

OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

Course Code and Number: KIN 272		Number of Credits: 4 Course credit policy (105)																	
Course Full Title: Human Physiology II																			
Course Short Title (if title exceeds 30 characters):																			
Faculty: Faculty of Health Sciences		Department (or program if no department): Kinesiology																	
Calendar Description: An extension of KIN 270. Examines the structure, function, and regulation of the organ systems supporting human movement (circulatory, lymphatic, respiratory, urinary, and digestive), as well as the immune and reproductive systems. Note: Students with credit for KIN 370 (formerly KPE 370) cannot take this course for further credit.																			
Prerequisites (or NONE):		KIN 270 (formerly KPE 270).																	
Corequisites (if applicable, or NONE):		NONE																	
Pre/corequisites (if applicable, or NONE):		NONE																	
Equivalent Courses (cannot be taken for additional credit) Former course code/number: Cross-listed with: Equivalent course(s): KPE 291, KPE 370, KIN 370 <i>Note: Equivalent course(s) should be included in the calendar description by way of a note that students with credit for the equivalent course(s) cannot take this course for further credit.</i>		Transfer Credit Transfer credit already exists: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Transfer credit requested (OREg to submit to BCCAT): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (if yes, fill in transfer credit form) Resubmit revised outline for articulation: <input type="checkbox"/> Yes <input type="checkbox"/> No To find out how this course transfers, see bctransferguide.ca .																	
Total Hours: 75 Typical structure of instructional hours: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr><td>Lecture hours</td><td style="text-align: center;">40</td></tr> <tr><td>Seminars/tutorials/workshops</td><td></td></tr> <tr><td>Laboratory hours</td><td style="text-align: center;">35</td></tr> <tr><td>Field experience hours</td><td></td></tr> <tr><td>Experiential (practicum, internship, etc.)</td><td></td></tr> <tr><td>Online learning activities</td><td></td></tr> <tr><td>Other contact hours:</td><td></td></tr> <tr><td style="text-align: right;">Total</td><td style="text-align: center;">75</td></tr> </table>		Lecture hours	40	Seminars/tutorials/workshops		Laboratory hours	35	Field experience hours		Experiential (practicum, internship, etc.)		Online learning activities		Other contact hours:		Total	75	Special Topics Will the course be offered with different topics? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, different lettered courses may be taken for credit: <input type="checkbox"/> No <input type="checkbox"/> Yes, repeat(s) <input type="checkbox"/> Yes, no limit <i>Note: The specific topic will be recorded when offered.</i>	
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Other contact hours:																			
Total	75																		
		Maximum enrolment (for information only): 36																	
		Expected frequency of course offerings (every semester, annually, every other year, etc.): four time annually																	
Department / Program Head or Director: Alastair Hodges		Date approved: May 2017																	
Faculty Council approval		Date approved: May 2017																	
Campus-Wide Consultation (CWC)		Date of posting: February 9, 2018																	
Dean/Associate VP: Joanne MacLean		Date approved: May 2017																	
Undergraduate Education Committee (UEC) approval		Date of meeting: March 23, 2018																	

Learning Outcomes

Upon successful completion of this course, students will be able to:

1. Explain the circulatory system, including blood, hemostasis, the heart, the cardiac cycle, cardiac conduction and ECG's, neural regulation and vascular anatomy,
2. Describe the respiratory system, including the mechanisms of inhalation and exhalation, regulation of breathing, gas transport and homeostatic imbalance with respiration.
3. Describe the lymphatic system and relate to immune function, non- specific and specific defenses.
4. Explain the digestive system, including mechanical.chemical digestion, absorption, accessory glands and overall regulation and control of our gut,
5. Explain the urinary system, including nephron structure and urine formation, and fluid and electrolyte balance,
6. Describe the male and female reproductive systems

Prior Learning Assessment and Recognition (PLAR)

Yes No, PLAR cannot be awarded for this course because

Typical Instructional Methods (guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion)

Lecture, audiovisual presentation, computer interaction (anatomy programs), class participation/discussion

Students may work as groups to prepare a written project on a contemporary issue relating to these organ systems. Student may be required to make an oral presentation and/or web page.

Grading system: Letter Grades: Credit/No Credit: Labs to be scheduled independent of lecture hours: Yes No

NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.

Typical Text(s) and Resource Materials (if more space is required, download Supplemental Texts and Resource Materials form)

	Author (surname, initials)	Title (article, book, journal, etc.)	Current ed.	Publisher	Year
1.	Marieb, E.N. and K.N. Hoehn	Human Anatomy and Physiology	<input checked="" type="checkbox"/>	Pearson	2015
2.	Open Text	Anatomy and Physiology	<input type="checkbox"/>	OpenStax	
3.	D.U. Silverthorne	Human Physiology: An Integrated Approach	<input checked="" type="checkbox"/>	Pearson	2014
4.			<input type="checkbox"/>		

Required Additional Supplies and Materials (software, hardware, tools, specialized clothing, etc.)

Laboratory space is provided along with anatomical charts and models. Equipment for blood, cardiovascular and respiratory function will be available, as well as urinalysis apparatus. Anatomy software is available in the computer lab

Typical Evaluation Methods and Weighting

Final exam:	20%	Assignments:	%	Midterm exam (2):	40%	Practicum:	%
Quizzes/tests:	%	Lab work (4 exams):	40%	Field experience:	%	Shop work:	%
Other:	%	Other:	%	Other:	%	Total:	100%

Details (if necessary):

Typical Course Content and Topics**Circulatory system**

- cardiac conduction system
- electrocardiograms
- relative and absolute refractory periods
- cardiac output
- capillary exchange
- peripheral resistance
- blood pressure regulation

Respiratory system

- pulmonary and alveolar ventilation
- gas transport in blood
- regulation of breathing
- breathing at high altitude and when diving

Lymphatic system

- regulation of body fluids
- filtering and recycling blood components

Immune system

- non-specific immune response (inflammation)
- specific immune response
- humoral response
- cell-mediated response
- immunocompetency and immunogenicity

Digestive system

- details of chemical digestion
- regulation of digestive function
- absorption and assimilation
- defecation

Urinary system

- urine production (filtration, reabsorption, and secretion)
- fluid and electrolyte balance
- pH balance
- micturition
- renin-angiotensin system

Male and female reproductive systems

- regulation of male gamete formation
- function of the accessory glands
- regulation of the menstrual cycle
- fertilization and pregnancy
- lactation