Biology 328 Course Outline, Spring 1997

Jan 16: Intro, terminology, bathymetry, water movements, geology
23: Phytoplankton and primary production
30: Zooplankton and secondary production

Feb 6: **Exam** (through 2° prod), pelagic environments
13: Pelagic environments
20: Rocky shore environments
27: Rocky and sediment shore environments

Mar 6: **Exam** (through pelagic), **student talks**
13: Estuaries (incl. salt marshes, mangrove swamps)
20: Spring recess; no class
27: Subtidal and deep sea benthic habitats

Apr 3: **Exam** (through deep sea), **student talks**
10: Coral reefs, **student talks**
17: Adaptive strategies: diving in airbreathers; **student panel**
24: Human impact: pollution, fisheries

May 1: **Student panels**

7?: **Exam** (through adaptive strategies), **student panels**

Biology 328 Reading Assignments, Spring 1997

Jan 16: Sumich 1, 2; Alheit paper
23: Sumich 4, 5
30: Sumich 10

Feb 6: **Exam**
13: Sumich 11; Grober, Helfman papers
20: Sumich 8, 7
27: Sumich 8; Williams paper

Mar 6: **Exam**
13: Sumich 6, Peterson paper
20: **Spring recess**
27: Sumich 9; Brooks paper

Apr 3: **Exam**
10: Sumich 7; Fricke, Shapiro, Davin, Magnelia papers
17: Sumich 12
24: Sumich 13, 14; Malins paper

May 1: **Student panels**

7?: **Exam** (through pollution), **student panels**
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 (1995 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, the oral presentations you give will meet the oral intensive part of the baccalaureate degree requirements as described in the UAF undergraduate catalog. Note: there are 50 students enrolled in this course. To incorporate 100 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 Thursday evenings. I’d have the student talks first, then do some lecturing. Be flexible about this if you can.

The last two weeks of class will be devoted to symposia or panel discussions on selected topics relating to marine biology. 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
- Potential for fishery interactions with nontargeted species
- Molluscs: their commercial and ecological importance
- Seabirds: life histories and adaptations
- Marine pharmaceuticals or natural products from the sea
- Estuaries: human and natural perturbations
- Marine fisheries
- 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
Name_________________________  Symposium Topic_________________________

Specific Topic___________________________________________________________

Start_________________________  Finish______________________________

Did talk address title?

Visual aids:

Outline or references:

Voice adequate?
Organization

Was topic covered adequately?

Summary

Did the group of talks hang together (integrate well)?