



UNIVERSITY OF
SASKATCHEWAN

Department of Biology

COURSE SYLLABUS

COURSE TITLE: BIOL 224 - Animal Body Systems

COURSECODE:	22868	TERM:	Winter 2022
COURSE CREDITS:	3.0	DELIVERY:	On Campus
CLASS SECTION:	01	START DATE:	January 10
LECTURE LOCATION:	Remote (Jan. 10-21) Arts Building 143 Bldg. (Jan. 24 - Apr. 8)	LAB LOCATION:	G74 Thorvaldson
LECTURE TIME:	MWF 8:30 am-9:20 pm	LAB TIME:	1:30 - 4:20 pm (M) 5.30 - 8:20 pm (M) 8.30 - 11:20 pm (T) 1:30 - 4.20 pm (T) 1.30 - 4.20 pm (W) 8.30 - 11:20 pm (Th)

WEBSITE: Via PAWS/CANVAS

Course Description:

We will study the problems all animals overcome in order to survive and reproduce, and the different body systems that must deal with both unique and common environmental challenges. **Prerequisite(s):** BIOL 120. Note that BIOL 121 is strongly recommended. Students with credit for BIOL 203 or BIOL 217 or HSC 208 or PHSI 208 or BMSC 224 will not receive credit for BIOL 224.

Land Acknowledgement:

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.

Remote and in person Learning Context:

Starting January 10, synchronous lectures for Winter 2022 BIOL 224 will be presented remotely via Zoom meetings set up in the course CANVAS page and returning to on campus starting January 24 in the Arts bldg. rm 143. Remote Zoom lectures will be recorded and posted on the course CANVAS site. Attendance of on

campus lectures starting January 24th is expected. Should the COVID-19 situation require continued remote delivery after January 24th, details will be provided by the instructor.

Labs will be in person and attendance is required. Should the laboratory component of the course be required to change, details will be provided.

The University of Saskatchewan has created a number of resources for us to use. We have linked to many of these resources in the BIOL 224 CANVAS. Please take the time to peruse these links. You will need to interact with your course instructors using online course tools. If you have any questions about how to do something, please feel free to ask one of the instructors.

Important Guidelines for this term:

During this term it is important that we undertake in-person elements of this class safely. In order to do this the university has developed a set of expectations and safety protocols that all students must adhere to if they are to engage in in-person activity.

Throughout the term:

- ➔ **Protect the pack:** Right now, the impact of student choices and activities when not on campus cannot be separated from time spent on campus. In order to “protect the pack”, the university is asking all students who are doing in-person work to be mindful and do whatever possible to lower the risk that you will contract COVID-19 and bring it onto campus.
- ➔ **Know what is required and expected of you:** One of the critical lessons learned in dealing with COVID-19 is knowing that situations can change and we must be flexible and ready to adjust our safety protocols. Instead of listing all of the relevant information in your course outline, the university has created [a webpage](#) where all up-to-date information around returning to campus is listed. **You are responsible for regularly** checking the health and safety guidelines <https://covid19.usask.ca/about/safety.php#Expectations> and knowing what is expected of you throughout the fall term.
- ➔ **Follow all guidance:** Students are expected to follow all guidance provided by the University’s Pandemic Recovery/Response Team (PRT), College/Department, professors, lab instructors, TAs, and any other staff member involved in the in-person academic program activities (e.g., Protective Services, Safety Resources).
- ➔ **Key channels of communication:** If there is a need for the class to pause meeting in-person for a period of time you will be notified. If this occurs, you will be provided with detailed information on what you will need to do in place of the in-person class sessions (e.g., read content posted in Canvas, complete learning activities in Canvas).
In your CANVAS account, ensure that notifications from Conversations and Announcements are activated and sent automatically to your USask email address.

Learning Outcomes:

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

1. Describe the organization of the major body systems in animals. (knowledge)
2. Explain how processes at the cellular, tissue and organ levels link to whole animal physiology. (understand)
3. Contrast homeostatic mechanisms and evolutionary adaptations in the vertebrate body that allow animals to respond to changes in their environment. (understand, analyze)
4. Compare vertebrate and invertebrate body systems in selected examples. (understand, analyze)
5. Quantify select physiological variables in a laboratory setting. (analyze)
6. Interpret experimental results and draw appropriate conclusions in the context of physiological concepts. (apply)
7. Construct scientific graphs and tables. (apply, create)
8. Write concise reports to evaluate results obtained during scientific experiments. (evaluate, create)
9. Work cooperatively in a small group setting to complete assigned tasks.
10. Promote academic integrity and professionalism.

Note: The learning outcomes for BIOL 224 encompass course-specific content, skills, and long-term attitudes or values. The descriptors shown in the parentheses after each learning objective refers to the placement of active verbs within Bloom's taxonomy of educational objectives. Specific skills transferable to other university level courses are developed in outcomes 5, 7, 6 and 8, whereas outcomes 9 and 10 address learner attitude/values. A copy of the Learning Charter can be found at: <https://teaching.usask.ca/about/policies/learning-charter.php>

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

Instructors:

Dr. Jack Gray

Email: jack.gray@usask.ca or Phone: 306-966-7771

Ms. Sheri Fisher (Lab Coordinator)

Email: sheri.fisher@usask.ca or Phone: 306-966-4431

Other modes of communication with instructors will be provided via CANVAS, as needed.

Communicating with Your Instructors: Your instructors will be routinely available by email or phone. A meeting with the instructor can also be arranged, either in person or via Zoom on CANVAS, if needed. However, **all questions about the lecture content** should be asked via the CANVAS Discussion board. Your instructors will monitor the discussion board and provide answers as appropriate. We will try to respond to your email or phone call/text quickly, but please remember that normal work hours are Monday to Friday 8:30 a.m. to 4:30 pm. Communications received outside of work hours may not be

answered immediately. We may also request that you ask a question via the CANVAS Discussion board.

Instructor Profiles & Other Information: Dr. Gray is a faculty member in the Department of Biology. He holds advanced degrees (MSc, PhD) and teaches and conducts research in the area of animal physiology. Dr. Gray will deliver the lectures. Ms. Fisher holds an advanced degree in biology and is responsible for coordinating all aspects of the laboratories. Note that your lab group will also be assigned a laboratory teaching assistant who will assist you in the lab periods and be responsible for grading your lab assignments, pre-lab quizzes and exams. The teaching assistants work under Ms. Fisher's supervision and are senior undergraduate or graduate students at the University.

Course Overview:

The course normally consists of 50 minutes of lectures on the MWF schedule. Posted lecture materials may include narrated videos (lecture capture) with powerpoint slides, selected readings from the textbook or scientific literature, or other material that teaches physiological concepts and details.

Lectures will be complemented by lab exercises, which are listed in the Class Lab Schedule below. These lab exercises are used to provide a practical illustration of some of the major lecture concepts and are coordinated with lecture materials. Completion of the labs is a required course component. The lab component of the course consists of eight hands-on lab exercises (each 2 hrs 50 minutes). The schedule of the labs is provided below.

There are six lab sections of BIOL 224: L01 Monday 1:30-4:20 pm, L02 Monday 5:30-8:20 pm, L03 Tuesday 8:30-11:20 am, L04 Tuesday 1:30-4:20 pm, L05 Wednesday 1:30-4:20 pm, and L06 Thursday 8:30-11:20 am. Within each lab section, students will be arranged into groups of three students. The lab schedule below indicates due dates for all group assignments, pre-lab quizzes and exams.

Class and Laboratory Schedule

Week/Dates	Major Lecture Topics	Laboratory Activity	Lab: Student Work Due/Other Types of Assessments
Week 1 Jan. 10, 12, & 14 ***Remote***	Nature and purpose of class Evolutionary aspects of animal kingdom	No lab scheduled	Nothing due
Week 2 Jan. 17, 19, & 21 ***Remote***	Communication & integration in the animal body – Homeostasis	No lab scheduled Complete the Academic Integrity Tutorial as homework. Pre-Lab Concept Quiz is also to be completed before Lab #1	All Sections: Friday Jan 21st at 4p.m. ACADEMIC INTEGRITY TUTORIAL CERTIFICATE DUE submit via CANVAS
Week 3 Jan. 24, 26, & 28 ***On Campus***	Nervous systems	Lab #1 Highlighting Homeostasis	Prelab Concepts Quiz #1 Due 30 minutes before the start of your in-person Lab session. Group lab report #1 due at end of lab period. Submit via CANVAS.
Week 4 Jan. 31, Feb. 2 & 4 ***On Campus***	Nervous systems Sensory systems Skeletal and Muscle Physiology	Lab #2 Neural Integration	Prelab Concepts Quiz #2 Due 30 minutes before the start of your in-person Lab session. Group lab report #2 due at end of lab period. Submit via CANVAS.

<p>Week 5 Feb. 7, 9, & 11 ***On Campus***</p>	<p>Skeletal & Muscle Physiology</p>	<p>Lab #3 Sensory Neuron Action Potentials</p>	<p>Prelab Concepts Quiz #3 Due 30 minutes before the start of your in-person Lab session. Group lab report #3 due at end of lab period. Submit via CANVAS.</p>
<p>Week 6 Feb. 14, 16, & 18 ***On Campus***</p>	<p>Midterm Lecture Exam (Feb. 14) Osmoregulation</p>	<p>Lab #4 Skeletal Muscle Physiology</p>	<p>Prelab Concepts Quiz #4 Due 30 minutes before the start of your in-person Lab session. Group lab report #4 due at end of lab period. Submit via CANVAS. Review lab exam #1 video</p>
<p>Week 7 Feb. 21, 23, & 25</p>	<p>Mid-term Break (No classes)</p>		
<p>Week 8 Feb. 28, Mar. 2 & 4 ***On Campus***</p>	<p>Osmoregulation Respiratory systems</p>	<p>Lab Exam #1 Group #1 1:30-2:30 & Group #2 2:45-3:45</p>	
<p>Week 9 Mar. 7, 9, & 11 ***On Campus***</p>	<p>Respiratory systems</p>	<p>Lab #5 Osmoregulation</p>	<p>Prelab Concepts Quiz #5 Due 30 minutes before the start of your in-person Lab session. Group lab report #5 due at end of lab period. Submit via CANVAS.</p>

<p>Week 10 Mar. 14, 16, & 18 ***On Campus***</p>	<p>Circulatory systems</p>	<p>Lab #6 Respiratory Physiology</p>	<p>Prelab Concepts Quiz #6 Due 30 minutes before the start of your in-person Lab session. Group lab report #6 due at end of lab period. Submit via CANVAS.</p>
<p>Week 11 Mar. 21, 23 & 25 ***On Campus***</p>	<p>Metabolism & body temp regulation Digestive systems</p>	<p>Lab #7 Circulatory System Physiology</p>	<p>Prelab Concepts Quiz #7 Due 30 minutes before the start of your in-person Lab session. Group lab report #7 due at end of lab period. Submit via CANVAS.</p>
<p>Week 12 Mar. 28, 30 & Apr. 1 ***On Campus***</p>	<p>Digestive systems Endocrine systems</p>	<p>Lab #8 Metabolism</p>	<p>Review lab exam #1 & #2 videos</p> <p>Prelab Concepts Quiz #8 Due 30 minutes before the start of your in-person Lab session. Group lab report #8 due at end of lab period. Submit via CANVAS.</p>
<p>Week 13 Apr. 4, 6, & 8 ***On Campus***</p>	<p>Reproductive Physiology Review for final exam</p>	<p>Lab Exam #2 Group #1 1:30-2:45 & Group #2 3:00-4:15</p>	

FINAL EXAMS will occur in April after then of classes. Date and Time will be announced by the Registrar's Office.

Required Resources:

Textbooks

Biology - Exploring the Diversity of Life (3rd or 4th Canadian Editions) by Russell et al., Nelson Education Ltd., 2016-2019. A hardcopy of the textbook can be purchased through the USask bookstore or an electronic version can be purchased online at <https://www.cengage.ca/shop>

Laboratory Manual for BIOL 224 (Winter 2022 edition must be purchased). An electronic version of the \$40 manual must be purchased from the University of Saskatchewan Bookstore:

<https://shop.usask.ca/Item/item/40000207072/course/UOFS,201901,BIOL,BIOL224>,

You will be provided with a unique access code for the digital copy of your lab manual affixed to a sheet of paper. Each student registered in Biology 224 must purchase an access code for the lab manual. Students who fail to do so will be given a 0% on all prelab concept quizzes, group assignments and group and self-assessment in the lab. The access code is linked to your registration in BIOL 224 and lab manual purchase will be monitored. Do not lose your access code, as you will have to purchase another. We recommend taking a photo of your access code in case you lose it. You may print one copy of the manual for your own use. You are not permitted to distribute the manual to others in any form, electronic or otherwise. To do so is considered copyright infringement and students who do so will be subject to disciplinary action in accordance with University of Saskatchewan academic conduct policies.

Electronic Resources:

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/study/tech-requirements.php>

The laboratory portion of this course will require a working knowledge of computers and various computer programs, including MS Excel and Word and access to OneDrive for file storage and sharing with your lab group.

Downloads:

PDF versions of Power Point slides of the lectures and laboratory materials will be available for download as appropriate through the course CANVAS.

Supplementary Resources:

Your instructors may make supplementary materials available to you through the course CANVAS. Other study materials may also be suggested which can be accessed from USask library online resources. More information about these is provided in the lab manual as appropriate.

Grading Scheme

Midterm Exam:	15
Final Exam:	45
Group Lab Reports:	10
Pre-Lab Quizzes:	4
Lab Exam #1:	9
Lab Exam #2 (comprehensive):	15
Group & Self Assessments	2
Total:	100%

Evaluation of Student Performance:

Midterm Lecture Exam

Value:	15% of final course grade
Date:	Feb. 14, 2022 – during lecture period
Length:	50 minutes
Format:	40 multiple-choice questions
Description:	Will include all lecture materials to end of Lecture 14 (Feb. 4). Will be conducted in Arts 143.

Final Exam

Value:	45% of final grade
Date:	Consult the Final Exam Schedule
Length:	120 minutes
Format:	100 multiple choice questions
Description:	The exam is comprehensive as it will cover all lecture materials. However, material delivered since the midterm exam will be emphasized. Will be conducted in person as a timed exam. Details will be provided. Consult the Final Exam Schedule for location.

Completion of USask Academic Integrity Tutorial

Value:	0% of final grade but completion required as a lab prerequisite
Date:	Due by Jan. 14, 4 pm
Format:	Online tutorial

Description: Our goal is to ensure a learning and teaching environment with a high standard of academic integrity for BIOL 224. The University of Saskatchewan has developed some outstanding web-based resources to help students understand and practice academic integrity. This includes an opportunity to complete three modules dealing with various aspects of academic integrity. You will be sent a certificate on completion of each of the modules. As a BIOL 224 student, you must complete the first module, and upload the certificate as a CANVAS assignment. It is acceptable if you have received the certificate of completion for the first module as a requirement in other courses. We also recommend completing the other two modules. This assignment will be graded as complete/incomplete (i.e., it does not contribute to your final course grade).

Laboratory Group Reports

Value: 10% of final grade

Due Date: See Course Schedule

Format: These will mostly consist of figures and tables. Data obtained during the lab periods are to be organized and presented in a scientific manner in these reports.

Description: All group members are to participate in the preparation of these reports. Figures will be drawn using MS Excel. A scientific figure legend will be written and included with each graph. These must be printed and handed in to your lab demonstrator before the end of the lab period. Complete instructions about these group reports are contained in your lab manual.

Quizzes

Value: 4% of final grade

Date: See Course Schedule

Format: Eight online quizzes to precede each lab period, each worth 0.5% of the final grade.

Description: The pre-lab quizzes will be 10 minutes in duration and test material for the upcoming lab exercise. They will be made available online following the previous week's lab, and will consist of multiple choice, or short answer questions with answers to be submitted through CANVAS. The quizzes are to be completed by each student working individually and will require use of the lab manual and textbook. Other reference material is allowed as needed. Additional information about the pre-lab quizzes is found in your lab manual.

Laboratory Exams

- Value:** 9 & 15% of final grade
- Date:** February 28-March 4 & April 4-8
- Format:** This will be a mixture of short written answers, long answer, calculations and multiple-choice questions.
- Description:** The first lab exam will be 1 hour in duration and test material from lab exercises 1 – 4. The second lab exam will be 1.25 hours in duration. Calculators allowed. Laptops permitted as exam is conducted using CANVAS. Additional information about the lab exams is found in your lab manual and will be provided in the lab review sessions.

Contributions to Lab Group Activity

- Value:** 2% of final grade
- Date:** April 8, 4 p.m.
- Format:** Survey based on work within their group.
- Description:** Students are expected to actively contribute to the work being performed within your group. Rubrics that will be used to determine these contributions will be posted on CANVAS. You are encouraged to review the rubric to understand the exact details of how you will be assessed for your contributions. Your contribution to the work of your group will be assessed by the other members in your group and your TA. It is fully expected that students will collaborate within their group to help each other with the collection, analysis and presentation of data. This assessment will count for 2% of your final grade.

Submitting Assignments/Feedback to Students:

Each week your group will submit a collaborative assignment via CANVAS at the end of the lab period. The lab reports will be graded by the teaching assistants who will also watch for plagiarism. Reports will be graded and returned on a schedule such that students will have feedback about their work after they have submitted the first assignment. Grades will be assigned based on the quality of the data presentation, grammar, spelling, scientific writing, and other aspects of the assignment. Additional information about the format of the assignments is contained in the lab manual; students must read this carefully. Marks from the midterm exam will be available 7 to 10 days after the exam, well in advance of the last day to withdraw deadline.

Late Assignments:

Lab assignments submitted after the deadline will not be accepted and will be assigned a grade of 0%.

Attendance Expectations:

Attendance to labs is a requirement for passing this course. Students are expected to be on time, on all scheduled labs. It is impossible to schedule make-up labs for this course. Students who miss a lab period are assigned a mark of zero for the group lab

report. Students are advised to consult the lab manual for further information about procedures to follow when they are too ill to attend the lab period or are facing extenuating personal circumstances.

Midterm and Final Examination Scheduling:

Midterm and final examinations must be written on the date scheduled. The final course examinations may be scheduled at any time during the examination period (Apr. 7 to 28); students should therefore avoid making prior travel, employment, or other commitments for this period that will compromise their internet connectivity. If a student is unable to write the midterm exam through no fault of their own for medical, compassionate or other valid reasons, documentation must be provided and an opportunity to write the missed exam may be given. Students who miss the final exam must contact the College of Arts & Science and apply for a deferred final exam. Deferred exams may utilize a different format than the regular exam, at the sole discretion of the course instructors.

Students are encouraged to review all University examination policies and procedures:

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

Recording of the Course:

In person attendance of lectures is expected. In person lectures will be recorded via lecture capture and made available only to students in the course for viewing via CANVAS after each session. This is done, in part, to ensure that students unable to join the session (due to COVID-19 related or other compelling circumstances) can view the session at a later time. This will also provide you the opportunity to review any material discussed. Please note that students are not allowed to record any aspect of this course, except with the permission of the instructors or as provided for by arrangements with Access and Equity Services. Any recording made under these provisions are to only be used for the personal learning of the student who made the recording. For questions about recording and use of sessions in which you have participated, including any concerns related to your privacy, please contact your instructor. More information on class recordings can be found in the Academic Courses Policy available at:

<https://policies.usask.ca/policies/academicaffairs/academic-courses.php#5ClassRecordings>

Copyright:

Course materials are provided to you based on your registration in the class, and anything created by your instructors is their intellectual property, unless materials are designated as open education resources. Copyright-protected material 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. For more details, see

<https://lawslois.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 at:

<https://library.usask.ca/copyright/general-information/fair-dealing-guidelines.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 306-9668817.

Student Feedback:

The Department of Biology or the instructors may survey students regarding the course. This is generally done through an assessment near the end of term.

University of Saskatchewan Grading System:

Students in BIOL 224 are reminded that the University has established a grading system to be used in all of its courses. Information on literal descriptors for grading at the University of Saskatchewan (reproduced below) can be found at:

<https://students.usask.ca/academics/grading/grading-system.php>

Exceptional (90-100). A superior performance with consistent evidence of

- a comprehensive, incisive grasp of the subject matter;
- an ability to make insightful critical evaluation of the material given;
- an exceptional capacity for original, creative and/or logical thinking;
- an excellent ability to organize, to analyze, to synthesize, to integrate ideas, and to express thoughts fluently.

Excellent (80-90) An excellent performance with strong evidence of

- a comprehensive grasp of the subject matter; an ability to make sound critical evaluation of the material given;
- a very good capacity for original, creative and/or logical thinking;
- an excellent ability to organize, to analyze, to synthesize, to integrate ideas, and to express (thoughts fluently).

Good (70-79) A good performance with evidence of a substantial knowledge of the subject matter;

- a good understanding of the relevant issues and a good familiarity with the relevant literature and (techniques; some capacity for original, creative and/or logical thinking;

- a good ability to organize, to analyze and to examine the subject material in a critical and (constructive manner).

Satisfactory (60-69) A generally satisfactory and intellectually adequate performance with evidence of

- an acceptable basic grasp of the subject material;
- a fair understanding of the relevant issues;
- a general familiarity with the relevant literature and techniques;
- an ability to develop solutions to moderately difficult problems related to the subject material;
- a moderate ability to examine the material in a critical and analytical manner.

Minimal Pass (50-59) A barely acceptable performance with evidence of

- a familiarity with the subject material;
- some evidence that analytical skills have been developed;
- some understanding of relevant issues; some familiarity with the relevant literature and techniques;
- attempts to solve moderately difficult problems related to the subject material and to examine the (material in a critical and analytical manner which are only partially successful.

Failure <50 An unacceptable performance

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.

Integrity in a Remote Learning Context:

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 (available at: <https://governance.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://governance.usask.ca/student-conduct-appeals/non-academicmisconduct.php#IISCOPE>)

For more information on what academic integrity means for students see the Academic Integrity section at: <https://library.usask.ca/academic-integrity.php>

You are required to complete the Academic Integrity Tutorial about the fundamental values of academic integrity and how to be a responsible scholar and member of the USask community –
<https://libguides.usask.ca/AcademicIntegrityTutorial>

In BIOL 224, you will need to have a clear understanding about what constitutes plagiarism. If you have any questions about this, contact one of your instructors for advice. The Writing Center can also assist you with your writing and help you avoid plagiarism <https://library.usask.ca/studentlearning/writing-help/>

***Note:** Additional information about student misconduct specific to BIOL 224 is found in the laboratory manual. BIOL 224 students are required to read and understand the information about misconduct that is presented in the laboratory manual.*

Access and Equity Services (AES) for Students:

Students who have disabilities (learning, medical, physical, or mental health) are strongly encouraged to register with Access and Equity Services (AES) if they have not already done so. Students who suspect they may have disabilities should contact AES for advice and referrals at any time. Those students who are registered with AES with mental health disabilities and who anticipate that they may have responses to certain course materials or topics, should discuss course content with their instructors prior to course add / drop dates. In order to access AES programs and supports, students must follow AES policy and procedures. For more information or advice, visit <https://students.usask.ca/health/centres/access-equity-services.php>, or contact AES at 306-966-7273 or aes@usask.ca.

Students registered with AES may request alternative arrangements for mid-term and final examinations. Students must arrange such accommodations through AES by the stated deadlines. Instructors shall provide the examinations for students who are being accommodated by the deadlines established by AES.

For information on AES services and remote learning please visit:

<https://updates.usask.ca/info/current/accessibility.php#AccessandEquityServices>

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 is available: <https://teaching.usask.ca/remote-teaching/teaching-remotely.php>

Class & study tips: <https://students.usask.ca/remote-learning/class-and-studytips.php>

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

Study skills materials for online learning: <https://libguides.usask.ca/studyskills> A guide on etiquette, principles to guide respectful online learning interactions: <https://teaching.usask.ca/remote-teaching/netiquette.php>

Writing Help: <https://library.usask.ca/studentlearning/writing-help/>

Library Biology Research Guide: <https://libguides.usask.ca/c.php?q=16523&p=91352>

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. For more information please check: <https://students.usask.ca> or <https://updates.usask.ca>

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. More information is available at:

<https://artsandscience.usask.ca/undergraduate/advising/>