

DEPARTMENT OF PHYSICAL EDUCATION AND KINESIOLOGY COURSE OUTLINE – FALL 2020 PE1015 (A2/B2): ESSENTIALS OF HUMAN PHYSIOLOGY

3 credit (3-0-0) UT 45 HRs / 15 WKs

| INSTRUCTOR: | Fabio Minozzo | PHONE: | 780532058 |
|--------------------|---------------|---------------|---------------------|
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OFFICE HOURS: Drop in or by appointment

DESCRIPTION: The main focus of this introductory course is systemic functions in the human body with special emphasis on systems that respond and adapt to exercise stress. The majority of the course will focus on the cardiovascular, respiratory, musculoskeletal, nervous, and neuroendocrine systems. A prior knowledge of general cellular function and metabolism (such as obtained in Biology 30) is presupposed.

DELIVERY MODE(S): Lecture, Problem-solving exercises, and activities. *

***FALL 2020 DELIVERY:** Remote Delivery. This course is delivered remotely. There are no face-to-face or onsite requirements. Students must have a computer with a webcam and reliable internet connection. Technological support is available through helpdesk@gprc.ab.ca.

PREREQUISITE(S)/COREQUISITE: N/A

REQUIRED TEXT/RESOURCE MATERIALS:

Stanfield, Cindy L. (2017). Principles of Human Physiology. 6th Edition, San Francisco: Pearson.

COURSE OBJECTIVES:

- Understand basic physiological concepts and processes;
- Define basic structure-function relationships that exist within the human body;
- Describe the regulation of various physiological systems that comprise the human body.

LEARNING OUTCOMES:

Upon successful completion of this course the student should be able to:

- Demonstrate an in-depth understanding of the main principles of the neurophysiology, muscle; cardiovascular, respiratory and neuroendocrine systems;
- Demonstrate an understanding of and be able to identify how changes in normal physiology lead to disease;
- Demonstrate the capacity to integrate information from different sources (biology, chemistry and physics) and effectively communicate this both verbally and in writing;

COURSE SCHEDULE/TENTATIVE TIMELINE:

| PE1015 ESSENTIALS OF HUMAN PHYSIOLOGY 2020 SCHEDULE (Tentative) | | | | | | |
|---|-------------------------------------|------------|----------------------------------|--|--|--|
| MONDAYS | TOPIC | WEDNESDAYS | TOPIC | | | |
| 31-Aug-20 | No Classes | 2-Sep-20 | Course Presentation | | | |
| 7-Sep-20 | Introduction to Physiology (1) | 9-Sep-20 | Introduction to Physiology (1) | | | |
| 14-Sep-20 | Cell: Structure and Function (2) | 16-Sep-20 | Cell: Structure and Function (2) | | | |
| 21-Sep-20 | Cell: Structure and Function (2) | 23-Sep-20 | Cell: Structure and Function (2) | | | |
| 28-Sep-20 | Cell Metabolism(3) | 30-Sep-20 | Cell Metabolism (3) | | | |
| 5-Oct-20 | Cell Metabolism (3) | 7-Oct-20 | Cell Metabolism (3) | | | |
| 12-Oct-20 | FALL BREAK | 14-Oct-20 | FALL BREAK | | | |
| 19-Oct-20 | Review / Activity | 21-Oct-20 | TES T I | | | |
| 26-Oct-20 | Cell Membrane Transport (4) | 28-Oct-20 | Cell Membrane Transport (4) | | | |
| 2-Nov-20 | Chemic Messengers (5) | 4-Nov-20 | Endocrine System (6) | | | |
| 9-Nov-20 | Nervous System(7) | 11-Nov-20 | Nervous System(8) | | | |
| 16-Nov-20 | Nervous System(9) | 18-Nov-20 | Nervous System (11) | | | |
| 23-Nov-20 | Muscle Physiology (12) | 25-Nov-20 | Muscle Physiology (12) | | | |
| 30-Nov-20 | Review / Activity | 2-Dec-20 | TEST II | | | |
| 7-Dec-20 | Cardiorespiratory System (overview) | 9-Dec-20 | Review / Activity | | | |
| 14-Dec-20 | Exam Period | 16-Dec-20 | Exam Period | | | |

Mondays and Wednesdays: A2- 10:00 to 11:20 / B2- 8:30 to 9:50

*Note: Some of these dates may vary to facilitate student learning

EVALUATIONS:

| 100% | Total |
|------|--------------------------------|
| 40% | FINAL EXAM |
| 25% | TEST 2 |
| 25% | TEST 1 |
| 10% | Coursework / Review Activities |

GRADING CRITERIA: The following criteria may be changed to suite the particular course/instructor: Please note that most universities will not accept your course for transfer credit IF your grade is less than C-. This means DO NOT GET LESS THAN "C-" IF YOU ARE PLANNING TO TRANSFER TO A UNIVERSITY.

| Alpha Grade | 4-point | Percentage | Alpha | 4-point | Percentage |
|-------------|------------|------------|-------|------------|------------|
| | Equivalent | Guidelines | Grade | Equivalent | Guidelines |
| A+ | 4.0 | 90-100 | C+ | 2.3 | 67-69 |
| А | 4.0 | 85-89 | С | 2.0 | 63-66 |
| A- | 3.7 | 80-84 | C- | 1.7 | 60-62 |
| B+ | 3.3 | 77-79 | D+ | 1.3 | 55-59 |
| В | 3.0 | 73-76 | D | 1.0 | 50-54 |
| B- | 2.7 | 70-72 | F | 0.0 | 00-49 |

STUDENT RESPONSIBILITIES:

Refer to the College Policy on Student Rights and Responsibilities on the GPRC website.

STATEMENT ON PLAGIARISM AND CHEATING:

Cheating and plagiarism will not be tolerated and there will be penalties. For a more precise definition of plagiarism and its consequences, refer to the Student Conduct section of the College Admission Guide at http://www.gprc.ab.ca/programs/calendar/ or the College Policy on Student Misconduct: Plagiarism and Cheating at www.gprc.ab.ca/programs/calendar/ or the College Policy on Student Misconduct: Plagiarism and Cheating at www.gprc.ab.ca/about/administration/policies/**

*Note: all Academic and Administrative policies are available on the same page.

UNIVERSITY TRANSFER (If applicable):

** Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. **Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability.** Please refer to the Alberta Transfer guide for current transfer agreements: <u>www.transferalberta.ca</u>