**Professor:**

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**“COURSE NUTS AND BOLTS”**

**VERY IMPORTANT:**

This course is for (1) biology majors and minors, (2) those in the Bachelor of Science in psychology, and (3) those who are completing prerequisites for health careers-related graduate programs. If you do not fall into one of these three categories, you should strongly reconsider whether or not to take this class.

**Course Description:**

The object of Endocrinology is to build the framework of your understanding of general aspects of anatomy and physiology of the endocrine system with an emphasis on the cellular and molecular mechanisms of endocrine functions. Because this is an introductory course, it is not intended to make you an expert in Endocrinology, but inspire you to think about the complexities of the endocrine system and the responses of organs, tissues and cells. Lectures are intended to clarify the reading and to focus on certain aspects of the text, but not substitute for it. You will note that the course skips whole or parts of chapters. There is not enough time for all of the text to be covered in this class. Thus, the reading that is assigned and the corresponding lectures presented are intended to cover some of the more important concepts of the physiology and pathophysiology of endocrine system.
Required Text:


Course Goals:
This course is designed to give the student an introduction to topics consistent with the current trends of Endocrinology with emphasis on basic concepts of cellular and molecular mechanisms of actions and to promote a higher level (≥ 4000 level) of understanding of learned material.

Course Pre-requisites:

1. 4674 – A course in Anatomy and Physiology
2. 5674 – Graduate standing

Class Attendance:
Attendance in the class is strongly recommended. Class lectures are meant to convey not only content from the text, but also emphasize concepts, terminology and comprehension. Missing a class once in awhile due to health, family or unexpected events is understandable. However, repeated lack of attendance is strongly correlated with poor performance on exams. Besides course content, important announcements are conveyed via the lectures. Not attending classes may result in missing important announcements such as changes in the syllabus and exam dates. Finally, I strongly suggest that you read ahead of the lecture for two reasons: (1) so that the lecture can answer your questions or clarify concepts that you have already read and (2) to allow us to move ahead of the pre-determined lecture-date format if necessary.

Updated January 21, 2014
“The Twenty-minute Rule”:
Although the course is scheduled to meet every designated lecture period (see exceptions where noted in the Syllabus Lectures and Readings portion of this document, we may complete the coursework sooner than expected. If this becomes the case, I will announce at the end of the last lecture the adjusted syllabus. For those particular non-lecture class times, you are not obligated to attend. Nevertheless, the University of Colorado requires that I be present for student-instructor contact during those lecture periods. Therefore, in accordance with the rules of the University I will be present for those class periods for review only. However, if no one shows up within the first 20 minutes, the University does not require me to stay in the classroom past that time.

A Common Myth:
Many students think or expect that their professor knows everything; far from the truth. Although I know much about cell biology and specifically insulin signaling, I don’t profess to know everything in science. There may be times that you ask a question and I don’t know the answer. To be honest, I will let you know what I do and do not know the answer and we’ll go from there.

The Weather:
There may be days when the weather might make it unsafe to attend class. If the weather becomes severe, please check the course’s Canvas web site. If there is no mention of weather, class will be held. REMEMBER, you are still ultimately responsible for your own safety no matter what the condition of the weather is and the information given on our web pages. If the weather disrupts our lecture and testing schedule, we will adjust accordingly. University of Colorado Alert System.

Lecture Notes and Study Guides:
You will find Announcements, the Syllabus, the Lecture Notes and other class materials on Canvas: a web site created for students of the University of Colorado. You can download the Lecture Notes and Study Guides to your computer and print them at your convenience. I would strongly recommend either printing the lecture slides and bring them to class so that you can decrease the amount of note taking during the lectures or bring your laptop with the notes in electronic form. If you like large individual pictures, you can print out one slide per page. If you wish to conserve paper print out three slides per page.

Grievance Policy (UCD – Biology Dept):
If you have a grievance with this course or with the instructor, it is necessary to proceed as follows with respect to resolving it. First, you must meet with the instructor to discuss your grievance. If your conflict or grievance is not resolved to your satisfaction, you may then contact the chair of the department to discuss the grievance further. You must follow this procedure. Keep in mind that it is in your best interest and others to approach the issue in this fashion and in a professional and diplomatic manner.
COURSE ACCOUNTING

TOTAL POINTS POSSIBLE = 400

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<tr>
<th>GRADE</th>
<th>POINTS</th>
<th>PERCENTAGE</th>
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<tbody>
<tr>
<td>A</td>
<td>360 – 400</td>
<td>90 – 100%</td>
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<tr>
<td>B</td>
<td>320 – 359</td>
<td>80 – 89%</td>
</tr>
<tr>
<td>C</td>
<td>280 – 319</td>
<td>70 – 79%</td>
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<tr>
<td>D</td>
<td>240 – 279</td>
<td>60 – 69%</td>
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<tr>
<td>F</td>
<td>0 – 239</td>
<td>0 – 59%</td>
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Please note that percentages will be rounded up to make the next grade. For example, if you received a ≥ “79.5%” you will receive a “B” not a “C”.

Exams:

There are three exams in this course. Each exam is worth 100 pts. Questions posed in the tests examine your ability to understand the material presented in class and the textbook in simple-concrete ideas and more advanced concepts.

Although the exams themselves are not cumulative, many questions are based on previously covered material. For example, the last exam of this course covers the material in the designated chapters, but there may be questions that relate to concepts already presented in previous chapters as well. The exams are listed by date on the syllabus. Unless otherwise posted or due to inclement weather, exams will be given on the date noted on the Syllabus.

Exam Scoring –

Each Exam is worth 100 points. Each exam has 33 questions. Each question is worth 3 points except for Q33, which is worth 4 points. Once the exams have been scored and graded, I will post the scores and the stats for that exam on the course’s web page. Exams will be returned to you thereafter.

Questions may be fill-in-the-blank, true or false, multiple choices or matching.

Examples of test questions –

a. Fill in the blank – “There are two colors of stripes on the United States of America flag, one is ________ (fill in the blank) and the other is white.” The correct answer is “red” not blue,
chartreuse or pink. In order to get credit, you must write the color "red" in the space provided to get credit.

b. True or False – “T/F (circle one) The color of the sky on a cloudless day is red?” The correct answer is “false”. You must circle the letter “F” to get credit.

c. Multiple choice (single answers) – “The color of the stars on the US flag is _____(circle one)
   A. Red  B. White  C. Blue  D. Green
   The correct answer is “white” so you must circle the letter “B.” You are welcome to place a letter(s) in the blank(s) to help you concentrate on your answer, but you must circle letter “B” in order to get credit. No circle, no credit.

d. Multiple choice (several answers) – “The color of the stars of the US flag is _____, the color of the non-white stripes is _____, and the color of the background behind the stars is _____(circle one answer).
   A. Red, White, Blue
   B. White, Red, Green
   C. Blue, Red, White
   D. White, Red, Blue
   The correct answer to this question is the letter “D”. Even though the first two colors are “white” and “red”, if you have circled the letter “B” instead of the letter “D”, you will not get 2 out of three points (i.e., partial credit) for this question. You will receive zero points for this question. **ORDER IS IMPORTANT AND ALL ANSWERS ARE IMPORTANT! IT’S ALL OR NOTHING.**

Adjustments to Exam Score –

a. If the class average for an exam is less than 75%, I will adjust everyone’s score accordingly to bring the class average up to 75%.

b. If the class average for an exam is greater than 75%, there will be no adjustments to exam scores.

c. If your answer is correct and it is marked wrong, I will adjust your exam score accordingly.

d. If you do find a particular question marked wrong, but it is right, please see me AFTER class, not before class. I will not discuss any issues about an exam before class time.

Rephrasing Exam Questions –

Due to previous semesters’ issues, I will not rephrase any questions for you during the exam. If you want to review your graded exam with me after I have graded the exam and returned it to you, please feel free to make an appointment with me and we will discuss the questions and answers at that time.

**Make-up Exams:**

Make-up exams are extremely discouraged. If you foresee a need to take an exam not on the scheduled date, please let me know as far in advance as possible. You will need to inform me as to why you need special dispensation. Once we have agreed on your need to take the exam not on the day listed in the syllabus, we will discuss when you must take the makeup exam. In most instances, you will need to take the makeup exam within three business days of the original exam date.

Updated January 21, 2014
You must request a change in your test date at least 10 days before the designated exam date before I can consider the request, and the request must be submitted to me by e-mail. If you ask for a change in a test date less than 10 days before the exam, you will not be granted a waiver, and you will have to take the exam on the test date noted below.

If you miss an exam, you will need verification of why you were absent (e.g., a doctor's note, an obituary notice, a police report). These excuses do not include vacation time. If I decide to allow you to take the make-up exam, you will need to make an appointment with me, and take the exam at my lab at the Denver VA Medical Center. You will need to take the exam within three business days of the original exam date. Additionally, any exams taken as a makeup exam might not be the same as the original. For example, the original exam will have 33 questions with points equaling 100. In contrast, the makeup might have only five questions, each worth 20 points.

**Student Presentations:**
As part of the Biology Department's directives, students of 4000 level classes and higher shall either submit a term paper or present a talk on a subject determined by the professor and the student. **You will present a ten minute PowerPoint talk on an endocrine disorder.** These talks will begin on the dates noted below. Between now and then, you will need to research the literature and investigate a particular endocrine disorder. You may gather several articles and put together a meta-analysis of these works or focus on one particular study that addresses a specific question concerning this disorder. You will need to inform me of your choice of presentation pathology by March 1st, 2014 so that I may confirm your choice and give you permission to continue with your project. Each pathology will be presented only once. Once I have given you an “OK” to present that pathology, no one else will be allowed to do so. Thus, it behooves you to decide on a pathology early and discuss it with me so that no one else can present your findings. A signup sheet will be distributed later this month in class so that you can select a date and presentation sequence slot for your talk. Under the “PRESENTATIONS” link you will find the main folder “ENDOCRINE PATHOLOGY PRESENTATIONS LIST”. Here you will find a heading titled “SP 14 Presentation List v(#)”. When you click on the pdf, you will see which pathologies have been requested and approved by me. If you see a topic that you are interesting in and already listed, you will need to choose another topic.

The presentation is worth 100 points. You must give a PowerPoint presentation that is no less than 9 minutes, but no more than 11 minutes. Any time variance less than 9 minutes or greater than 11 minutes will cause a deduction of 5 points per minute. So, practice and time your presentation repeatedly and carefully. Additionally, you may not use any figures from our textbook or my lecture notes in your presentation. Moreover, you must have at least 10 references in your presentation and none of them can be our text book. If your number of references is less than 10, five points will be deducted for each reference that is not present. For example, if you submit your presentation with 8 references, 10 points will be deducted from your possible score of 100. Make sure your references are listed as one of your slides in your presentation. More information will be noted about these presentations in the early part of this course.
THE SYLLABUS LECTURES AND READINGS:

The intent of the syllabus is to inform you as to the chapters and corresponding readings that will be covered in this course and the time schedule of the course. The syllabus is a 

temporary outline and may change from time to time due to the dynamics of the lecture, the weather, class enrollment or unforeseen events. Thus, although the content and the sequence of events will be adhered to as best as possible, the actual time course may vary from that noted below. If the syllabus changes, I will update it as soon as possible on the course’s Blackboard* web pages.

SPECIAL DATES –
- Spring Break: 3.24 – 3.30

THE SYLLABUS LECTURES AND READINGS

<table>
<thead>
<tr>
<th>LECTURE #</th>
<th>CHAPTER</th>
<th>PAGES</th>
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<td>INTRODUCTION, SYLLABUS</td>
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<td>CH 2: THE ENDOCRINE SYSTEM</td>
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<td>CATCH UP AND REVIEW</td>
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<td>EXAM I – CHAPTERS 1, 2 3 AND 5</td>
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<td>CH 10: GASTROINTESTINAL HORMONES</td>
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<td>17</td>
<td>EXAM II – CHAPTERS 6, 7 AND 10</td>
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<td>CH 13: THE THYROID</td>
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<td>CH 13: cont’d</td>
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<td>4-10</td>
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<td>23</td>
<td>CH 13: cont’d</td>
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<td>24</td>
<td>CH 13: cont’d</td>
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<td>25</td>
<td>CATCH UP AND REVIEW (Study Guide 3)</td>
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<td>26</td>
<td>EXAM III CHAPTERS 11 AND 13</td>
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<td>27</td>
<td>PRESENTATIONS 1 – 6</td>
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<td>PRESENTATIONS 7 – 12</td>
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<td>PRESENTATIONS 19 – 24</td>
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<td>31</td>
<td>PRESENTATIONS 25 – 30</td>
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<td>TBA*** Week of 5-12</td>
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**TBA – The University will publish a “finals schedule” sometime later this semester. It will be posted both on the UCD website and on our course’s webpage when it is available.**
SPECIAL DATES TO REMEMBER:

For Special Dates of the Semester use the following link: SPECIAL DATES. Click on Spring 2014. Alternatively you can find Spring 2014 Semester Academic Calendar in our course’s website.

Faculty in the University of Colorado system have both a legal and moral obligation to provide reasonable accommodations to students who must be absent from classes because of religious holidays. The faculty is expected to develop course-consistent accommodations for students who miss class or graded assignments in order to observe religious holidays. The faculty is encouraged to (1) avoid examinations during major religious holidays and (2) ask students to privately identify all course conflicts at the beginning of the semester. Please use the following link to access the religious holidays in this semester: RELIGIOUS HOLIDAYS 2014.

OTHER INFORMATION

Directions to VA Medical Center – 9th and Clermont St.

See link in Course Documents web page and click on “DIRECTIONS TO VA MEDICAL CENTER”. A PowerPoint file with maps, directions and instructions is included in this link.

Disability Accommodations

The faculty in the University of Colorado system has both a legal and moral obligation to provide reasonable accommodations to students with disabilities. To be eligible for accommodations, students must be registered with the UCD Office of Disability Resources and Services (DRS) (North Classroom 2514, 303-556-3450, 303-556-4766 [TTY]) [Make sure you click on the Downtown tab and not the Anschutz campus tab]. The DRS staff has experience to assist faculty in determining reasonable accommodations and to coordinate these accommodations. If a student is given accommodations, they must be followed. If a student chooses not to accept the accommodations set forth by the DRS, they MUST complete all assignments and do all course work in the same manner as all other students. No exceptions or alternate forms of evaluation can be used except those mandated by the DRS. Faculty cannot arbitrarily decide to give a student extra time, extra assistance or other forms of aid unless it is formally mandated by the DRS.

CLAS Incomplete (IW/IF) Policy

The faculty in the College of Liberal Arts and Sciences passed the following policy relating to the awarding of incomplete grades. This CLAS policy is consistent with the UCD campus policy.

Incomplete grades (IW or IF) are NOT granted for low academic performance. To be eligible for an Incomplete grade, students MUST (1) successfully complete a minimum of 75% of the course, (2) have special circumstances beyond their control that preclude them from attending class and completing graded assignments, and (3) make arrangements to complete missing assignments.

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with the original instructor. Verification of special circumstances is required. Completion of a CLAS Course Completion Agreement is strongly suggested.

The CLAS Course Completion Agreement is available from the CLAS Advising Office, NC 4002, 303.2555.

Letters of Recommendation

I will give letters of recommendation (LOR) to students who have taken at least two classes from me and have exhibited exemplary performance in both classes. You must be in the top 10% of the class for me to consider writing an LOR. You may not ask for an LOR while attending this class. I will not submit an LOR for a student while s/he is still attending my class. I must observe the entire semester’s worth of work before I will recommend someone. The only time that it would be appropriate for you to ask for a letter of recommendation from me would be after final grades for this class have been posted. Additionally, you must submit your request by e-mail.

Additionally, if I agree to write an LOR, you must make an appointment with me and tell me about your personal and professional history so that I may include these items in your LOR. Finally, I must have at least 4 weeks after the interview to prepare and submit the LOR to the institution(s) of your choice. No exceptions will be made.

E-mail

Because I am teaching more than one class this semester, please use the following instructions when sending an e-mail to me:

- Use only your official university e-mail account. Firstname.Lastname@ucdenver.edu.
- Send your e-mails only to my ucdenver e-mail address. Marc.Goalstone@ucdenver.edu
- In the subject line always start with “Endo 4674-5674/ optional information”.
  - For “optional information” you can use particular words such as “Exam II”, “wrong score”, or something else that specifies the issue to delineate one e-mail message from another.
  - Do not place in the Subject Line, “Exam 2” or “problem” alone without the “Endo 4764-5674/ preface. If you do, I will not answer your e-mail.
- Sign your full name at the bottom of your text.
- When discussing ongoing issues always use the “REPLY” key. Do not start a new communication each time you reply. By using the “REPLY” key, the threaded discussion of our back and forth comments will be preserved, allowing us to review the entire matter each time we respond to the other.
- Until you receive a final grade for the class from the University, save all of your communications with me. You never know when one e-mail may help out tremendously.

Office Hours

All of my VA office hours are by appointment only. Once the semester has begun and the Biology Department has sorted out my scheduled time in a shared on-campus office, I will inform the class as to the location and times that I am available on the Auraria campus. Since my on-campus

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hours may be limited due to space considerations, it might be easier for you to attend office hours with me at the VA; obviously this depends on whether or not you can commute to the VA. I can be more flexible with our meetings at the VA than on campus. It is still your choice. If you would like to talk to me during my VA office hours, please follow these simple rules:

- Send me an e-mail requesting an appointment and include several dates and times that you are available to meet with me.
- Once we have agreed upon a day and time, make a hard copy of the “MAP TO THE VA” found in the DOCUMENTS section of this course.
- Bring the map with you to ensure a timely arrival.
- Follow the instructions of the map: go to the front desk, don’t try to find me. I’ll find you.
- If you find yourself running late (> 5 minutes of your appointment time), call me and inform me of your estimated arrival. I’ll wait for you.
- If I don’t hear from you by 15 minutes past our appointment time, I will assume you are not coming and I will begin another task.