

COURSE SYLLABUS

COURSE TITLE:	BIOL 317 Fundamentals of Animal Physiology		
COURSE CODE:	82533	TERM:	Fall 2022
COURSE CREDITS:	3.0	DELIVERY:	In person
CLASS SECTION:	01	1st LECTURE :	2 Sep 2022
LECTURE LOCATION:	Geol 269	LAB LOCATION:	G74A Thorv
LECTURE TIME:	11:30 am to 12:20 pm MWF	LAB TIME:	Th 1:30-5:20 pm (1 st lab on Sept 15 2022
WEBSITE:	via Canvas (see PAWS)		

Course Description

Considers physical, chemical and functional aspects of animal cells and tissues. Specifically examines membrane transport mechanisms, bioelectricity and fundamental principles of muscle and nervous system physiology, evolution and plasticity. Cellular mechanisms underlying learning and memory are introduced.

Prerequisite(s): BIOL 224 or BMSC 224 (or HSC 208); CHEM 112; CHEM 115 or CHEM 250 (CHEM 115 recommended).

Note: PHYS 115 and 117 are recommended. Students with credit for BIOL 217 will not receive credit for this course.

Land Acknowledgement

As we gather here today, we 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.

Important Guidelines for this Term:

During the continued presence of COVID-19, it is important that we undertake in-person elements of this class safely. The University has created [Health and Safety webpage](#) where all up-to-date information around returning to campus is listed. You are responsible for **regularly** checking these guidelines and knowing what is expected of you throughout the fall term. Like the University, your instructors **strongly encourage you to wear face masks** during class activities. If you test positive for COVID-19 follow the instructions on the webpage, which includes notifying your instructors about this.

Learning Outcomes

1. By the completion of this course, students will:
2. Demonstrate an in-depth understanding of physiological principles and explain processes associated with cell membrane function
3. Apply the scientific method to quantify and interpret physiological data
4. Write clear and concise lab reports in the scientific style

5. Evaluate the scientific literature and integrate this into their writing and understanding of physiological processes
6. Demonstrate their oral presentation skills
7. Develop group working skills to discuss physiological findings with others in the course

Note: 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: <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: <http://policies.usask.ca/policies/academic-affairs/academic-courses.php>

Course Overview

The course consists of 50 minutes of face-to-face lectures on the MWF schedule. Lectures will be complemented by weekly labs exercises. The experiments will provide a practical illustration of some of the major physiological mechanisms and are coordinated with lecture material as shown in the schedules below. Completion of the labs is a required course component. For these exercises, you will work in small groups (of about 3 students; groups assigned randomly) to collect and analyze sets of experimental data. You will hone your scientific writing and oral communication skills through the preparation of labs reports and a class presentation based on your experimental results. Each student will be responsible for completing five lab reports and giving one 10-minute oral presentation on results from one of the lab exercises. More information about the lab report format will be provided in the first lab period. The schedule for the oral presentations will be determined by a random draw at the beginning of the term. Lab reports are to be completed individually, although it is expected that students will work in their groups to analyze the experimental data and prepare preliminary figures or table of their results. The deadlines for lab report submission will be strictly adhered to and a penalty will apply for late reports (see grade assessment section below).

Class Lecture Schedule

Week Dates	Instructor Major Lecture Topics	Lab Activity	Reports, Presentations & Other Work Due
Week 1 Sept 1 to 2	Dr. Marchant Nature & purpose of this course Water as the Biological Solvent Textbook Readings*: Chapter 1	Sept 1: no in-person lab activity is scheduled	Nothing due
Week 2 <i>Sept 5 - Labour Day Holiday</i> Sept 6 to 9	Dr. Marchant Water as the Biological Solvent (important features of biological solutions & molecular exchange in solution) Textbook Readings*: Chapters 2 & 5	Sept 8: no in-person lab activity is scheduled	Academic Integrity Tutorial Certificates due at 5:20 pm Sept 8 (submit via Canvas)

<p>Week 3 Sep 12 to 16</p>	<p><u>Dr. Marchant</u> Exchange of Materials Across Biomembranes (ion channels, carrier mediated transport; bulk transport, osmosis)</p> <p>Textbook Readings*: Chapters 2 & 5 (with some examples from Part V of textbook; literature readings on Canvas)</p>	<p>Sept 15 Lab: <i>Introduction & Writing Workshop</i></p>	<p>In Class Writing Assignment due 5:20 pm Sept 15 (submit via Canvas)</p>
<p>Week 4 Sep 19 to 23</p>	<p><u>Dr. Marchant</u> Exchange of Materials conclusions</p> <p>Transmembrane Potentials (Gibbs-Donnan equilibrium; diffusion potentials; ionic basis of membrane charge; steady state & equilibrium potentials)</p> <p>Textbook Readings*: Chapters 5 & 12</p>	<p>Sept 22 Lab: <i>Experiments on Molecular Exchange</i></p>	<p>Group Data Sheet #1 due at 5:20 pm Sept 22 (submit via Canvas)</p>
<p>Week 5 Sep 26 to 29</p> <p><i>Sept 30 – National Day For Truth & Reconciliation – University closed</i></p>	<p><u>Dr. Marchant</u> Transmembrane Potentials conclusions</p> <p>Textbook Reading*: Chapters 12</p>	<p>Sept 29 Lab: <i>Experiments on Diffusion Potentials</i></p>	<p>1:30 pm Sept 29 Molecular Exchange Report Due (submit via Canvas)</p> <p>Group Data Sheet #2 due at 5:20 pm Sept 29 (submit via Canvas)</p>
<p>Week 6 Oct 3 to 7</p>	<p><u>Dr. Marchant</u> Bioelectricity (passive vs active electrical properties; action potentials; Hodgkin-Huxley cycle; action potential conduction)</p> <p>Textbook Reading*: Chapters 12</p>	<p>Oct 6 Lab: <i>Experiments on Compound Action Potential</i></p>	<p>1:30 pm Oct 6 Diffusion Potentials Report Due (submit via Canvas)</p> <p>Group Data Sheet #3 due at 5:20 pm Sept 29 (submit via Canvas)</p>
<p>Week 7 <i>Oct 10 Thanksgiving Holiday</i> Oct 11 to 14</p>	<p><u>Dr. Marchant</u> Bioelectricity (continued)</p> <p>Textbook Reading*: Chapters 12</p>	<p>Oct 13 Lab: <i>optional Compound Action Potent drop-in Q&A</i></p>	<p>4:30 pm Oct 14 Compound Action Potentials Report Due (submit via Canvas)</p>
<p>Week 8 Oct 17 to 21</p>	<p><u>Dr. Marchant</u> Bioelectricity (conclusions)</p> <p><u>Dr. Gray</u> Intercellular Communication (neurotransmitter release; synaptic & neuromuscular transmission; chemically-sensitive ion channels)</p> <p>Textbook Reading*: Chapter 13</p>	<p>Oct 20 Lab: Lecture Midterm Exam</p>	<p>No work due – study for the midterm!</p>

Week 9 Oct 24 Oct 26 Oct 28	Dr. Gray Intercellular Communication (conclusions) Muscle Physiology (muscle types; contractile units; sliding filament theory; excitation-contraction coupling smooth vs. striated muscle) Textbook Reading*: Chapter 13 & 20	Oct 27 Lab: <i>Experiments on Skeletal Muscle Physiology week 1</i>	Group Data Sheet #4 due at 5:20 pm Nov 3 (submit via Canvas)
Week 10 Oct 31 Nov 2 Nov 4	Dr. Gray Muscle Physiology (conclusions) Textbook Reading*: Chapter 20	Nov 3 Lab: <i>Skeletal Muscle Physiology week 2</i>	No work due
Week 11 Nov 7 to 11	No Lectures or Labs Fall Term Break Week		
Week 12 Nov 14 to 18	Dr. Gray Signal Transduction Across Membranes (general mechanisms; mechanoreceptors; photoreceptors; visual and infrared spectra; phonoreceptors; middle ear receptors; lateral line receptors) <u>Textbook Reading*</u> : Chapter 14	Nov 17 Lab: <i>Sensory Receptors</i>	1:30 pm Nov 17 Skeletal Muscle Physiology Report Due (submit via Canvas) Group Data Sheet #5 due at 5:20 pm (submit via Canvas)
Week 13 Nov 21 to 25	Dr. Gray Nervous Integration & Regulation (basic concepts; animal models of memory & learning; evolution of the nervous system; vertebrate brain structure & function; autonomic nervous system) <u>Textbook Readings*</u> : Chapters 13 & 15	Nov 23 Lab: <i>Student Presentations</i>	1:30 pm Nov 24 Sensory Receptors Report Due Presentations on Lab 1 through 3 (if assigned).
Week 14 Nov 28 to Dec 2	Dr. Gray Nervous Integration & Regulation (continued) <u>Textbook Readings*</u> : Chapter 15	Dec 1 Lab <i>Student Presentations</i>	Presentation on Lab 4 & 5 (if assigned).
Week 15 Dec 5 to 7	Dr. Gray Nervous Integration & Regulation (conclusion) Course wrap-up		
	Final Exam during regular exam period (Dec 8 to 23)		

* Additional readings will be listed in Canvas as appropriate.

Instructors:

Contact Information:

Dr Tracy Marchant	room 120.3 CSRB tracy.marchant@usask.ca	966-4420
Dr Jack Gray	room 120.2 CSRB jack.gray@usask.ca	966-7771
Ms Sheri Fisher (lab coordinator/instructor)	room G77.3 Thorvaldson sheri.fisher@usask.ca	966-4431

Instructor Profiles & Other Information: Drs Marchant and Gray are regular faculty members/professors in the Department of Biology. They hold advanced degrees (MSc, PhD) and teach and conduct research in the general area of animal physiology. Ms Fisher holds an advanced degree (MSc) and is responsible for coordinating all aspects of the laboratories for BIOL 317. Note that your lab group will also be assigned a laboratory demonstrator who will assist you during the lab periods and be responsible for grading your lab reports and presentation. The lab demonstrators work under Ms Fisher's supervision and are senior undergraduate or graduate students at the University.

Required Resources

Textbooks

Hill, Wyse, Cavanaugh & Anderson. 2022. Animal Physiology 5 ed, Sinauer/Oxford.
Hardcopies may be purchased from the University of Saskatchewan Bookstore:
<https://bookstore.usask.ca/students.php#MyTextbooks>

An electronic version of the text is also available for purchase (see bookstore link)

The Lab Manual for BIOL 317 will be available to download through the course Canvas.

Electronic Resources

The laboratory portion of this course will require a working knowledge of computers and various computer programs, including MS Excel, Word and Powerpoint. Computers will be used to collect and analyze data and prepare reports in the laboratory. You will need to access your University computer account during the laboratory; make sure you know your university nsid and password and how to log on to your account. Further details are in the lab manual.

Downloads

These will be available as appropriate through the course Canvas. The only document that you are required to download and read is the course syllabus (in addition to the lab manual). Please note that instructor's Powerpoint slides may be provided to you as a courtesy. You are not required to download or print these slides. While we will endeavour to have the lecture Powerpoint slides posted sometime in advance of the lectures, we will not guarantee this. Each instructor will provide you with additional information about their downloads.

Supplementary Resources

From time to time, your instructors may make supplementary material available to you through the course Canvas. This material will not replace the lecture or lab experience and you are encouraged to attend all lectures and take your own notes. A number of paper-based resources

for the laboratory may be placed on reserve for you in the Natural Sciences Library; information about these is provided in the lab manual as appropriate.

Grading Scheme

Midterm Exam	20
Final Exam	40
Lab Reports (five)	30
Oral Presentation (one)	5
Contributions to Group & Course	5
Total	100%

Evaluation of Student Performance

Midterm Exam

Value: 20% of final course grade

Date: Oct 20 (to be written in the lab period)

Length: 90 minutes

Format: A Canvas exam (in-person) with a mix of multiple choice questions and those requiring a written answer. Location will be in a computer lab (TBD).

Description: Will include all lecture material to the end of the Bioelectricity lectures. Calculators allowed. No phones, laptops, tablets, textbook, lecture notes or other materials allowed.

Final Exam

Value: 40% of final grade

Date: Consult the Final Exam Schedule when it is released.

Length: 3 hours

Format: A Canvas exam (in-person) with a mix of multiple choice questions and those requiring a written answer. Location will be in a computer lab (TBD).

Description: The exam is comprehensive in that it will cover all lecture material. However, material delivered since the midterm exam will be emphasized. Calculators allowed. No phones, laptops, tablets, textbook, lecture notes or other materials allowed. Students should plan to be in Saskatoon during the final exam period (Dec 8 to 23) as the BIOL 317 final exam could be scheduled on any day during this period.

Laboratory Reports:

Value: 30% of final grade

Due Date: See Course Schedule for exact dates

Format: Each student must independently write a report for each of the five lab exercises. A pdf copy of the report must be submitted according to the schedule shown above.

Description: Comprehensive information about the format and style to be used for these reports is contained in the lab manual and will be explained in detail during the orientation lab. Generally, each report will consist of several pages of writing plus a number of Figures and/or Tables depicting the results obtained in the lab exercise. Students are required to know and understand what constitutes plagiarism and the University's Regulations on Academic Student Misconduct (see below). Reports 1 & 2 will be worth 5% of the final grade; Report 3 worth 6%, Report 4 worth 8% each and Report 5 worth 6%. Note that failure to turn-in a

Group Data Sheet will result in a 25% deduction from that lab report mark for each student in the group.

Lab Presentation :

Value: 5% of final grade

Date: See Course Schedule for exact dates.

Format: 10 minute Powerpoint presentation

Description: Each student will be required to give one presentation detailing and explaining the results obtained during one of the lab exercises. Presentation topics are assigned randomly in the lab orientation period. Students who fail to attend both days of student presentations will receive a 2.5 mark deduction from their final course grade.

Contributions To Group Work and Course:

Value: 5% of final grade

Description: Students are expected to attend lectures and labs, complete all assignments, and to be well prepared for these meetings. You are also expected to actively contribute to the work being performed within your group. Your contribution to the work of your group will be assessed by the other members in your group and your TA. Although, the lab reports will be written individually, it is fully expected that students will collaborate within their group to help each other with the analysis and presentation of data. A rubric 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 to the course.

Completion of USask Academic Integrity Tutorial:

Value: 0% of final grade but failure to complete this will result in an automatic 50% reduction in the Contributions to Group Work & Course score.

Date: Due by September 8 at 5:20 pm

Format: Online tutorial

Description: We want to ensure a learning and teaching environment with a high standard of academic integrity for BIOL 317. Scientists and other professionals are held to these high standards and it is appropriate that we ensure this in our courses. 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 317 student, you are required to complete all three of these modules and upload all three certificates as a Canvas Assignment. It is acceptable if you have received these certificates as a requirement in other courses, as long as the tutorial was completed this academic year.

Submitting Assignments/Feedback to Students

Each student must independently write a report for each of the lab exercises. These will be submitted electronically via Canvas. 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 timely feedback about their work. Grades will be assigned based on the quality of the data presentation, grammar, spelling, scientific writing and other aspects of the report. Additional information about the format of the reports is contained in the lab manual; students must read this carefully. The oral presentation will be evaluated by Ms Fisher, your TA and the faculty. A rubric and weighting scheme for assessing the presentation will be posted on

Canvas. Presenters will be provided with written feedback about their performance. Marks from the midterm exam will be available 7 to 10 days after the exam.

Late Assignments/Missed Lab Deadlines

Lab reports submitted after the deadline will be penalized by a 10% reduction in the mark assigned to the report for each day that the report is late. Students who miss a deadline due to a protracted illness or extenuating personal circumstances are required to contact the lab coordinator (an email or phone call to Ms Fisher is adequate) on the day the assignment is due and discuss the reasons why the deadline is being missed. There are no exceptions to this policy; students who fail to proactively advise the lab coordinator that they will miss the deadline will be subject to the 10% per day penalty. Depending on the situation, additional documentation may be requested from the student. Deadline extensions will only be provided when the protracted illness or extenuating personal circumstance is verifiable. Ms Fisher may consult with faculty during this verification process. Similar procedures must be followed by a student if they are going to miss giving their scheduled lab presentation. Note that failure to turn-in a Group Data Sheet will result in a 25% deduction from that lab report mark for each student in the group (see above).

Attendance Expectations

Students are expected to attend all scheduled lab periods. It is impossible to schedule make-up labs for this course. A student who does not attend a laboratory activity and does not have a valid excuse, will receive a grade of zero for any assignment associated that activity. Students who fail to attend both days of student presentations and who do not have a valid excuse based on illness or extenuating personal circumstances will receive a 2.5 mark deduction from their final course grade.

Ethical Use of Animals

Two of the lab exercises will utilize tissues from frogs that have be euthanized specifically for the BIOL 317 labs. The use of these animals has been approved through the University of Saskatchewan policies on animal care and use. The labs are an integral part of the course and active participation by students in the conduct of these experiments is necessary to meet course learning objectives. Students who feel that they would be unable to participate in the animal lab exercises should choose another course to satisfy their degree requirements. Advisors in the Department of Biology can assist in the selection of an alternate course.

Criteria That Must Be Met to Pass

Students must write the final exam in order to pass the course. Students who do not write the final exam will be assigned a final course grade of 49%, or lower depending on their performance in other aspects of the course, along with a grade comment of INF (Incomplete Failure). The final grade will be adjusted if a deferred final exam is written (see below).

Midterm and Final Examination Scheduling

Midterm and final examinations must be written on the date scheduled. Final course examinations may be scheduled at any time during the examination period (Dec 8 to 23); students should therefore avoid making prior travel, 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, compassionate or other valid reasons, documentation must be provided and an opportunity to write the missed exam may be given. Note: students should consult the laboratory manual for information specific to missed laboratories. 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://policies.usask.ca/policies/academic-affairs/academic-courses.php>

Recording of the Course

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

Copyright

Course materials are provided to you based on your registration in the class, and anything created by your professors and 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 (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-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 306-966-8817.

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 317 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:

<http://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 (<https://academic-integrity.usask.ca/>). Academic misconduct is a serious matter and can result in grade penalties, suspension, and expulsion.

Prepare for Integrity

Students are expected to act with academic integrity.

- Students are required 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 (tutorial link: <https://libguides.usask.ca/AcademicIntegrityTutorial>).
- Students can access campus resources that support development of study skills, time and stress management, and ethical writing practices important for maintaining academic integrity and avoiding academic misconduct.

Responses to Misconduct

Students are expected to be familiar with the academic misconduct regulations (<https://governance.usask.ca/student-conduct-appeals/academic-misconduct.php#About>).

- Definitions appear in Section II of the academic misconduct regulations.
- The academic misconduct regulations apply regardless of type of assessment or presence of supervision during assessment completion.

- Students are advised to ask for clarification as to the specific expectations and rules for assessments in all of their courses.
- Students are urged to avoid any behaviour that could result in suspicions of cheating, plagiarism, misrepresentation of facts. Students should note that posting copyrighted course materials (e.g., notes, questions, assignments or exams) to third party websites or services or other forum or media without permission is an academic or non-academic misconduct offense.

Non-academic offenses are dealt with under the [Standard of Student Conduct in NonAcademic Matters and Regulations and Procedures for Resolution of Complaints and Appeals](#).

Examinations with Access and Equity Services (AES)

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 for Fall 2022 please visit:

<https://students.usask.ca/health/centres/access-equity-services.php#Fall2021Information>

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>

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 for more information.

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