

**Scientific Diving Syllabus**  
**MSL 220**                      **Spring 2015**

Fees: \$450      This covers: pool work, gear rental, tanks, lodging and food during spring break  
\*This does not cover: transportation to the lab, medical physical, CPR, First Aid, O2 certifications.

Instructor: Brenda Konar  
bhkonar@alaska.edu    telephone: 474-5028  
Open office hours – Tuesday 930-1030 or call/email for appointment  
Scientific Diving Web Site: <http://www.sfos.uaf.edu/dive/>

TTW Instructor: Mitch Osborne  
TTW telephone: 490-4444

TA: Alex Ravelo  
[alexandramavelo@gmail.com](mailto:alexandramavelo@gmail.com)    telephone: 474-7074

Classes will be held at either UAF or Patty Pool. See schedule for times and locations  
UAF: 201 O'Niell Bldg, unless otherwise specified  
Patty Pool: bring: lock, swim suit, towel & any personal dive gear

**Learning Objectives:** This course will 1) train students to use scuba as a research tool, 2) assist students to become proficient in cold water diving techniques, 3) allow students to become eligible to join the UA diving program, and 4) assist current AAUS students to remain active in the UA dive program.

**Course Description:** Completion of this course will allow students to be eligible to join (or remain active in) the UA dive program. This will allow students to dive on UA sanctioned diving projects and have reciprocity to dive with other universities and government agencies. The course will introduce and familiarize students to SCUBA diving techniques commonly used in the research community. The course also will familiarize students with local Alaska subtidal flora and fauna and give students an opportunity to work underwater.

We will spend several weeks in Fairbanks mastering skills and passing evaluations and then will spend Spring Break diving at the Kasitsna Bay Laboratory. **The field trip is mandatory.** After several check-out dives at the lab for specific skills and completing a mock "at sea" rescue, the students will assist with diving projects being conducted by the Field Topics students and assist in a survey for invasive species.

This course also can certify students with a Research Diver Specialty and Dry Suit Specialty (PADI). We do the coursework for these specialties. If you would like a PADI card, there is a PADI card fee. Please let us know in the first couple weeks if you want to do this.

**Prerequisites:** This course is open to both undergraduates and graduates and can be retaken for credit.

-An Open Water SCUBA certification is required.

-Current CPR and First Aid certifications also are required. If a student does not have these, courses can be taken on-line at <http://cpaedcourse.com/>.

-A current Emergency Oxygen Administration certification is also required. If a student does not have this certification, then a class may be taken through the UA Dive program at an additional fee.

-A SCUBA medical physical also is required. If a student does not have a current AAUS sanctioned physical, the health center offers most of the required tests; however, some must be done at other locations. Students are responsible for the cost of the SCUBA physical. Graduate students and staff within UAF should talk with Dr. Konar about special conditions regarding physicals.

**Grading:** Pass/Fail. A pass will result after the successful completion of all pool and open ocean skills. Also, current CPR, First Aid and Emergency Oxygen Administration certifications and medical physical are required before a Pass will be given.

**NOTES:**

-No incompletes will be given for this course since it involves a field trip.

-If a student cannot complete the swimming requirements within one month of the first day of class, they will get a faculty-initiated withdrawal (W – this appears on your transcript) from the course (possibly with no refund).

-If a student cannot *satisfactorily* complete the scuba pool-check out requirements prior to the field trip, they will get a faculty-initiated withdrawal (W – this appears on your transcript) from the course (possibly with no refund). All skills must be completed at a proficient level (i.e. students do not "bolt" for the surface during a skill). If a student "bolts" to the surface while attempting to complete a skill 3 times, they will get a faculty-initiated withdrawal (W – this appears on your transcript) from the course (possibly with no refund).

-If a student misses the class orientation, they will get a faculty-initiated drop (does not appear on your transcript) from the class (unless prior arrangements have been made).

-Note: Jan 30 is the last day for 100% refund of tuition and fees

-If you are not a US citizen, there is a bit of paperwork that must be completed 45 days before the field trip. Please see the instructor about this asap.

**Course readings/materials:** All students must be familiar with the Scientific Diving Manual: <http://www.sfos.uaf.edu/dive/manual/contents.html>  
Organism keys and field guides will be provided while at the Kasitsna Bay Laboratory.

**Course policies:** Attendance is expected unless there is a good reason for the absence (illness or research-related travel). Students must contact the instructor prior to a planned absence.

**Support and Disability Services:** At UAF, the Office of Disability Services (203 WHIT; 474-5655; TTY 474-1827; [fydso@uaf.edu](mailto:fydso@uaf.edu)) ensures that students with physical or learning disabilities have equal access to the campus and course materials. If you have specialized needs, please contact this office or the instructor to make arrangements.

The class is a field course. Facilities at the lab are disability accessible. However, SCUBA diving excursions are required.

**SCHEDULE:**

DATE	TIME	LOCATION	TOPIC
1/21	5pm	(UAF)	Orientation, paperwork, requirements.
1/28	635pm	(Hamme)	Swim evaluation
2/4	5pm	(TTW)	Drysuit fitting at Test the Waters
2/11	635pm	(Hamme)	AAUS skills/swim evaluation
2/18	530pm	(Patty)	drysuit and AAUS skills/swim evaluation

2/25 530pm (UAF) Emergency Oxygen Administration (optional if cert is current)  
\$23:12 folks/max ... NOTE: this is in 201 ONL

\*2/26 (tues) 515pm (UAF) \*there may be an additional session on 2/5 if more than 12  
students need this certification (this will be in 138 IRV2 ONL)

3/4 530pm (Patty) rescue drills/**last day to pass swim evaluation**

3/11 635pm (Hamme) make-up day

Mar 14-22 SPRING BREAK at KASITSNA BAY LABORATORY  
<http://www.westnurc.uaf.edu/kbay.html>  
During this time the following will be completed:  
Drysuit video  
Open water, drysuit, compass, and rescue (beach and  
boat) drills  
Assist with second year projects  
Introduction to local flora and fauna  
Biodiversity Treasure Hunt  
Open Book/Web Exam (**bring your open water book**)  
There may also be fun slide shows by various people

\*for an extra fee, you can get PADI specialty cards for Drysuits and Research through TTW