

Department of Physiology and Pharmacology
Physiology 1021

Course outline for Fall/Winter 2021-2022

REVISED JANUARY 2022



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

2. Important Dates



Classes Begin	Reading Week	Classes End	Study day(s)	Exam Period
September 8	November 1–7	December 8	December 9	December 10–21

* November 12, 2021: Last day to drop a first-term full course without penalty

Classes Resume	Reading Week	Classes End	Study day(s)	Exam Period
January 3 January 10	February 19–27	April 1 April 8	April 2/3 April 9	April 4–30 April 10-30

3. Contact Information



Course Coordinator + Instructor	Contact Information
Dr. Angela Beye	abeye2@uwo.ca

Instructors	Contact Information
Dr. Stefan Everling	severlin@uwo.ca
Dr. Oana Birceanu	obircean@uwo.ca
Dr. Anita Woods	anita.woods@uwo.ca
Dr. Christine Bell	christine.bell@uwo.ca

4. Course Description and Design

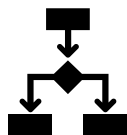
Delivery Mode: in-person

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).

Timetabled Sessions

Component	Date(s)	Time
Lectures	Tues & Thurs	9:30 AM – 10:20 AM
Tutorials	Tues, Wed, or Thurs	Various depending on tutorial section enrolled



- Any asynchronous pre-work must be completed prior to lecture sessions
- Attendance at tutorials is **strongly recommended**
- Lectures will also be live streamed on Zoom, recorded, and posted on OWL

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](#).

NOTE: In the event of a COVID-19 resurgence during the course that necessitates moving away from face-to-face interaction, course content will be delivered entirely online, either synchronously (i.e., at times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience). The grading scheme will not change. Any remaining assessments will also be conducted online at the discretion of the instructor.

NEW for 2022: When deemed necessary, tests and examinations in this course will be conducted using a remote proctoring service. More information about this remote proctoring service, including technical requirements, is available on Western's Remote Proctoring website at: <https://remoteproctoring.uwo.ca>

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



Fall Term			
Week	Dates	Topic	Instructor
1	Sept 8	Excitable Cells 1	Dr. Beye
2	Sept 14, 16	Excitable Cells 2 & 3	Dr. Beye
3	Sept 21, 23	Excitable Cells 4 & 5	Dr. Beye
4	Sept 28, 30	Endocrine Phys 1 & 2	Dr. Beye
5	Oct 5, 7	Endocrine Phys 3 & 4	Dr. Beye
6	Oct 12, 14	Sensory Phys 1 & 2	Dr. Everling
7	Oct 19, 21	Sensory Phys 3 & 4	Dr. Everling
8	Oct 26, 28	Motor Control 1 & 2	Dr. Everling
9	Nov 1–7	Reading Week	N/A
10	Nov 9, 11	Autonomic Nervous System & Muscle Phys 1	Dr. Birceanu
11	Nov 16, 18	Muscle Phys 2 Cardiovascular Phys 1	Dr. Birceanu Dr. Beye
12	Nov 23, 25	Cardiovascular Phys 2 & 3	Dr. Beye
13	Nov 30, Dec 2	Cardiovascular Phys 4 & 5	Dr. Beye
14	Dec 7	Cardiovascular Phys 6	Dr. Beye

Winter Term				
Week	Old Dates	New Dates	Topic	Instructor
1	Jan 4, 6	Jan 11, 13	Renal Phys 1 & 2	Dr. Woods
2	Jan 11, 13	Jan 18, 20	Renal Phys 3 & 4	Dr. Woods
3	Jan 18, 20	Jan 25, 27	Renal Phys 5 & 6	Dr. Woods
4	Jan 25, 27	Feb 1, 3	Integrative Phys 1 Respiratory Phys 1	Dr. Woods Dr. Beye
5	Feb 1, 3	Feb 8, 10	Respiratory Phys 2 & 3	Dr. Beye
6	Feb 8, 10	Feb 15, 17	Respiratory Phys 4 & 5	Dr. Beye
7	Feb 21–25	Same	Reading Week	N/A
8	Feb 15, 17	Mar 1, 3	Integrative Phys 2 Gastrointestinal Phys 1	Dr. Beye Dr. Woods
9	Mar 1, 3	Mar 8, 10	Gastrointestinal Phys 2 & 3	Dr. Woods
10	Mar 8, 10	Mar 15, 17	Gastrointestinal Phys 4 & 5	Dr. Woods
11	Mar 15, 17	Mar 22, 24	Gastrointestinal Phys 6 Reproductive Phys 1	Dr. Woods Dr. Bell
12	Mar 22, 24	Mar 29, 31	Reproductive Phys 2 & 3	Dr. Bell
13	Mar 29, 31	April 5, 7	Reproductive Phys 4, Integrative Phys 3	Dr. Bell

7. Participation and Engagement

I know first year can feel intimidating, but we'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 lecture content as much as possible
- Students should participate during tutorial sessions in group activities with their small group and feel comfortable to ask or answer questions posed by their teaching assistant
- Students can also participate by interacting in the forums with their peers and instructors

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 Endocrine lectures	1%	Author: Tues, Oct 12
	Answer 5 multiple choice questions in PeerWise		Answer: Thurs, Oct 14
Online Quiz #1	Online via OWL (<i>questions taken from PeerWise Assignment 1</i>)	2.5%	Opens Mon, Oct 18 at 4PM until Tues, Oct 19 at 11:55PM
Midterm #1	Multiple Choice (in person): <i>covers Excitable Cells lecture 1 to end of Sensory lecture 2</i>	17%	Friday, Oct 22, 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 Sensory, Motor control, ANS, Muscle, and Cardio lectures Answer 5 multiple choice questions in PeerWise from the content stated above	1%	Author: Tues, Nov 30 Answer: Thurs, Dec 2
Online Quiz #2	Online via OWL (<i>questions taken from PeerWise Assignment 2</i>)	2.5%	Opens Mon, Dec 6 at 4PM until Tues, Dec 7 at 11:55PM
Midterm #2	Multiple Choice (in person): <i>covers Sensory lecture 3 to end of Cardio lecture 6</i>	17%	Dec. Exam Period

Semester 2

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 in PeerWise from the content stated above	1%	Author: Tues, Feb 15 Answer: Thurs, Feb 17 <i>(no date change)</i>
Online Quiz #3	Online via OWL (<i>questions taken from PeerWise Assignment 3</i>)	2.5%	Opens Mon, Feb 28 at 4PM until Tues, Mar 1 at 11:55PM <i>(no date change)</i>
Midterm #3	Multiple Choice (in person): <i>covers Renal lecture 1 to end of Integrative lecture 2</i>	17%	Friday, Mar 4, 6-7PM <i>(tentative, date/time subject to change)</i>
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: Tues, Mar 22 Answer: Thurs, Mar 24 NEW DATES Author: Tues, Mar 29 Answer: Thur, Mar 31
Online Quiz #4	Online via OWL (<i>questions taken from PeerWise Assignment 4</i>)	2.5%	Opens Mon, Mar 28 at 4PM until Tues, Mar 29 at 11:55PM NEW DATES Opens Mon, Apr. 4 at 4PM until Tues, Apr. 5 th at 11:55PM

Final Exam	Multiple Choice: <i>cumulative covering the entire year</i>	30%	Apr. Exam Period	
Weekly Concept Checkpoint	Online via OWL, answer the concept checkpoint for each week	5%	Weekly	

*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 are due at **11:55 pm EST** unless otherwise specified
- PeerWise assignments will be completed on <https://peerwise.cs.auckland.ac.nz>
- PeerWise assignments will be reviewed by Dr. Beye for originality checks to ensure questions were authored by each student and not shared or taken from internet resources or previous exams. Any sharing of questions between students or taking questions from other resources will be granted a grade of zero on that assignment.
- 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.
- Concept checkpoints are due on the Monday the week after it was released. See OWL Course Questions for details.

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.
- Students are **permitted to miss 3 weekly checkpoints** without penalty. If there is an approved documented absence through academic counselling or a self-reported absence, the checkpoint will be reweighed to the other weekly checkpoints in the course. **At least 50% of the checkpoints must be completed, otherwise a grade of zero will be assigned for this component.**
- 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, when permitted, as follows:

Tentative date: Monday, Oct 25 (time TBA): Makeup Midterm 1

Tentative date: Scheduled by department in early January: Makeup Midterm 2
Tentative date: Monday, Mar 7 (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, but an attempt to locate that information on the syllabus or OWL should be made 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

10. Office Hours



- Dr. Beye's **office hours** will be held remotely using Zoom. Dates and times will be posted on OWL.
- 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, as long as there is considerable interest. 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 from UWO Bookstore: Physiology 1021: Introduction to Human Physiology Custom Workbook. Printed format is recommended but a digital version is also available. You should bring this workbook to class.

https://bookstore.uwo.ca/textbook-search?campus=UWO&term=W2021&courses%5B0%5D=001_UW/PHL1021

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:



- 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
- Students are expected to be kind and professional in their conduct, including in forum posts and PeerWise assignments

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** to help you stay on track.
4. **Take notes** as you go through the material. Keeping handwritten notes will help you learn more effectively than just reading or listening in lecture. *Note: typed notes work too, but literature suggests handwritten notes are a more effective learning strategy.*
5. **Connect with others.** Try forming a study group and meet 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. Feel free to also ask questions in class!
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, *unless otherwise stated above in section 8 for this course*. 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. **You can find the website for your home academic counselling offices in this syllabus under Section 16: Support Services.**

Accommodation for Religious Holidays

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

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](#).

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](#).

Discovery Credit Statement

Students are permitted to designate up to 1.0 Discovery Credit course (or equivalent) for pass/fail grading that can be counted toward the overall course credits required for their degree program. The details of this policy and the deadlines can be found [here](#).

15. BMSUE Academic Policies and Statements

Cell Phone and Electronic Device Policy (for in-person tests and exams)

The Schulich School of Medicine & Dentistry is committed to ensuring that testing and evaluation are undertaken fairly across all our departments and programs. For all tests and exams, it is the policy of the School that any electronic devices, i.e., cell phones, tablets, cameras, or iPod are strictly prohibited. These devices **MUST** be left either at home or with the student's bag/jacket at the front of the room and **MUST NOT** be at the test/exam desk or in the individual's pocket. Any student found with one of these prohibited devices will receive a grade of zero on the test or exam. Non-programmable calculators are only allowed when indicated by the instructor. The program is not responsible for stolen/lost or broken devices.

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

Approved by Department: Anita Woods Jan. 4th, 2022
Approved by BMSUE: Brad Urquhart January 4, 2022