Course:  BI 358 Investigations in Medical Physiology, CRN 22313, 04 cr, Lecture: 8:30-9:50 TR 110 Willamette (WIL) + Discussion: CRN 22314 10:00-11:50 T or CRN 22315 12:00-13:50 T or CRN 22316 14:00-15:50 T, 112 HUE (HUE), Winter 2014. Website: http://blogs.uoregon.edu/bi358/winter-2014/

Instructor: V. Pat Lombardi, 73A KLA, 541-346-4536, lombardi@uoregon.edu
Office Hr: M, 11:00 -12:00 and by appointment.
Discussion Coordinators: Conor O’Sullivan, TBA, TBA, conoro@uoregon.edu
Sam Rutherford, TBA, TBA, srutherf@uoregon.edu
Office Hr: TBA


*BI 358, Investigations in Medical Physiology Discussion/Lecture Notebook* (DLN), 2014. [Required]


See Course Reserve List http://libweb.uoregon.edu/ for additional excellent references. NB: Beneath Library Materials to the lower left, click on the green tab Course Reserves, then type in Lombardi as Instructor.

Tentative Outline:


Jan 14 (T) Discussion 3: Quiz 1-covers Lectures 1, 2 & 3. Peer Review of Outlines. 4 Copies of Brief Outline Due + prior to Discussion, e-mail copy of outline to lombardi@uoregon.edu. Brief topic explanations within small groups. Peer review of outlines + feedback by e-mail to peers. Readings: DLN pp 3-1, 3-2.


Jan 21 (T)  **Discussion 4:** **NB:** Prior to this Discussion, please complete p 4-8 by recording at least one full day of your diet so that you have personal data to conduct the computer nutritional analyses. **Readings:** DLN pp 4-1 thru 4-20.


Jan 28 (T)  **Lecture 7:** Immunology II: Resistance of the Body to Infection; Immunity & Allergy + Evolution of the Immune System. How Breast Milk Protects Newborns. **Readings:** G&H ch 34 pp 433-44; + e-mailed article links.


Jan 30 (R)  **Lecture 8:** Cardiovascular Physiology: Heart & Vessels Anatomy & Physiology, General Circulation, Coronary Circulation, Atherosclerosis, CABG & PTCA, Hypertension. **Readings:** G&H ch 9 pp 101-13; ch 14 pp 157-60; ch 15 pp 170-6; ch 16 pp 186-9; ch 19 pp 217-22; ch 21 pp 246-53; ch 68 pp 819-30.

Feb 4 (T)  **Lecture 9:** Guest Lecture Series-Clinical: Kraig W. Jacobson, MD, Allergy & Asthma Associates, Eugene, OR. Allergy & Immunology. **Readings:** DLN pp D-1 thru D-15.

Feb 4 (T)  **Discussion 6:** **Quiz 3** -covers Lectures 6, 7 & 9. Peer Review of Papers. 4 Copies of Paper Draft Due to Group Members + prior to Discussion, e-mail copy of Paper Draft to either conoro@uoregon.edu or srutherford@uoregon.edu based on Discussion section. Small Group Discussions + Feedback on papers by way of follow-up e-mails to group members. **Reading:** DLN p 6-1.

Feb 6 (R)  **Lecture 10:** I. Cardiovascular Physiology (continued). II. Introduction to Endocrinology, Pituitary Hormones & Control by the Hypothalamus. **Readings:** G&H ch 74 & 75 pp 881-906.

Feb 11 (T)  **Lecture 11:** Insulin, Glucagon & Diabetes Mellitus; Thyroid Metabolic Hormones; Adrenocortical Hormones. **Readings:** G&H ch 78 pp 939-54; ch 76 pp 907-19; ch 77 pp 921-37.

Feb 11 (T)  **Discussion 7:** Class Presentations I.

Feb 13 (R)  **Lecture 12:** Guest Lecture Series-Clinical: Richard C. Padgett, MD, Cardiology, Oregon Cardiology Associates, Eugene, OR. Clinical Cardiology, Case Studies & Recent Advances. DLN pp E-1 thru E-14.

Feb 18 (T)  **Lecture 13:** II. Reproductive Physiology Overview, Ovarian & Menstrual Cycle, Birth Control Techniques, Introduction to Infertility. **Readings:** G&H ch 81 pp 987-1002; ch 80 pp 973-86.

Feb 18 (T)  **Discussion 8:** **Quiz 4** -Covers Lectures 8 & 10 (CV Physiology) & 12. Feedback on Papers (continued). **Additional Assignment:** Endocrine case histories to prepare for Dr. Cirullo. **Readings:** DLN pp8-1 thru 8-8.

Feb 20 (R)  **Lecture 14:** Guest Lecture Series-Clinical: Ron Cirullo, MD, PhD, Internal Medicine, Endocrinology, Diabetes Mellitus & Thyroid Disorders, PeaceHealth Medical, Eugene, OR. Clinical Correlates in Endocrinology. **Readings:** DLN pp F-1 thru F-10.

Feb 25 (T)  **Lecture 15:** Guest Lecture Series-Clinical: Paul F. Kaplan, MD, OHSU, U of O Student Health Center & Department of Human Physiology, Eugene, OR. Reproductive Steroid Hormones & Cardiovascular Function in Young Healthy Women. **Readings:** DLN pp G-1 thru G-8.

Feb 25 (T)  **Discussion 9:** Class Presentations II.

Mar 4 (T)  **Lecture 17: Guest Lecture Series-Clinical:** Pilar Bradshaw, MD, PeaceHealth Medical Group, Eugene, OR. *Pediatrics: Introduction & Cases.* **Readings:** DLN pp H-1 thru H-6.

Mar 4 (T)  **Discussion 10: Class Presentations III.**

Mar 6 (R)  **Lecture 18:** Eye I: Anatomy & Optics of Vision; II: Retinal Receptor & Neural Function; III: Central Neurophysiology of Vision. **Readings:** G&H ch 49, 50 pp 597-621; ch 51 pp 623-4.

Mar 11 (T)  **Lecture 19: Guest Lecture Series-Clinical:** Annette Chang Sims, MD; Drs. Fine, Hoffman, Packer & Sims, Ophthalmologists, Eugene, OR. *Ophthalmology: The Medical & Surgical Treatment of Eye Diseases.* **Readings:** I-1 thru I-10.

Mar 11 (T)  **Discussion 11: Vision Lab with Eye Dissections. Readings:** DLN pp 11-1 thru 11-3.

Mar 13 (R)  **Lecture 20: Quiz 6** - covers Lectures 16, 17, 18, 19 (110 WIL). Break. Thoughts on applying to graduate schools in medicine & allied health. Final comments by Pat.

Mar 18 (T)  **Final Research Paper Due** no later than 5:00 pm in Pat Lombardi’s box in Main Biology Office (77 KLA).

**Grading:**

- Attendance & Participation, Feedback on Guest Lecturers (25%)
- Quizzes (25%)
- Class Presentation (25%)
- Research Paper (25%)