

BIO 362 - ENDOCRINOLOGY LECTURE
Spring 2010

Instructor: Delahunty Office: Hoffberger G48
 Lecture MWF 10:30 HS-G59
 Office Hours: MWF 12:30-1:30; Tuesday 10-11; or by appointment
 Text: Endocrinology by Mac Hadley and Jon E. Levine
 Additional readings will be assigned during the semester.

Additional readings and sample exams will be posted on BLACKBOARD. You can access BLACKBOARD via the Internet at <http://blackboard.goucher.edu>.

Lecture Schedule

<u>Week</u>	<u>Date</u>	<u>Topic</u>	<u>Reading (Pages)</u>
Week 1	Jan 27	Introduction, define hormones and messengers: General outline of vertebrate endocrine system	Chapter 1 & 2
	Jan 29	Basic experimental techniques	Chapter 4
Week 2	Feb 1	Receptors: Binding kinetics, saturation analysis, scatchard plots	p 39-45
	Feb 3	Binding kinetics continued	39-45
	Feb 5	Mechanisms of hormone action, 2 nd messengers (proteins)	46-57
Week 3	Feb 8	Mechanisms of hormone action (steroids)	57-65
	Feb 10	Anterior pituitary: Development anatomy and circulation	93-98
	Feb 12	Anterior Pituitary: Hormone families	98-108
Week 4	Feb 15	Endocrine hypothalamus	111-120
	Feb 17	Endocrine hypothalamus	121-130
	Feb 19	Neurohypophysial hormones	Chapter 7
Week 5	Feb 22	Hormonal control of growth, IGFs	264-274
	Feb 24	Growth hormone receptor	264-274
	Feb 26	Prolactin	274-278

<u>Week</u>	<u>Date</u>	<u>Topic</u>	<u>Reading (Pages)</u>
Week 6	Mar 1	Thyroid, Histology, biochemistry transport in blood	Chapter 13
	Mar 3	Thyroid: Regulations and feedback loops	Chapter 13
	Mar 5	EXAM I	
Week 7	Mar 8	Thyroid: Actions of T4	Chapter 13
	Mar 10	Calcium regulation	Chapter 9
	Mar 12	Calcium regulation	Chapter 9
Week 8	Mar 15-19	SPRING BREAK	
Week 9	Mar 22	Overview of metabolism	Chapter 11
	Mar 24	Insulin: Intro & biosynthesis	Chapter 11
	Mar 26	Insulin: Actions and secretion	Chapter 11
Week 10	Mar 29	Insulin: Signal transduction, Diabetes	Chapter 11
	Mar 31	Glucagon	Chapter 11
	Apr 2	Satiety, adipose tissue, leptin and obesity	Assigned reading
Week 11	Apr 5	Steroid hormones and adrenal cortex	Chapter 15
	Apr 7	Adrenal	Chapter 15
	Apr 9	Adrenal	Chapter 15
Week 12	Apr 12	EXAM II	
	Apr 14	Male reproductive physiology	Chapter 17
	Apr 16	Male reproductive physiology	Chapter 17
Week 13	Apr 19	Male reproductive physiology	Chapter 17
	Apr 21	Sexual differentiation	Chapter 16
	Apr 23	Female reproductive physiology	Chapter 18
Week 14	Apr 26	Female reproductive physiology	Chapter 18
	Apr 28	Female reproductive physiology	Chapter 18
	Apr 30	Gestation	Chapter 19
Week 15	May 3	Partuition	Chapter 19
	May 5	Lactation	Chapter 19

Attendance: Students are expected to attend all scheduled lectures and keep up to date with the reading assignments. Additional reading assignments will be made throughout the semester.

Examinations: There will be two lecture tests plus a final exam; the dates are listed in the lecture schedule. Exams will cover material from the lectures, textbooks and other assigned readings. Each lecture test will be comprised of a one-hour in-class session plus a take-home component. There are no make up exams in Bio 362. If an exam is missed, the lowest grade on one of the other exams will be counted twice. This missing test policy can be used only once. After that the grade of F will be assigned.

All students are bound by the standards of the Academic Honor Code found at www.goucher.edu/documents/general/AcademicHonorCode.pdf.

Final Grades: Determined as follows:

Test 1	100 pt (class) + 50 pt take-home
Test 2	100 pt (class) + 50 pt take-home
Final Exam	200 pts. (100pt recent material+100pt cumulative)
Total	500 pts.