FLORIDA ATLANTIC

UNIVERSITY

NEW COURSE PROPOSAL Graduate Programs

Department HBOI/Biological Sciences

College Schmidt College of Science
(To obtain a course number, contact erudolph@fau.edu)

(10 obtain a course number, contact erudolpn@rau.edu)			8	
Prefix OCB Number 6637	(L = Lab Course; C = Combined Lecture/Lab; add if appropriate) Lab Code	Type of Course Lecture/Lab	Course Title Marine Trophic Ed	cology
Credits (See Definition of a Credit Hour) 3 Effective Date (TERM & YEAR) Spring 2024	Grading (Select One Option) Regular Sat/UnSat	Course Description (Syllabus must be attached; see Template and Guidelines) This course will involve the advanced study of theory and techniques in marine trophic ecology. The course will begin with an overview of marine communities and habitats over which trophic interactions occur, followed by discussion of the various associated processes (e.g., predation, energy transfer) involved at the individual, population, community, and ecosystem level. Throughout the process students will be exposed to various techniques used to study trophic interactions in marine environments, from traditional dissections of predators to chemical/genetic tracers and emerging technologies such as biologging.		
Prerequisites OCB 6066 (Biological Oceanography)		Academic Service Learning (ASL) course Academic Service Learning statement must be indicated in syllabus and approval attached to this form.		
or equivalent or approval by instructor. Prerequisites, Corequisites and Registration Controls are enforced for all sections of course.		Corequisites	R	egistration Controls (For eample, Major, College, Level)
Minimum qualifications needed to teach		List toythook in	formation in cyllab	us or horo
course: Member of the FAU graduate faculty and has a terminal degree in the subject area (or a closely related field).		List textbook information in syllabus or here Recommended Text: Garvey, J. E., & Whiles, M. (2016). Trophic ecology. CRC Press.		
Faculty Contact/Email/Phone		List/Attach comments from departments affected by new course		
Dr. Matt Ajemian/majem	ian@fau.edu/6-2730	**************************************	•	-

Approved by	Date 9-21-23
Department Chair VV VV	
College Curriculum Chair	10/23/2023
College Dean Aca and	10/23/2023
UGPC Chair Falk latur	Nov 13, 2023
UCC Chair Palk Town	Nov 13, 2023
Graduate College Dean Robert W. Stackman Jr. Robert W. Stackman Jr. Robert W. Stackman Jr. Robert W. Stackman Jr.	Nov 13, 2023
UFS President	
Provost	

Email this form and syllabus to UGPC@fau.edu 10 days before the UGPC meeting.



OCB 6637C-XXXX Marine Trophic Ecology

3 credits

Spring, 2024
Dr. Matt Ajemian
Office: HB-01, Rm 138
Office hours: XXXX AM-XXX PM
Classroom: MC 209

Telephone: 772-242-2730 Email: majemian@fau.edu



Course Description

This course will involve the advanced study of theory and techniques in marine trophic ecology. The course will begin with an overview of marine communities and habitats over which trophic interactions occur, followed by discussion of the various associated processes (e.g., predation, energy transfer) involved at the individual, population, community, and ecosystem level. Throughout the process, students will be exposed to various techniques used to study trophic interactions in marine environments, from traditional dissections of predators to chemical/genetic tracers and emerging technologies such as multi-sensor bio-logging tags and acoustics. Hands-on field experiences will be offered throughout the course to foster skill development and practical training.

Instructional Method

In-person (virtual where necessary)

Prerequisites/Corequisites

In-Person

Biological Oceanography (OCB 6066) preferred, and/or General Ecology coursework.

Course Objectives/Student Learning Outcomes

This course aims to introduce students to the fundamentals of marine trophic ecology and develop appreciation for the interdisciplinary nature of the field and interconnectedness of food webs in the marine environment.

Objectives:

- Introduce students to current theory and advanced concepts in marine trophic ecology
- Demonstrate the unification of individual, population, community and ecosystem-based approaches to study ecological processes in marine environments
- Foster independent and critical thinking as it pertains to ecological studies

Work will include readings in recent text and current literature as well as a term project/presentation. The lab will emphasize practical sampling design and data interpretation, simulations, and field trips allowing students to experience various means of collecting trophic data and processing samples for research.

Student Learning Outcomes:

- Establish future leaders and professionals with an in-depth marine ecological education
- Educate future leaders and professionals with specialized skills by teaching methods of collecting, interpreting, analyzing, and presenting scientific data both orally and written
- Enable future leaders and professionals to contribute to the profession through practical skills development

Course Evaluation Method

There will be graded lab assignments accounting the student's cumulative performance, including: 2 exams (50%), Lab Reports and participation (25%), and a special topic presentation/paper (25%). The overall grade in the course is derived from the cumulative performance according to the following table.

Your grade will be calculated as a percentage of 400 available points:

2 Lecture Exams (100 pts ea)	200
Special Topic Presentation/Discussion	100
Lab (Participation, Reports, Assignments)	100

Course Grading Scale

Percentage Score:	Grade:	Percentage Score:	Grade:
92% - 100%	A	72% - 77%	С
90% - 91%	A-	70% - 71%	C-
88% - 89%	B^{+}	68% - 69%	\mathbf{D}^{+}
82% - 87%	В	62% - 67%	D
80% - 81%	В-	60% - 61%	D-
78% - 79%	C^+	0% - 59%	F

Special Course Requirements

This course will include activities such as presentations, experiments, and local/regional field trips. While most field excursions/labs will be held during normal class hours, there will be additional participation activities available throughout the semester outside of normal class time. Participation in those activities is highly encouraged but not required. Multiple lab reports will due throughout the semester, which may require interpretation of data collected during field excursions.

Classroom Etiquette Policy

University policy on the use of electronic devices states: "In order to enhance and maintain a productive atmosphere for education, personal communication devices, such as cellular telephones and pagers, are to be disabled in class sessions."

Policy on the Recording of Lectures

Students enrolled in this course may record video or audio of class lectures for their own personal educational use. A class lecture is defined as a formal or methodical oral presentation as part of a university course intended to present information or teach students about a particular subject. Recording class activities other than class lectures, including but not limited to student

presentations (whether individually or as part of a group), class discussion (except when incidental to and incorporated within a class lecture), labs, clinical presentations such as patient history, academic exercises involving student participation, test or examination administrations, field trips, and private conversations between students in the class or between a student and the lecturer, is prohibited. Recordings may not be used as a substitute for class participation or class attendance and may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements may constitute a violation of the University's Student Code of Conduct and/or the Code of Academic Integrity.

Attendance Policy

Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance. Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

Religious Accommodations: Students who wish to be excused from coursework, class activities or examinations must notify the instructor in advance of their intention to participate in religious observation and request an excused absence.

Counseling and Psychological Services (CAPS) Center

Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to http://www.fau.edu/counseling/

Disability Policy

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses — Boca Raton, Davie and Jupiter — however disability services are available for students on all campuses. For more information, please visit the SAS website at www.fau.edu/sas/.

Code of Academic Integrity

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it

interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see <u>University Regulation 4.001</u>.

Required Texts/Readings

N/A

Supplementary/Recommended Readings

Garvey, J. E., & Whiles, M. (2016). Trophic ecology. CRC Press.

Course Topical Outline

Week	TOPICS	DATE	Lab	Assignments
1	Introduction - Marine ecosystems	1/10/2024		IACUC training
2	Trophic Pyramids and Trophic Levels	1/17/2024		
3	Scavenging and Decomposition	1/24/2024		
4	Foraging in Patches	1/31/2024	IFD/FR experiments	
5	Predators and Prey	2/7/2024		
6	Diet Analysis	2/14/2024		Patch Feeding Report
7	FIELD TRIP I - Fish collection	2/21/2024	Offshore or IRL Field Trip	
8	EXAM I	2/28/2024		
	NO CLASSES - SPRING BREAK	3/6/2024		
9	FIELD TRIP II - Fish collection	3/13/2024	Offshore or IRL Field Trip	
10	Consumption and Nutrition	3/20/2024	SCA	
11	Food Webs and Secondary Production	3/27/2024		SCA Report
12	Nutrient Dynamics and Stoichiometry	4/3/2024		
13	Elements, Isotopes, and Lipids	4/10/2024		
14	Emerging Techniques (Acoustics)	4/17/2024		
15	FIELD TRIP III - Tracking Sound	4/24/2024	IRL or Sarasota Trip	SIA Report
16	EXAM II	5/1/2024		