



Department of Biology

COURSE SYLLABUS

COURSE TITLE: BIOL 90.3 Introduction to Biology	
COURSE CODE: 86943	TERM: Term 1 (Fall) 2020-2021
COURSE CREDITS: Non degree-credit	DELIVERY: Remotely (Mixed learning - synchronous and asynchronous)
CLASS SECTION: 01	
LECTURES/TUTORIALS LOCATION: Remotely	
MEETING TIMES: Tuesday 9:00 am <u>AND</u> Thursday 9:00 am	
WEBSITE: see PAWS/CANVAS	

Course Description

Designed as a preparatory access course for students who were unable to access, or need to review, 30-level biological science curricula. Content focuses on core concepts, terminology, problem solving strategies, and skills foundational to success in post-secondary biological sciences and related degree paths.

Prerequisite(s): Grade 12 Diploma or equivalent

Note: BIOL 90 fulfills prerequisite requirements for BIOL 120 and BIOL 121, though BIOL 90 is not directly equivalent to Biology 30. BIOL 90 is a not-for-credit course and does not contribute to the course requirements for a university degree.

Course Themes

The course will facilitate student learning in the following themes:

- Physiology/Health
- Genetics/Cell biology
- Ecology/Environment
- Biodiversity/Evolution

Treaty Acknowledgement

As we engage in Remote Teaching and Learning, we would like to acknowledge that the Saskatoon campus of the University of Saskatchewan is on Treaty Six Territory and the Homeland of the Métis. We pay our respect to the First Nation and Métis ancestors of this place and reaffirm our relationship with one another. We would also like to recognize that some may be attending this course from other traditional Indigenous lands. We ask that you take a moment to make your own Land Acknowledgement to the peoples of those lands. In doing so, we are actively participating in reconciliation as we navigate our time in this course, learning and supporting each other.

Important Academic Dates

Tuesday Sept. 17th – Last day to withdraw from Term 1 (Fall) classes with 100% tuition credit.

Tuesday Sept. 24th – Last day to withdraw from Term 1 (Fall) classes with 75% tuition credit.

Tuesday Oct. 1st – Last day to withdraw from Term 1 (Fall) classes with 50% tuition credit.

Monday Dec. 7th – Last day to withdraw from Term 1 (Fall) classes.

Learning Outcomes

Upon successful completion of this course, students will have reliably demonstrated the ability to:

1. Analyze case studies within the contents of the course themes;
2. Find, learn and interpret problem-related concepts and incorporate new concepts in the analysis of the case studies;
3. Integrate multiple sources of information to gain a better understanding of the problem;
4. Clearly articulate the conceptual knowledge related to the problem/issue in the form of written and oral presentations;
5. Actively participate in class discussion and other collaborative tasks;
6. Demonstrate leadership roles and responsibilities.

Note: The University of Saskatchewan's 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.

More information on University policies on course delivery, examinations and assessment of student learning can be found at: <http://policies.usask.ca/policies/academic-fairs/academiccourses.php>

Detailed Course Schedule

Week/ Dates	Major Activities
Week 1 Sept 3	Session A Thursday Sept 3 <ul style="list-style-type: none">• Course opening/introductions• Using WebEx• Ice breaking activity• Add our photos to the online profiles• Overview of the course and its objectives

<p>Week 2 Sept 8 & 10</p>	<p>Session B Tuesday Sept 8</p> <ul style="list-style-type: none"> • Overview of the course learning assessment • Using PAWS/Canvas/other USask web resources • Citing and referencing • Preparing PowerPoint.ppt • Learning to work together <p>Session A Thursday Sept 10</p> <ul style="list-style-type: none"> • Department of Biology orientation & advising • Orientation on the use of science library resources (quest speaker – Ms. DeDe Dawson)
<p>Week 3 Sept 15 & 17</p>	<p>Session B Tuesday Sept 15</p> <ul style="list-style-type: none"> • Individual learning tour in nature to write a reflective essay <p>Session A Thursday Sept 17</p> <ul style="list-style-type: none"> • Practice quiz Interesting Biology topic to be presented by instructor “Let’s talk about genetics” • Introductory case study
<p>Week 4 Sept 22 & 24</p>	<p>Session B Tuesday Sept 22</p> <ul style="list-style-type: none"> • Finish group introductory case study work • Debrief about the case; instructions for the Reflection Essay • Distribution of next week’s case study <p>Case Study #1</p> <p>Session A Thursday Sept 24</p> <ul style="list-style-type: none"> • Reflection Essay due this day (September 24) • Case scenario review; search for background knowledge • Case discussion (students & instructor)
<p>Week 5 Sept 29 & Oct 1</p>	<p>Case Study #1 (continued)</p> <p>Session B Tuesday Sep 29</p> <ul style="list-style-type: none"> • Group discussion of research • Case Objectives Review/Completion of Handout Material • Jigsaw activity <p>Session C Thursday Oct 1st</p> <ul style="list-style-type: none"> • Review of jigsaw activity results and case learning objectives • Build and finalize power-point presentations

<p>Week 6 Oct 6 & 8</p>	<p>Case Study #1 (continued) Session D Tuesday Oct 6</p> <ul style="list-style-type: none"> • Topic presentations; Q & A • Upload presentations and completed handouts to Canvas • Distribution of next week's case study <p>Case Study #2 Session A Thursday Oct 8 <i>Oct 8 - 15 minute quiz via Canvas on the concepts learned from Case Study #1</i></p> <ul style="list-style-type: none"> • Case scenario review; search for background knowledge • Case discussion (students & instructor interaction)
<p>Week 7 Oct 13 & 15</p>	<p>Case Study #2 (continued) Session B Tuesday Oct 13</p> <ul style="list-style-type: none"> • Group discussion of research • Case Objectives Review/Completion of Handout Material • Jigsaw activity <p>Session C Thursday Oct 15</p> <ul style="list-style-type: none"> • Review of jigsaw activity results and case learning objectives • Build and finalize power-point presentation
<p>Week 8 Oct 20& 22</p>	<p>Case Study #2 (continued) Session D Tuesday Oct 20</p> <ul style="list-style-type: none"> • Topics presentation; Q & A • Upload presentations and completed handouts to Canvas • Distribution of next week's Case Study <p>Case Study #3 Session A Thursday Oct 22 <i>Oct 22 - 15 minutes quiz via Canvas on the concepts learned from Case Study #2</i></p> <ul style="list-style-type: none"> • Case scenario review; search for background knowledge • Case discussion (students & instructor interaction)
<p>Week 9 Oct 27&Oct 29</p>	<p>Case Study #3 (continued) Session B Tuesday Oct 27</p> <ul style="list-style-type: none"> • Group discussion of research • Case Objectives Review/Completion of Handout Material • Jigsaw activity <p>Session C Thursday Oct 29</p> <ul style="list-style-type: none"> • Review of jigsaw activity results and case learning objectives • Build and finalize power-point presentation

<p>Week 10 Nov 3&5</p>	<p>Case Study #3 (continued) Session D Tuesday Nov 3</p> <ul style="list-style-type: none"> • Topic presentations; Q & A • Upload presentations and completed handouts • Distribution of next week's Case Study <p>Case Study #4 <i>Nov 5 - 15 minute quiz via Canvas on the concepts learned from Case Study #3</i></p> <p>Session A Thursday Nov 5</p> <ul style="list-style-type: none"> • Case scenario review; search for background knowledge • Case discussion (students & instructor interaction)
<p>Nov 10& 12</p>	<p><i>Break Week – No Classes</i></p>
<p>Week 11 Nov 17& 19</p>	<p>Case Study #4 (continued) Session B Tuesday Nov 17</p> <ul style="list-style-type: none"> • Group discussion of research • Case Objectives Review/Completion of Handout Material • Jigsaw activity <p>Session C Thursday Nov 19</p> <ul style="list-style-type: none"> • Review of jigsaw activity results and case learning objectives • Build and finalize power-point presentation
<p>Week 12 Nov 24& 26</p>	<p>Case Study #4 (continued) Session D Tuesday Nov 24</p> <ul style="list-style-type: none"> • Topics presentation; Q & A • Upload presentations and completed handouts <p>Session A Thursday Nov 26 <i>Nov 26 - 15 minute quiz via Canvas on the concepts learned from Case Study #4</i></p> <ul style="list-style-type: none"> • CourseReview • Distribution of the Final Exam assignment
<p>Week 13 Dec 1&3</p>	<p>Session B Tuesday Dec 1st <i>Dec 3 – Final Exam Answers to be submitted</i> No other course activity scheduled for Dec 1</p> <p>Thursday Dec 3 – individual debrief with instructors/assessment of course components 1 through 5.</p>

Course Overview & Structure:

1. Course Structure

The Biol 90 course is uniquely structured, and encompasses a specific teaching methodology. Unlike traditional courses, the instruction methodology will be case-based and problem-solving oriented where the instructor will play a facilitating role. It is a non-credit, non-degree level course, the completion of which is on a pass/fail basis.

This year, Biol 90 will be delivered entirely remotely, course material will be prepared and posted to the course management system Canvas in advance of each scheduled lecture. Students are expected to interact in a weekly live (synchronous) meeting with the course professor and other students through WebEx. And they will be required to complete a variety of online activities, both oral and written, using a variety of technology tools.

Students are expected to actively engage in all class activities. Activities include blogging and discussion forums, email interaction, journaling, wikis, and web posting. Some components of the course, including your participation, will be video-/audio-recorded and will be available to students for viewing remotely after each session.

The recorded materials belong to your instructor and U o S and are copyright protected. In this course, you are permitted to download session videos and materials for your own academic use, but you should not copy, share, or use them for any other purposes without the explicit permission from the instructor.

The course involves 4 cases that will be described, discussed, analyzed and presented. Each case will be investigated over a two-week period as follows:

Case scenario review (Session A): Students will be seated in groups of 4 and will have access to the case in advance. Both the instructor and the students will go through WebEx over the case in general during which students' reflections, questions, and inquiries are facilitated.

Main Group work (Session A & B): Each group will investigate the case following one of the main course themes (Physiology/Health; Genetics/Cell Biology; Ecology/Environment; Biodiversity/Evolution). For each theme, a written handout with instructions for investigation of the case as well as related questions is provided to a group. The investigation of each topic requires the group to study related concepts, search multiple resources, explore and interpret findings, and reach a conclusion(s). In subsequent cases, the groups are assigned a course theme different than the ones they were assigned in the previous case on a rotational basis. The complete work of the groups must be submitted to Canva before 6 pm CST on Tuesday of the of the assigned week).

Jigsaw activity (Session B & C): In the jigsaw activity, Students need to make a visit to the case study module in Canvas and go over the material of the other three groups and contribute to these groups' work by incorporating their personal experiences, raise interesting questions on the work of other groups and/or respond to the peers' comments. The group will be responsible for answering all the addressed questions. Participation will be assessed at 6 pm CST on Thursday of the assigned week.

PowerPoint presentations (Session C): Each group prepares a PowerPoint presentation using their research findings to summarize the relevant case-learning objectives. The group then nominates one member or more to present the slides. Eventually, every student is expected to present a research finding objective at one point throughout the course.

Case wrap-up (Session D): All students and the instructor will convene as one group for the students to present their case summaries. Each presentation will approximate 15-minutes in duration with extra time allowed for questions and answers. Student presentations and completed handouts from the group work must be uploaded to Canvas for the rest of the class to review and the instructor to comment on. The group discussion should address all case learning objectives, summarize, reflect and combine the conclusions from the four course themes. The next case will be introduced at the end of the wrap-up

Instructor:

Dr. Manar Angrini Office location: room 220.2 WPT CSRB
addition phone: 306-966-4437 email:
manar.angrini@usask.ca

Office Hours: There are no “in-person” office hours this term. However, you still can arrange an online meeting with your professor. Please email me to arrange for an individual meeting via WebEx. For more information, including how to set up WebEx conference, see <https://training.usask.ca/webex.php>.

Required & Supplementary Resources

Textbook: No textbook required

Integrity in a remote learning context (from the Office of the University Secretary)

Although the face of teaching and learning has changed due to covid-19, the rules and principles governing academic integrity remain the same. If you ever have questions about what may or may not be permitted, ask your instructor. Students have found it especially important to clarify rules related to exams administered remotely and to follow these carefully and completely.

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 (<https://secretariat.usask.ca/student-conduct-appeals/academic-misconduct.php>) as well as the Standard of Student Conduct in Non-Academic Matters and Procedures for Resolution of Complaints and Appeals (<https://secretariat.usask.ca/student-conduct-appeals/academic-misconduct.php#IXXIIAPPEALS>)

For more information on what academic integrity means for students see the Academic Integrity section of the University Library Website at: <https://library.usask.ca/academic-integrity#AboutAcademicIntegrity>

You are encouraged to complete the Academic Integrity Tutorial to understand the fundamental values of academic integrity and how to be a responsible scholar and member of the USask community - <https://library.usask.ca/academic-integrity.php#AcademicIntegrityTutorial>

Student Supports

Academic Help for Students

The University Library offers a range of learning and academic support to assist USask undergrad and graduate students. For information on specific services, please see the Learning page on the Library web site <https://library.usask.ca/support/learning.php>.

Remote learning support information <https://students.usask.ca/remote-learning/index.php>

[Class and study tips https://students.usask.ca/remote-learning/class-and-study-tips.php](https://students.usask.ca/remote-learning/class-and-study-tips.php)

Remote learning tutorial https://libguides.usask.ca/remote_learning

Study skills materials for online learning <https://libguides.usask.ca/studyskills>

A guide on netiquette, principles to guide respectful online learning interactions
<https://teaching.usask.ca/remote-teaching/netiquette.php>

Teaching, Learning and Student Experience

Teaching, Learning and Student Experience (TLSE) provides developmental and support services and programs to students and the university community. For more information, see the students' web site <http://students.usask.ca>.

Financial Support

Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact Student Central (<https://students.usask.ca/student-central.php>).

Aboriginal Students' Centre

The Aboriginal Students' Centre (ASC) is dedicated to supporting Aboriginal student academic and personal success. The centre offers personal, social, cultural and some academic supports to Métis, First Nations, and Inuit students. The centre is also dedicated to intercultural education, bringing Aboriginal and non-Aboriginal students together to learn from, with and about one another in a respectful, inclusive and safe environment. Students are encouraged to visit the ASC's Facebook page (<https://www.facebook.com/aboriginalstudentscentre/>) to learn more.

International Student and Study Abroad Centre

The International Student and Study Abroad Centre (ISSAC) supports student success and facilitates international education experiences at USask and abroad. ISSAC is here to assist all international undergraduate, graduate, exchange and English as a Second Language students in their transition to the University of Saskatchewan and to life in Canada. ISSAC offers advising and support on matters that affect international students and their families and on matters related to studying abroad as University of Saskatchewan students. Please visit students.usask.ca or updates.usask.ca for more information.

Recommended Technology for Remote Learning

Students are reminded of the importance of having the appropriate technology for remote learning. The list of recommendations can be found at <https://students.usask.ca/remote-learning/tech-requirements.php>.

College Supports

Students in Arts & Science are encouraged to contact the Undergraduate Student Office and/or the Trish Monture Centre for Success with any questions on how to choose a major; understand program requirements; choose courses; develop strategies to improve grades; understand university policies and procedures; overcome personal barriers; initiate pre-career inquiries; and identify career planning resources. Contact information is available at: <http://artsandscience.usask.ca/undergraduate/advising/>

Examinations through Access and Equity Services (AES)

Students who have disabilities (learning, medical, physical, or mental health) are strongly encouraged to register with AES if they have not already done so. Students who suspect they may have disabilities should contact AES for advice and referrals. In order 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 9667273 or aes@usask.ca.

Students who are in need of accommodation for the course must present the appropriate letter from AES to the course coordinator. Students registered with AES may require alternative arrangements for examinations. Students must arrange such accommodations through AES by their stated deadlines.

Copyright

Course materials are provided to you based on your registration in a class, and anything created by your professors and instructors is their intellectual property, unless materials are designated as open education resources. This includes exams, PowerPoint/PDF slides and other course notes. Additionally, other copyright-protected materials created by textbook publishers and authors may be provided to you based on license terms and educational exceptions in the Canadian Copyright Act (see <http://laws-lois.justice.gc.ca/eng/acts/C-42/index.html>).

Before you copy or distribute others' copyright-protected materials, please ensure that your use of the materials is covered under the University's Fair Dealing Copyright Guidelines available at <https://library.usask.ca/copyright/general-information/fair-dealingguidelines.php>. For example, posting others' copyright-protected materials on the open web is not covered under the University's Fair Dealing Copyright Guidelines, and doing so requires permission from the copyright holder.

For more information about copyright, please visit <https://library.usask.ca/copyright/index.php> where there is information for students available at <https://library.usask.ca/copyright/students/rights.php>, or contact the University's Copyright Coordinator at <mailto:copyright.coordinator@usask.ca> or 306-966-8817.

Learning Assessment

Overall assessment is designed to ensure students have attained the learning outcomes for the course. Credit for the course will be granted on a complete/incomplete basis. To successfully complete BIOL 90 the student should be able to **Meet Expectations** in each of the six categories below:

Assessment Item	Learning Outcome	Criteria to be met		
		Exceeds Expectations	Meets Expectations	Does not meet expectations
1. Reflection Essay (One reflective written page about your Individual learning tour in nature)	Communicating, integrating information, analyzing problems and issues	Prepares a well-constructed essay reflecting on the information conveyed in the lecture and how it integrates with the student's own experiences or prior knowledge.	Essay conveys some information gained from the lectures and attempts to relate it to the student's own experiences or prior knowledge.	Is not able to convey the lecture information accurately and/or place it in relation to the student's own knowledge and experience base.
2. Quizzes (Five 15-minutes quizzes via Canvas. Consult course schedule for the quiz time and date)	Incorporating new concepts; Articulating conceptual knowledge	Completes all quizzes with an average of greater than 70%	Achieves an average of 60% on at least three post-case-study quizzes.	Completes less than three quizzes or obtains an average of less than 50% on the best three quizzes
3. Participation in group activities (you will be assessed on your participation based on your contribution in answering questions and solving problems of your group theme of each case study).	Analyze problems; integrate sources of information; actively participate in collaborative tasks	Actively contributes to all case studies, playing an active role in group activities, including preparation of Case Study handouts, whole class discussion the Class Journal of Biological Terms	Actively participates in at least three case studies, contributing to group activities, including preparation of Case Study handouts, whole class discussion the Class Journal of Biological Terms	Does not participate in, or actively contribute to, at least three case studies.

Participation will be assessed at 6 pm CST on Tuesday of the week to which you are assigned).				
<p>4. Jigsaw Discussions (your contribution will be assessed looking at Incorporating your personal experiences, raise interesting questions on the work of other groups and/or respond to your peers' comments). Participation will be assessed at 6 pm CST on Thursday of the week to which you are assigned).</p>	Demonstrating leadership, integrating sources of information	Leads a jigsaw activity for all case studies and is able to routinely and accurately conveying original group's findings. Allows others the opportunity to lead.	Leads a jigsaw discussion for at least three case studies, accurately conveying original group's findings.	Is unable to communicate original group's ideas in at least three jigsaw activities.
<p>5. Oral presentations (PowerPoint slides should be emailed to your instructor by 6pm CST of the day preceding your presentation).</p>	Communicating, integrating information, analyzing problems and issues	Plays a leadership role in developing oral presentations. Presents findings more than once during the term.	Contributes to developing (at least three) case-related oral presentations. Presents at least once during the term.	Does not contribute to presentation research or present at least once during the term.

6. Final Exam/Case study Individual study (i.e. take-home exam) and follow-up discussion with your instructor.	Identifying problems; incorporating new concepts; integrating multiple sources; articulating conceptual knowledge;	Student identifies the problem or issue from at least three course themes. Student presents a well-researched analysis from these themes and identifies commonalities or conflicts among them. Student draws from a range of information, documenting the findings. Student is able to discuss the issue from more than one perspective	Student is able to work individually to analyze and identify the problem presented and present relevant concepts from the perspective of at least one of the course themes Student is able to convey ideas in both written and oral form (discussion or presentation). Analysis draws from more than one source of information, documenting these, integrated to gain a better understanding and communicate their ideas	Student is not able to provide a reasonable description of the problem or issue from the perspective of any of the themes of the course.

In the event that a student does not meet expectations in one of the first five categories (weekly quizzes, participation in group activities, jigsaw discussions, oral presentations, reflection essay) the student may pass the course if the instructor deems the relevant concepts are demonstrated to their satisfaction as part of the final exam/individual case study assignment.

If the student has not met expectations in more than one of the first five categories, but achieves a score of “Exceeds expectations” on the final exam/individual case study, the student may still be given a passing grade.

Failure to demonstrate one or more of required learning outcomes will result in a grade of “incomplete”.