ECOLOGY AND CONSERVATION OF COASTAL BC (REM 475)

INSTRUCTOR: Jon Moore

office: SSB 8275
phone: 778-782-9246
email: jwmoore@sfu.ca

TA: Brennan Lowery
email: blowery@sfu.ca

LECTURES: Tuesday 12:30-14:20 (BLU 10031); Thursday 13:30-14:20 (AQ 4120)

READINGS: Class readings will be historic and current scientific articles. Papers available as pdfs on the website. You are expected to read all of the assigned papers before the class period and be ready to discuss them. There is no textbook.

TUTORIALS: Thursday 14:30-15:20/Thursday 15:30-16:20 (RCB7102). Please refer to the website for updated information on tutorial.

COURSE OBJECTIVES: This course will examine the ecosystems and environmental challenges of coastal BC as well as general concepts and topics in conservation ecology. This course will be organized by tracking the fate of a molecule of water that falls in the coastal mountains and makes its way across the range of ecosystems from mountains to freshwater through to the ocean. This approach will be used for driving the framework and organization of the course, and it will also highlight the interconnected nature of terrestrial, freshwater, and marine ecosystems. Across these ecosystems, we will examine: 1. Natural history: What are the major flora and fauna? What controls community and ecosystem dynamics? 2. Conservation challenges: What are major threats and challenges? 3. Scientific insights and techniques: What are relevant ecological principles and methods? How can science guide management and conservation?

EXAMS: The first midterm covers material from Jan 5 to Feb 9. The second midterm is comprehensive, but will have a greater focus on the second half of the semester.

WEBSITE: Materials for class such as readings, assignments, and lecture outlines will be posted periodically on the website. You are responsible for visiting this site and downloading the relevant course materials. http://www.sfu.ca/biology/faculty/jwmoore/REM475.html

LATE ASSIGNMENT POLICY: All assignments are due at the beginning of class. Assignments will lose 5% per day if they are late (starting after the beginning of the class period).

ACADEMIC HONESTY: All assignments need to be original works by you. There will be no tolerance of any kind of academic dishonesty.

TENTATIVE SCHEDULE:

Week	Date	Day	Topic	Readings[1]
1	5-Jan	Thurs	Introduction	
2	10-Jan	Tues	Alpine—driver: climate change	Chen et al. 2011
2	12-Jan	Thurs	Alpine—ecology	Mote et al. 2005
3	17-Jan	Tues	Alpine—applied science	
3	19-Jan	Thurs	Alpine—paper discussion	Krajick 2004*
4	24-Jan	Tues	Forest—ecology	
4	26-Jan	Thurs	Forest—driver: logging	
5	31-Jan	Tues	Forest—applied science	
5	2-Feb	Thurs	Forest—paper discussion	Simberloff 1987*
6	7-Feb	Tues	Stream—ecology	Naiman et al. 2000
6	9-Feb	Thurs	Stream—applied science	
7	14-Feb	Tues	Reading break-no class	
7	16-Feb	Thurs	Reading break-no class	
8	21-Feb	Tues	--*First midterm*--	
8	23-Feb	Thurs	River—paper discussion	Schindler et al. 2003*
9	28-Feb	Tues	River—ecology	
9	1-Mar	Thurs	River—applied science: salmon	Healey 2009
10	6-Mar	Tues	River—driver	
10	8-Mar	Thurs	Sheltered marine—paper discussion	Crowl et al. 2008*
11	13-Mar	Tues	Sheltered marine—ecology	Guerry 2005
11	15-Mar	Thurs	Sheltered marine—driver	Krkosek 2010
12	20-Mar	Tues	Sheltered marine—applied science	
12	22-Mar	Thurs	Exposed marine—paper discussion	Hughes et al. 2005*
13	27-Mar	Tues	Exposed marine—ecology	
13	29-Mar	Thurs	Exposed marine—applied science	Jamieson and Levings 2001
14	3-Apr	Tues	Diaspora—watersheds	
14	5-Apr	Thurs	Diaspora—paper discussion	Darimont et al. 2010*
15	10-Apr	Tues	--*Second midterm*--	

[1]*This represents an initial set of potential readings. This will likely be changed throughout the course, and readings will likely be added.*

**These papers are the student-led discussion papers*

TENTATIVE GRADING SCHEME

Assignment	**% of final grade**	**Date due**
Species presentation	10	Variable
"Sense of place" assignment	20	
Part 1—Site description		Jan 26
Part 2—Portfolio		April 16
Leading discussion	10	Variable
Problem set	10	March 6
First midterm	20	Feb 21
Second midterm	20	April 10
Class participation	10	Cumulative
Total	100	