

**Fundamentals of Fisheries Biology – FT S274**  
**Spring 2017**  
**University of Alaska Southeast Sitka**  
**3 Credits**

**Class times/location**

Lecture: Monday 5:00 – 7:30 pm

This will be a distance class with some distance delivery. Students will find information about this course through UAS online (Blackboard really). You will need access to a computer and a headset with microphone. We will utilize the web meeting function (Elluminate/Collaborate live) which you will find on the left hand tool bar of the homepage of UAS on-line and we will review using this the first night of class.

**Instructor:**

Reid Brewer, Ph.D.  
Room 101D, Sitka Campus  
Office phone: 907-747-7799  
Email: [rsbrewer@alaska.edu](mailto:rsbrewer@alaska.edu)

**Office hours:**

Tuesday 3-5pm  
Wednesday 3-5pm  
Contact me to arrange an appt.

**Mailing address:**

1332 Seward Ave.  
Sitka, AK 99835

**Required text(s):**

No textbooks are required for this course. All readings will be supplied in .pdf format

**How to Begin:**

1. Read your **Getting Started Packet** (sent by US Mail), return required forms
2. To access the class you will only need to power up your UAS provided iPad. If you have difficulty with the technology, remember that the help desk is available as are several tutorials. The first module START HERE will walk you through course content and taking exams. Contact the help desk for more information: toll free 1-877-465-6400 or local 796-6400; e-mail: [helpdesk@uas.alaska.edu](mailto:helpdesk@uas.alaska.edu)

**Help Resources :**

The SSC now offers everything your students will need. Support services are available during day and evening hours, both in person and through a variety of distance delivery methods.

Records and Registration – [sitka.registrations@uas.alaska.edu](mailto:sitka.registrations@uas.alaska.edu) 907-747- 7700  
Financial Aid Vouchers for textbooks - [kmcase@alaska.edu](mailto:kmcase@alaska.edu) 907-747- 7726  
Testing and Proctoring – [sitka.testing@uas.alaska.edu](mailto:sitka.testing@uas.alaska.edu) 907-747- 7717  
Advising, Counseling, and PEPS – [sitka.ssc@uas.alaska.edu](mailto:sitka.ssc@uas.alaska.edu) 907-747- 7717  
Tech Support – [sitka.it@uas.alaska.edu](mailto:sitka.it@uas.alaska.edu) 907-747- 9444

## **Contact Information**

### Advising

Cheryl Stromme 907-747- 7781 cstromme@alaska.edu

Amelia Budd 907-747- 7705 a.budd@alaska.edu

### Counseling, Disability Services, Conduct

Chris Washko 907-747- 7703 cmwashko@alaska.edu

### Personal Education Planners (Success for Alaska Native and High-Need Students)

Joy Klushkan (Financial Lit. Specialist) 907-747-7771 jwklushkan@alaska.edu

Deb Corso (Behavioral Health Specialist) 907-747- 7772 dmclean2@alaska.edu

Crystal Duncan (Native; Rural Specialist) 907-747- 7773 clduncan@alaska.edu

### Records and Registration

Randy Nutting – 907-747- 7701 rpnutting@alaska.edu

Kristen Case – 907-747- 7726 kmcase@alaska.edu

### Testing and Proctoring

Audrey Beam – 907-747- 7785 ajbeam@alaska.edu

Emy Roles – 907-747- 7721 aroles@alaska.edu

### Technology Support

Eric Elsensohn – 907-747- 7757 edelsensohn@alaska.edu

### Tutoring

sitka.tutor@uas.alaska.edu 907-747- 7717

UAS Technology Help Desk: 877-465-6400, <http://www.uas.alaska.edu/helpdesk/>

## **Course Description:**

The goal of this course is to introduce students to the diversity of fishes and their life in aqueous environments. Students will learn about evolution of fish, physical form and functioning of fish, fish habitats, behavior and ecology.

## **UAS Competencies:**

This course will address the following UAS competencies:

- **Competency in Critical Thinking:** Students in this class will be required to apply critical thinking skills to understand the functioning of fish in aqueous environments and to understand how they have adapted to this environment and function in it.
- **Competency in Quantitative Skills:** Students in this class will apply quantitative skills to the study of fish. Examples include discussion fish growth and age determination.
- **Competency in Professional Behavior:** Students will be required to work as a team and help each other as part of a small group. Promoting a positive learning environment and working with others are important behaviors for fisheries technicians.
- **Competency in Communication:** Students in this class will demonstrate communication skills in their fish presentation and in question and answer periods.

## Student Learning Outcomes

By the end of this course, a student should be able to:

1. Describe how a fish swims. Give emphasis on swimming styles, scales, fin and tail types, and differences in musculature
2. Diagram how the respiratory system of a fish works
3. Describe fish metabolism and growth
4. Differentiate different strategies in fish reproduction
5. Describe how fish interact with the environment. Give emphasis on ion balance, buoyancy, sensory systems, competition and predation and ecology

## Lecture Schedule:

<i>Date</i>	<i>Topic</i>	<i>Reading/Assignments</i>
January 23	Class 1. Introduction to Fish Biology	Read: Syllabus.doc 1. Introduction.pdf/ Writing: Assignement1.doc
January 30	Class 2. Systematics/Evolution/Genetics	Read: 2. Systematics.pdf Writing: Assingment2.doc
February 6	Class 3. Structure and Function	Read: 3. Structure and Function.pdf Writing: Assignment3.doc
February 13	Class 4. Respiration and Circulation	Read: 4. Respiration.pdf Writing: Assignment4.doc
February 20	Class 4. Respiration and Circulation (continued)	Read: 4. Circulation.pdf
February 24	<b>EXAM I (Intro to Respiration; Classes 1-4)</b>	
February 27	Class 5. Buoyancy/Thermal Regulation/ Hydromineral Balance	Read: 5. Buoyancy.pdf Writing: Assignment5.doc
March 6	Class 6. Feeding, Nutrition and Growth	Read: 6. Nutrition.pdf Writing: Assignment6.doc
March 13	SPRING BREAK NO CLASS	
March 20	Class 6. Feeding, Nutrition and Growth (continued)	Read: 6. Growth.pdf
March 27	Class 7. Reproduction	Read: 7. Reproduction.pdf Writing: Assignment7.doc
March 31	<b>EXAM II (Circulation to Growth; Classes 5-7)</b>	
April 3	Class 8. Sensory Perception and Behavior and Communication	Read: 8. Sensory Perception.pdf Writing: Assignment8.doc
April 10	Class 9. Intro to Fish Ecology	Read: 9. Fish Ecology.pdf Writing: Assignment9.doc
April 17	Class 10. Fish Groups	Read: 10. Fish Groups.pdf Writing: Assignment10.doc
April 24	Class 10. Fish Groups (continued)	NA
May 1-5	<b>FINAL EXAM (Comprehensive with focus on Sensory Perception to Fish Groups; Classes 8-10)</b>	

### **Grading for FT 274:**

3 exams:

First two exams worth 100 points each	200 points
Final exam worth 150 points (Comprehensive)	150 points
Writing assignments (12 at 10 points each)	120 points
Class attendance and participation	120 points
Total	590 points

Final grades will be based upon below scale according to total points indicated above:

	B+ 87-89%	C+ 77-79%	D+ 67-69%	F less than 60%
A 93-100%	B 83-86%	C 73-76%	D 63-66%	
A- 90-92%	B- 80-82%	C- 70-72%	D- 60-62%	

### **SPECIFIC INFORMATION AND EXPECTATIONS**

Attendance is required and factors into the final course grade. If you are unable to attend class, please contact the instructor **prior** to class. It is the responsibility of the student to get information missed in class. All class lectures are archived in UAS online homesite for the class. We will go over finding these the first night of class.

Exams will be sent to pre-arranged proctors. Students residing in Sitka, Juneau and Ketchikan will take exams at UAS learning centers. I will give you the better part of a week to take the exams. It is the responsibility of each student to find an appropriate exam proctor. Please contact me early in the semester if you have questions about this. In rural areas, schools, libraries or places of employment have been used for this purpose. No notes, books or other resources are to be used in the exam room.

### **Technology:**

Expect to face some technology issues as part of getting your work done. Technology problems can be frustrating and time-consuming. Take control. Be a good shepherd of your time and your attitude. A good rule of thumb is to never spend more than about 15 minutes trying to resolve a technology problem on your own. Reach out for help using the numbers on the front page of the syllabus. If it is after hours, switch to a different task until you can reach technology help.

### **Incomplete Policy:**

Incomplete grades may sometimes be negotiated when circumstances such as illness or family emergency interfere with completion. To qualify for consideration of an incomplete a student must have completed the majority of coursework, earned a C or better and participated fully and consistently though out the class. Incomplete grades will not be given in cases of non-participation or failure to communicate with the instructor. Students who are unable to participate in coursework for a significant amount of time during the semester should plan to re-register for the course at a later date rather than take an incomplete grade.

### **The Most Important Study Tip: Aim to Understand Rather Than Memorize:**

There will be many new terms and concepts that you will need to commit to memory. However, you will find the subject much less overwhelming if you focus on understanding the information rather than memorizing it. As we approach each new system, synthesize and build on the information you have previously learned.

**Time and Effort:**

Each modules should take two to five hours per week including reading materials. Much of the coursework involves independent study and you should be prepared to work very hard. I am here to help you learn and will do whatever I can to assist you. Tutorials available at: <http://tss.learningspaces.alaska.edu/tutorials/>

- [Plagiarism – What it is And How to Avoid it](#)
- [How to Write a Basic Essay](#)
- [Note Taking](#)
- [How to Study](#)
- [Email Etiquette](#)
- [Basic Grammar](#)
- [Test Taking Tips](#)
- [Time Management for Students](#)

**Important dates:**

1<sup>st</sup> day of class

January 17

Spring Break

March 13-17

Instructor must have grades posted by

May 10

**GENERAL INFORMATION****Disability Services:**

If you experience a disability and would like information about support services, contact the Sitka Campus at 800-478-6653 or DSS at <http://www.uas.alaska.edu/dss/index.html>. It is the student's responsibility to initiate contact and provide appropriate disability documentation to DSS.

**Multi-Lingual Students:**

Taking an advanced course in a language that is not your first language is an accomplishment to be admired. It can also be a challenge. Our writing tutors have ESL expertise and a commitment to helping you reach your goals.

**Prerequisites and Recommendations:**

No prerequisites are required for FT274

**Important:** Reading and writing skills should be of college freshman level or higher. This means you should qualify for placement into English 111. Students with skills below this level usually do not succeed in this course. Reading assignments are complicated and written work is graded on content and clarity. If you are not at this level, contact me to discuss better options. If unsure of your level, I suggest taking the English Placement Test.

**Academic Honesty:**

Academic integrity is expected at all times. **It is the student's responsibility to be familiar with the relevant sections in the UAS catalog and the UAS student handbook.** Academic dishonesty of any type, including plagiarism and inappropriate test conduct, will typically result in the most serious consequences provided for by UAS

policy. Test misconduct or plagiarism of a written or image-based assignment (including Open Book Tests, Disease Team posts and Labs) will result in a zero for the assignment or a failing grade for the course. Students are required to view the presentation on avoiding plagiarism at our website before starting assignments.

### **STUDENT WITH DISABILITIES:**

The University of Alaska Southeast is committed to providing a working and learning atmosphere that supports our diverse student population. The Americans with Disabilities Act (ADA) of 1990 and Section 504 of the Rehabilitation Act of 1973 prohibit discrimination against any qualified person regardless of his or her disability, and require universities to provide reasonable accommodations to students with disabilities in order to ensure equal access to all academic and co-curricular programs and services. Students with disabilities requesting accommodations should contact the Disabilities Support Services (DSS) Coordinator to obtain forms for requesting accommodations and documentation requirements. Once a determination is made, faculty will be notified of the accommodations established for the student, which they must allow. The nature of all disabilities is held extremely confidential. Students are encouraged to request accommodations prior to the start of the semester, or as soon as possible, to allow time for a formal review and for the accommodations to be put into place. The DSS Coordinator for the UAS Sitka Campus is Christopher Washko, Student Success Center Manager (Rm 226C), who can be contacted at [cmwashko@uas.alaska.edu](mailto:cmwashko@uas.alaska.edu) or (907) 747-7703.

### **SEXUAL HARASSMENT, SEXUAL VIOLENCE, AND GENDER-BASED DISCRIMINATION POLICY:**

The University of Alaska Southeast is committed to providing both employment and educational environments free of harassment or discrimination related to an individual's race, color, gender, religion, national origin, age, physical or mental disability, veteran status, marital status, pregnancy or parenthood as prohibited by Title IX of the Education Amendments of 1972 and of Title VII (Section 703) of the Civil Rights Act of 1964. University of Alaska Board of Regents policy further includes sexual orientation as a protected class on all UA campuses. These protections are extended not only to university employees, but to students and campus visitors as well.

Title IX specifically prohibits sexual harassment, gender-based discrimination, and sexual violence against any participant in an educational program or activity that receives federal funds. Sexual violence includes attempted or completed rape or sexual assault, as well as sexual harassment, stalking, voyeurism, exhibitionism, verbal or physical sexuality-based threats or abuse, and intimate partner violence. Title IX aims to create educational environments absent all forms of sex discrimination. It addresses university programs, admissions, athletics, sponsored activities and organizations, and student-to-student sexual harassment/violence conducted either on or off-campus. Any person who believes herself or himself (or another member of the university community) to be subjected to such unlawful sexual harassment, violence, discrimination, intimidation and/or exploitation should immediately bring the matter to the attention of the campus Title IX Coordinator, or to any instructor, academic or administrative officer, supervisor,

or advisor. These employees are then mandated to forward the complaint confidentially to the campus Title IX Coordinator, who will take prompt actions to investigate all incidents and take necessary actions to immediately stop the unlawful behavior or situation, prevent its reoccurrence, and remedy its effects upon the victims and the university community. The Sitka Campus Title IX Coordinator/Investigator is Christopher Washko, who can be reached at (907) 747-7703.