

The UofS and St. Peter's College are situated on Treaty 6 Territories and the Homelands of the Métis. We pay our respects to the First Nations and Métis ancestors of this place and reaffirm our relationship with one another. We would also like to recognize all other Treaty Territories and Homelands within Saskatchewan.

COURSE SYLLABUS

COURSE TITLE:	Biology 121 The Diversity of Life		
COURSE CODE:	22644	TERM:	2
COURSE CREDITS:	3	DELIVERY:	Lecture & Practicum (Lab)
CLASS SECTION:	96		
CLASS START DATE:	Jan. 4 th , 2018	LAB START DATE:	Jan. 18 th , 2018
CLASS LOCATION:	St. Peter's College	LAB LOCATION:	St. Peter's College
CLASS TIME:	Thur. 1:00 p.m.	LAB TIME:	Thurs. 9:00 a.m.
WEBSITE:	www.usask.ca and www.bblearn.usask.ca		

Instructor Information

Contact Information

Lecture & Lab:	Kim Cross (primary)	kim.cross@usask.ca
	Rebecca Cross	rebecca.cross@usask.ca

Office Hours

Typically held 30 minutes before and after class. You can also contact the instructor by email, or by WebEx online meetings through PAWS.

Course Description

Our world has at least 15 million species, all of which have adapted to particular environments and lifestyles and use energy to grow and reproduce. We examine these processes in representative organisms from all the major groups, and discuss factors influencing changes in biodiversity over time and space.

Prerequisites: Biology 30 or BIOL 107 or BIOL 108.

Note: Students with credit for BIOL 110 will not receive credit for BIOL 121.

Course Overview

Every week Biology 121 will require 3 hours of lecture, 3 hours of lab and a minimum of 3 hours of study. Reading and partially completing the notes prior to lecture, and doing the same with the lab manual prior to lab will ensure greater understanding of the material. Attention to current events, especially those that have implications to the natural world, will assist you greatly in this class.

Learning Outcomes

By the completion of this course, students will be expected to:

1. Improve your critical thinking skills and observation skills.
2. Understand how biology functions as a science.
3. Obtain knowledge from other disciplines within biology and from other fields of study, in order to understand world from as many perspectives as possible.
4. Understand the concepts of biodiversity and the interactions leading to biodiversity.
5. Understand systematics and taxonomy.
6. Understand species, microevolution and macroevolution.
7. Understand human influences on biodiversity.
8. Obtain laboratory experience to help link these topics together, with hands-on exercises leading to your understanding the use of microscopes to visualize cells and dissections/observations of larger organisms.
9. In lab, obtain knowledge of 25 representative organisms, in order to appreciate the scope of diversity on Earth.

Information on literal descriptors for grading at the University of Saskatchewan can be found at: <http://students.usask.ca/current/academics/grades/grading-system.php>

Please note: There are different literal descriptors for undergraduate and graduate students.

More information on the Academic Courses Policy on course delivery, examinations and assessment of student learning can be found at:

http://www.usask.ca/university_secretary/council/academiccourses.php

The University of Saskatchewan Learning Charter is intended to define aspirations about the learning experience that the University aims to provide, and the roles to be played in realizing these aspirations by students, instructors and the institution. A copy of the Learning Charter can be found at:

http://www.usask.ca/university_secretary/LearningCharter.pdf

Required Resources

Readings/Textbooks

No required textbook. However, if you can obtain a full copy of Peter Russell's Biology it will be useful for other biology classes in the future. Ask your instructor if you are interested. OpenStax has a free online textbook called Biology which may be useful.

2017-2018 Lab Manual for Biology 121.3. University of Saskatchewan, Biology Department. Required.

Lab Manuals are available from the University of Saskatchewan Bookstore:

www.usask.ca/bookstore/ or via online resellers.

Electronic Resources, Downloads & Supplementary Resources

Blackboard Learn (<https://bblearn.usask.ca>) is where you will be able to access the syllabus and other resources from your instructor.

Class Schedule

(Approximate number of 50 minute lectures indicated in brackets)

WEEK	Lecture	Lab
1 (Jan. 3-5)	Intro (1); Intro to life, water & energy (1); Biology as a Science (1)	NO LAB
2 (Jan. 8-12)	Intro to Biodiversity & Species Concepts (3)	NO LAB
3 (Jan. 15-19)	Classification, Systematics/Cladistics & Lab ROs (3)	LAB 1 Introduction, Prokaryotes
4 (Jan. 22-26)	Evolution – History of thought & evidence (3)	LAB 2 Protists
5 (Jan. 29 – Feb. 2)	Evolution – Microevolution & Hardy-Weinberg (3)	LAB 3 Fungi
6 (Feb. 5-9)	Evolution – Macroevolution & Extinctions (3)	LAB 4 Plants I - Green algae, Mosses, Ferns & Club Mosses
7 (Feb. 12-16)	Midterm I – Weeks 1-6 Abiotic and Biotic World (2)	NO LAB
8 (Feb. 19-23)	Midterm Break	
9 (Feb. 26 – Mar. 2)	Changes through time – Geological time scale, origins of life to multicellular sexual organisms (3)	LAB 5 Plants II – Conifers & Angiosperms
10 (Mar. 5-9)	Changes through time (3) – changes to multicellular life	LAB 6 Animals I - Sponges, Cnidarians, Flatworms & Nematodes
11 (Mar. 12-16)	Biotic Interactions – behaviors, growth, competition & exploitation (3)	LAB 7 Animals II – Annelids, Molluscs & Arthropods
12 (Mar. 19-23)	Biotic Interactions – mutualism, succession & island biogeography (3)	LAB 8 Animals III - Echinoderms & Chordates
13 (Mar. 26-30)	Humans & Biodiversity – exploitation, introduced species, pollution, conservation (3)	Review Lab
14 (Apr. 2-6)	BBC Planet Earth as a summary (3)	Lab Exam – Labs 1-8

Midterm and Final Examination Scheduling

Midterm, final and lab examinations must be written on the date scheduled, and at the location scheduled. See above schedule for the midterm exam date.

Final examinations may be scheduled at any time during the examination period (April 9th to April 28th, 2018); students should therefore avoid scheduling travel plans, employment, or other commitments for this period.

If a student is unable to write an exam through no fault of his or her own for medical or other valid reasons, documentation must be provided and an opportunity to write the missed exam may be given. Students absent for a midterm exam must advise their lecturer in person, by telephone or by e-mail and initiate arrangements for writing a Deferred Midterm Exam. Contact must be made within **three working days** of the missed exam and **supported by appropriate documentation**, in order to avoid being assigned a grade of zero for the exam. The same rules apply for a Deferred Final Exam, but applications are made to the Dean's Office of your college.

As a student, you must bring your current College or University of Saskatchewan student ID card to all exams and be prepared to present it for verification purposes.

It is forbidden for you to utilize, in any way during an exam, any electronic device (e.g. cell phone, smart phone, tablet, laptop, electronic dictionary or translator) other than a simple calculator (if required by the examiner) for solving mathematical problems.

Students are encouraged to review all examination policies and procedures:

<http://students.usask.ca/academics/exams.php>

Grading Scheme

Midterm Exam	15%
Final Exam	45%
Lab Assignments and Quizzes	20%
Lab Exam	20%
Total	100%

Evaluation Components

Midterm Exam

Value: 15% of final grade

Date: See Course Schedule on page 3

Length: 50 minutes

Type: Multiple choice. Closed book, hand marked.

Description: 40 multiple choice questions, based on information presented in Weeks 1-6. During the exam, it is forbidden for you to utilize any electronic device other than a simple calculator (if required).

Final Exam

Value: 45% of final grade
Date: See Course Schedule on pages 2-3
Length: 3 hours
Type: Multiple choice, comprehensive. Closed book, hand marked.
Description: 100 multiple choice questions, based on all course information. This exam will be split approximately 30% Weeks 1-6 and 70% Weeks 7-14. During the exam, it is forbidden for you to utilize any electronic device other than a simple calculator (if required).

Lab Assignments

Value: 20% of final grade
Due Date: TBA during Lab 1
Type: Spot test, short answer, fill in blanks, T/F, diagrams, flower dissection.
Description: Approximately 5 small assignments, 10-20 minutes in length, to be completed during lab time. More details given during lab.

Lab Exam

Value: 20% of final grade
Due Date: See Course Schedule on pages 2-3
Type: Spot test, short answer, project and RO sheet.
Description: Comprehensive on Labs 1-8. More details given during lab.

Submitting Assignments & Late Assignments

All exams, quizzes and assignments are to be completed during the assigned class time. Any assignments handed in late or remaining uncompleted will be assigned a mark of zero. Please see above for other rules and regulations around missed exams. Please refer to the current lab manual for other policies around missed lab assignments.

Student Feedback

All exam, quiz and assignment marks will be returned to the student within one week (5 working days) of the exam/quiz/assignment date. Lecture midterms will be discussed with students during lecture time during the week following the midterm date. Final lecture exam and lab exam marks will be posted (in class, online or sent via email), but you must make arrangements with the instructor to see these exams.

Attendance Expectations & Participation

It is to the student's benefit to be on time and attend all lectures and labs. When attending classes or labs, it is essential you attend the section(s) in which you are enrolled. Asking questions and engaging in the material is also beneficial.

Criteria That Must Be Met to Pass

A recorded grade for all assignments, quizzes and exams, with a total grade of 50%, is required to pass this course. INF (incomplete failure) can be applied to those students not attending the final lab exam. INF will be applied to those students not attending the lecture final exam.

Integrity Defined (from the Office of the University Secretary)

The University of Saskatchewan is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the Student Conduct & Appeals section of the University Secretary Website and avoid any behavior that could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University.

All students should read and be familiar with the Regulations on Academic Student Misconduct (<http://www.usask.ca/secretariat/student-conduct-appeals/StudentAcademicMisconduct.pdf>) as well as the Standard of Student Conduct in Non-Academic Matters and Procedures for Resolution of Complaints and Appeals (<http://www.usask.ca/secretariat/student-conduct-appeals/StudentNon-AcademicMisconduct.pdf>)

For more information on what academic integrity means for students see the Student Conduct & Appeals section of the University Secretary Website at:

<http://www.usask.ca/secretariat/>

Examinations with Access and Equity Services (AES)

Students who require accommodations based on disability, religion, family status and gender identity are strongly encouraged to register with Access and Equity Services (AES), if they have not already done so. Students who suspect they may require accommodations should contact AES for advice and referrals, as soon as possible. To access AES programs and supports, students must follow AES policy and procedures. For more information, check <https://students.usask.ca/health/centres/access-equity-services.php>, or contact AES at 966-7273 or aes@usask.ca.

Students will provide a copy of their AES letter to the instructor at the beginning of term, or as soon as it is available. This letter may allow for certain accommodations for lab exams and mid-term and final lecture exams. However, to receive accommodation **students must provide AES documentation to the instructor and to college staff 14 days prior to the midterm exam date or lab exam dates, and a minimum of 3 weeks before the start of final exams.** Accommodations not listed in the AES letter will be denied, unless agreed upon by all parties prior to the exam date.

You may record lectures, but please give the instructor notice if you intend to do so, as fair warning to other students must be given.