

Department of Physiology and Pharmacology
Physiology 1021

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 (asynchronous) class lectures	2 lecture hours per week	N/A
Virtual live (synchronous) tutorials	Depends on section enrolled in	Depends on section enrolled

*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 + Instructor	Contact Information
Professor Angela Beye	abeye2@uwo.ca



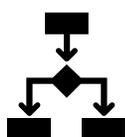
Instructor(s)	Contact Information
Professor Stefan Everling	severlin@uwo.ca
Professor Tom Stavrakys	tom.stavrakys@schulich.uwo.ca
Professor Anita Woods	anita.woods@uwo.ca

4. Course Description and Design

An introductory course outlining the principles of human/mammalian physiology along with a general survey of various physiological systems (e.g. cardiovascular, renal, neural, motor, gastrointestinal, endocrine, respiratory, etc.). Limited to students enrolled in first year Kinesiology and first year Bachelor of Science (Foods and Nutrition). 2 lecture hours, 1 tutorial hour. Prerequisite(s): Grade 12U Biology or equivalent. Grade 12U Chemistry recommended. Antirequisite(s): Physiology 1020, 2130, 3120

Physiology 1021 is designed to help you learn the basic facts, concepts, and principles that are essential to your understanding of the function of the human body, so that you will be able to use that knowledge to solve physiological problems. Because many of you who are enrolled in this course intend to pursue careers related to health, the course will place some emphasis on clinical scenarios and disease (pathophysiology).

Mode	Dates	Time	Frequency
Virtual live (synchronous) tutorials	T/W/Th depending on tutorial section	1 hour	weekly
Virtual recorded (asynchronous) classes	N/A	2-3 hours (lectures & pre or post-lecture work)	weekly



- Asynchronous class work must be completed 1 day prior to live tutorial sessions
- Attendance at live virtual tutorial sessions is **strongly recommended**
- A recording of any tutorial content taught by your teaching assistant will be available within 24 hrs of tutorial
- Closed captioning will be provided on videos of asynchronous lectures when possible
- Missed course work with documentation or a self-reported absence should be completed within 24 hours

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; update 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:



- Describe the function of the cardiovascular, respiratory, gastrointestinal, nervous, sensory, muscular, renal, endocrine and reproductive systems of the human body at the organ and cellular level
- Predict how these organs and organ systems will respond to a problem in order to maintain homeostasis
- Integrate information from lecture to identify how organs react to pathologies and what types of solutions can be utilized to correct the pathology of those systems involved

There are a few general objectives that you should always keep in mind as you study. You will be expected to be able to recall or recognize facts, concepts, or physiological principles. The ability to recall, however, is not so useful unless you can do something with the information that you have learned. Therefore, you should also be able to use your knowledge to explain physiological function.

Most important, of course, is your ability to use your knowledge to predict the consequences of alterations to normal physiological function or to predict changes in physiological systems. Not only are these latter objectives the most useful skills you can learn, but they are also the most interesting. Therefore, the type of effort you put into learning the course material will affect how well you do at applying what you have learned. We will be teaching you about different study methods to achieve the goal of long term retention and a deep understanding of the course material, instead of just trying to memorize for the short-term.

6. Course Content and Schedule

Week	Dates	Topic	Instructor
1	Sept 9 – 13	Excitable Cells 1	Prof. Beye
2	Sept 14 – 20	Excitable Cells 2 & 3	Prof. Beye
3	Sept 21 – 27	Excitable Cells 4 & 5	Prof. Beye
4	Sept 28 – Oct 4	Sensory Phys 1 & 2	Prof. Everling
5	Oct 5 – 11	Sensory Phys 3 & 4	Prof. Everling
6	Oct 12 – 18	Motor Control 1 & 2	Prof. Everling
7	Oct 19 – 25	Endocrine Phys 1 & 2	Prof. Beye
8	Oct 26 – Nov 1	Endocrine Phys 3 & 4	Prof. Beye
9	Nov 2 – 8	Reading Week	N/A
10	Nov 9 – 15	Autonomic Nervous System & Muscle Phys 1	Prof. Stavraky
11	Nov 16 – 22	Muscle Phys 2 & Cardiovascular Phys 1	Prof. Stavraky
12	Nov 23 – 29	Cardiovascular Phys 2 & 3	Prof. Stavraky
13	Nov 30 – Dec 6	Cardiovascular Phys 4 & 5	Prof. Stavraky
14	Dec 7 – 9	Cardiovascular Phys 6	Prof. Stavraky
SEMESTER	TWO		
15	Jan 4 – 10	Renal Phys 1 & 2	Prof. Woods
16	Jan 11 – 17	Renal Phys 3 & 4	Prof. Woods
17	Jan 18 – 24	Renal Phys 5 & 6	Prof. Woods
18	Jan 25 – 31	Integrative Phys 1, Respiratory Phys 1	Prof. Woods, Prof. Beye
19	Feb 1 – 7	Respiratory Phys 2 & 3	Prof. Beye
20	Feb 8 – 14	Respiratory Phys 4 & 5	Prof. Beye
21	Feb 15 – 21	Reading Week	N/A
22	Feb 22 – 28	Integrative Phys 2, Gastrointestinal Phys 1	Prof. Beye, Prof. Woods
23	Mar 1 – 7	Gastrointestinal Phys 2 & 3	Prof. Woods
24	Mar 8 – 14	Gastrointestinal Phys 4 & 5	Prof. Woods
25	Mar 15 – 21	Gastrointestinal Phys 6, Reproductive Phys 1	Prof. Woods, Prof. Beye
26	Mar 22 – 28	Reproductive Phys 2 & 3	Prof. Beye
27	Mar 29 – Apr 4	Reproductive Phys 4, Integrative Phys 3	Prof. Beye



7. Online Participation and Engagement

I know learning online might be new and challenging. I've built in opportunities for you to get to know other students in the course, your teaching assistant, as well as your instructors. All of these resources will be helpful to keep you motivated and feeling supported.



- Students are expected to participate and engage with content as much as possible
- Students can participate during live tutorial sessions with their teaching assistant by asking or answering questions
- Tutorials will have virtual breakout rooms in Microsoft Teams so students can participate with a small group of peers working on group activities
- Students can also participate by interacting in the forums with their peers and instructors. This is the best place to get questions answered and posts will be anonymous among your peers.

8. Evaluation

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

Assessment	Format	Weighting	Due Date
PeerWise* Assignment #1	Author 2 original multiple choice questions (4 answer choices) on course content from Excitable Cell and Sensory lectures Answer 5 multiple choice questions in PeerWise	1%	Author: Wed, Oct 14 Answer: Fri, Oct 16
Online Quiz #1	Online via OWL <i>(questions taken from PeerWise Assignment 1)</i>	2%	Opens Mon, Oct 19 at 4PM until Tues, Oct 20 at 11:55PM
Midterm #1	Multiple Choice - online (proctored): covers <i>Excitable Cells lecture 1 to end of Motor Control lecture 2</i>	14%	Friday, Oct 23, 6-7PM <i>(tentative, date/time subject to change)</i>
PeerWise* Assignment #2	Author 2 original multiple choice questions (4 answer choices) on course content from Endocrine, ANS, Muscle and Cardio lectures Answer 5 multiple choice questions authored by peers in PeerWise from the content stated above	1%	Author: Wed, Dec 2 Answer: Fri, Dec 4
Online Quiz #2	Online via OWL <i>(questions taken from PeerWise Assignment 2)</i>	2%	Opens Mon, Dec 7 at 4PM until Tues, Dec 8 at 11:55PM
Midterm #2	Multiple Choice - online (proctored): covers <i>Endocrine lecture 1 to end of Cardio lecture 6</i>	14%	Dec. Exam Period

PeerWise* Assignment #3	Author 2 original multiple choice questions (4 answer choices) on course content from Renal, Integrative Phys 1, and Respiratory lectures Answer 5 multiple choice questions authored by peers in PeerWise from the content stated above	1%	Author: Wed, Feb 10 Answer: Fri, Feb 12
Online Quiz #3	Online via OWL (<i>questions taken from PeerWise Assignment 3</i>)	2%	Opens Mon, Feb 22 at 4PM until Tues, Feb 23 at 11:55PM
Midterm #3	Multiple Choice - online (proctored): <i>covers Renal lecture 1 to end of Integrative lecture 2</i>	14%	Friday, Feb 26, 6-7PM (tentative, date/time subject to change)
PeerWise* Assignment #4	Author 2 original multiple choice questions (4 answer choices) on course content from Gastrointestinal and Reproductive lectures Answer 5 multiple choice questions authored by peers from the content stated above	1%	Author: Wed, Mar 24 Answer: Fri, Mar 26
Online Quiz #4	Online via OWL (<i>questions taken from PeerWise Assignment 4</i>)	2%	Opens Mon, Mar 29 at 4PM until Tues, Mar 30 at 11:55PM
Final Exam	Multiple Choice - online (proctored): <i>cumulative covering the entire year</i>	30%	Apr. Exam Period
Lecture completion	Watch lecture recordings and complete concept checkpoint questions from lecture	5%	Must complete by Friday at 4PM of the following week that the lectures were posted
Content Expert checks	Randomly selected concept checkpoint questions from lecture will be evaluated for correctness	11%	Randomly graded throughout the year from lecture checkpoint questions

*For PeerWise assignments, please see the PeerWise information on OWL (under "Course questions?" tab) for detailed instructions. There are no part marks for only completing part of this assignment.

- All assignments and quizzes are due at **11:55PM EST** except lecture completion checkpoints (Fridays at 4PM)
- PeerWise assignments will be completed on <https://peerwise.cs.auckland.ac.nz>
- PeerWise assignments will be submitted by Dr. Beye to Turnitin (statement in policies below) for originality checks to ensure questions were authored by each student and not shared or taken from internet resources. Any plagiarism of questions will be granted a grade of zero on that assignment.
- Lecture completion checks will be done on concept checkpoint questions by Dr. Beye every Friday (4PM) the week after lectures were posted to determine if lectures were completed

on time; marking to determine whether correct responses were given (Content Expert checks) will be completed at randomly selected times during the year.

After an assessment grade is published, students should wait 24 hours to digest feedback before contacting Dr. Beye; to ensure a timely response, students are expected to reach out within 7 days. Any grade appeals on any assignments, quizzes, or midterms must be received within 3 weeks of the grade being posted.

Virtual proctoring will be used for exams in this course.

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/>.

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 evaluations:

There are no makeup PeerWise assignments offered due to the extensive time given to complete them. However, if there is an approved documented absence through academic counselling for a significant amount of time, the assignment will be reweighed to the other 3 PeerWise assignments in the course.

A quiz cannot be completed after answers have been released to the class; instead the weight of that quiz will be transferred to the other 3 quizzes in the course if there is a self-reported absence or approved documented absence through academic counselling.

A make-up exam will be offered to students who have received academic accommodations for approved absences or have submitted a self-reported absence as follows:

Monday, Oct 26 (time TBA): Makeup Midterm 1

Monday, Jan 4 (time TBA): Makeup Midterm 2

Monday, Mar 1 (time TBA): Makeup Midterm 3

The makeup final exam will be scheduled by the department in May 2021. *All of these dates are tentative and subject to change.*

Only one makeup is offered for each exam. If a student's documentation covers an absence for both the regular exam and makeup exam, the weight of that exam will be added to the final exam in the course.

Any assignments, quizzes, exams or makeup exams that are missed without a self-report or documentation approved by academic counselling will receive a grade of 0 on that evaluation.

At least TWO midterms must be written to be permitted to write the final exam in the course.

9. Communication:



- Students should check the OWL site every 24 – 48 hours
- A weekly update will be provided on the OWL announcements
- Students should email Dr. Beye (abeye2@uwo.ca) with questions about the course structure or assignments if that information cannot be located on the syllabus or OWL first
- Emails sent to Dr. Beye will be monitored during regular business hours; students will receive a response within 48 – 72 hours
- Students should post all questions related to lecture content on the discussion forum so that other students can access answers to questions
- The discussion forums will be monitored Monday-Friday by teaching assistants or instructors
- This course will use Microsoft Teams for tutorials and tutorial group work

10. Office Hours:



- Dr. Beye's **office hours** will be held remotely using Zoom on **Thursdays from 3-4PM**
- Students will be able to sign up for an appointment with Dr. Beye using the Sign Up tool on OWL (10 min appts)
- Students will be able to attend group drop in sessions with Dr. Beye, known as *Mentoring Monday's*, on the **first Monday of each month at 3:30PM** via Zoom. More details will be available in OWL announcements the week before each session.
- Mentoring Monday's will be recorded and posted for everyone to view
- Office hours scheduling for other instructors will be posted on OWL

11. Resources



- Required workbook (\$98.95): Introduction to Human Physiology Custom Workbook, 5th Custom Edition. Comes packaged with an electronic textbook (Human Anatomy and Physiology by Marieb and Hoehn) and Learning Catalytics at no extra cost. The latter will be useful resources while studying.

12. 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

13. 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 day planner** to keep track of your courses and assignment deadlines. Populate all of 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 material. Treat this course as you would a live face-to-face course. Keeping handwritten notes will help you learn more effectively than just reading or watching the videos. *Note: typed notes work too, but literature suggests handwritten notes are a more effective learning strategy.*
5. **Connect with others.** Try forming an online study group and meeting on a weekly basis for studying and peer support. While tutorials are optional, but strongly encouraged, this is a great place to get to know your peers, learn good study habits, and form supportive networks that might last for years.
6. **Do not be afraid to ask questions.** If you are struggling with a topic, check the online discussion forums and post your questions there. You will be anonymous to your peers. Feel free to answer other questions posted in the discussion forum too! Your teaching assistant is also a great resource and will answer questions in tutorial sessions.
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.
8. Try to **keep a weekly routine.** Consistent wake up times, regular exercise, and building in some enjoyable activities will help break up your week to balance academics and your own personal health and wellbeing.

14. 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 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 through your home academic counselling offices. You can find the website for your home academic counselling offices in this syllabus under Section 16: Support Services.

There may be situations such as illness, or scheduled class conflicts that may prevent you from writing the exams on their scheduled date. You may be eligible to write a make-up test or make-up final exam. Please note that there will only be one make-up date that will be scheduled. You must contact the course manager immediately to obtain the information of the make-up. If you miss both the scheduled exam and the scheduled make-up exam and have no valid reasons for doing so or have done so without obtaining permission from your academic counselling office, you will obtain a 0% for that missed test or exam performance.

15% Assessment Rule

At least three days prior to the deadline for withdrawal from a course without academic penalty, students will receive assessment of work accounting for at least 15% of their final grade. For more details, refer to the link found [here](#).

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. All assignments 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](#).

15. 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.

16. Support Services

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

[Academic Counselling \(Faculty of Science\)](#)

[Academic Counselling \(Kinesiology\)](#)

[Academic Counselling \(Brescia students\)](#)

[Appeal Procedures](#)

[Registrarial Services](#)

[Student Development Services](#)

[Student Health Services](#)