1. **Course:** ZOOL 597, Principles of Endocrinology - Fall 2023

   **Coordinator(s)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
<th>Phone</th>
<th>Office</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Hamid Habibi</td>
<td><a href="mailto:habibi@ucalgary.ca">habibi@ucalgary.ca</a></td>
<td>403 220-5270</td>
<td>BI 276</td>
<td>By Appointment</td>
</tr>
</tbody>
</table>

   **Section(s)**

   Lecture 01: TR 09:30 - 10:45 in SS 006

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Email</th>
<th>Phone</th>
<th>Office</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Hamid Habibi</td>
<td><a href="mailto:habibi@ucalgary.ca">habibi@ucalgary.ca</a></td>
<td>403 220-5270</td>
<td>BI 276</td>
<td>By Appointment</td>
</tr>
<tr>
<td>Dr Matt Vijayan</td>
<td><a href="mailto:matt.vijayan@ucalgary.ca">matt.vijayan@ucalgary.ca</a></td>
<td>403 220-3094</td>
<td>BI 268</td>
<td>By Appointment Only</td>
</tr>
</tbody>
</table>

To account for any necessary transition to remote learning for the current semester, courses with in-person lectures, labs, or tutorials may be shifted to remote delivery for a certain period of time. In addition, adjustments may be made to the modality and format of assessments and deadlines, as well as to other course components and/or requirements, so that all coursework tasks are in line with the necessary and evolving health precautions for all involved (students and staff).

**Online Delivery Details:**

Some aspects of this course are being offered in real-time via scheduled meeting times. For those aspects you are required to be online at the same time.

To help ensure Zoom sessions are private, do not share the Zoom link or password with others, or on any social media platforms. Zoom links and passwords are only intended for students registered in the course. Zoom recordings and materials presented in Zoom, including any teaching materials, must not be shared, distributed or published without the instructor’s permission.

Lecture Material in this course will be delivered synchronously, in person, for the most part. A few lectures may be delivered remotely by posting the recorded lectures on the D2L site for two weeks to access and review at your convenience (asynchronously). A tutorial will be arranged online to answer questions regarding the materials delivered asynchronously. All lecture notes will be posted to the D2L site for you to access.

**Course Site:**

D2L: ZOOL 597 L01-(Fall 2020)-Principles of Endocrinology

**Note:** Students must use their U of C account for all course correspondence.

**Equity Diversity & Inclusion:**

The University of Calgary is committed to creating an equitable, diverse and inclusive campus, and condemns harm and discrimination of any form. We value all persons regardless of their race, gender, ethnicity, age, LGBTQIA2S+ identity and expression, disability, religion, spirituality, and socioeconomic status. The Faculty of Science strives to extend these values in every aspect of our courses, research, and teachings to better promote academic excellence and foster belonging for all.

The Biological Sciences Equity Committee acknowledges there are persistent barriers that prevent such accessibility and hinder our progress towards EDI. Our representatives (faculty, staff, postdocs, graduate and undergraduate students) are committed to addressing any concerns and work towards proactive solutions that enact necessary change within the department. To submit anonymous questions, comments or concerns regarding EDI related issues, please reach out to our Chair, Arshad Ayyaz (arshad.ayyaz@ucalgary.ca), or a committee representative of your choice at https://science.ucalgary.ca/biological-sciences/about/equity-diversity-and-inclusion

2. **Requisites:**

   See section 3.5.C in the Faculty of Science section of the online Calendar.
3. **Grading:**

The University policy on grading and related matters is described in F.1 and F.2 of the online University Calendar.

In determining the overall grade in the course the following weights will be used:

<table>
<thead>
<tr>
<th>Course Component</th>
<th>Weight</th>
<th>Due Date (duration for exams)</th>
<th>Modality for exams</th>
<th>Location for exams</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiz 1 -Habibi section(^1)</td>
<td>5%</td>
<td>Ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quiz 2 - Vijayan(^2)</td>
<td>5%</td>
<td>Ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midterm exam(^3)</td>
<td>42%</td>
<td>Oct 26 2023 at 09:30 am (75 Minutes)</td>
<td>in-person</td>
<td>TBA</td>
</tr>
<tr>
<td>Registrar Scheduled Final Exam</td>
<td>48%</td>
<td>Will be available when the final exam schedule is released by the Registrar</td>
<td>in person</td>
<td>Will be available when the final exam schedule is released by the Registrar</td>
</tr>
</tbody>
</table>

\(^1\) There will be an in-class quiz on topics covered in the lectures before the mid-term exam. Date to be announced and posted on D2L.

\(^2\) There will be an in-class quiz on topics covered in the lectures after the mid-term and before the final exam. Date to be announced and posted on D2L.

\(^3\) There will not be a deferred mid-term exam. The portion of the mid-term grade for the students who miss the exam for valid reasons will be transferred to the final exam.

Each piece of work (reports, assignments, quizzes, midterm exam(s) or final examination) submitted by the student will be assigned a grade. The student's grade for each component listed above will be combined with the indicated weights to produce an overall percentage for the course, which will be used to determine the course letter grade.

The conversion between a percentage grade and letter grade is as follows.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Minimum % Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>95 %</td>
</tr>
<tr>
<td>A</td>
<td>90 %</td>
</tr>
<tr>
<td>A-</td>
<td>85 %</td>
</tr>
<tr>
<td>B+</td>
<td>80 %</td>
</tr>
<tr>
<td>B</td>
<td>75 %</td>
</tr>
<tr>
<td>B-</td>
<td>70 %</td>
</tr>
<tr>
<td>C+</td>
<td>65 %</td>
</tr>
<tr>
<td>C</td>
<td>60 %</td>
</tr>
<tr>
<td>C-</td>
<td>55 %</td>
</tr>
<tr>
<td>D+</td>
<td>50 %</td>
</tr>
<tr>
<td>D</td>
<td>45 %</td>
</tr>
</tbody>
</table>

The final exam will be cumulative. Quiz 1 and 2, the midterm, and the final exam require attendance in person.

This course will have a Registrar Scheduled Final exam that will be delivered in-person and on campus. The Final Examination Schedule will be published by the Registrar’s Office approximately one month after the start of the term. The final exam for this course will be designed to be completed within 3 hours.

The University of Calgary offers a flexible grade option, Credit Granted (CG) to support student’s breadth of learning and student wellness. Faculty units may have additional requirements or restrictions for the use of the CG grade at the faculty, degree or program level. To see the full list of Faculty of Science courses where CG is not eligible, please visit the following website: https://science.ucalgary.ca/current-students/undergraduate/program-advising/flexible-grading-option-cg-grade

4. **Missed Components Of Term Work:**

In the event that a student legitimately fails to submit any online or in-person assessment on time (e.g. due to illness, domestic affliction, etc...), please contact the course coordinator, or the course instructor if this course does not have a coordinator to arrange for a re-adjustment of a submission date, or possible exemption and reweighing of components. Absences not reported within 48 hours will not be accommodated. Students may be asked to provide supporting documentation (Section M.1) for an excused absence, See FAQ.

If an excused absence is approved, options for how the missed assessment is dealt with is at the discretion of the coordinator or course instructor. Some options such as an exemption and pro-rating among the components of the course may not be a viable option based on the design of this course.

Lecture notes will be available on D2L.

5. **Scheduled Out-of-Class Activities:**

There are no scheduled out of class activities for this course.

6. **Course Materials:**
In order to successfully engage in their learning experiences at the University of Calgary, students taking online, remote and blended courses are required to have reliable access to the following technology:

- A computer with a supported operating system, as well as the latest security, and malware updates;
- A current and updated web browser;
- Webcam/Camera (built-in or external);
- Microphone and speaker (built-in or external), or headset with microphone;
- Current antivirus and/or firewall software enabled;
- Stable internet connection.

For more information please refer to the UofC ELearning online website.

7. **Examination Policy:**

   No aids are allowed on tests or examinations.

   Students should also read the Calendar, [Section G](#), on Examinations.

8. **Approved Mandatory And Optional Course Supplemental Fees:**

   There are no mandatory or optional course supplemental fees for this course.

9. **Writing Across The Curriculum Statement:**

   For all components of the course, in any written work, the quality of the student's writing (language, spelling, grammar, presentation etc.) can be a factor in the evaluation of the work. See also Section [E.2](#) of the University Calendar.

10. **Human & Living Organism Studies Statements:**

    Students will not participate as subjects or researchers in human studies.

    See also [Section E.5](#) of the University Calendar.

    **STUDIES IN THE BIOLOGICAL SCIENCES INVOLVE THE USE OF LIVING AND DEAD ORGANISMS.** Students taking laboratory and field-based courses in these disciplines can expect involvement with and experimentation on such materials. Students perform dissections on dead or preserved organisms in some courses. In particular courses, students experiment on living organisms, their tissues, cells, or molecules. Sometimes field work requires students to collect a variety of living materials by many methods, including humane trapping.

    All work on humans and other animals conforms to the Helsinki Declaration and to the regulations of the Canadian Council on Animal Care. The Department strives for the highest ethical standards consistent with stewardship of the environment for organisms whose use is not governed by statutory authority. Individuals contemplating taking courses or majoring in one of the fields of study offered by the Department of Biological Sciences should ensure that they have fully considered these issues before enrolling. Students are advised to discuss any concern they might have with the Undergraduate Program Director of the Department.

    Students are expected to be familiar with [Section SC.4.1](#) of the University Calendar.

11. **Reappraisal Of Grades:**

    A student wishing a reappraisal, should first attempt to review the graded work with the Course coordinator/instructor or department offering the course. Students with sufficient academic grounds may request a reappraisal. **Non-academic grounds are not relevant for grade reappraisals.** Students should be aware that the grade being reappraised may be raised, lowered or remain the same. See [Section I.3](#) of the University Calendar.

    a. **Term Work:** The student should present their rationale as effectively and as fully as possible to the Course coordinator/instructor within ten business days of either being notified about the mark, or of the item's return to the class. If the student is not satisfied with the outcome, the student shall submit the Reappraisal of Graded Term work form to the department in which the course is offered within 2 business days of receiving the decision from the instructor. The Department will arrange for a reappraisal of the work within the next ten business days. The reappraisal will only be considered if the student provides a detailed rationale that outlines where and for what reason an error is suspected. See sections [I.1](#) and [I.2](#) of the University Calendar.

    b. **Final Exam:** The student shall submit the request to Enrolment Services. See [Section I.3](#) of the University Calendar.

12. **Other Important Information For Students:**
a. **Mental Health**: The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, [Mental Health Services Website](https://www.ucalgary.ca/student-life/mental-health-and-wellness)) and the Campus Mental Health Strategy website ([Mental Health](https://www.ucalgary.ca/student-life/mental-health-and-wellness)).

b. **SU Wellness Services**: For more information, see their [website](https://www.ucalgary.ca/student-life/mental-health-and-wellness) or call 403-210-9355.

c. **Sexual Violence**: The Sexual Violence Support Advocate, Carla Bertsch, can provide confidential support and information regarding sexual violence to all members of the university community. Carla can be reached by email (svsa@ucalgary.ca) or phone at 403-220-2208. The complete University of Calgary policy on sexual violence can be viewed [here](https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Accommodation-Procedure.pdf).

d. **Student Ombuds Office**: A safe place for all students of the University of Calgary to discuss student related issues, interpersonal conflict, academic and non-academic concerns, and many other problems.

e. **Student Union Information**: SU contact, Email your SU Science Reps: science1@su.ucalgary.ca, science2@su.ucalgary.ca, science3@su.ucalgary.ca.

f. **Academic Accommodation Policy**:

It is the student's responsibility to request academic accommodations according to the University policies and procedures listed below. The student accommodation policy can be found at: [https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Student-Accommodation-Policy.pdf](https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Student-Accommodation-Policy.pdf).

Students needing an accommodation because of a disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities: [https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Accommodation-for-Students-with-Disabilities-Procedure.pdf](https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Accommodation-for-Students-with-Disabilities-Procedure.pdf).

Students needing an accommodation in relation to their coursework or to fulfill requirements for a graduate degree, based on a Protected Ground other than Disability, should communicate this need, by filling out the [Request for Academic Accommodation Form](https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Student-Accommodation-Policy.pdf) and sending it to Lisa Gieg by email lmgieg@ucalgary.ca preferably 10 business days before the due date of an assessment or scheduled absence.

g. **Misconduct**: Academic integrity is the foundation of the development and acquisition of knowledge and is based on values of honesty, trust, responsibility, and respect. We expect members of our community to act with integrity. Research integrity, ethics, and principles of conduct are key to academic integrity. Members of our campus community are required to abide by our institutional [Code of Conduct](https://www.ucalgary.ca/student-life/academic-integrity) and promote academic integrity in upholding the University of Calgary’s reputation of excellence. Some examples of academic misconduct include but are not limited to: posting course material to online platforms or file sharing without the course instructor’s consent; submitting or presenting work as if it were the student’s own work; submitting or presenting work in one course which has also been submitted in another course without the instructor’s permission; borrowing experimental values from others without the instructor’s approval; falsification/fabrication of experimental values in a report. Please read the following to inform yourself more on academic integrity:

- [Student Handbook on Academic Integrity](https://www.ucalgary.ca/student-life/academic-integrity)
- [Student Academic Misconduct Policy and Procedure](https://www.ucalgary.ca/student-life/academic-integrity)
- [Faculty of Science Academic Misconduct Process](https://www.ucalgary.ca/student-life/academic-integrity)
- [Research Integrity Policy](https://www.ucalgary.ca/student-life/academic-integrity)

Additional information is available on the [Student Success Centre Academic Integrity page](https://www.ucalgary.ca/student-life/academic-integrity).

h. **Copyright of Course Materials**: All course materials (including those posted on the course D2L site, a course website, or used in any teaching activity such as (but not limited to) examinations, quizzes, assignments, laboratory manuals, lecture slides or lecture materials and other course notes) are protected by law. These materials are for the sole use of students registered in this course and must not be redistributed. Sharing these materials with anyone else would be a breach of the terms and conditions governing student access to D2L, as well as a violation of the copyright in these materials, and may be pursued as a case of student academic or non-academic misconduct, in addition to any other remedies available at law.

i. **Freedom of Information and Privacy**: This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). Students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information, see [Legal Services](https://www.ucalgary.ca/legal-services) website.
Surveys: At the University of Calgary, feedback through the Universal Student Ratings of Instruction (USRI) survey and the Faculty of Science Teaching Feedback form provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses. Your responses make a difference - please participate in these surveys.

**ZOOLOGY 597 SCHEDULE 2023**

**September 5 - October 24 (15 Lectures: H.R. Habibi)**

*Hormone-receptor interaction and post-receptor mechanisms*

Introduction, measurement & characterization of hormones
Hormone-receptor interaction
Signal Transduction
Signal Transduction
Hormonal drug development and Biotechnology

*Brain-pituitary axis and control of reproduction & Growth*

Hypothalamic-Pituitary hormones
Hypothalamic-Pituitary hormones
Hypothalamic-Pituitary hormones
Endocrine control of growth and differentiation
Endocrine control of growth and differentiation
Male and female reproduction
Paracrine/autocrine control of Gonadal function
Paracrine/autocrine control of Gonadal function
Therapeutic use of hormones and analogues
Endocrine disruption-Reproduction and development

**Thursday, October 26 MID-TERM EXAM (50%) (9:30 - 10:45 a.m.)**

**October 31 - December 5 (8 Lectures: M. Vijayan)**

*Endocrinology of Stress response*

Adrenal Endocrinology
Adrenal Endocrinology
Stress Endocrinology
Stress Endocrinology
Endocrine disruption - stress

*Integrated control of intermediary metabolism*

Hormonal control of metabolism
Hormonal control of metabolism
Hormonal control of metabolism
Hormonal control of metabolism

**November 30 Special presentation**
Lecture duration 75 minutes (9:30 – 10:45 am.)

**Course Outcomes:**
- This course is designed to provide coverage of the principles of modern endocrinology and to prepare students for graduate courses on more advanced topics in endocrinology. Lectures will include examples to emphasize comparative aspects. It is assumed that the student has knowledge of basic endocrinology from previous physiology and biochemistry courses.