
- b. Identify ~~and~~ play lives.

## **COURSE MATERIALS:**

Textbook: Levinton, J.S. (2009) Marine biology: function, biodiversity, ecology. 3rd Ed. New York, Oxford UP.

Supplemental Book: Lalli and Parsons (1997) Biological Oceanography, an introduction. 2<sup>nd</sup> Edition. The Open University. <http://site.ebrary.com/lib/valdosta/docDetail.action?docID=10251250>

Additional readings from primary literature will be posted to Blazeview throughout the semester. Textbook readings are to be completed before class in order to be able to participate in class activities. Homework and exam questions will be based on readings as well as in class material. The supplemental book is available as a free ebook and an additional resources to aide in your learning.

**INSTRUCTIONAL ACTIVITIES:** Learning is not a passive activity in which you simply absorb and repeat back facts given ~~and~~ be

**GRADING PROCEDURES:** Letter grades will be assigned based on the following tables:

| <b>Course Component</b>     | <b>% of Course Grade</b> |
|-----------------------------|--------------------------|
| Exams                       | 60%                      |
| Teaching Session            | 25%                      |
| In Class Activities/Quizzes | 15%                      |
| <b>Total</b>                | <b>100%</b>              |

**Final Letter Grade**

A: 90 – 100%

B: 80 – 89%

C: 70 – 79%

D: 60 – 69%

F: < 60%

**Exams:** There are three exams scheduled throughout the semester; each will cover the material from the end of the previous exam through the current exam. Each exam will be worth 20% of your final grade. While exams are not labeled as cumulative, concepts that are connected throughout the course are fair material for exams. The final

**ACADEMIC HONESTY POLICY:** Cheating, plagiarism (submitting another person's material as one's own, or

## Tentative Topics and Reading Assignments

| Day           | Topic                                  | Textbook Reading                       | Supplimental   |
|---------------|--|--|----------------|
| 1             | Course Introduction and Ecology Primer |  |                |
|               | <b>Life in the Water Column</b>        |  |                |
| 1             | Properties of seawater                 | Ch 2;pg 18 22                          |                |
| 2             | Life in a Fluid World                  | Ch 5;<br>Ch 13 pg 297 300              |                |
| 2             | Oceanography                           | Ch 2; pg 22 29                         | L&P Ch 2       |
| 3             | Life in the Plankton                   | Ch 7                                   | L&P Ch 3       |
| 3             | Patterns of Primary Production         | Ch 9                                   |                |
| 4             | Zooplankton and Nutrient Cycles        | Ch 10                                  | L&P Ch 4/5     |
| <b>21 May</b> | <b>Exam 1</b>                          |  |                |
| 5             | Nekton                                 |  | Handout        |
| 6             | Waves, Currents and Tides              | Ch 2; pg 33 37                         |                |
|               | <b>Life in Intertidal Habitats</b>     |  |                |
| 6             | Intertidal Communities                 |  | L&P Ch 8.1     |
| 7             | The Rocky Intertidal                   | Ch 14; pg 309 327<br>Ch 6; pg 118 138  | L&P Ch 8.2     |
| 7 8           | Soft Sediment Communties               | Ch 14; pg 327 330<br>Ch 13; pg 283 295 | L&P Ch 8.4     |
| 8             | Estuaries                              | Ch 14; pg 349 355<br>Ch 2; pg 37 38    | L&P Ch 8.5     |
| 9             | Salt Marshes                           | Ch 14 335 343                          |                |
| <b>29 May</b> | <b>Exam 2</b>                          |  |                |
|               | <b>Life in Subtidal Habitats</b>       |  |                |
| 10 11         | Coral Reefs                            | 15                                     | L&P Ch 8.6     |
| 11            | Seagrass beds and Kelp Forests         | 15                                     | L&P Ch 8.3     |
| 12            | Deep Sea & Chemosynthetic Communities  | 16                                     | L&P Ch 8.8 8.9 |
|               | <b>Humans and the Sea</b>              |  |                |
| 13            | Marine Invasions                       | 17                                     |                |
| 13            | Marine Reserves                        | 17                                     |                |
| 14            | Marine Fisheries                       | 18                                     |                |
| 15            | Ocean and Climate Change               | 19                                     |                |
| <b>6 Jun</b>  | <b>Final Exam</b>                      |  |                |

The schedule of topics is tentative and may be changed, however exam dates are set as written

Note: Chapt 3 provides a basic primer to ecological terms and concepts. If you have not had BIOL 3250, or it's been a while since thinking ecologically, you should review this chapter.