

BIOLOGY 646: Endocrinology

INSTRUCTOR: John Yarotsky, PhD

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LECTURES: Mon & Wed 10-11:30 CKB 207

OFFICE HOURS: Wed 3-6

DESCRIPTION:

The course will cover the entire human endocrine system from both an anatomical and physiological perspective. The development, gross anatomy, regulation and interaction between various endocrine components will be discussed. Emphasis will be placed on student learning through detailed examinations of endocrine disorders in order to apply critical thinking about the endocrine system in a real-world context.

TEXTBOOKS:

“Endocrine Physiology” 4th Edition by Lange ISBN: 978-0-07-161301-9

GRADING	POINTS
Exams	200pts
Assignments	100pts
Attendance and Participation	50pts
Case Study Presentation & Write up	150pts
Moderating a Class	100pts
TOTAL	600pts

GRADING SCALE			
A	90-100	C	70-74
B+	85-89	D	65-69
C+	75-79		

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WEEK	DATES	TOPICS	
Week 1	Jan 18	Introduction	
Week 2	Jan 23-25	General Endocrinology	
Week 3	Jan 30 Feb 1	Hypothalamus & Posterior Pituitary	
Week 4	Feb 6-8	Anterior Pituitary	
Week 5	Feb 13-15	Thyroid Gland	
Week 6	Feb 20-22	Exam 1	
Week 7	Feb 27 March 1	Parathyroid Glands	
Week 8	March 6-8	Adrenal Glands	
Week 9	March 13-17	Spring Break	
Week 10	March 20-22	Endocrine Integration & Electrolyte Balance	
Week 11	March 27-29	Pancreas	
Week 12	April 3-5	Exam 2	
Week 13	April 10-12	Male Reproductive	
Week 14	April 17-19	Female Reproductive	
Week 15	April 24-26	Pregnancy	
Week 16	May 1	Exam 3	

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EXAMINATIONS:

⊕ COURSE REQUIREMENTS, EVALUATION PROCEDURES, AND POLICIES:

THIS COURSE IS A HYBRID BETWEEN A TRADITIONAL LECTURE-BASED CLASS AND A PRESENTATION BASED CLASS. THE FIRST FEW WEEKS WILL BE CENTERED AROUND PRESENTATIONS GIVEN BY THE INSTRUCTOR. THESE ARE TO SERVE AS EXAMPLES OF THE MATERIAL AND PRESENTATION STYLE. THE POWER POINTS WILL BE UPLOADED TO CANVAS AND SERVE AS STUDY MATERIALS FOR THE CLASS. THE EXAMS WILL BE BASED ON PRESENTATIONS GIVEN BY THE INSTRUCTOR AND STUDENTS.

EXAMS- ALL EXAMS ARE NON-CUMULATIVE, MEANING THAT EXAMS ONLY COVER MATERIALS PRESENTED BETWEEN EXAMS. THE EXAMS WILL BE 50 QUESTION MULTIPLE CHOICE TESTS. THE QUESTIONS WILL COME DIRECTLY FROM THE PRESENTATIONS AND HOMEWORK COVERED DURING THAT EXAM PERIOD. THERE IS NO FINAL EXAM FOR THIS COURSE.

HOMEWORK-ASSIGNMENTS WILL BE POSTED AS QUIZZES ON THE COURSE'S CANVAS PAGE. THE QUIZZES WILL BE OPEN FOR ONE WEEK FOLLOWING THE POSTING AND CAN BE COMPLETED AT ANY TIME DURING THAT WEEK. THE ASSIGNMENTS WILL REMAIN OPEN AFTER THAT WEEK HAS ENDED BUT ANY ASSIGNMENTS COMPLETED AFTER THE FIRST WEEK WILL BE PENALIZED. THE PENALTY WILL BE 10% PER DAY. SO, AFTER AN ASSIGNMENT IS TEN DAYS LATE, IF YOU COMPLETE IT AND GET A 100, THE PENALTY WILL RESULT IN A 0 SCORE.

PRESENTATIONS AND WRITE UPS-THE PRESENTATION AND WRITE UP FOR YOUR CASE STUDY NEED TO BE SENT TO THE MODERATOR OF THE CLASS WHO IS SCHEDULED FOR THE DAY OF YOUR PRESENTATION. SOME DAYS THAT WILL BE YOUR INSTRUCTOR AND OTHER DAYS THAT MAY BE A GRADUATE STUDENT. TO FIND THE MODERATOR YOU NEED TO REVIEW YOUR PRESENTATION AND WRITE UP YOU MUST CONSULT THE PRESENTATION SCHEDULE POSTED TO THE CANVAS PAGE. YOUR MATERIALS MUST BE SENT TO YOUR MODERATOR ONE WEEK PRIOR TO YOUR PRESENTATION DATE IN ORDER TO GIVE THE MODERATOR TIME TO GO OVER YOUR MATERIALS PRIOR TO YOU PRESENTING YOUR CASE STUDY. IF YOU SEND YOUR MATERIALS LESS THAN A WEEK BEFORE YOUR PRESENTATION DATE, EACH DAY LATE WILL RESULT IN A 10% PENALTY ON YOUR FINAL SCORE. SO, MAKE SURE YOU DON'T LOSE POINTS BY FORGETTING TO SEND YOUR PRESENTATION IN ON TIME. THIS MEANS THAT YOU MUST HAVE YOUR WRITE UP AND POWER POINT COMPLETED THE WEEK BEFORE YOU ARE TO PRESENT. PLEASE MANAGE YOUR TIME ACCORDINGLY SO AS NOT TO LOSE POINTS NEEDLESSLY.

ATTENDANCE-ATTENDANCE AND PARTICIPATION ARE MANDATORY. ATTENDANCE WILL BE TAKEN DURING THE FIRST FIVE MINUTES OF CLASS. AFTER 5 MINUTES HAS PASSED YOU WILL BE MARKED AS LATE FOR THAT DAY'S ATTENDANCE SCORE AND RECEIVE A 10% REDUCTION IN POINTS FOR EVERY 5 MINUTES THEREAFTER.

MODERATING A CLASS- AS A MODERATOR YOU WILL BE RESPONSIBLE FOR REVIEWING STUDENT'S PRESENTATIONS AND WRITE UPS FOR ONE CLASS. YOU MUST COORDINATE WITH THE UNDERGRADUATE STUDENT LISTED IN THE PRESENTATION SCHEDULE THE WEEK PRIOR TO THEIR PRESENTATION. YOU MUST REVIEW THE WRITE UP, GRADE IT ACCORDING TO THE RUBRIC, AND SEND IT TO THE INSTRUCTOR WHEN YOU ARE FINISHED. YOU MUST ALSO REVIEW THE PRESENTATION AND GIVE THE STUDENT ADVICE REGARDING THE STYLE, MATERIAL, AND OVERALL FLOW OF THE PRESENTATION. IT SHOULD FOLLOW THE STYLE OF THE PRESENTATIONS THAT HAVE BEEN GIVEN BY THE INSTRUCTOR. IN ADDITION TO THOSE DUTIES, YOU MUST ALSO REVIEW THE CASE STUDY YOURSELF AND

FAMILIARIZE YOURSELF WITH THE DISEASE. YOU SHOULD KNOW MORE THAN THE STUDENT WHO IS PRESENTING. YOU ARE A GRADUATE STUDENT AND SHOULD ALREADY KNOW MORE BASIC BIOLOGY THAN AN UNDERGRADUATE. YOU SHOULD HAVE A THOROUGH UNDERSTANDING OF THE SYSTEM THEY ARE PRESENTING AND THE DISEASE SUCH THAT YOU CAN ASK IN DEPTH QUESTIONS REGARDING MECHANISMS, SIMILAR DISEASES AND DISORDERS THAT THIS PARTICULAR CONDITION MAY BE CONFUSED WITH, ALONG WITH TREATMENT OPTIONS. MANY TIMES THERE ARE MEDICATIONS OR SURGERIES THAT CAN CORRECT THESE CONDITIONS BUT YOU SHOULD RESEARCH NEW OR DEVELOPING TREATMENT OPTIONS SO YOU CAN EDUCATE THE CLASS ABOUT THESE DURING THE END OF THE PRESENTATION.

⊗ Extra credit is not an option.

This course will strictly adhere to the [NJIT Honor Code](#)!! Both the lecture and the lab will have zero tolerance for violations to the NJIT's [University Code on Academic Integrity](#)!!
