University of Oregon  
Department of Biology

Course: BI 358 Investigations in Medical Physiology, CRN 21651, 04 cr, Lecture: 8:30-9:50 TR 110 Willamette (WIL) + Discussion: CRN 21652 10:00-11:50 T or CRN 21653 12:00-13:50 T or CRN 21654 14:00-15:50 T, 112 HUE (HUE), Winter 2013.

Instructor: V. Pat Lombardi, 73A KLA, 541-346-4536, lombardi@uoregon.edu
Office Hr: M, 10:30-11:30 and by appointment.
Discussion Coordinators: Andrew Cvitanovich, TBA, TBA, cvitanov@uoregon.edu
Jennifer Finley, TBA, TBA, jjeffres@uoregon.edu
Office Hr: TBA


BI 358, Investigations in Medical Physiology Discussion/Lecture Notebook (DLN), 2013. [Required]


See Course Reserve List http://libweb.uoregon.edu/ for additional excellent references. NB: Click on green tab Course Reserves, then type in Lombardi as Instructor.

Tentative Outline:


Jan 8 (T) Discussions 1 & 2: Introduction & Resources: Personal Information Cards; Guidelines for Research Paper & Presentation; Addiction Medicine Primer; Discussion + Mini-group Presentations on Common Drugs of Addiction: Alcohol, Cocaine, Heroin, Marijuana, Methamphetamine, Nicotine. Readings: DLN pp iv-x, 1-1, 1-2, 2-1 thru 2-60. Additional Assignment: Resources & Computer Search, Focus on Topics of Personal Interest to create paper outline due Jan 17 (T) (112 HUE + begin personal search outside of lab).


Jan 15 (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 22 (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.


Feb 5 (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 cvitanov@uoregon.edu or jjeffres@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 7 (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 12 (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 12 (T) **Discussion 7**: Class Presentations I.


Feb 19 (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 pp 8-1 thru 8-8.

Feb 21 (R) **Lecture 14**: Guest Lecture Series-Clinical: Ron Cirullo, MD, PhD, Internal Medicine, Endocrinology, Diabetes Mellitus & Thyroid Disorders, PeaceHealth Medical, Eugene, OR. **Readings**: DLN pp F-1 thru F-10.


Feb 26 (T) **Discussion 9**: Class Presentations II.

Mar 5 (T)  **Lecture 17: Guest Lecture Series-Clinical:** Pilar Bradshaw, MD, PeaceHealth Medical Group, Eugene, OR. *Pediatrics & Clinical Case Presentations.* **Readings:** DLN pp H-1 thru H-6.

Mar 5 (T)  **Discussion 10: Class Presentations III.**

Mar 7 (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 12 (T)  **Lecture 19: Guest Lecture Series-Clinical:** Annette Chang Sims, MD; Drs. Fine, Hoffman, Packer & Sims, Ophthalmologists, Eugene, OR. *Clinical Evaluation & Treatment of Cataracts & Glaucoma.* **Readings:** I-1 thru I-10.

Mar 12 (T)  **Discussion 11: Vision Lab with Eye Dissections.** **Readings:** DLN pp 11-1 thru 11-3.

Mar 14 (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 19 (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%)