Ichthyology - BIOE 127/L - 2018

Location: LG Discovery 128 (Seymour Center Marine Lab)
https://seymourcenter.ucsc.edu/visit/directions/
Instructor: Eric Garcia **OH:** by appointment
TA: Dan Wright **OH:** Tuesday 10-11am
Contacts: **egarci36@ucsc.edu** , **dbwright@ucsc.edu**
Office: OHB builiing (previously COH), room 152b

Tentative schedule

Week	Day	Lecture	Lab
1	M 7.30.18	1) Introduction to Ichthyology 2) Systematics, Evolution and Phylogenetics	1) Meristics & morphometrics
	W 8.1.18	3) Conodonts and Agnatha 4) Chondrichthyes and Sarcopterygians	2) Fish in jars 1 **Select your paper and have a fish head by end of week**
2	M 8.6.18	5) Non-Acanthopterygians Teleostean 6) Acanthopterygians	3) Fish in jars 2
	W 8.8.18	7) Form and movement 8) Physiology	**Paper, 1st draft due** 4) Bony fish dissection + 5) Age and growth lab
3	M 8.13.18	**Midterm** 9) Feeding	6) Shark dissection lab
	W 8.15.18	10) Reproduction 11) Perception	7)Tidepool lab, Natural Bridges *with Marina Ramon* **return your reviews**
4	M 8.20.18	12) Behavior 13) Marine Ecology	**Paper, final draft due** 8) Seymour center lab
	W 8.22.18	14) Speciation Genetics	California Academy of Sciences **Fish skull and drawing due**
5	M 8.27.18	15) Zoogeography/Habitat 16) Fisheries and conservation -	**Lab Practical** **Notebooks due**
	W 8.29.18	**FINAL EXAM**	Monterey Bay Aquarium

Grading criteria:

Lecture

Assignment	Lecture	Due date	% of grade
1	Paper	8.13.18	20%
2	Midterm	8.13.18	40%
3	Final	8.29.18	40%
Total			100%

Lab

Assignment	Lab	Due date	% of grade
2	Fish skull	date	15%
4	Lab practical	date	25%
5	Lab notebook	date	60%
Total			100%

Course description:
An introduction to the biology of jawless, cartilaginous, and bony fishes—their classification, evolution, form, physiology, and ecology.

Course materials:
1) **Field/lab notebook:** composition book, ideally with blank pages**.**
2) The Diversity of Fishes: Biology, Evolution, and Ecology (Helfman et al. 2nd edition: ISBN-10: 1405124946). The Diversity of Fishes is available electronically through the UCSC library.
3) Fishes: A guide to their diversity (Philip A. Hastings, H.J. Walker, Jr. and Grantly R. Galland). Also available electronically through the UCSC library

Expectations: Attendance is required for both lecture and lab as they may be combined throughout the day. For full credit you must attend all labs, fully participate and clean up thoroughly after. See make-up policy below.

Lectures and Labs: Lectures and labs will take place in LG Discovery 128 on Mondays and Wednesdays from 9-12:30 and 1-4:30. Most labs will be in the afternoon, but on some occasions

lecture and lab times will be switched. During days where lectures are long and back-to-back, there will be a break between lectures.

Exams: There will be three examinations total for lecture and lab combined. Lecture exams include a multiple choice/short answer midterm and final. For lab there will be a practical exam which will be based on in-lab activities as well as observations at the Seymour Center and in the intertidal. See grading above.

Field Trips: We will visit Natural Bridges to check out intertidal fishes, the California Academy of Sciences (CAS) and the Monterey Bay Aquarium (MBA). See syllabus for dates and times. The intertidal trip is mandatory and will be EARLY, but we will finish earlier too so you can go home and catch up on sleep before lecture that afternoon. You can miss one of the other trips (CAS or MBA) with no consequences but if you miss both, **you will lose 10 points from the notebook**.

Make-up policy: Make-up exams will only be allowed for students who have a prior substantiated excuse approved by the instructor. Leaving a phone message or sending an e-mail without confirmation is not acceptable. Labs are mandatory. There are no make-up labs. One lecture absence will be permitted; beyond that you will lose 10% of your lecture grade per absence.

Session Deadlines:

Session 2
July 30 - August 31

Deadlines
- **Add** - Thursday, August 2
- **Drop** - Monday, August 6 (tuition refund*)
- **Financial Aid Disbursement** - July 23
- **Change Grade Option** - Friday, August 10
- **Withdraw** - Friday, August 17 (no tuition refund)
- **Grades Due** - Thursday, September 6

*If you drop all of your summer courses, there is a $50 cancellation charge (tuition and fees are refunded)

Summer Session does not drop students for non-attendance or non-payment. Students must drop themselves.

DRC Accommodations: The DRC reduces barriers to inclusion and full participation for students with disabilities by providing support to individually determine reasonable academic accommodations. If you have questions or concerns about exam accommodations, or any other disability-related matter, please contact the DRC office, located in Hahn 125 or at 831-459-2089 or drc@ucsc.edu.

Academic Dishonesty: Academic integrity is the cornerstone of a university education. Academic dishonesty diminishes the university as an institution and all members of the university community. It tarnishes the value of a UCSC degree.

All members of the UCSC community have an explicit responsibility to foster an environment of trust, honesty, fairness, respect, and responsibility. All members of the university community are expected to present as their original work only that which is truly their own. All members of the community are expected to report observed instances of cheating, plagiarism, and other forms of academic dishonesty in order to ensure that the integrity of scholarship is valued and preserved at UCSC.
In the event a student is found in violation of the UCSC Academic Integrity policy, he or she may face both academic sanctions imposed by the instructor of record and disciplinary sanctions imposed either by the provost of his or her college or the Academic Tribunal convened to hear the case. Violations of the Academic Integrity policy can result in dismissal from the university and a permanent notation on a student's transcript.
For the full policy and disciplinary procedures on academic dishonesty, students and instructors should refer to the Academic Integrity page at the Division of Undergraduate Education.

Title IX: The university cherishes the free and open exchange of ideas and enlargement of knowledge. To maintain this freedom and openness requires objectivity, mutual trust, and confidence; it requires the absence of coercion, intimidation, or exploitation. The principal responsibility for maintaining these conditions must rest upon those members of the university community who exercise most authority and leadership: faculty, managers, and supervisors.

The university has therefore instituted a number of measures designed to protect its community from sex discrimination, sexual harassment, sexual violence, and other related prohibited conduct. Information, advice, referrals, and/or copies of the UC Policy on Sexual Violence and Sexual Harassment and the UC Santa Cruz Procedures for Reporting and Responding to Reports of Sexual Violence and Sexual Harassment are available to all students, faculty, and staff by contacting Tracey Tsugawa, Title IX/Sexual Harassment Officer, 105 Kerr Hall, 459-2462, or ttsugawa@ucsc.edu.

Citations: Resources on how to properly cite others' work
http://guides.library.ucsc.edu/citesources

UC Santa Cruz Academic Misconduct Policy for Undergraduates
https://www.ue.ucsc.edu/academic_misconduct