DEPARTMENT OF BIOLOGICAL SCIENCES
COURSE OUTLINE

1. Course: MRSC 321 – INTRODUCTION TO MARINE SCIENCE

Lecture Section(s)	L01	TR	09:30	ICT 114	Fall 2014
Instructor(s):	Dr. P. Vize		BI 268	220-8502	pvize@ucalgary.ca

Course website available on Desire 2 Learn (D2L), MRSC 321 L01 (Fall 2014)

Biological Sciences Department BI 186 403-220-3140 biosci@ucalgary.ca

2. Prerequisites: Any two of Biology 231, 233, 241 and 243
See section 3.5.C in the Faculty of Science section of the online Calendar
wwww.ucalgary.ca/pubs/calendar/current/sc-3-5.html

3. Grading: The University policy on grading and related matters is described sections F.1 and F.2 of the online University Calendar. In determining the overall grade in the course the following weights will be used:

Midterm 1	25%	Oct 10, 2014	In-Class
Midterm 2	25%	Nov 14, 2014	In-Class
Paper	10%	Oct 31, 2014	
Final exam	40%	The final examination will be comprehensive.	

Final Examination scheduled by the Registrar's Office.

Standard letter grades with - and + options will be used. The class letter grade cut offs are:

A+	93	C+	74
A	90	C	70
A-	87	C-	65
B+	84	D	60
B	80	F	<60
B-	77		

These grade cutoffs will not be altered. Grades will not be rounded up, no matter how close.

* There will be a final exam scheduled by the Registrar's office

Each piece of work (assignment, laboratory report, midterm test or final examination) submitted by the student will be assigned a percentage score. The student's average percentage score for the various components listed above will be combined with the indicated weights to produce an overall percentage for the course, which will be used to determine the course letter grade, bearing in mind that an F grade will result if the student does not pass the overall lab OR the overall lecture component.

4. Missed Components of Term Work: The regulations of the Faculty of Science pertaining to this matter are found in the Faculty of Science area of the Calendar in Section 3.6. It is the student's responsibility to familiarize himself/herself with these regulations. See also Section E.6 of the University Calendar.

5. Scheduled out-of-class activities: Dates and times of approved class activities held outside of class hours. N/A

REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME-ACTIVITY. If you have a clash with this out-of-class-time-activity, please inform your instructor as soon as possible so that alternative arrangements may be made for you.

6. Course Materials: *Introduction to Marine Biology, Karleskint, Turner and Small, 3rd or 4th Edition. Cengage Learning, ISBN 0-495-56197. This text is highly recommended as a learning aid but is not required.*

Online Course Components: Various videos and links will be posted to the D2L site throughout the course.

7. **Examination Policy**: No aids may be used in examinations. Students should also read the Calendar, Section G, on Examinations.

8. **Approved Mandatory and Optional Course Supplemental Fees**: A list and description of approved optional and mandatory course fees.

9. **Writing across the curriculum statement:** e.g. "In this course, the quality of the student's writing in laboratory reports will a factor in the evaluation of those reports. See also Section E.2 of the University Calendar.

10. **Human studies statement:** students in the course will not be expected to participate as subjects or researchers. See also Section E.5 of the University Calendar.

ETHICS IN THE BIOLOGICAL SCIENCES

Studies in the Biological Sciences involve the use of living and dead organisms. Students taking laboratory- and field-based courses in these disciplines can expect involvement with and experimentation on such materials. Students perform dissections on dead or preserved organisms in some courses. In particular courses, students experiment on living organisms, their tissues, cells, or molecules. Sometimes field work requires students to collect a variety of living materials by many methods, including humane trapping.

All work on humans and other animals conforms to the Helsinki Declaration and to the regulations of the Canadian Council on Animal Care. The Department strives for the highest ethical standards consistent with stewardship of the environment for organisms whose use is not governed by statutory authority. Individuals contemplating taking courses or majoring in one of the fields of study offered by the Department of Biological Sciences should ensure that they have fully considered these issues before enrolling. Students are advised to discuss any concern they might have with the Undergraduate Program Director of the Department.

11. **OTHER IMPORTANT INFORMATION FOR STUDENTS:**

(a) Academic Misconduct: (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the University Calendar under Section K. Student Misconduct to inform yourself of definitions, processes and penalties

(b) Assembly Points: In case of emergency during class time, be sure to FAMILIARIZE YOURSELF with the information on assembly points.

(c) Academic Accommodation Policy: Students with documentable disabilities are referred to the following links:
Calendar entry on students with disabilities and Student Accessibility Services.

(d) Safewalk: Campus Security will escort individuals day or night (http://www.ucalgary.ca/security/safewalk/). Call 220-5333 for assistance. Use any campus phone, emergency phone or the yellow phones located at most parking lot pay booths.

(e) Freedom of Information and Privacy: This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). As one consequence, students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information see also

(f) http://www.ucalgary.ca/secretariat/privacy.

(g) Student Union Information: VP Academic Phone: 220-3911 Email: suvpaca@ucagary.ca.
SU Faculty Rep. Phone: 220-3913 Email: sciencerep@su.ucalgary.ca; Student Ombudsman

(h) Internet and Electronic Device Information: You can assume that in all classes that you attend, your cell phone should be turned off unless instructed otherwise. Also, communication with other individuals, via laptop computers, Blackberries or other devices connectable to the Internet is not allowed in class time unless specifically permitted by the instructor. If you violate this policy you may be asked to leave the classroom. Repeated abuse may result in a charge of misconduct.

(i) At the University of Calgary, feedback provided by students through the Universal Student Ratings of Instruction (USRI) survey provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses (www.ucalgary.ca/usri). Your responses make a difference - please participate in USRI Surveys.

Department Approval_____Date_____

UNIVERSITY OF CALGARY
DEPARTMENT OF BIOLOGICAL SCIENCES

COURSE OUTLINE

MARINE SCIENCES 321

ECOLOGICAL AND EVOLUTIONARY APPLICATIONS

TERM: FALL 2014 SECTION NO: 01

PREREQUISITE(S): Any two of Biology 231, 233, 241 and 243

A student may not register in a course unless he has a grade of at least C- in each prerequisite course.

LECTURER(S): Dr. Peter Vize BI 039 220-8502 pvize@ucalgary.ca

LECTURE : TR 11:00-12:15 ICT 114

TUTORIALS : W 9:00/10:00/13 :00/14:00 ST 027/SS 117

TEXT: Introduction to Marine Biology, Karleskint, Turner and Small, 3rd edition (or 4th); recommended

MARK DISTRIBUTION:

A. Composition of Final Grade

Grading will be based as follows

Midterm 1	25% Oct 07, 2014	In-Class
Midterm 2	25% Nov 06, 2014	In-Class
Paper	10% Oct 30, 2014	
Final exam	40% The final examination will be comprehensive.	

B. Final Exam

There will be a 3 hr comprehensive Final Examination scheduled by the Registrar's Office.

Schedule

	Title	Chapter	
Sept 09	Introduction, Geology of the ocean	3	
Sept 11	Water, waves and tides	4	
Sept 16	Marine microbes	6	
Sept 18	Algae and plants	7	
Sept 23	Inverts 1, sponges, cnidarians	8	
Sept 25	Inverts 2, molluscs, cephalopods	9	
Sept 30	Inverts 3, echinoderms, arthropods	9	
Oct 02	Inverts 4, worms and chordates	9	
Oct 07	**Midterm 1 (classes up to and including Oct 02)**	IN-CLASS	
Oct 09	Fish	10	
Oct 14	Fish	10	
Oct 16	Marine reptiles and birds	11	Paper titles available
Oct 21	Marine mammals	12	
Oct 23	Marine mammals	12	
Oct 28	Marine mammals	12	
Oct 30	Coral Reproduction		**PAPERS DUE**
Nov 04	Coral reef communities	15	
Nov 06	**Midterm 2 (classes from Oct 08 to Nov 06 inclusive)**	IN-CLASS	
Nov 11	reading day- no class		
Nov 13	Sharks and the oceanic ecosystem		
Nov 18	Polar seas		
Nov 20	Continental shelves	16	
Nov 25	The open ocean	17	
Nov 27	The depths	18	
Dec 02	The depths	18	
dec 04	TBD		

Final to be announced, some time between Dec 08-18.