Physiology 4620a: Endocrine and Reproductive Physiology  
Fall Term 2018-2019

Lectures:  
Tuesdays 12:30-2:30    NCB-114

Physiology 4620a does not attempt to be a comprehensive course in the sense that no attempt is made to cover all aspects of endocrine and reproductive physiology. Rather, aspects of selected topics are examined in depth, with emphasis on current literature. The format of the course will be a series of lectures and seminars on the selected topics. The topics will be introduced by the Faculty member and then all topics will be considered in class by a general discussion with all class participants.

Requisites:  
Prerequisite(s): Physiology 3120, Physiology 3140A and either Physiology and Pharmacology 3000E or the former Physiology 3130Z; or Physiology 3120 (with a mark of at least 75%) and Physiology 3140A.

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.

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

Course coordinator:  
Dr. Andrew Watson (Course Manager) andrew.watson@schulich.uwo.ca

Lecturers:  
Dr. S. Medwid smedwid@uwo.ca  
Dr. A. Hijazi ahijazi@uwo.ca

TA: David Hawke dhawke@uwo.ca

Teaching Assistant Duties  
The Teaching Assistant will attend all lectures and respond in a timely fashion to questions which students have posted on OWL. We use OWL as the main communication tool outside the classroom. Dr. Watson also monitors OWL activities and also responds to students’ questions posted on OWL.
OWL: Students with OWL issues should see: https://owl.uwo.ca/portal/site/owldocs

Course Syllabus

Learning Outcomes:
- discuss the current state of knowledge of those areas of endocrine and reproductive physiology covered by the course
- evaluate critically the problem formulation, methodology, results and conclusions in selected research literature using external criteria (conclusions of others) and internal criteria (appropriateness of methodology, significance of results, consistency of conclusions)
- make hypothetical predictions relating to the implications of the results and conclusions in selected literature.

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<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Lecturer</th>
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<tbody>
<tr>
<td>September 11</td>
<td>Why study reproductive biology? Neuroendocrinology: The HPO Axis</td>
<td>Watson</td>
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<td>September 18</td>
<td>Sex Determination/Sex Differentiation</td>
<td>Watson</td>
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<td>September 25</td>
<td>Puberty</td>
<td>Medwid</td>
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<td>October 2</td>
<td>Reproductive Cycles</td>
<td>Watson</td>
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<td>October 9</td>
<td>Reading Week – no class</td>
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<td>October 16</td>
<td>Ovary</td>
<td>Medwid</td>
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<td>October 23</td>
<td>First Midterm (20%) – and Testes</td>
<td>Watson</td>
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<td>October 30</td>
<td>Fertilization/Take home assignment handed out</td>
<td>Watson</td>
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<td>November 6</td>
<td>Preimplantation Development</td>
<td>Watson</td>
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<td>November 13</td>
<td>Implantation</td>
<td>Watson</td>
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<td>November 20</td>
<td>Maternal Recognition of Pregnancy/Take home assignment handed in (25%)</td>
<td>Hijazi</td>
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<td>November 27</td>
<td>Placenta</td>
<td>Hijazi</td>
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<td>December 4</td>
<td>Contraception/Fertility Treatment</td>
<td>Watson</td>
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Final Exam (45%): December 10-21 2018
Course Materials:

Texts for Background Information: Martin Johnson and Barry Everitt, *Essential Reproduction.*
C.R. Austin and R.V. Short, *Reproduction in Mammals* (several small volumes).
Ernst Knobil and Jimmy Neil (eds.), *The Physiology of Reproduction.*

Evaluation:

To comply with the new Western Policy in which 15% of the final grade must be awarded before the end of October; students will be examined in the first hour of the October 23rd week class. This exam will consist of answering 3 mini-essays ie 1 page each, answering questions based on the first 4 weeks of class material.

The Second examination will be a take-home examination. It will be given to the students at the October 30th week class, and must be returned at the beginning of the class on November 20th at 12:30 pm. The examination will be designed to test the student's ability to meet the course objectives outlined above. Students will be presented with a set of experimental results which must be presented in a published manuscript format. Students will write an abstract (maximum 250 words), introduction (background, rationale, hypothesis/objectives; maximum 2 pages), materials and methods (maximum 1 page), results (maximum 1 page), discussion (maximum 2 pages) and cited literature (maximum of 1 page; 10 references maximum) based on the provided data. **Thus the report must fit within a maximum of 8 single double spaced times roman 12pt font pages.** Three weeks should provide ample time to complete the examination. As with all examinations, students are expected not to collaborate with others in the completion of the examination.

In evaluating the second examination consideration will be given to:

- Organization and Content: Was the hypothesis and objectives clearly described? Was a strong rationale for the study clearly built? Was the relevant literature covered well?
- Knowledge of Topic and Related Areas: Did the student understand the data and its application? How well did the student present the topic? Did the discussion actually assess the quality of the results and how the results advanced the field of knowledge? Were the conclusions reasonable and clearly presented? What were the strengths and weaknesses of the study?
- Overall form and structure: Was the information presented to allow a logical presentation of the data and conclusions? Was sufficient space allocated to each section of the paper? [Each paper should not exceed 8 double spaced times roman 12pt font pages in length.]

A number of mini-quizzes will be administered at the beginning of class throughout the term. The questions posed will be readily answerable by those students who have read the papers which are to be covered on that day. Papers citations will be provided at least the week before a given paper is considered in class.
The final examination (date/place/scheduled by Western) and being 2.5hrs in length will consist of a mixture of essay-type (maximum 1 page), short answer (one paragraph) and one word answer questions dealing with the course material and related readings. It will be scheduled during the final examination period.

A detailed and comprehensive set of regulations concerning the scheduling of tests, assignments, etc. is available at:
http://www.uwo.ca/univsec/academic_policies/examinations.html

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 below:
http://www.uwo.ca/univsec/pdf/academic_policies/exam/evaluation_undergrad.pdf

Policy on Rounding and Bumping of Grades
Across the Basic Medical Sciences Undergraduate Education programs and within the department of Physiology and Pharmacology 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 in 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.

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 ones own words for multiple assignments is subjected to the same penalty as plagiarizing another. Courses in Physiology and Pharmacology use turnitin, a similarity checking software embedded within OWL. We encourage all students to run their assignments through turnitin prior to submitting their reports for grading. Any report flagged as yellow (25-49% matching text), orange (50-74% matching text) or red 75-100% matching text) will be considered plagiarism (pending investigation by the instructor). It should be noted that a document could be plagiarized yet still pass the similarity check on turnitin.

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.
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.

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<tr>
<th>Component</th>
<th>% of Final Mark</th>
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<tbody>
<tr>
<td>First Midterm</td>
<td>20%</td>
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<tr>
<td>Midterm (take home assignment)</td>
<td>25%</td>
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<tr>
<td>Final Exam</td>
<td>45%</td>
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<tr>
<td>Mini quizzes</td>
<td>10%</td>
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**Additional Information/Statements**

**Statement on Use of Electronic Devices**

**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 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 Department of Physiology and Pharmacology is not responsible for stolen/lost or broken devices.
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

Absence from course commitments

Medical/Compassionate Relief Program Policy

It is current policy that students who are unable to write a test or examination or other form of course evaluation are required to obtain a medical certificate that is taken to the Academic Counseling Office, WSC140 (for Science and Basic Medical Science students) or to your appropriate Home Faculty Counseling Office. In the case of an unexpected absence on compassionate grounds, documentation is also requested. Such documentation must be submitted by the student directly to the Academic Counseling office and not to the instructor. An academic counselor in that office will review and either approve or deny the accommodation request. It will be the Academic Counseling office that will determine if accommodation is warranted. This policy applies to all forms of assessment, including evaluations that are less than 10%.

A. Absence for medical illness:

Students must familiarize themselves with the Policy on Accommodation for Medical Illness for Undergraduate Students, located at: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf

Statement from the Academic Counselling Office, Faculty of Science (for Science and BMSc students)

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 the Academic Counselling 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 by the Academic Counselling Office 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 Academic Counselling Office immediately.

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: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.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
http://www.uwo.ca/univsec/pdf/academic_policies/exam/definitions.pdf

A Special Examination is any examination other than the regular final examination, and it may be offered only with the permission of the Dean/Academic Counselling Office 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/Academic Counselling Office of the Faculty. The Dean/Academic Counselling Office will consult with the instructor and Department Chair and, if a later date is arranged, will communicate this to the Office of the Registrar.

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/Academic Counselling Office 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.

When a grade of Special (SPC) or Incomplete (INC) appears on a student's record, the notations will be removed and replaced by a substantive grade as soon as the grade is available.

Support Services:
Registrarial Services: http://www.registrar.uwo.ca

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

USC Student Support Services: http://westernusc.ca/services/

Student Development Services: http://www.sdc.uwo.ca

Student Health Services: http://www.shs.uwo.ca/

Students who are in emotional/mental distress should refer to Mental Health@Western https://www.uwo.ca/health/mental_wellbeing/self/student.html for a complete list of options about how to obtain help.