

## **AQUATIC ECOLOGY (PCB-3442)**

**Spring 2018**

### **SYLLABUS**

**COURSE DESCRIPTION:** Aquatic Ecology PCB-3442 is a general introduction to freshwater ecology. The course covers (in various amounts of detail): freshwater systems of the world, properties of water, biodiversity and diversification of freshwater organisms, adaptations to aquatic life, physiology, sensory ecology, trophic ecology, and conservation and management.

**LECTURES:** Two 1 hr 20 min lectures per week: to be defined

**DEMONSTRATIONS:** Conducted during class times

**PROFESSOR:** Dr. Will Crampton

**CONTACT:** ROOM 402A

**E-MAIL:** [crampton@ucf.edu](mailto:crampton@ucf.edu)

**OFFICE HOURS:** 130-230 pm Tuesdays

**CLASS WEBSITE:**

Lectures and announcements to be posted on Webcourses

**LECTURE NOTES:**

Will be posted AFTER lectures (typically the same day) in PowerPoint format

**REQUIRED TEXT:** *No textbook is required*

**GRADING SCALE:**

**A**= 90-100, **B**=80-89, **C**=70-79, **D**=60-69. **F** = below 60.

**GRADING BREAKDOWN:**

EXAM 1 = 25%

EXAM 2 = 25%

TERM PAPER = 20%

NOTES ON DEMONSTRATIONS = 5%

FINAL EXAM = 25%

**"Curving"**

Curves may be applied to exams. Students who achieve over 100% in exams 1 or 2 due to curving will have those points "rolled over" to next exam.

**Exams 1 and 2** are multiple choice.

**Final exam:** Multiple choice and short answers/multiple choice

**Scantron sheets for exams:** I will provide them for you at the time of each exam.

**Demonstration Notebook:** Write notes on during demonstrations, including web resources (including audio visual presentations). Keep notes on blank sheets of paper (letter size) and use a pencil. Maximum 1 page per demonstration. Summarize what you learned.

**Term Paper:** You will pick an aquatic ecology-related subject of interest to you and conduct a literature-based review. Do not replicate your term papers with material from any other class.

**Abstract:** Title and 50 word abstract for Dr. C's approval.

**Format for Term paper:**

Minimum **6** pages. Maximum **10** pages, including 200 word (maximum) abstract.

Use 12 point Times New Roman. Single spaced.

Title and abstract on first page.

Type your term paper and submit to me via Turnitin.com (*details to be announced later in semester*).

You are allowed no more than six figures. Embed figures in text near the point at which they are first mentioned. Number them in order of first mention.

You are allowed up to 4 tables. These should be placed at the end of the paper. They do not count in the page count (i.e. you are allowed 10 pages of text and then four pages of tables as well).

You are allowed an unlimited number of references. These do not count in the page count.

No appendices or other supplementary documents should be included.

The paper should be formatted approximately as a scientific journal (more information to be provided in class).

Title, abstract, introduction, then divide paper into headings (with no more than two levels of subheadings: 1., 1.1., 1.1.i.) and have a summary. Then add References, and finally figures.

We will discuss how to find and cite bibliographic information in class.

I will post A TEMPLATE for the formatting around week 5

**OTHER INFORMATION:**

**Make-up policy:** Exams can only be made up for valid, documented reasons. You must contact me in advance concerning allowable university events (sporting events etc.) or as soon as possible in the event of an unforeseen event.

**Final Note:** I reserve the right to change the syllabus and management of the class at any time during the semester. These changes will be announced in lecture.

Month	Date	Day	Lecture	Subject	Deadlines
Week 1	9-Jan 11-Jan	Tue Thu	<b>1</b>	Introduction & Syllabus Life and the properties of water 1	
Week 2	16-Jan 18-Jan	Tue Thu		<b>Demonstration 1/2</b> <b>Demonstration 1/2</b>	
Week 3	23-Jan 25-Jan	Tue Thu	<b>2</b> <b>3</b>	Life and the properties of water 2 Life and the properties of water 3	
Week 4	30-Jan 1-Feb	Tue Thu	<b>4</b> <b>5</b>	Water bodies 1 Water bodies 2	
Week 5	6-Feb 8-Feb	Tue Thu	<b>6</b> <b>7</b>	Aquatic viruses Aquatic prokaryotes	
Week 6	13-Feb 15-Feb	Tue Thu		<b>Exam 1</b> <b>Demonstration 3/4</b>	
Week 7	20-Feb 22-Feb	Tue Thu	<b>8</b>	<b>Demonstration 3/4</b> Aquatic plants	
Week 8	27-Feb 1-Mar	Tue Thu	<b>9</b> <b>10</b>	Aquatic animals 1 Diversification 1	
Week 9	6-Mar 8-Mar	Tue Thu	<b>11</b> <b>12</b>	Diversification 2 Diversification 3	<b>Term paper abstract due</b>
				SPRING BREAK SPRING BREAK	
Week 10	20-Mar 22-Mar	Tue Thu	<b>13</b>	Respiratory physiology <b>Demonstration 4/5</b>	
Week 11	27-Mar 29-Mar	Tue Thu		<b>Demonstration 4/5</b> <b>Exam 2</b>	
Week 12	3-Apr 5-Apr	Tue Thu	<b>14</b> <b>15</b>	Sensory Ecology 1 Sensory Ecology 2	
Week 13	10-Apr 12-Apr	Tue Thu	<b>16</b> <b>17</b>	Sensory Ecology 3 Demonstration 6 - Sensory Ecology	
Week 14	17-Apr 19-Apr	Tue Thu	<b>18</b> <b>19</b>	Conservation 1 Conservation 2	<b>Term paper and demo notes due</b>
Week 15	26-Apr	Thu		<b>Exam 3 (Final) 10-12.50 (HEC 103)</b>	