INSTRUCTOR:     Christopher Trimby, PhD

EMAIL:          c.trimby@njit.edu

OFFICE:         442 Colton Hall • 973-642-4973

OFFICE HOURS:   T:  12:00–4:00pm

Course Syllabus
SPRING 2014

**BIOLOGY 445-002: ENDOCRINOLOGY**

**COURSE DESCRIPTION:** This course will discuss endocrinology from both an anatomical and physiological view. We will discuss synthesis, distribution and regulation of the entire human endocrine system. In addition, contextual examples of these functions through human endocrine disorders will also be explored.

**OBJECTIVES:** (1) To provide student with a basic knowledge of the complex endocrine system. (2) To improve the ability of students to apply basic science knowledge to real world situations. (3) To improve students critical thinking and presentation skills.

**PREREQUISITES:** Mammalian Physiology (BIOL 340) and Cell Biology (R120:355) or Molecular Biology (R120:356).

**INSTRUCTIONAL MATERIALS:**

- Endocrine Physiology; 3rd Edition: Paper Text © 2010; ISBN: 9780071613019 or 4th Edition: Paper Text © 2013; ISBN: 9780071796781 [Lange Physiology Series], by Patricia E. Molina. It is actually important that you procure the book, and read any assigned sections. It isn’t a thick book, so it won’t be that bad. I don’t plan on giving lectures; instead we will hit the major/interesting points leaving us time to discuss clinical examples and primary literature. And, the instructor does reserve the right to ask questions from material covered only in the text.

- You should also procure a one inch (1”) 3-ring binder for the in class assignments and case studies.

**SUPPLEMENTAL MATERIALS:**

- Any additional materials required for class (case study’s, primary literature, etc) would either be provided through Moodle, (UCID required), handed out in class, or via web link.

**CODE OF STUDENT CONDUCT:** Be aware of the rules set forth in the University Code on Academic Integrity. In brief, the instructor will not allow cheating or plagiarism.

**REASONABLE ACCOMMODATION:** If you have a special need that may require an accommodation or assistance, please inform me of that fact as soon as possible and no later than the end of the second class meeting. Students with disabilities who require accommodations must contact Dr. Phyllis Bolling, Center for Counseling and Psychological Services (C-CAPS), Campbell Hall, (entry level), Room 205, (973) 596-3420.
Course Requirements, Evaluation Procedures, and Policies:

<table>
<thead>
<tr>
<th>Grading</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams (3)</td>
<td>120pts</td>
</tr>
<tr>
<td>Clinical Discussions (3)</td>
<td>60pts</td>
</tr>
<tr>
<td>Assignments (24)</td>
<td>170pts</td>
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<tr>
<td>Attendance &amp; Participation</td>
<td>75pts</td>
</tr>
<tr>
<td>Case Study Presentation &amp; Write-Ups</td>
<td>150pts</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>575pts</strong></td>
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</tbody>
</table>

Grading Scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>90-100</td>
</tr>
<tr>
<td>B+</td>
<td>85-89</td>
</tr>
<tr>
<td>B</td>
<td>80-84</td>
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<tr>
<td>C+</td>
<td>75-79</td>
</tr>
<tr>
<td>C</td>
<td>65-74</td>
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<tr>
<td>D</td>
<td>50-64</td>
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<tr>
<td>F</td>
<td>0-49</td>
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Class Attendance is Required: Attendance will be taken, and attendance is included in the course grade. This class is not a lecture-based course. In class discussions of clinical studies & primary research articles contribute a significant portion of your grade.

Make-Up Policy:

- **Exams:** In order for an absence to be excused, students must contact the instructor as soon as possible, following their knowing that they will be missing an exam. For example: This means if you wake up in the morning and are too ill to come to class, you should email me immediately. Arrangements can then be made. Upon your return to class documentation of your absence should then be provided (Doctors note, court notice etc...).
- **Assignments:** There are no make-ups for in class assignments EXCEPT for a written excused absence. Homework assignments will be posted on Moodle, and are a student’s responsibility to check for.

Absenteeism:

- **Excused absences:** examples of excused absences include a serious illness, school trips, major religious holidays, or death of a family member.
- **Unexcused absences:** include minor illness, transportation problems, non-emergency appointments, traveling home for the weekend, etc.

Written verification: e.g., doctor’s note, traffic report, court notice, is required. For anticipated absences due to observance of religious holidays, the student must notify the instructor in writing ahead of time.

Late Work: Assignments are due at the beginning of the class as outlined in their descriptions syllabus. If you must be absent on the day work is due, it is your responsibility to turn it in early or make arrangements for someone else to turn it in on the due date. Other possibilities include submitting an electronic version via email. Unexcused late work will receive a 10% penalty for every day late.

Other Policies: No cell phone usage in class, please turn off or to silent mode.
**Hints/Tips:** Actually read your book and any assigned articles ahead of time. We will generally be doing discussions and problem sets in class (during which your participation will be noted) - so it may be helpful if you have actually read what we are discussing. If you don’t understand something, ask (more than a couple hours ahead of due date/exam please). DO NOT Procrastinate! DO NOT Plagiarize!

**TENTATIVE COURSE OUTLINE:**

<table>
<thead>
<tr>
<th>WEEK #: DATE</th>
<th>EXERCISE</th>
<th>GENERAL PLAN (TEXTBOOK READINGS)</th>
</tr>
</thead>
</table>
| 1: 01/21 & 01/22 | 01/21 – Dr. MLK Jr. Day – No Class Introduction | □ Read Chapter 1 for class this week  
  (General Principles of Endocrine Physiology)  
  ▶ Do Problem Set #1 for HW  
  ▸ In class: Organization/Plan/Groups |
| 2: 01/27 & 01/29 | General Endocrinology | □ Read Chapter 2 for class this week  
  ▶ Problem Set #2 for HW (Due 2/3) |
| 3: 02/03 & 02/05 | Hypothalamus & Posterior Pituitary | □ Read Chapter 3 for class this week  
  ▶ Do Problem Set #3 for HW (Due 2/10)  
  ▸ In class (2/5): Example Case Study Presentation (by Dr. Trimby) |
| 4: 02/10 & 02/12 | Anterior Pituitary | □ Read Chapter 4 for class next week  
  ▶ Do Problem Set #4 for HW (Due 2/17)  
  ▸ In class (2/10): Case Study Presentation Group #1/2 |
| 5: 02/17 & 02/19 | Thyroid Gland | ▸ In class (2/19): Case Study Presentation Group #3/4 |
| 6: 02/24 & 02/26 | EXAM I: WED. FEB 26, 2014 | □ Read Chapter 5 for class next week  
  ▶ Do Problem Set #5 for HW (Due 3/3)  
  ☑ Exam will take place during the Wednesday class period. |
| 7: 03/03 & 03/05 | Parathyroid Gland | □ Read Chapter 6 for class next week  
  ▶ Do Problem Set #6 for HW (Due 3/10)  
  ▸ In class: Case Study Presentation Group #5/6 |
| 8: 03/10 & 03/12 | Adrenal Gland | □ Read Chapter 7 for class the week of 3/24  
  ▶ Do Problem Set #7 for HW (Due 3/24)  
  ▸ In class: Case Study Presentation Group #7/8 |
| 9: MARCH 17-21 | SPRING BREAK | NO CLASSES THIS WEEK |
Hints/Tips: Actually read your book and any assigned articles ahead of time. We will generally be doing discussions and problem sets in class (during which your participation will be noted) - so it may be helpful if you have actually read what we are discussing. If you don’t understand something, ask (more than a couple hours ahead of due date/exam please). DO NOT Procrastinate! DO NOT Plagiarize!

**Tentative Course Outline Continued:**

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<th>EXERCISE</th>
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</table>
| 10: 03/24 & 03/26 | Endocrine Pancreas | ☐ Read Chapter 10 for class next week  
  ▶ Do Problem Set #8 for HW (Due 3/31)  
  ▪ In class: Case Study Presentation Group #9/10 |
| 11: 03/31 & 04/02 | Endocrine Integration of Energy & Electrolyte Balance | ☐ In class: Case Study Presentation Group #11/12                                               |
| 12: 04/07 & 04/09 | EXAM II: WED. APRIL 9, 2014 | ☐ Read Chapter 8 for class next week  
  ▶ Do Problem Set #9 for HW (Due 4/14)  
  ▼ Exam will take place during the Wednesday class period. |
| 13: 04/14 & 04/16 | Male Reproductive System | ☐ Read Chapter 9 for class next week  
  ▶ Do Problem Set #10 for HW (Due 4/21)  
  ▪ In class: Case Study Presentation Group #13/14 |
| 14: 04/21 & 04/23 | Female Reproductive System | ☐ In class: Case Study Presentation Group #15/16                                                |
| 15: 04/28 & 04/30 | Pregnancy                      |                                                                                                |
| 16: 05/05 | EXAM III: MON. MAY 5, 2014 |                                                                                                |

**Finals**

**Final Exam Week: May 8-14, 2014**