

BIOL 396: Marine Invertebrate Communities

Dates of course: July 31st, 2004 (6 pm) - August 7th, 2004 (12-noon)

Location of course: Oregon Institute for Marine Biology (OIMB)
63466 Boat Basin Road
Charleston, OR 97420
Phone at OIMB: 541-888-2581

Professor: Dr. Aparna D. Nageswaran Palmer (please call me Aparna)

Office: Wubben 265, Mesa State College

Office phone: 248-1984; **Home phone:** 263-4148; **E-mail:** aparna@mesastate.edu

Phone in Oregon (Aparna's parents): 541-928-5334

INTRODUCTION: Welcome to the course! It is my pleasure to introduce you to the rugged and spectacular coast of Oregon and to help you become familiar with the marine invertebrates that make their livings here.

CLASS OBJECTIVES: The primary objective of this course is to familiarize you with the marine invertebrate communities that characterize the Oregon coast. As such, my goals are to expose you to:

- (1) the diversity of marine life found along the Oregon coast
- (2) the various habitats that these marine invertebrates occupy

REQUIRED TEXT: Seashore Life of the Northern Pacific Coast, by Eugene Kozloff, paperback edition (ISBN: 0295960841). This field guide is available through the Mesa State Bookstore OR through the web. If you wish, you may purchase a used copy through the web rather than buy a new one through the bookstore.

REQUIRED TOOLS/MATERIALS:

1. Pocket-sized field notebook (you can get a water-resistant notebook at this a surveyor's supply store; ask for "Rite in Rain" notebooks)
2. Pens/Pencils
3. Lab Notebook (one that you use in the lab and turn in to me in the fall)
4. 100 gallon sized ziploc bags (for carrying organisms and storing possessions)
5. Backpack/Fanny pack for carrying materials into the field and bringing back specimens.
6. \$50.00 to contribute towards food

YOU ALSO NEED TO BRING THE FOLLOWING ITEMS:

Clothing:

1. Underwear (bring more than enough--you will get soaked at some point!)
2. Footwear (for the field and for the lab):

Footwear for field work on the coast (rubber irrigation boots with good tread OR tennis shoes that you can immerse completely in seawater OR river sandals with traction on slippery surfaces OR watershoes with hard soles to protect you from sharp rocks). Make sure you choose a comfortable pair of fieldwork footwear--you will have to spend hours with them on!

Footwear for trail walking (lightweight hiking boots are great!)

Footwear for labwork (anything comfortable that you can change into after coming in from the field)

3. Three to five sets of “grubbies” that you can wear in the field (these are shirts and pants that you can get dirty and wet; quick-dry clothes are best)
4. One to two sets of “dry” clothes that you will NOT wear in the field; these will be for indoors in the afternoons and evenings!
5. Cold weather gear: (long underwear, fleece jackets/sweaters, long-sleeved shirts, gloves, winter hat, socks, wind and water-resistant jacket)
6. Warm weather gear: (shorts, swimsuit, sun hat w/tie (so it doesn't fly away))
7. Rain gear: poncho that covers you and your backpack, rain hat, and umbrella
8. Sleep wear: be prepared for both chilly, bone-chilling nights **AND** comfortable, warm nights!

Bedding/Toiletries:

1. Sleeping bag and pillow (for placing on your cot)
2. Toiletries (including any feminine products you may need--bring more than enough--we won't have time to run to the store if you run out)
3. Two Towels (large one for bath; small one for drying off after being in the field)

4. Sunscreen
5. Insect repellent
6. First-aid kit (including items for sore, blistered feet)

I HIGHLY RECOMMEND THAT YOU BRING THE FOLLOWING ITEMS:

1. Fold-up shovel (you can get one at an army/navy store)
2. Putty knife (you can get this at a hardware store)
3. Camera with flash (bring plenty of film/discs and batteries)
4. Binoculars for the field

EVALUATION OF STUDENTS: Because this is an intensive field course, participation is very important. Please be prepared to participate in ALL of the field trips that we take, the lab opportunities that we have, and the lectures that will be given. You will also be required to keep a lab notebook and give a short oral presentation on a topic that I will help you choose during the course. Finally, after returning to Mesa, you will have the fall semester to complete a short paper on the topic that you chose for your oral presentation.

Point Distribution

| | |
|--------------------|-------------------|
| Participation | 200 points |
| Lab Notebook | 100 points |
| Oral Presentation | 100 points |
| <u>Short Paper</u> | <u>100 points</u> |
| Total | 500 points |

Final grades will be assigned according to following breakdown:

- A: 90% to 100%
- B: 80% to 89%
- C: 70% to 79%
- D: 60% to 69%
- F: 59% and below

DISABILITIES: If you have a disability that required special accommodations, please contact me as soon as possible.

TENTATIVE SCHEDULE: Please note that I reserve the right to change the schedule if needed.

| <u>Date</u> | <u>Activity</u> |
|------------------------|---|
| July 31 st | Check-in; Meeting at 6pm; grocery shopping; cooking assignments |
| August 1 st | Rocky Intertidal Field Trip (morning) Examination of specimens in lab (afternoon) Short Lecture (evening) Night lighting (night) |
| August 2 nd | Mudflat Field Trip (morning) Examination of specimens (afternoon) Short Lecture (evening) Night lighting (night) |
| August 3 rd | Sandy Beach Field Trip (morning) Examination of specimens (afternoon) Short Lecture (evening) Night lighting (night) |
| August 4 th | Floating Dock Field Trip (morning) Bottom Trawl of Bay (afternoon) Short Lecture (evening) Night lighting (night) |
| August 5 th | Lab time (morning) Field trip to South Slough Estuary (afternoon) Lab time (evening) Night lighting (night) |
| August 6 th | Lab time (morning) Presentations (afternoon) Clean-up (evening) |
| August 7 th | Check out and finish clean-up (noon) |

SUGGESTED ROUTE FOR GETTING TO OIMB IN CHARLESTON, OREGON

There are many ways to get to Charleston, Oregon! Please use your own best judgment in planning out your route! If you are driving, give yourself at least 2 full days to get to Charleston. It is an 18 hour drive!

Suggested Route:

DAY 1: 9-10 hours of driving

1. Take Interstate 70 west to Green River, Utah
2. As you go by Green River, look for Hwy 6 to Price, Utah
3. Take Hwy 6 all the way past Price to Provo, Utah
4. At Provo, join Hwy 15 North (also known as Hwy 84 North)
5. Near Tremonton, Utah, you will veer off to take Hwy 84 North towards Twin Falls, Idaho. Eventually, you will reach Boise, Idaho
6. Go past Boise, Idaho and take Hwy 84 all the way to Ontario, Oregon.
7. Stay overnight in Ontario, Oregon or somewhere close. If it's early, you may go on to Burns, Oregon (Burns is a 2 and a half hour drive from Ontario).

DAY 2: 10 hours of driving

1. From Ontario, find your way to Hwy 20 West (also called Hwy 26) to Vale, Oregon (proceed slowly--this road may be difficult to find and may be confusing to follow at first). If you end up in the town of Nyssa, you need to back up and find the road to Vale.
2. In Vale, take Hwy 20 West towards Burns, Oregon.
3. Continue on Hwy 20 West to Bend, Oregon.
4. From Bend, Oregon, continue on Hwy 20 past Sisters, Oregon. Note that Hwy 20 joins Hwy 126 in Sisters but will separate from it just past Santiam Pass.
5. After you reach Santiam Pass, follow Hwy 126 South towards Belknap Springs. Eventually, this highway will take you westward into Eugene, Oregon.
6. At Eugene, stay on Hwy 126 and head west until you reach Hwy 101 in Florence, Oregon.
7. Take Hwy 101 South until you reach North Bend, Oregon.
8. At North Bend, look for signs to take you to Charleston, Oregon via the Cape Arago Hwy.
9. As you approach Charleston, you will cross a large bridge over the bay.
10. After the bridge, you will reach a major intersection (businesses will be on all four corners of the intersection). At the intersection, turn right. After you turn right, you should be able to see Capt. John's Motel.
11. Now look for Boat Basin Drive. At Boat Basin Drive, turn right.
12. Start looking for the Marine Station. It has grey clapboard buildings. Park and come look for me at the Main Office!

If you need help finding OIMB, please try the main office at 541-888-2581 (they might not have the office open on Saturday) or ask someone in town!