Course: BI 358 Investigations in Medical Physiology, CRN 21508, 04 cr, Lecture: 8:30-9:50 TR 110 Willamette (WIL) + Discussion: CRN 21509 10:00-11:50 T or CRN 21510 12:00-13:50 T or CRN 21511 14:00-15:50 T, 5 Klamath (KLA), Winter 2012.

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, cvitano@uoregon.edu
Jennifer Hampton, TBA, TBA, jhampton@uoregon.edu
Office Hr: TBA


*BI 358, Investigations in Medical Physiology Discussion/Lecture Notebook* (DLN), 2012. [Required]


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

Tentative Outline:


Jan 10 (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) (5 KLA + begin personal search outside of lab).


Jan 17 (T) **Lecture 3: Guest Lecture Series-Clinical**: Douglas Bovee, MD, Addiction & Internal Medicine, Eugene, OR. *Pharmacology of Drugs of Addiction: Pathophysiology, Adverse Effects & Case Presentations*. **Readings**: DLN pp B-1 thru B-7 + [http://learn.genetics.utah.edu/content/addiction/drugs/mouse.html](http://learn.genetics.utah.edu/content/addiction/drugs/mouse.html).

Jan 17 (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 19 (R) **Lecture 4**: Gastrointestinal Anatomy & Physiology. **Readings**: G&H ch 62, 63 & 64, pp 753-88.

Jan 24 (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 7 (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 cvitano@uoregon.edu or jhampton@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 14 (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 14 (T)  Discussion 7: Class Presentations I.


Feb 23 (R)  Lecture 14: Guest Lecture Series-Clinical: Ron Cirullo, MD, PhD, Internal Medicine, Endocrinology, Diabetes Mellitus & Thyroid Disorders, PeaceHealth Medical, Eugene, OR. Endocrinology & Clinical Case Presentations. Readings: DLN pp F-1 thru F-10.


Feb 28 (T)  Discussion 9: Class Presentations II.

Mar 6 (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 6 (T)  **Discussion 10: Class Presentations III.**

Mar 8 (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 13 (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 13 (T)  **Discussion 11: Vision Lab with Eye Dissections. Readings:** DLN pp 11-1 thru 11-3.

Mar 15 (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 20 (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%)