

Department of Physiology and Pharmacology Physiology 3120

Course outline for 2020/2021



Although this academic year might be different, Western University is committed to a **thriving campus**. We encourage you to check out the [Digital Student Experience](#) website to manage your academics and well-being. Additionally, the following link provides available resources to support students on and off campus: <https://www.uwo.ca/health/>.

1. Technical Requirements:



Stable internet connection



Laptop or computer



Working microphone



Working webcam

2. Course Overview and Important Dates:



Delivery Mode	Dates	Time
Online	N/A	N/A

*Details about design and delivery of the course are listed below in Section 4

Classes Start	Reading Weeks	Classes End	Study day(s)	Exam Period
September 9	November 2 - 8	December 9	December 10	December 11 - 22
January 4	February 13 - 21	April 5	April 6 and 7	April 8 - 30

*November 30, 2020: Last day to drop a full course and full-year half course without penalty

3. Contact Information



Course Coordinator	Contact Information
Tom Stavraky	Tom.stavraky@schulich.uwo.ca

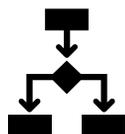
Additional Instructor(s)	Contact Information
Dr. D Hardy	Dan.hardy@schulich.uwo.ca
Dr. A Pruszynski	Andrew.pruszynski@uwo.ca
Dr. T Regnault	Tim.regnault1@uwo.ca
Dr. R Veldhuizen	rveldhuizen@uwo.ca
Dr. A Woods	Anita.woods@uwo.ca

4. Course Description and Design

Physiology 3120 is a core course in Human Physiology. Students study, in great detail, the physiological processes of nerve, muscle, central nervous system, renal, cardiovascular, respiratory, endocrine, reproductive and gastrointestinal control systems as they function in living humans. The majority of the material makes reference to human physiology and uses human examples to help explain the various physiological processes.

Prerequisites:

Prerequisite(s): one of Physics 1028A/B, 1301A/B or 1501A/B and one of Physics 1029A/B, 1302A/B or 1502A/B, or the former Physics 1020 or 1024;
1.0 course from: Calculus 1000A/B or 1100A/B or 1500A/B, Calculus 1301A/B or 1501A/B, Mathematics 1600A/B or the former Linear Algebra 1600A/B, Mathematics 1225A/B, 1228A/B, 1229A/B, Statistical Sciences 1024A/B, Applied Mathematics 1201A/B or the former Calculus 1201A/B, Applied Mathematics 1413, or the former Mathematics 030; one of Biology 1001A or 1201A and one of Biology 1002B or 1202B, or the former Biology 1222 or 1223; or permission of the department. It is strongly recommended that Biochemistry 2280A and Biology 2382B be taken prior to Physiology 3120. Open only to students who are registered in Years 3 or 4.
Corequisite(s) – there are no corequisites
Antirequisite(s) - The former Physiology 310 or Biology 310



Senate regulation regarding the student's responsibility regarding prerequisites:

Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

Mode	Dates	Time	Frequency
Virtual synchronous	N/A	0	weekly
Virtual asynchronous	N/A	3 hours	weekly

Closed captioning will be provided on audio or video recordings when possible

All course material will be posted to OWL: <http://owl.uwo.ca>. Any changes will be indicated on the OWL site and discussed with the class.

If students need assistance, they can seek support on the [OWL Help page](#). Alternatively, they can contact the [Western Technology Services Helpdesk](#). They can be contacted by phone at 519-661-3800 or ext. 83800.

[Google Chrome](#) or [Mozilla Firefox](#) are the preferred browsers to optimally use OWL; upgrade you're your browsers frequently. Students interested in evaluating their internet speed, please click [here](#).

5. Learning Outcomes

Upon successful completion of this course, students will be able to:



- demonstrate a detailed knowledge and critical understanding of key concepts in Physiology by describing concepts, applying and integrating one's knowledge, and critically evaluating and reflecting upon major theories and practices in the field.
- demonstrate a strong knowledge of the mechanisms that make up normal body functions at the cell, tissue, organ level and body systems
- extend their knowledge in physiology to other areas of science and other disciplines.
- critically evaluate, reflect on, integrate and apply their knowledge
- extend their core knowledge in physiology to new areas and different fields.

6. Course Content and Schedule



Week	Dates	Topic	Instructor
1	Sept 9 – 13	Homeostasis and membrane transport	Stavraky
2	Sept 14 – 20	Mem transport, fluid shifts and edema	Stavraky
3	Sept 21 – 27	Membrane potentials	Stavraky
4	Sept 28 – Oct 4	NMJ and muscle	Stavraky
5	Oct 5 – 11	Muscle, brain and synaptic transmission	Stavraky and Pruszynski
6	Oct 12 – 18	Somatosensory system	Pruszynski
7	Oct 19 – 25	Somatosensory, vision and auditory systems	Pruszynski
8	Oct 26 – Nov 1	Vestibular and motor system	Pruszynski
9	Nov 2 – 8	Reading Week	N/A
10	Nov 9 – 15	Motor cortex and cerebellum	Pruszynski
11	Nov 16 – 22	Limbic and ANS I	Stavraky
12	Nov 23 – 29	ANS II and Cardio	Stavraky
13	Nov 30 – Dec 6	Cardiovascular Phys	Stavraky
14	Dec 7 – 9	Cardiovascular Phys	Stavraky
15	Jan 4 – 10	Cardiovascular Phys	Stavraky
16	Jan 11 – 17	Rena 1, 2, 3	Woods
17	Jan 18 – 24	Renal 4, 5, 6	Woods
18	Jan 25 – 31	Renal 7, 8 and Skeletal Physiology	Woods
19	Feb 1 – 7	Resp 1, 2, 3	Veldhuizen
20	Feb 8 – 14	Resp 4, 5, 6	Veldhuizen
21	Feb 15 – 21	Reading Week	N/A
22	Feb 22 – 28	Endocrine 1, 2, 3	Hardy
23	Mar 1 – 7	Endocrine 4, 5, 6	Hardy
24	Mar 8 – 14	Gastro 1, 2, 3	Woods
25	Mar 15 – 21	Gastro 4, 5, 6	Woods
26	Mar 22 – 28	Gastro 7, Repro 1, 2	Woods and Regnault
27	Mar 29 – Apr 4	Repro 3, 4,	Regnault
28	Apr 5	Repro 5	Regnault

7. Evaluations

Below is the evaluation breakdown for the course. Any deviations will be communicated.

Assessment	Format	Weighting	Date
Midterm 1	MCQ and/or short answer	30%	Tentative date – November 20th
Midterm 2	MCQ and/or short answer	30%	Tentative date – February 5th
Final exam	MCQ and/or written	40%	TBA by Registrar's office

- Virtual proctoring will be used (see info below and on Owl)
- After an assessment is returned, students should wait 24 hours to digest feedback before contacting their evaluator; to ensure a timely response, reach out within 7 days

Click [here](#) for a detailed and comprehensive set of policies and regulations concerning examinations and grading. The table below outlines the University-wide grade descriptors.

A+	90-100	One could scarcely expect better from a student at this level
A	80-89	Superior work which is clearly above average
B	70-79	Good work, meeting all requirements, and eminently satisfactory
C	60-69	Competent work, meeting requirements
D	50-59	Fair work, minimally acceptable
F	below 50	Fail



Information about late or missed exams:

- If an exam is missed, a single make-up test will be scheduled for those students who missed the exam. The format of which will be different from the main exam and could be MCQ, short answer and/or integrative comprehensive essay style questions
- A makeup exam cannot be scheduled after it has been returned to the class.
- If a make-up exam is missed, the weight of the assessment will be added to the final exam
- If all midterm exams and makeup exams are missed, the student will NOT be allowed to write the final exam and will have to write the assessments the following academic year when the course is offered again

Virtual Proctoring Service

Tests and examinations in this course will be conducted using the remote proctoring service, Proctortrack. By taking this course, you are consenting to the use of this software and acknowledge that you will be required to provide **personal information** (including some biometric data) and the session will be **recorded**. More information about this remote proctoring service is available in the Online Proctoring Guidelines at the following link:

<https://www.uwo.ca/univsec/pdf/onlineproctorguidelines.pdf>.

Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. Information about the technical requirements are available at the following link:

<https://www.proctortrack.com/tech-requirements/>.

8. Communication:



- Students should check the OWL site every 24 – 48 hours
- Emails will be monitored daily; students will receive a response in 24 – 48 hours
- This course will use the OWL forum for discussions
- Students should post all course-related content on the discussion forum so that everyone can access answers to questions
- The discussion forums will be monitored daily by instructors and/or teaching assistants

9. Office Hours:



- Office hours will be held remotely using Zoom
- Students will be able to sign up for an appointment using OWL – details will be announced later

10. Resources



- All resources will be posted in OWL
- Study guide material will be available online on Owl and is strongly recommended

11. Professionalism & Privacy:



Western students are expected to follow the [Student Code of Conduct](#). Additionally, the following expectations and professional conduct apply to this course:

- Students are expected to follow online etiquette expectations provided on OWL
- All course materials created by the instructor(s) are copyrighted and cannot be sold/shared
- Recordings are not permitted (audio or video) without explicit permission
- Permitted recordings are not to be distributed
- Students will be expected to take an academic integrity pledge before some assessments
- All recorded sessions will remain within the course site or unlisted if streamed

12. How to Be Successful in this Class:



Students enrolled in this class should understand the level of autonomy and self-discipline required to be successful.

1. Invest in a planner or application to keep track of your courses. Populate all your deadlines at the start of the term and schedule time at the start of each week to get organized and manage your time.
2. Make it a daily habit to log onto OWL to ensure you have seen everything posted to help you succeed in this class.
3. Follow weekly checklists created on OWL or create your own to help you stay on track.
4. Take notes as you go through the lesson material. Treat this course as you would a face-

to-face course. Keeping handwritten notes or even notes on a regular Word document will help you learn more effectively than just reading or watching the videos.

5. Connect with others. Try forming an online study group and try meeting on a weekly basis for study and peer support.
6. Do not be afraid to ask questions. If you are struggling with a topic, check the online discussion boards or contact your instructor(s) and or teaching assistant(s).
7. Reward yourself for successes. It seems easier to motivate ourselves knowing that there is something waiting for us at the end of the task.

13. Western Academic Policies and Statements

Absence from Course Commitments

[Policy on Academic Consideration for Student Absences](#)

If you are unable to meet a course requirement due to illness or other serious circumstances, you must seek approval for the absence as soon as possible. Approval can be granted either through a **self-reported absence** or via the **Academic Counselling** unit. Students have two self-reports to use throughout the academic year; absence from course commitments including tests, quizzes, presentations, labs, and assignments that are worth 30% or less can be self-reported. Self-reported absences cover a student for 48 hours (yesterday + today or today + tomorrow). Your instructor will receive notification of your consideration; however, you should contact your instructor immediately regarding your absence. Students are expected to submit missed work within 24 hours of the end of the 48-hour period. Please review details of the [university's policy on academic consideration for student absences](#).

If you have used both their self-reported absences or will miss more than 48 hours of course requirements, a Student Medical Certificate (SMC) should be signed by a licensed medical or mental health practitioner and you should contact academic counselling. Academic Counselling will be operating virtually this year and can be contacted at scibmsac@uwo.ca.

Accommodation for Religious Holidays

The policy on Accommodation for Religious Holidays can be viewed [here](#).

Special Examinations

A Special Examination is any examination other than the regular examination, and it may be offered only with the permission of the Dean of the Faculty in which the student is registered, in consultation with the instructor and Department Chair. Permission to write a Special Examination may be given on the basis of compassionate or medical grounds with appropriate supporting documents. To provide an opportunity for students to recover from the circumstances resulting in a Special Examination, the University has implemented Special Examinations dates. These dates as well as other important information about examinations and academic standing can be found [here](#).

Academic Offenses

"Scholastic offences are taken seriously, and students are directed [here](#) to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence.

Accessibility Statement

Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact

Accessible Education (AE) at 661-2111 x 82147 for any specific question regarding an accommodation or review [The policy on Accommodation for Students with Disabilities](#).

Correspondence Statement

The centrally administered **e-mail account** provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at his/her official university address is attended to in a timely manner. You can read about the privacy and security of the UWO email accounts [here](#).

Turnitin and other similarity review software

All assignments will be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. Students will be able to view their results before the final submission. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between Western University and [Turnitin.com](#).

14. BMSUE Academic Policies and Statements

Copyright and Audio/Video Recording Statement

Course material produced by faculty is copyrighted and to reproduce this material for any purposes other than your own educational use contravenes Canadian Copyright Laws. You must always ask permission to record another individual and you should never share or distribute recordings.

Rounding of Marks Statement

Across the Basic Medical Sciences Undergraduate Education programs, we strive to maintain high standards that reflect the effort that both students and faculty put into the teaching and learning experience during this course. All students will be treated equally and evaluated based only on their actual achievement. **Final grades** on this course, irrespective of the number of decimal places used in marking individual assignments and tests, will be calculated to one decimal place and rounded to the nearest integer, e.g., 74.4 becomes 74, and 74.5 becomes 75. Marks WILL NOT be bumped to the next grade or GPA, e.g. a 79 will NOT be bumped up to an 80, an 84 WILL NOT be bumped up to an 85, etc. The mark attained is the mark you achieved, and the mark assigned; requests for mark "bumping" will be denied.

15. Support Services

The following links provide information about support services at Western University.

[Academic Counselling \(Science and Basic Medical Sciences\)](#)

[Appeal Procedures](#)

[Registrarial Services](#)

[Student Development Services](#)

[Student Health Services](#)