

Introduction to Human Physiology

Kinesiology 205

Section: D100

Term: 2010 Fall

Instructor: Professor: Dr. Peter Ruben

Email: I will answer messages using WebCT (M-F 9:30-5). I will NOT answer questions sent to my SFU Connect account.

Phone: 778-782-3497

Office hours: Mondays and Wednesdays 9:30 11:00. It is highly recommended you come see me at least once during the term.

Discussion Topics: Course Overview:

The course is an introductory survey of human physiology covering the muscular, nervous, cardiovascular, respiratory, renal, and gastrointestinal systems. We will study anatomy of structures when it is critical to a functional understanding of physiology. Although this is intended as a survey course, we will cover some topics in reasonable detail (e.g. skeletal muscle and the cardiovascular system) to give insight into mechanisms of function.

WebCT will be used for this course. There will be required readings, handouts, and figures posted, discussion opportunities, and I will answer any questions you have via WebCT but not via my SFU Connect account. I will answer questions via WebCT once a day between 9:30 a.m. and 5:00 p.m. Monday through Friday. I will NOT answer questions at night, on the weekend, or during holidays. (I have a life outside of SFU and so should you!)

We will use iClicker technology in class. It is REQUIRED that you obtain and register an iClicker for this course. 10% of your grade will depend on you using an iClicker to respond to questions in class. To earn the full 10%, it is required that you answer at least 75% of the questions asked during class. It is therefore highly recommended that you attend all classes. Tests will be a combination of multiple choice, short answer, and long (essay) answer.

Lecture Schedule (approximate):

September 8 Introduction to course and review of Chapters 1-5 Basic Cell Processes

September 10 Chapter 6 Cell-Cell Communication

September 13 Chapter 8 Neurons: Cellular and Network Properties (pages 247-257)

September 15 Chapter 8 Neurons: Cellular and Network Properties (pages 258-272)

September 17 Chapter 8 Neurons: Cellular and Network Properties (pages 273-288)

September 20 Chapter 9 Central Nervous System (pages 296-312)

September 22 Chapter 9 Central Nervous System (pages 313-326)

September 24 Chapter 10 Sensory Physiology (pages 333-346)

September 27 Chapter 10 Sensory Physiology (pages 353-361)

September 27 Chapter 10 Sensory Physiology (pages 362-372)

October 1 Chapter 11 Autonomic and Somatic Nervous System (pages 386-399)

October 6 First Midterm Exam

October 8 Chapter 12 Muscles (pages 406-426)

October 11 Thanksgiving

October 13 Chapter 12 Muscles (pages 427-439)

October 15 Chapter 13 Control of Body Movement (pages 446-457)

October 17 Chapter 13 Control of Body Movement (pages 457-461)

October 20 Chapter 14 Cardiovascular Physiology (pages 467-475)

October 22 Chapter 14 Cardiovascular Physiology (pages 478-486)

October 25 Chapter 14 Cardiovascular Physiology (pages 487-504)

October 27 Chapter 16 Blood (pages 446-456)

November 1 Chapter 15 Blood Flow and Blood Pressure (pages 512-528)

November 3 Chapter 17 Breathing (pages 568-577)

November 5 Chapter 17 Breathing (pages 578-591)

November 8 Second Midterm Exam

November 10 Chapter 18 Gas Exchange and Transport (pages 597-609)

November 12 Chapter 18 Gas Exchange and Transport (pages 612-617)

November 15 Chapter 19 Kidneys (pages 622-628)

November 17 Chapter 19 Kidneys (pages 629-643)

November 19 Chapter 20 Fluid and Electrolyte Balance (pages 651-669)

November 22 Chapter 20 Fluid and Electrolyte Balance (pages 672-679)

November 24 Chapter 21 Digestion (pages 686-701)

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November 26 Chapter 21 Digestion (pages 703-717)
November 29 Chapter 22 Metabolism and Energy Balance (pages 724-735)
December 1 Chapter 22 Metabolism and Energy Balance (pages 736-746)
December 3 Chapter 22 Metabolism and Energy Balance (pages 747-751)
December 6 Review

Grading: GRADING

In class quizzes 10%

We will use iClicker to assess your understanding of key concepts throughout the term.

Tutorial quizzes 10%

Problems given during tutorial will assess your understanding of key concepts.

Exam 1 Monday, October 6 (short answer, essay, and multiple choice) 20 %

Will include all material covered from September 7 October 4, with a few adjustments.

Exam 2 Friday, November 10 (short answer, essay, and multiple choice) 20 %

Exam 2 will include all material covered from September 7 November 8, with a few adjustments.

Final Exam, December to be announced (short answer, essay, and multiple choice) 40 %

Final exam will include everything covered from September 7 last class, with a few adjustments.

NO EXCUSE FOR MISSING ANY EXAM WILL BE ACCEPTABLE UNLESS ARRANGEMENTS ARE MADE PRIOR TO THE EXAM.

Required Texts: Silverthorn, Human Physiology An Integrated Approach, 5th ed. Pearson Educational Inc.

Recommended Texts:

Materials/Supplies:

Prerequisite/Corequisite: BISC 101, CHEM 281, and PHYS 101 and 102.

Notes: Each lecture will start at 2:30 pm from first day of classes, September 7, 2010.

Academic Honesty and Student Conduct: Please check policy T10.01 and T10.02 available at <http://www.reg.sfu.ca>.

Note: The use of your iClicker by anyone other than yourself will constitute a breach of the Academic Honesty and Student Conduct Code. All breaches of the Academic Honesty and Student Conduct Code will be treated very seriously.

This outline is derived from a course outline repository database that was maintained by SFU Student Services and the University's IT Services Department. The database was retired in 2014 and the data migrated to SFU Archives in 2015.