Physiology 2130: Human Physiology

Fall/Winter: Distance Studies 2018

A survey course outlining the principles of human/mammalian physiology; general properties of the living cell and internal environment; neural, muscular, cardiovascular, respiratory, gastrointestinal, renal and endocrine system; metabolism, reproduction and homeostasis. Physiology 2130 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 most of you who are enrolled in this course intend to pursue careers related to health, the course will place some emphasis on clinical correlations with pathophysiology.

Requisites:

Prerequisite(s): First year courses in biology and chemistry are recommended

Antirequisite(s): Physiology 1020, 1021, 3120

Senate regulation regarding the student’s responsibility regarding requisites:

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.

You may contact Services for Students with Disabilities (SSD) at 661-2111 x 82147 for any specific question regarding an accommodation.

Instructor Information

name: Dr. Christine Bell

email: christine.bell@uwo.ca
Appointments are online and can be made by emailing me.

**OWL:**

OWL is a course management system that allows students and instructors to interact over the web. It allows for discussion of physiological topics using a discussion/bulletin board. It also includes a list of course content, a calendar or course schedule and other information (not all of these will necessarily be running during the course).

You will discover that OWL will be an important part of the course. Owl contains all the content you will need to know for the course. The Physiology 1020 OWL site will allow you to interact with all the other students, the teaching assistants and the instructor. **It is imperative that you access this web site frequently.**

Students with OWL issues should contact the Computer Support Centre at 519 661-3800 or fill out the OWL webform:

[https://servelt.uwo.ca:8081/vistahelpdesk/controller.jsp](https://servelt.uwo.ca:8081/vistahelpdesk/controller.jsp)

**Course Syllabus**

**Course Objectives:** 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 principles. The ability to recall, however, is of little value 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 also they are the most interesting.
Each section of the course has its own individual objectives that you should be able to answer upon completion of the particular section.

Course Format: The Content OWL Website contains all of the basic information and materials presented in the Physiology course offered by the Department of Physiology at the University of Western Ontario. The content has been developed by a Physiology Lecturer and is based directly on the contents of the "traditional" classroom-based course. Completion of these course materials (and of course passing the exam) will provide you with the same course credit received by students who complete the course on campus - even if your schedule won't let you attend classes.

However, this software doesn't just represent a convenient alternative to sitting in class. The multimedia nature of this software has allowed the developers to create a rich array of dynamic media that present basic physiology concepts in unique and illustrative ways. The interactive nature of the software means that learning is completely self-paced and under direct control of the student at all times. Material can be viewed and reviewed at any time, and a student can move through the information in any way they like: Module by module in a linear fashion, reviewing a series of related topics or exploring all the information on one specific concept.

Course Topics

Module 1 – Introduction to Human Physiology

Module 2 – Body Fluids

Module 3 - The Human Cell

Module 4 – The Nerve

Module 5- Muscle

Module 6- The Nervous System

Module 7- The Sensory System

Module 8- The Cardiovascular System
Module 9- The Circulatory System
Module 10- Respiratory System
Module 11- The Renal System
Module 12- Acid/Base Balance
Module 13- The Endocrine System
Module 14- The Reproductive System
Module 15- The Digestive System
Module 16- Metabolism

Course Materials

Required- None

Recommended- Textbook: Human Physiology- Silverthorn 6th edition (older editions are fine as well), any other Human physiology text are also fine (Vanders Human Physiology, 10th edition, or Human Physiology-From Cells to Systems 1st edition).

Note: You will only be tested on material contain within the course. Information from a text book would be to enhance this material and is completely optional.

Evaluation:

Breakdown of evaluations:

4 quizzes: Each worth 1% for a total of 4%
4 case studies: Each worth 2% for a total of 8%
2 tests: each worth 16%
Midterm: 16%
Final exam: 40%

The tests, midterm and final exam will be on campus (UWO) or at an exam centre and consist of multiple-choice questions. The questions will be a single multiple choice question, where you are expected to select the best answer. The tests and midterm will be 1 hour in length. The final exam will be cumulative and 3 hours in length.

You will be evaluated on the lecture material only.

The quizzes and the case studies will be done online through the 'Test and Quizzes' tab on OWL and will be graded based on performance.

There will be no accommodations granted for missed quizzes or case studies. If you miss an assignment or quiz it will result in an automatic zero, or possibly reweighed if proper documentation is presented that covers the entire missed period.

TED talks are not evaluated, they are simply for entertainment.

Additional Information and Statements.

Statement on Academic Offences

“Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following website: http://www.uwo.ca/univsec/handbook/appeals/scholastic_discipline_undergrad.pdf.”

“Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.”

Absence from course commitments

Illness or Compassionate Accommodations for exams and quizzes: Students are expected to write quizzes and case studies during the scheduled time. In the case of illness or other serious circumstances during the tests, midterm or final exam, you will be required to provide valid medical or supporting documentation as follows:

Senate policy states that “Students seeking academic accommodation on medical grounds for any missed tests, exams, participation components and/or assignments worth 10% or more of their final grade must apply to the Academic Counseling office of their home Faculty and provide documentation. Academic accommodation cannot be granted by the instructor or department.” The UWO policy on accommodation for Medical Illness can be found at:
A completed Student Medical Certificate (SMC) is required for medical documentation. Please present this to the physician and then the appropriate Dean’s office. This certificate is available at:
http://www.uwo.ca/univsec/handbook/appeals/medicalform.pdf

Please notify Dr. Bell immediately to let me know you will not complete the exam/quiz at the scheduled time. You will be responsible to make alternative arrangements to complete the missing material once the accommodation has been approved by the Dean’s office. For accommodation to be approved for a missed quiz, the reason for missing the quiz or case study has to apply for the entire time the quiz or case study was available, ex. If a student has not taken the quiz or case study, and is suddenly unable to on the last day the quiz is available, an accommodation will not be granted.

Accommodations for Religious Holidays: If you will be absent from an exam for a religious holiday, you are responsible for contacting Dr. Bell in advance of your absence as well as your academic advisor. This policy can be found at:
http://www.uwo.ca/univsec/handbook/appeals/accommodation_religious.pdf

### A. Absence for medical illness:

Students must familiarize themselves with the Policy on Accommodation for Medical Illness: [https://studentservices.uwo.ca/secure/index.cfm](https://studentservices.uwo.ca/secure/index.cfm)

**Statement from the Dean’s Office, Faculty of Science**

If you are unable to meet a course requirement due to illness or other serious circumstances, you must provide valid medical or other supporting documentation to your Dean’s office as soon as possible and contact your instructor immediately. It is the student’s responsibility to make alternative arrangements with their instructor once the accommodation has been approved and the instructor has been informed. In the event of a missed final exam, a "Recommendation of Special Examination" form must be obtained from the Dean's Office immediately. For further information please see:


A student requiring academic accommodation due to illness, should use the Student Medical Certificate when visiting an off-campus medical facility or request a Record's Release Form (located in the Dean's Office) for visits to Student Health Services.

The form can be found at:

https://studentservices.uwo.ca/secure/medical_document.pdf

### B. Absence for non-medical reasons:
A clear indication of how **non-medical absences** from midterms, tutorials, laboratory experiments, or late essays or assignments, will be dealt with must be provided. If documentation is required, such documentation must be submitted by the student directly to the appropriate Faculty Dean’s Office and **not** to the instructor. It will subsequently be the Dean’s Office that will determine if accommodation is warranted.

**C. 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.

A Special Examination must be written at the University or an Affiliated University College no later than 30 days after the end of the examination period involved. To accommodate unusual circumstances, a date later than this may be arranged at the time permission is first given by the Dean of the Faculty. The Dean will consult with the instructor and Department Chair and, if a later date is arranged, will communicate this to Registrarial Services. If a student fails to write a scheduled Special Examination, permission to write another Special Examination will be granted only with the permission of the Dean in exceptional circumstances and with appropriate supporting documents. In such a case, the date of this Special Examination normally will be the scheduled date for the final exam the next time the course is offered.

**Support Services:**

Registrarial Services: [http://www.registrar.uwo.ca/](http://www.registrar.uwo.ca/)

Academic Counselling (Science and Basic Medical Sciences): [http://www.uwo.ca/sci/counselling/index.html](http://www.uwo.ca/sci/counselling/index.html)

Student Development Services: [http://www.sds.uwo.ca](http://www.sds.uwo.ca)

Student Health Services: [http://www.shs.uwo.ca/](http://www.shs.uwo.ca/)

**Accommodations for Religious Holidays**

Accommodations for religious holidays will be made in the event that such a holiday coincides with an exam. However, it is the student’s responsibility to inform the course manager well in advance. For details on the procedures for religious accommodations, please refer to the *Academic Calendar*. These procedures must be followed. Students seeking accommodation are expected to write the scheduled make-up exam.

**Policy on Plagiarism**
The Department of Physiology and Pharmacology strongly condemns plagiarism. Plagiarism is the “act or instance of copying or stealing another’s words or ideas and attributing them as ones own.” (Excerpted from Black’s Law Dictionary, West Group, 1999, 7th ed. Pg 1170 and the definition used by Western’s Scholastic Discipline document). Plagiarism can be intentional or unintentional and regardless of intent, is a scholastic offence. It should be noted that self-plagiarism, plagiarizing one's own words for multiple assignments is subjected to the same penalty as plagiarizing another.

The minimum penalty for a first time plagiarism offence of any kind is a grade of zero on the assignment. In addition, details of the offence will be forwarded to Dean’s office and stored. A second offence will carry a much stricter penalty in line with Western’s Scholastic Discipline policies http://www.westerncalendar.uwo.ca/2017/pg113.html

Cell Phone and Device Policy

The Department of Physiology and Pharmacology is committed to ensuring that testing and evaluation are undertaken fairly. For all tests and exams, it is the policy of the Department of Physiology and Pharmacology that any devices with a battery (e.g. cell phone, tablet, camera, watch, smart watch, ipod) are strictly prohibited. These devices MUST be left either at home or with the students bag/jacket at the front of the room and MUST not be at the test/exam desk or in the individuals 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 Department of Physiology and Pharmacology is not responsible for stolen/lost or broken devices.

Appeals Policy

The Department of Physiology and Pharmacology follows the Western University student academic appeals policy (http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#SubHeading_181). All appeals to individual graded course components must be submitted to the course instructor within 3 weeks of the grade being released. All final course grade appeals must be received by January 31 (1st term classes) or June 30 (2nd term half classes and full year classes). You must first appeal to the course manager. If this appeal is rejected, then you can appeal to the Undergraduate Chair of the Department of Physiology and Pharmacology (Brad.Urquhart@schulich.uwo.ca). If this appeal is rejected, you may then appeal to the Assistant Dean of the Bachelor of Medical Sciences Undergraduate Education Committee (Candace.Gibson@schulich.uwo.ca).

You must have suitable grounds for appeal which may include: 1) appeal on medical or compassionate grounds; 2) appeal based on extenuating circumstances beyond your control; 3) appeal based on bias, inaccuracy or unfairness. All appeals must be accompanied by a detailed explanation along with supporting documentation. You should submit your appeal as an e-mail
with a single attachment. If you have multiple supporting documents, you should merge them into a single document.

**Rules for Exam Conduct by the Student (Candidate)**

1. Candidates are responsible for arriving at the examination room on time with adequate supplies (pens, pencils, erasers, calculator and current ID card) and may be admitted five minutes before the beginning of the examination. Upon entering the examination room, candidates will refrain from talking to or communicating with other candidates. Candidates will read any posted Instructions concerning seating and other arrangements within the examination room. Candidates must place their ID card on the left corner of the desk.

2. No candidate may leave the examination room during the first thirty minutes of the examination.

3. Candidates must sign the nominal roll which will be circulated by the proctor during the first thirty minutes of the examination.

4. Candidates arriving later than thirty minutes after the commencement of the examination will not be allowed to write the examination. Under such circumstances candidates should proceed to the Dean of their Faculty for instructions. In the case of evening or Saturday examinations, candidates should proceed to the Department of Admissions and Academic Records for instructions.

5. Candidates prevented from writing an examination by circumstances such as illness, or death in the family shall submit a written petition to the Dean of their faculty. A petition made because of illness should be accompanied by a medical certificate stating the time and duration of the illness, a petition for other reasons should be supported by evidence from a responsible person acquainted with the circumstances.

6. Candidates are forbidden to give information or to receive it from any other candidate during the examination.

7. Candidates will not make use of any books, notes, diagrams or other aids, unless authorized by the examiner, such authorization being clearly stated on the question paper. Candidates who bring any unauthorized notes, books or other aids into the examination room must leave them in an area designated by the Chief Proctor.

8. Smoking is not permitted in the examination room.

9. In the case of an emergency, candidates will be permitted to leave and re-enter the examination room only if accompanied by a proctor. Candidates may be granted permission to move to another available seat if they can provide a legitimate reason.

10. Candidates are responsible for ensuring that they receive the proper question paper.
11. Candidates will use only the approved answer form supplied (question paper, markex card, or answer booklet). When answer booklets are employed, candidates will use them even for rough work and will not write on any other paper. Pages will not be removed from answer books. Candidates must keep all papers on their desk.

12. Candidates who require additional answer books during the examination will not leave their seat but will attract the attention of the proctor by raising a hand.

13. Any suspected irregularities in the question paper or any unusual distractions in the vicinity of the candidates should be brought to the attention of the proctor (Senate, May 23 2958).

14. Upon completion of the examination, candidates will ensure that their student number, name, course number, book number and total number of books, and the name of the instructor are lettered legibly on all answer books. If more than one book has been used they should be numbered consecutively and placed inside Book 1. No answer books or parts of answer books will be taken from the examination room.

15. Candidates will not be allowed to leave the examination room during the last fifteen minutes. Under no circumstances including late arrival, will the time beyond the designated period be extended.

16. At the conclusion of the examination, candidates will remain seated until a proctor has collected their completed examination booklets. CANDIDATES WHO LEAVE THE ROOM AND NEGLECT TO SIGN THEIR NAME AND SUBMIT THEIR COMPLETED BOOKLETS TO THE PROCTOR WILL BE CONSIDERED AS NOT HAVING WRITTEN THE EXAMINATION.

17. For all tests and exams, it is the policy of the Department of Physiology and Pharmacology that any devices with a battery (e.g. cell phone, tablet, camera, watch, smart watch, ipod) are strictly prohibited. These devices MUST be left either at home or with the students bag/jacket at the front of the room and MUST not be at the test/exam desk or in the individuals pocket. Any student found with one of these prohibited devices will receive a grade of zero on the test or exam.

PLEASE NOTE:

All exam answer sheets are subject to a common data analysis, which identifies anomalies of statistical significance in the selection of right and wrong answers by pairs of students. The course instructor is required to report all statistically significant results, which suggest that cheating may have occurred. All such incidents will be subject to further investigation. All proven cases of cheating will be subject to severe academic penalties. If you are seated near someone with whom you studied, and you think you may choose many of the same answers as that person, please raise your hand and ask a proctor to reseat you for the exam.
STUDENTS MAY OBTAIN A COPY OF THESE REGULATIONS AT THE DEPARTMENT OF ADMISSIONS AND ACADEMIC RECORDS.