

Fish and Crustacean Nutrition-FAS 6165

1 Course Overview

Course description:

This course will acquaint students with basic principles of nutrition and formulation of diets for fish and crustaceans in aquaculture.

Lectures will cover digestive physiology, nutrients, feed formulation, and specific nutritional requirements for numerous aquatic organisms.

Students will be required to give one oral presentation on assigned topics using PowerPoint and narrating it in Voicethread. Students will watch the other student lectures and participate in online discussion of the topics covered.

- 3 Credits
- Spring semester
- 100% online, asynchronous
- <http://elearning.ufl.edu/>

Prerequisites: N/A

Instructor: Cortney L Ohs, Ph.D. cohs@ufl.edu, UF/IFAS Indian River Research and Education Center (IRREC), 2199 South Rock Road Ft. Pierce, FL 34945, 772-577-7348.

- Please use the Canvas message/Inbox feature, or email directly and please include "FAS6165" in the subject line.
- Office hours: Every Thursday from 4:00-5:00PM EST via Zoom and phone or available by email or phone outside of office hours

Teaching Assistant: Brittney Lacy, Ph.D. Student, blacy2@ufl.edu, UF/IFAS Tropical Aquaculture Laboratory 1408 24th St SE, Ruskin, FL 33570, 813-671-5230

- Please use the Canvas message feature, or email directly and please include "FAS6165" in the subject line.
- Office hours: Available Tuesday from 4:00-5:00 PM EST through Zoom, other weekdays available by appointment

Textbook(s) and/or readings: If there is no required text for the course. Weekly readings are provided for each learning topic through Canvas "course reserves" feature.

2 Learning Outcomes

By the end of this course, each student will be able to:

- Describe the basic principles of fish and crustacean nutrition.
- Describe various nutrients and differentiate their utilization in fish and crustaceans.
- Create dietary plans to meet the requirements of various species and life stages of fish and crustaceans.
- Present and communicated knowledge of fish and crustacean nutrition.

3 Course Logistics

Students may access lectures, assignments, readings, and supporting materials through the course Canvas site as they become available. This course is entirely web-based, and students will be able to access lectures, readings, and supporting materials at their own pace. Exams are available ONLY on the dates listed in this syllabus.

Each learning module contains a recorded lecture presentation. Each presentation includes photographs or diagrams that summarize important information for each topic. You will be able to re-watch and read through slides as many times as necessary to learn the information. Learning modules build upon previous topics, so they should be completed in the order presented.

Each learning module contains required readings in addition to the lecture. This information will be covered on quizzes and exams. These files will be made available to you online to download, save, or print. There will be additional optional readings if you would like to further investigate a topic.

Learning modules covered in the mid-term exam (modules 1-8, in addition to the video field trip in module 9) will be available at the start of the course. Learning modules covered on the final exam (modules 10-17) will be available after the mid-term exam.

Technology Requirements:

- A computer or mobile device with high-speed internet connection.
- A webcam, headset and/or microphone, and speakers.
- Latest version of web browser. Canvas supports only the two most recent versions of any given browser. If you are not sure what browser you are using → [What's my browser?](#)
- Installation of the Gatorlink VPN will be necessary to access course materials including required readings. → [GatorLink VPN Information](#)
- Required assignments must be completed through Voicethread, please ensure you can access the Voicethread website → [Voicethread Website](#)
- If you need help with getting things set up, please email the TA for basic set-up advice. For more advanced technology questions you can contact the University IT help desk

Synchronous online sessions may be recorded. By sharing your video, screen, or audio during any synchronous online class sessions, you are consenting to being recorded for the benefit of students who cannot attend live as well as for class review during the current semester. If you have special circumstances or concerns about privacy, it is your responsibility to discuss it with your instructor.

3.1 Description of Assessments & Activities

Introduction: Please introduce yourself in the Canvas Discussion set up for that purpose. Read and comment on your peer's introductions.

Quizzes: 10 points each. Each learning module will have a five to ten question quiz. The questions will require the student to go through the PowerPoint presentation, watch any attached videos, and read the assigned readings to answer the questions correctly. These quizzes will contribute to the grade. All quizzes will be taken from your computer. Quizzes will consist of multiple choice questions.

Exams: 100 points each. Mid-term and final exams: Each exam will consist of up to 50 questions. Some of the questions may come from the lecture quizzes. These exams will consist of multiple-choice

questions, matching, or short answer questions. The mid-term will consist of questions from the first half of the learning modules. The final exam will consist of questions from the last half of the learning modules. The exams will be taken on your computer. Exams are available on the days indicated.

- March 4-March 10 – Mid-term exam available
- April 29-May 03 – Final exam available

Discussions 50 points. There will be five discussion topics following different lectures. Students are required to participate in all 5 discussions. Participation can include posting answers or additional, pertinent questions. A robust discussion rather than a few simple answers will make this a more useful enterprise. In particular, students posing questions/thoughts discussed by other students in the class will provide an excellent learning environment. Instructors will assist in moderating to ensure a fact-based discussion.

Project 100 points. A PowerPoint presentation will be developed by the student on an assigned topic and it will be presented and narrated online through a program called Voice Thread. This presentation will be critiqued and discussed online by other students. This presentation and discussion will be equivalent to an exam in points. Students must submit the powerpoint file in addition to recording the lecture in voicethread.

- April 2 – PowerPoint and VoiceThread lecture due
- April 22 – Comments and discussion on VoiceThread lectures due

3.2 Grades & Grading Scale

Quizzes (34%)	170 points
Discussions (9%)	50 points
Project (19%)	100 points
Midterm Exam (19%)	100 points
Final Exam (19%)	100 points
TOTAL	520 points

For information on current UF policies for assigning grade points, see [Undergraduate Grading Policies](#) [Graduate Grading Policies](#)

Grading Scale (%)

A	100% to 94%
A-	93.99% to 90%
B+	89.99% to 87%
B	86.99% to 84%
B-	83.99% to 80%
C+	79.99% to 77%
C	76.99% to 74%
C-	73.99% to 70%
D+	69.99% to 67%
D	66.99% to 64%
D-	63.99% to 61%
E	60.99% to 0%

4 Learning Content

Learners are expected to move through the course at their own pace. They will be able to work ahead if they choose; however, there are deadlines for quizzes and discussion at the Midterm and Final Exam dates, as well as, deadlines for the student presentations. This Learning Content schedule is meant to serve as a guide and is by no means a hard schedule for moving through the course.

Schedule			
Week	Date	Topic	Assignment Due
1	1/8/2024- 1/12/2024	Course Overview/ Introductions Module 1: Digestive Physiology	
2	1/16/2024- 1/19/2024	Module 2: Energy Digestibility, Proximate Analysis	
3	1/22/2024- 1/26/2024	Module 3: Proteins and Amino Acids	
4	1/29/2024- 2/2/2024	Module 4: Lipids and Fatty Acids	
5	2/5/2024- 2/09/2024	Module 5: Carbohydrates	
6	2/12/2024- 2/16/2024	Module 6: Vitamins and Minerals	
7	2/19/2024- 2/23/2024	Module 7: Feed Formulation	
8	2/26/2024- 03/01/2024	Module 8: Feed Manufacture Module 9: Virtual Field Trip	
9	03/04/2024- 03/08/2024	Midterm Exam: Due 03/10/2024 Module 10: Catfish Nutrition	Quizzes Modules 1-9 Discussion Modules 1-9 Due 03/10/24
10	03/18/2024- 03/22/2024	Module 11: Hybrid Striped Bass	
11	03/25/2024- 03/29/2024	Module 12: Tilapia	VoiceThread Presentations Due: 04/02/24
12	04/01/2024- 04/05/2024	Module 13: Shrimps and Prawns	
13	04/08/2024- 04/12/2024	Module 14: Salmon	

14	04/15/2024-04/19/2024	Module 15: Marine Fish	VoiceThread Comments Due: 4/22/2024
15	04/22/2024-04/24/2024	Module 16 Larval Diets and Live Feeds	
16	04/29/2024-05/03/2024	Module 17: Broodstock Final Exam: Due 5/03/2024	Quizzes Module 10-17 Discussions Module 10-17 Due 05/03/2024

5 Policies and Requirements

This course plan and syllabus are subject to change in response to student and instructor needs. Any changes will be clearly communicated in advance through Canvas.

5.1 Attendance, Late Submissions & Make-up Requests

It is the responsibility of the student to access on-line lectures, readings, quizzes, and exams and to maintain satisfactory progress in the course. Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Computer or other hardware failures, except failure of the UF e-Learning system, will not excuse students for missing assignments. Any late submissions due to technical issues MUST be accompanied by the ticket number received from the Helpdesk when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request consideration.

For computer, software compatibility, or access problems call the HELP DESK phone number—352-392-HELP = 352- 392-4357 (option 2).

5.2 Communication Courtesy and Professionalism

Just as in any professional environment, meaningful and constructive dialogue is expected in this class and requires a degree of mutual respect, willingness to listen, and tolerance of opposing points of view.

Respect for individual differences and alternative viewpoints will be maintained in this class at all times. All members of the class are expected to follow rules of common courtesy, decency, and civility in all interactions. Failure to do so will not be tolerated and may result in loss of participation points and/or referral to the Dean of Students' Office.

5.3 Semester Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning.

At approximately the mid-point of the semester, the School of Forest, Fisheries, & Geomatics Sciences will request anonymous feedback on student satisfaction on various aspects of this course. These surveys will be sent out through Canvas and are not required but encouraged. This is not the UF Faculty Evaluation!

At the end of the semester, students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance

on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

5.4 Academic Honesty Policy

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: *"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."*

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment."*

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct or appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated.

Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>.

5.5 Inclusive Learning Environment

This course embraces the University of Florida's Non-Discrimination Policy, which reads,

The University shall actively promote equal opportunity policies and practices conforming to laws against discrimination. The University is committed to non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information and veteran status as protected under the Vietnam Era Veterans' Readjustment Assistance Act.

If you have questions or concerns about your rights and responsibilities for inclusive learning environment, please see the instructor or refer to the Office of Multicultural & Diversity Affairs website: <http://multicultural.ufl.edu>.

5.6 Services for Students with Disabilities:

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation. 0001 Reid Hall, 352-392-8565, disability.ufl.edu

5.7 Software Use

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

6 Campus Helping Resources

For issues with technical difficulties for e-learning in Canvas, please post your question to the Technical Help Discussion in your course, or contact the UF Help Desk at:

- Learning-support@ufl.edu | (352) 392-HELP - select option 2 | <http://elearning.ufl.edu>
- Library Help Desk support <http://cms.uflib.ufl.edu/ask>
- SFFGS Academic Hub <https://ufl.instructure.com/courses/303721>

6.1 Student Life, Wellness, and Counseling Help

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- Counseling and Wellness resources <http://www.counseling.ufl.edu/cwc/>
- U Matter, We Care <http://www.umatter.ufl.edu/>
- Career Connections Center <http://career.ufl.edu/>
- Other resources are available at <http://www.distance.ufl.edu/getting-help> for online students.

6.2 Student Complaint Process

The School of Forest, Fisheries, & Geomatics Sciences cares about your experience and we will make every effort to address course concerns. We request that our online students complete a course satisfaction survey each semester, which is a time for you to voice your thoughts on how your course is being delivered. You can also [submit feedback anytime](#).

If you have a more urgent concern, your first point of contact should be the Academic Coordinator or the Graduate/Undergraduate Coordinator for the program offering the course. You may also submit a complaint directly to UF administration:

- <https://distance.ufl.edu/getting-help/>
- <https://registrar.ufl.edu/complaint.html>