



# UNIVERSITY OF CALGARY

## DEPARTMENT OF BIOLOGICAL SCIENCES COURSE OUTLINE

### 1. **Course:** MRSC 321 – INTRODUCTION TO MARINE SCIENCE

Lecture Section(s)	L01	TR	11:00-12:15	ES 162	Fall 2016
<b>Instructor(s):</b>	Dr. P. Vize		BI 268	220-8502	pvize@ucalgary.ca

Course website available on Desire 2 Learn (D2L), MRSC 321 L01 (Fall 2016)

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  
[www.ucalgary.ca/pubs/calendar/current/sc-3-5.html](http://www.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 13, 2016	In-Class
Midterm 2	25%	Nov 08, 2016	In-Class
Paper	10%	Nov 01, 2016	take home
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 (paper, 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 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.3](#) of the University Calendar. Missed exams require a doctor's note on the appropriate university form.

### 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. Missed exams will be evaluated by an alternative short answer paper. Students are strongly advised to take scheduled examinations.
8. **Writing across the curriculum statement:** e.g. "In this course, the quality of the student's writing in laboratory reports will be a factor in the evaluation of those reports. See also [Section E.2](#) of the University Calendar.
9. **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.

#### 10. 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) **Student Accommodations:** Students needing an Accommodation because of a Disability or medical condition should contact Student Accessibility Services in accordance with the Procedure for Accommodations for Students *with Disabilities available at [http://www.ucalgary.ca/policies/files/policies/procedure-for-accommodations-for-students-with-disabilities\\_0.pdf](http://www.ucalgary.ca/policies/files/policies/procedure-for-accommodations-for-students-with-disabilities_0.pdf)*.  
  
Students needing an Accommodation in relation to their coursework or to fulfil requirements for a graduate degree, based on a Protected Ground other than Disability, should communicate this need, preferably in writing, to the Associate Head of Biological Sciences, Dr. H. Addy by email [addy@ucalgary.ca](mailto:addy@ucalgary.ca) or phone 403 220-3140.
- (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 (FOIP). 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 <http://www.ucalgary.ca/secretariat/privacy>.
- (f) **Student Union Information:** VP Academic Phone: 403 220-3911 Email: [suvpaca@ucalgary.ca](mailto:suvpaca@ucalgary.ca)  
SU Faculty Rep. Phone: 403 220-3913 Email: [science1@su.ucalgary.ca](mailto:science1@su.ucalgary.ca), [science2@su.ucalgary.ca](mailto:science2@su.ucalgary.ca) and [science3@su.ucalgary.ca](mailto:science3@su.ucalgary.ca);  
Student Ombuds Office: 403 220-6420 Email: [ombuds@ucalgary.ca](mailto:ombuds@ucalgary.ca); <http://ucalgary.ca/provost/students/ombuds>
- (g) **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.
- (h) 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](http://www.ucalgary.ca/usri)). Your responses make a difference - please participate in USRI Surveys.
- (i) Email policy. This class has a no email policy. To communicate with the instructor attend office hours or meet after classes.

Department Approval \_\_\_\_\_ ORIGINAL SIGNED \_\_\_\_\_ Date \_\_\_\_\_

**Schedule**

	<b>Title</b>	<b>Chapter</b>	
Sept 13	Introduction, geology, water	3,4	
Sept 15	Marine microbes	6	
Sept 20	Algae and plants	7	
Sept 22	Plants and sponges	7&8	
Sept 27	Cnidaria and Ctenophores Inverts 2,	8&9	
Sept 29	Molluscs inc Cephalopods Inverts 3	9	
Sept 29	Inverts 4, arthropods	9	
Oct 04	Inverts 5, echinoderms	9	
<b>Oct 06</b>	Inverts 6 worms and chordates	9	
Oct 11	Fish 1	10	
Oct 13	<b>Midterm 1 (classes up to and including Oct 06)</b>	IN-CLASS	
	(midterms are a combination of multiple choice and short answer questions)		
Oct 18	Fish 2	10	Paper titles available
Oct 20	Marine reptiles and birds	11	
Oct 25	Marine mammals 1	12	
Oct 27	Marine mammals 2	12	
Nov 01	Marine mammals 3	12	<b>PAPERS DUE</b>
Nov 03	Coral reef communities	15	
<b>Nov 08</b>	<b>Midterm 2 (classes from Oct 11 to Nov 03 inclusive)</b>	IN-CLASS	
Nov 10	Reading Days – No Class		
Nov 15	Sharks and marine ecosystems		
Nov 17	Polar seas		
Nov 22	Open ocean and mesopelagic zone	17	
Nov 24	The Abyss	18	
Nov 29	The Abyss	18	
Dec 01	Coral reproduction		
Dec 06	Climate change		
Dec 08	Revision		

Final to be announced, some time between Dec 12-22. The final exam is all multiple choice.

October 10, thanksgiving

Nov10-13 Reading Days

Dec 09 classes end