Biology 328 Course Outline, Spring 1999

Jan 20: Intro, terminology, bathymetry, water movements, geology, oral guidelines
        27: Phytoplankton and primary production

Feb 3: Zooplankton and secondary production, student talks
        10: Exam (through 29 prod), pelagic environments
        17: Pelagic environments, seabird symposium
        24: Rocky shore environments, student talks

Mar 3: Rocky and sediment shore environments
        10: Exam (through pelagic), student talks
        17: Spring recess; no class
        24: Estuaries (incl. salt marshes, mangrove swamps), estuaries symposium
        31: Subtidal and deep sea benthic habitats, hydrothermal vent symposium

Apr 7: Exam (through deep sea), student talks
        14: Coral reefs, global warming symposium
        21: Marine mammals, marine mammal symposium
        28: Human impact: pollution, fisheries fisheries symposium

5: Exam (through fisheries) Note: this exam will begin at 5PM, not at 8PM as indicated in the final exam schedule.

Biology 328 Reading Assignments, Spring 1999

Jan 20: Waller 21-27, 31-48, 52-53; Alheit paper
        27: Waller 54-64

Feb 3: Exam: Waller 54-64, 127-133 (part), 172-179 (part)
        10: Waller 96-97, 309-311, 320-323, 326,332, 332-337; Grober, Helfman papers
        17: Waller 361-365, 378-382
        24: 66-78, 100-103, 133-145 (part), 172-179 (part); Williams paper

Mar 3: Exam: Waller 78-80
        10: Peterson paper
        17: Spring recess
        24: Waller 81-84; Brooks paper
        31: Waller 84-88, 98-99

Apr 7: Exam
        14: Waller 88-93, 104-111; Fricke, Shapiro, Davin, Magnelia papers
        21: Waller 395-405, 421-428; Malins paper
        28: Student panels

5: Exam (through fisheries)
Biology 328 Grading Policy  
Spring, 1999

Your grade will be based on your performance on four lecture exams and two oral presentations. Each of the four one-hour lecture exams is worth 20% of the semester grade. The oral presentations will consist of one short (5-10 min) summary of a recent (1996 or more recent) paper from the scientific literature of marine biology (5% of semester grade) and one longer (12-15 min) talk in which you integrate your specific topic into a set of talks devoted to a common theme, i.e., a panel discussion or symposium (15% of final grade). This second talk will require that you meet with the other speakers to organize and subdivide the general theme. Of the 15%, 2/3 or 10% of semester grade will be assigned to your individual performance in the symposium; the other third or 5% of semester grade will be assigned to the group symposium/panel discussion. Each oral presentation will be followed by a short question/answer period with questions from both the instructor and classmates. Taken together, your two oral presentations will meet the oral intensive part of the baccalaureate degree requirements as described in the UAF undergraduate catalog. Note: there are over 35 students enrolled in this course. To incorporate this many oral presentations into a non-lab course and stay within the three-hour per class meeting is going to be impossible. We will need to schedule some extra time to work in all these presentations. One possibility is to extend the class meeting time for some evenings, i.e., meet from 5pm to 830 or 9pm on some Wednesday evenings. I’d have the student talks first, then do some lecturing. Be flexible about this if you can.

The symposia or panel discussions on selected topics relating to marine biology will be interspersed throughout the semester. Each student will prepare a talk for presentation to the class. Each symposium will have a focus and your talk must fit into that focus or topic. Here are some possible topics:

Pollution effects in the marine environment  
Global warming and marine life  
Seabirds: life histories and adaptations  
Marine pharmaceuticals or natural products from the sea  
Estuaries: human and natural perturbations  
Marine fisheries (of Alaska?)  
Marine mammals: life histories and adaptations  
Bioluminescence  
Symbiotic relationships in the marine environment

Each topic could be presented by 5-8 students; I envision 6 - 7 topics. Your individual talks should be about 12-15 minutes long and address a distinct aspect of the overall topic. Some coordination among participants will be necessary. Your talk will be graded; the criteria for the grade are on the accompanying sheet. The intent is for you to not only prepare and deliver a well-organized, informative talk, but (I hope), to explore a new area in marine biology. If, for instance, you have worked for ADF&G for years on salmon and/or prepared salmon talks and papers before, I would strongly recommend you pick a different topic.

The grading scale in this course is as follows:

A:  90-100  
B:  80-89  
C:  70-79  
D:  60-69  
F:  0-59