

# **OCB 1000C-5 Course 2591: Introduction to Marine Biology**

## **INSTRUCTOR:**

Name: **James E. Ivey, Ph.D.**

Contact Information:

Email: ively.james@spcollege.edu

Phone: (727) 394-6003

Instructor Availability:

**Clearwater Campus:** Thurs, 6:30-7:00 PM CL-NM265

**Seminole Campus:** Mon, 9:15-9:45 AM & Wed 10:45-11:15 AM; SE-TL162

The best way to reach the instructor is through the email address given above.

Instructor Web Page: <http://www.spcollege.edu/instructors/id/2576>

## **ACADEMIC DEPARTMENT:**

Dean: **Dr. John Chapin**

Office Location: SE-UP 337B

Office Number: (727) 394-6695

Academic Chair: **Dr. Amanda Gilleland**

Office Location: SE-UP 337F

Office Number: (727) 394-6024

## **COURSE INFORMATION:**

The Biology of Marine Life will merge traditional biology and the local ecology of Florida's Gulf Coast. This is a "C" class so it counts as your Gen. Ed. lab. This class will include lecture, hands-on activities, labs and field trips. We have a number trips scheduled including snorkeling and an ocean kayaking.

Course Goals:

Student will attain at least 70% knowledge demonstrated by Unit tests, assignments, projects and final exam.

Course Objectives:

- 1) The student will understand the unity among all life forms in their cellular structure, chemical and energy requirements and their ability to reproduce, develop and respond.
- 2) The student will design and analyze experiments using scientific methods.
- 3) The student will understand the basic energy processes within organisms.
- 4) The student will compare and contrast energy flow within the individual organism with energy flow in the ecosystem.
- 5) The student will compare the influences of genetics and environment on population growth and survival.
- 6) The student will outline the evolution of diversity in marine life and how it parallels changes in time and environment.
- 7) The student will identify and describe major marine groups in the sea and correlate each with its specific niche.
- 8) The student will assess human impact on the marine environment and its inhabitants.

## **COURSE DESCRIPTION FOR BSC2011:**

Prerequisite: (ENC 0025 or ENC 0020 or ENC 0990) and ( REA 0017 or REA 0002 or REA 0990) and (MAT 0028 or MAT 0024 or MAT 0990) or (EAP 1695 and MAT 0028 or MAT 0024 or MAT 0990) or appropriate scores on the SPC placement tests.

This course is designed to provide the non-science major student with an understanding of basic biological principles using marine organisms as examples. The focus is on functional interactions at the cellular, organismal and community levels. The laboratory component will apply concepts through direct observations and experiments using the diversity of organisms in and from our local marine environment. (This course may not be taken for credit subsequent to receiving a grade of "C" or better in any course with a BSC prefix.) 77 contact hours.

## **REQUIRED TEXTBOOK & OTHER RESOURCE INFORMATION:**

### **Required Texts:**

Field Guide to Coastal Fishes

Author: Kells

Publisher: The Johns Hopkins University ISBN: 9780801898389

Florida's Living Beaches

Author: Witherington

Publisher: Pineapple Press ISBN: 9781561643868

### **Other Reading Material:**

Marine Biology

Author: Castro and Huber

Publisher: McGraw-Hill ISBN: 978-0073524160

### **Field Work Fees/Transportation:**

Two of our field experiences (CMA) have a fee of \$20 payable in cash the day of the trip. You are responsible for transportation to and from all field experiences.

Library: <http://www.spcollege.edu/central/libonline/>.

## **MEETING INFORMATION:**

Course Location: SE-TL162 Seminole Campus

Meeting Days: Monday and Wednesday

Class Times: Mon 8:00 - 9:15 AM & Wed 8:00-10:45 AM

## **IMPORTANT DATES:**

Course Dates: August 18 - December 12, 2014

Drop/Add: 08/22/2014

Drop Add Policy: <http://www.spcollege.edu/addendum/index.php>

College closed: Labor Day, 9/1/2014; Thanksgiving break, 11/24-11/28/2014

Withdrawal Date: 10/23/2014 (With WF afterwards)

Financial Aid: <http://www.spcollege.edu/getfunds/>

## **DISCIPLINE SPECIFIC INFORMATION:**

Each student's behavior in the classroom or Web course is expected to contribute to a positive learning/teaching environment, respecting the rights of others and their opportunity to learn. No student has the right to interfere with the teaching/learning process, including the posting of inappropriate materials in discussion forums or Web page sites.

The instructor has the authority to ask a disruptive student to leave the classroom, lab and to file disciplinary charges if disruptive behavior continues.

St. Petersburg College expects students to be honest in all of their academic work. St. Petersburg College has an Academic Honesty policy. It is your responsibility to be familiar with the policies, rules, and the consequences of violations. There is no tolerance for cheating and academic dishonesty. Discipline can range from a zero on a specific assignment to expulsion from the class with the grade of an F.

SPC defines cheating as the improper taking or tendering of any information or material which shall be used to determine academic credit.

Taking of information includes, but is not limited to, copying graded homework assignments from another student; working together with another individual(s) on a take-home test or homework when not specifically permitted by the instructor; looking or attempting to look at another student's paper during an examination and; looking or attempting to look at text or notes during an examination when not permitted.

Tendering of information includes, but is not limited to, giving your work to another student to be used or copied; giving someone answers to exam questions either while the exam is being given or after having taken the exam; giving or selling a term paper or other written materials to another student and; sharing information on a graded assignment.

The instructor may assign a grade of F or zero to an assignment, test, exam or other course work or the entire course for admitted or alleged academic dishonesty.

**PLAGIARISM:** Note that copy/pasting published information, whether it's from your textbook or the Internet, without citing your source is plagiarism and violates this policy. Even if you have changed the words slightly, the ideas are someone else's so you still have to cite your sources. Cheating, plagiarism, bribery, misrepresentation, conspiracy, and fabrication are defined in Board Rule 6hx23-4.461. Student Affairs: Academic Honesty Guidelines, Classroom Behavior.

[http://www.spcollege.edu/webcentral/catalog/current/stu\\_affairs\\_honesty.htm](http://www.spcollege.edu/webcentral/catalog/current/stu_affairs_honesty.htm)

## **ATTENDANCE:**

The college-wide attendance policy is included in the Syllabus Addendum <http://www.spcollege.edu/central/asa/addendum.htm>. The policy notes that each instructor is to exercise professional judgment and define "active participation" in class (and therefore "attendance"), and publish that definition in each syllabus. For this class, that is as follows: You are expected to attend every class in its entirety. In the event of an absence, it is your responsibility to find out what lessons were covered and whether there is assigned work. PLEASE do not schedule appointments, work, trips to the airport, etc. during class time.

Attendance will be taken in class EVERY day. Students missing class are strongly encouraged to contact the professor within 24 hours to avoid unexcused absences. Documentation will be required in order to excuse an absence.

If you are late or must leave early you must notify the instructor or T.A. so that you will not be counted as absent.

Poor attendance and tardiness will count against you if your grade is borderline at the end of the semester.

Up to the withdrawal date, a student may go online and withdraw from the course with a grade of W. After the withdrawal date, students will be able to withdraw from the course but will receive a WF grade.

All cell phones and beepers must be turned off prior to entering the Class. If you have some personal emergency that requires a phone or beeper to be left on during a particular lab, you must clear that with the instructor at the start of the lab.

You may use laptops to take notes but on the first instance of any other use you will be asked not to bring it to class for the rest of the semester.

In the event that a hurricane or other natural disaster causes significant damage to St. Petersburg College facilities, you may be provided the opportunity to complete your course work online. Following the event, please visit the College web site ( [HYPERLINK "http://www.spcollege.edu"](http://www.spcollege.edu) [www.spcollege.edu](http://www.spcollege.edu) ) for an announcement of the College's plan to resume operations.

## DISABILITY POLICY:

If you require any special accommodations pertaining to the course, please let me know the first week of classes. If you wish to receive special accommodations as a student with a disability, you must provide documentation that can be obtained by making an appointment with the Learning Specialist on the St. Petersburg/Gibbs (341-4758), Clearwater (791-2710) or Tarpon Springs (712-5789) campuses. If you have a documented hearing loss, please contact the Program for the Deaf (791-2628). If you will require assistance during any emergency evacuation of the classroom, it is imperative that you speak with me as soon as possible.

## GRADING and ASSIGNMENTS:

**Weekly Class/Lab Tests (25% Total)** - Each exam will be about 1 hour in multiple choice/matching formats. You will be required to complete each exam outside of class time. The highest 11 weekly test grades will be counted toward your final grade.

**Lab/Field Practical Exams and Lab Report (25% Total)** - As a requirement of this class there are a number of hands on activities and field trips associated with it to improve both understanding and critical thinking skills. These activities will be assessed by a lab practical. They will be live and you will have no resources. You will be required to identify and answer questions regarding all of the living things we discuss in class.

You need to select one of the lab exercises and present it as a formal scientific paper. This is due by November 19th.

**The highest 11 Lab grades will be counted toward your final grade.**

**Final Project (10% of grade)** – You will complete a final project by constructing a field guide for a habitat of your choice in our Tampa Bay Estuary. This project is outlined in ANGEL.

**Midterm (20% of grade)** – The midterm exam is in class and closed book. It covers the first half of the class lecture and lab activities. It includes multiple choice, true/false, and essay sections.

**Final Exam (20% of grade)** - The final exam is a cumulative test. It is administered in class during the assigned exam time. It includes multiple choice, true/false, and essay sections covering both lecture and lab activities from the entire semester.

No late work will be accepted. I will not issue an incomplete without a documented medical excuse or a death in the immediate family...no exceptions. Computer problems ARE NOT considered an acceptable excuse. All campuses have computers and all units are accessible from day one.

**Extra Credit** - I believe that hands on learning is the best way to gain an appreciation of science. Because of this I will allow each student to earn **up to 5 points** extra credit added directly to your final grade.

The requirements for extra credit are as follows:

You may receive 5 points extra credit for becoming an intern at an approved agency. Internships are generally a weekly commitment and internships are available at Florida Fish and Wildlife Research Institute, Clearwater Marine Aquarium, The Science Center of Pinellas County and The Pinellas Living Green EXPO. You **MUST** get this preapproved based on subject matter. If you select FWRI to intern, you must select a different section from my section (HAB).

You may receive 1 point extra credit for attending a lecture or symposium relating to SUBJECT MATTER. There are several lecture series available in our area including Boyd Hill Nature Preserve's Natural History Series, The Clearwater Marine Aquarium Speaker Series and a weekly show at the St. Petersburg College's planetarium on the Gibbs Campus.

To earn extra credit you must provide a letter of participation provided by the agency you are working for or lecture you are attending. You should contact the agency **BEFORE** you attend to make sure they will provide this for you. If attending SPC's planetarium show you must pre-type a letter and have Dr. Joseph sign it after the program. Each letter should have your name, agency you worked with, date of participation and what you did to receive credit.

Under the lessons tab I will give information on various events. If you are looking for opportunities that are not posted you must get my approval **BEFORE** you complete an activity. There is no other opportunity for extra credit under any circumstances.

## GRADING:

Your Final Grade will be determined as follows:

Category	Percent of grade
Weekly Tests (highest 10)	25
Lab/Field Practical Exams	25
Midterm Exam	20
Final Project	10
Final Exam	20

Letter grades will be assigned according to college policy:

Letter Grade	Percentages
A	90 - 100
B	80 - 89
C	70 - 79
D	60 - 69
F	Below 60

F

## EXAM POLICY:

Dates and material covered on each practical exam can be found in your lab schedule on Angel.

All books, electronic devices (including phones and watches), hats, and sunglasses must be deposited at the back of the class before an exam.

You may not leave the classroom for ANY reason during an exam. Use the restroom BEFORE coming in to the exam.

## CLASSROOM CIVILITY:

Students are expected to assist in maintaining a classroom environment that is conducive to learning. In order to assure that all students have the opportunity to gain from time spent in class, unless otherwise approved by the instructor; students are prohibited from engaging in any other form of distraction. Inappropriate behavior in the classroom that disturbs the instructor or the students during the class period shall result, minimally, in a request to leave class.

In the interest of consideration for the professor as well as fellow students, students are asked to observe the following:

1. Students who arrive late or leave early should enter the room and walk around the back of the room without walking in front of the desk, PowerPoint projector or screen, or approach the front desk when the professor is addressing the class. Students who arrive late or leave early should sit as close to the door as possible and enter or leave quietly and unobtrusively, without slamming the door.
2. Exams and papers for students will be handed directly back to them. No one has authorization to look through stacks of papers for any reason.
3. All regrade requests should be written politely, concisely, and to the point within one week of receiving the paper.

4. Necessary conversation can be conducted outside of the classroom. Questions about course material can be asked of the professor during class as frequently as needed and IS ENCOURAGED.
5. The professor will grade tests in as timely a manner as possible. Tests will be returned in class; scores may be available on Angel prior to class. Exams are returned at the end of class with a few minutes to check answers against the key. Students who miss class when a test is returned should receive his/her test during office hours.
6. Please reserve questions about grading etc. that can wait, until the end of the class. It is necessary to get started on the lecture at the beginning of the class and interruptions delay the beginning of class. If it is an emergency that can't wait then you may approach the instructor.

### STUDENTS' EXPECTATIONS AND INSTRUCTOR'S EXPECTATIONS:

One of my primary areas of focus in this class is on the application of the scientific method. Students are expected to not just memorize but to apply their knowledge using scientific principles. My goal in this class is not to give you a good grade or a bad grade but that you learn and fundamentally understand the course material. However, if you apply yourself to this class, you will likely do well.

The material in this class primarily focuses on biology but includes overviews of chemistry, physics, and ecology. This type of class involves a lot of identification of preserved organisms based on observable characteristics. To be successful, you need to do the work yourself and not rely on your lab partner to do all the work. Do not simply take a shot with your cell phone, but create drawings and take notes on your observations. Observation is the first step in the scientific method and observation is required to do well in this course.

**Important:** This class involves a lot of field activities. You need to have transportation to the field site. You also will need to pay entrance fees for some of the exercises. If this presents a difficulty, please let me know and I will assist you in making arrangements to attend the field lab.

Please review <http://www.spcollege.edu/central/asa/addendum.htm> for the college's policy on the following:

- Drop/add and audit
- Grading and repeat course policies
- Grading and repeat course policies
- Attendance/active participation/withdrawal policies
- Federal guidelines financial aid/total withdrawal
- CLAST changes
- Dual enrollment, Early admissions/college
- Academic honesty
- Student expectations
- Online student participation/conduct guidelines
- Emergency preparedness
- Campus safety & security
- Sexual predator information
- Special accommodations

### STUDENT SURVEY OF INSTRUCTION:

The student survey of instruction is administered in courses each semester. It is designed to improve the quality of instruction at St. Petersburg College. All student responses are confidential and anonymous and will be used solely for the purpose of performance improvement.

## CLASS SCHEDULE:

This schedule may be modified to accommodate unforeseen events. The classes are from 8:00 to 10:15 AM on Tuesdays and Thursdays.

Date	Activity	Weekly Quiz Due Date/Topic	Meeting Time/Place
18-Aug	Introduction and Syllabus		SE UP307 (Lab)
20-Aug	Animals of Tampa Bay Classification Using a Dichotomous Key	Field Identification of Common Marine Animals of Tampa Bay.	SE UP307 (Lab)
25-Aug	Classification of Marine Life-Taxonomy and Habitats		SE UP307 (Lab)
27-Aug	Introduction to the Microscope and Dichotomous Key	Key Usage and Phyla of Tampa Bay Marine Animals.	SE UP307 (Lab)
1-Sep	Labor Day No Class		
3-Sep	Ft. De Soto – Seine and Plankton	Plankton/Seagrass Organisms.	(Seaside) 3500 Pinellas Bayway S • Tierra
8-Sep	Classification of Marine Life – Taxonomy and Habitats		SE UP307 (Lab)
10-Sep	Marine Microorganisms	Identification.	SE UP307 (Lab)
15-Sep	Practical #1 – 25 Common Animals of Tampa Bay (Taxonomy and common names)		SE UP307 (Lab)
17-Sep	CMA – Seagrass Snorkel	Field Identification of Seagrass Ecosystem, Photosynthesis vs. Respiration.	Clearwater Marine Aquarium 249 Windward Passage • Clearwater, FL (727) 441-1790 at 8AM, Bring \$20
22-Sep	Intro to Biology		SE UP307 (Lab)
24-Sep	Protostome Dissection (Clam, Crab and Squid)	Oct 1 @ 11:59PM Invertebrate A&P, Biological Molecules	SE UP307 (Lab)
29-Sep	Intro to Chemistry		SE UP307 (Lab)
1-Oct	CMA Tour – Otter Trawl	Field Identification of Marine Fish/Organisms (found @ CMA).	Clearwater Marine Aquarium 249 Windward Passage • Clearwater, FL (727) 441-1790 at 8AM, Bring \$20
6-Oct	Marine Ecology		SE UP307 (Lab)
8-Oct	Ft. De Soto Beach Study	Beach Zonation and Field Identification of Common Birds and Shells.	Ft. De Soto – North Beach 3500 Pinellas Bayway S • Tierra Verde at 8AM
13-Oct	World Ecosystems		SE UP307 (Lab)
15-Oct	<b>Midterm Exam</b>		SE UP307 (Lab)
20-Oct	The Ocean Environment		SE UP307 (Lab)
22-Oct	Mangrove Swamp Study (Marine Kayak)	Field Identification of Mangrove Flora/Fauna, General Oceanography	Pop Stansell Park Located at the Corner of Florida Ave and 8th St (by the Gulf) • Palm Harbor at 8AM
27-Oct	The Properties of Sea Water		SE UP307 (Lab)
29-Oct	Honeymoon Island Hike	Formation of Barrier Islands, Flora and Fauna of Barrier Islands and Food Chains from TB ecosystems.	Honeymoon Island – Osprey Nature Trail #1 Causeway Boulevard • Dunedin, Florida (727) 469-5942 at 8AM
3-Nov	Human impact on the Oceans		SE UP307 (Lab)
5-Nov	Suncoast Seabird Sanctuary and Indian Shores Study	Sea Bird Identification and Dune Plants.	Suncoast Seabird Sanctuary 18328 Gulf Blvd • Indian Shores (727) 391-6211 at 8AM
10-Nov	Grasses, Marine Microbes, and Photosynthesizers		SE UP307 (Lab)
12-Nov	Practical #2 – Mangroves and Sea Grass Communities		SE UP307 (Lab)
17-Nov	Marine Invertebrates		SE UP307 (Lab)
19-Nov	Deuterostome Dissections Projects and Extra Credit Due (Sea Star and Shark)	Vertebrate A&P, Trophic Levels and Niches.	SE UP307 (Lab)
24-Nov	Thanksgiving break		
26-Nov	Thanksgiving break		
1-Dec	Fish & Higher Vertebrates		SE UP307 (Lab)
3-Dec	Final Practicals: #4 Barrier Islands – Arrowhead Trail #5 Beach Community – North Beach		Ft. De Soto – Arrowhead Picnic Area (Seaside) 3500 Pinellas Bayway S • Tierra Verde at 8 AM
8-Dec	<b>Final Exam</b>		SE UP307 (Lab)

**SIGNATURE PAGE:**

**I have read, understand, and agree to abide fully by the parameters set in this syllabus and Syllabus Addendum for BSC1005 , Summer 2014, course number 760 .**

I, \_\_\_\_\_, have read and fully understand the terms stated in the above syllabus and agree to all fully and completely with the understanding that failure to do so could result anywhere from failing the class to expulsion from the college.

**Student Signature:** \_\_\_\_\_ **Date:**