BIO 8S — INTRODUCTION TO HUMAN PHYSIOLOGY
(Tentative) Syllabus

Instructor: Christina Goeders, MS (*cgoeders@stanford.edu*)
Office Hours: TBA
Course Time: TBA, plus weekly attendance at one 50-min discussion section
Course Location: TBA
Grading Option: Letter Grade or Credit/No Credit
Units: 4

TEXTBOOK
Guyton and Hall Textbook of Medical Physiology, 13th Edition
ISBN: 978-1-4557-7005-2

COURSE DESCRIPTION
Normal functioning and pathophysiology of major organ systems: nervous, respiratory, cardiovascular, renal, digestive, and endocrine. Additional topics include integrative physiology, clinical case studies, and applications in genomics-based personalized medicine.

EVALUATION
Course grading is based on performance in the following areas:

Lecture and Section Participation……. 10%
Problem Sets…… 20%
Midterm…… 30%
Final Exam…… 40%

LECTURE AND SECTION PARTICIPATION
Participation in both lecture and discussion section is required. Sections are held weekly in 50-minute time blocks (beginning the second week of the quarter). Times and locations will be announced during the first week of class.

PROBLEM SETS
Several problem sets will be released throughout the quarter (due dates TBA). They will emphasize core concepts, integrate material from multiple units, and encourage critical thinking.

MIDTERM EXAM
The date, time, and location of the midterm exam will be announced on the first day of class. An out-of-class review session will be scheduled to aid in exam preparation.

FINAL EXAM
The final exam date, time, and location will be announced on the first day of class. An out-of-class, comprehensive review session will be scheduled prior to the exam.

A tentative lecture schedule and recommended readings are included on the following page. Please note that this syllabus is subject to change. The final version will be released on the first day of class.

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(Tentative) Lecture Schedule

DATE	DAY	TOPIC	READING
06.25.19	**T**	**Course Introduction** **Autonomic Nervous System I:** Functional Anatomy	Ch. 1, 4, 5, 61
06.27.19	**Th**	**Autonomic Nervous System II:** Toxidromes, Pharmacology **Cardio I:** Hemostasis, Cardiac Anatomy	Ch. 61, 6; Ch. 37, 9, 14
07.02.19	**T**	**Cardio II:** Electrophysiology, Blood Pressure Regulation	Ch. 9-11, 14, 15, 18
07.04.19	**Th**	**HOLIDAY — No Class**	N/A
07.09.19	**T**	**Cardio III:** CV Mechanics, Contractility, CHF	Ch. 20, 22
07.11.19	**Th**	**Respiratory I:** Functional Anatomy, Gas Exchange	Ch. 38-40
07.16.19	**T**	**Respiratory II:** O_2 Transport, Respiration Regulation	Ch. 41, 42
07.18.19	**Th**	**Renal I:** Functional Anatomy, Concentration of Urine	Ch. 25, 26, 28
07.23.19	**T**	**Renal II:** Electrolyte and Volume Regulation	Ch. 19, 27, 29
07.25.19	**Th**	**Renal III:** Quantitative Physiology, Acid-Base Regulation	Ch. 28, 31
07.XX.19	**X**	**MIDTERM EXAM (Date, Time, and Location TBA)**	N/A
07.30.19	**T**	**Integrative Physiology:** CHF, Shock **GI I:** Digestion	Ch. 20, 22; Ch. 65
08.01.19	**Th**	**GI II:** Absorption, Lipid Metabolism, Liver	Ch. 66, 69, 71
08.06.19	**T**	**Endocrine I:** Hormones, Calcium Regulation	Ch. 75-77, 80
08.08.19	**Th**	**Endocrine II:** Insulin, Glucagon, Diabetes Mellitus	Ch. 79
08.13.19	**T**	**Clinical Case Studies**	TBA
08.15.19	**Th**	**Clinical Applications:** Genomics-Based Personalized Medicine	TBA
08.XX.19	**X**	**FINAL EXAM (Date, Time, and Location TBA)**	N/A