Course: BI 358 Investigations in Medical Physiology, CRN 21720, 04 cr, Lecture: 8:30-9:50 TR 110 Willamette (WIL) + Discussion: CRN 21721 10:00-11:50 T or CRN 21722 12:00-13:50 T or CRN 21723 14:00-15:50 T, 130 Huestis (HUE), Winter 2018. Website: [http://blogs.uoregon.edu/bi358/winter-2018/](http://blogs.uoregon.edu/bi358/winter-2018/)

Instructor: V. Pat Lombardi, 65A KLA, 541-346-6055, lombardi@uoregon.edu

Office Hr: M, 11:00 -12:00 and by appointment.

Discussion Coordinators, Office Hr: Kelsey Schultz, TBA, kschult7@uoregon.edu

Hannah Soukup, TBA, hsoukup@uoregon.edu


BI 358, Investigations in Medical Physiology Discussion-Lecture Notebook (DLN), 2018. [Required]


See Course Reserve List [http://libweb.uoregon.edu/course-reserves](http://libweb.uoregon.edu/course-reserves) for additional excellent references.

NB: To the left of Search Course Reserves, type in Lombardi, then login with your uoregon ID and password.

Tentative Outline:


Jan 16 (T) **Lecture 3**: Guest Lecture Series-Clinical: Douglas Bovee, MD, Addiction & Internal Medicine, Eugene, OR. Drugs of Addiction: A Survey of their Pharmacology & Pathophysiology. **Readings**: DLN pp B-1 thru B-10 + [http://learn.genetics.utah.edu/content/addiction/mouse/](http://learn.genetics.utah.edu/content/addiction/mouse/)

Jan 16 (T) **Discussion 3**: Quiz 1-covers Lectures 1, 2 & 3 & Discussion 2. 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 18 (R) **Lecture 4**: Gastrointestinal Anatomy & Physiology. **Readings**: G&H ch 63, 64 & 65, pp 797-832.

Jan 23 (T) **Lecture 5**: I. Digestion & Absorption. II. Nutrition & Disease Prevention. **Readings**: G&H ch 66 pp 833-42; + highlights of ch 72 pp 887-902; DLN pp C-1 thru C-16.
Jan 23 (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 4-24.*

Jan 25 (R)  **Lecture 6:** Blood + Immunology I: Blood Cells & Immunity, Overview of Innate vs. Acquired/Adaptive (Nonspecific vs. Specific) Immunity. Readings: G&H ch 33 & 34 pp 445-64; ch 36 pp 477-82.


Feb 6 (T)  **Discussion 6:** I. Peer Review of Papers. 4 hard copies of Paper Draft due & e-mail copy to Group Members + prior to Discussion, e-mail copy of Paper Draft to either kschult7@uoregon.edu or hsoukup@uoregon.edu based on Discussion section. Small Group Discussions with project overviews + detailed feedback on papers by way of follow-up e-mails to each group member. II. Heart Dissections. Readings: DLN p 6-1 and 6-2.

Feb 8 (R)  **Lecture 10:** I. Introduction to Endocrinology, Pituitary Hormones & Control by the Hypothalamus. II. Peripheral Endocrine Organs. Readings: G&H ch 75 & 76 pp 925-50; ch 77 & 78 highlights pp 951-82.

Feb 13 (T)  **Lecture 11:** Guest Lecture Series-Clinical: Richard C. Padgett, MD, Cardiology, Oregon Heart & Vascular Institute, Eugene, OR. Clinical Cardiology, Case Studies & Recent Advances. DLN pp E-1 thru E-12.

Feb 13 (T)  **Discussion 7:** *Quiz 3: Covers Lectures 6, 7 & 9 & Discussion 5 (Immunology). Feedback on Papers (continued). Additional Assignment: Case histories to prepare for Dr. Garrett. Readings: DLN pp 7-1 thru 7-3.*

Feb 15 (R)  **Lecture 12:** Reproductive Physiology: I. Female Reproductive Anatomy & Physiology: Ovarian & Menstrual Cycle, Birth Control Techniques. II. Male Reproductive Anatomy & Physiology. Readings: G&H ch 82 pp 1037-54; ch 83 pp 1066-9; ch 3 pp 41-3; ch 81 pp 1021-35.


Feb 20 (T)  **Discussion 8:** Class Presentations I.

Feb 22 (R)  **Lecture 14:** Guest Lecture Series-Clinical: Audrey P. Garrett, MD, MPH, Willamette Valley Cancer Institute & Research Center, Eugene, OR & Oregon Health & Science University, Portland, OR. HPV & Gynecologic Care of Women with Breast Cancer. Readings: DLN pp F-1 thru F-14.

Feb 27 (T)  **Lecture 15:** Guest Lecture Series-Clinical: Paul F. Kaplan, MD, Oregon Health Science University, Portland, OR & University Health Center & Department of Human Physiology, Eugene, OR. Polycystic Ovarian Syndrome & Assisted Reproductive Technologies. Readings: DLN pp G-1 thru G-7.

Feb 27 (T)  **Discussion 9:** Class Presentations II.
Mar 1 (R)  **Lecture 16: Quiz 5 – NB:** Start time 8:00 am. Covers Lectures 10, 12, 14 & 15 & Discussion 7 Case Histories (Endocrinology, Reproduction & Cancer) (110 WIL + ?). **Guest Lecture Series - Clinical:** Deanna St. Germain, DO, Medical Director, Kids’ FIRST Center (Forensic Intervention Response & Support Team), Eugene, OR. Adverse Childhood Experiences: Impact on DNA & the Brain. Readings: DLN pp H-1 thru H-13.


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


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 13, 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 (20%)
- Quizzes (40%)
- Class Presentation (20%)
- Research Paper (20%)