

MCMASTER UNIVERSITY
Department of Kinesiology

Kinesiology 1AA3/1YY3/2YY3: Human Anatomy and Physiology II

Term: Winter 2018

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DESCRIPTION

An introduction to the anatomy and physiology of the cardiovascular, respiratory, gastrointestinal, renal, endocrine and reproductive systems.

COURSE OBJECTIVES

Course Content Objectives

On completion of this course, the student should be able to comprehend/identify the following items:

- A) The three functional components of the cardiovascular system (blood, heart, blood vessels) and how they operate in unison for form a functional system.
- B) The role of the respiratory system in maintaining acid-base balance and overall physiological homeostasis.
- C) The neuromuscular control of human ventilation as well as the intrinsic/extrinsic factors regulating breathing.
- D) The structure and function of the human digestive system in the process of breaking down and absorbing macro- and micro-nutrients.
- E) The role that the human kidney plays in maintaining blood homeostasis, and the mechanisms involved with the production of concentrated or dilute urine.

- F) The major organs, and their secretions, of the human endocrine system, as well as the general characteristics and effects of the major hormones secreted in the human body.
- G) The structure and function of the human reproductive system, including the process of spermiogenesis.
- H) The normal periodic structural/physiological changes that occur to the female reproductive system during the menstrual cycle, as influenced by hormonal secretions.

Skill and Value-Based Learning Objectives:

Upon completion of this course, the student will demonstrate competencies in:

- **Personal organization and time management** in order to multi-task, set priorities, and allocate time effectively to meet deadlines such as tests, prelab quizzes, exams, and lecture/lab attendance.
- **Professional interaction and communication** via email, online forums, and face to face meetings with professors, staff, teaching assistants, and peers.
- **Critical and integrative thinking skills** as students research and answer questions based on anatomical systems based case studies.
- **Teamwork and interpersonal skills** by participation in small group laboratory exercises and/or initiating participation on discussion boards.
- **Displaying appropriate and respectful behaviour** towards the human anatomy laboratory, individuals who have donated their bodies to science, and instructors, staff, teaching assistants, and peers.
- **Reading** relevant texts and course materials and demonstrating comprehension by completing iclicker questions, weekly tests, prelab quizzes, and final exam.

RESOURCES

Required Resources: All resources will be available in the Campus Store.

- Tortora and Derrickson (2014 14th edition) *Principles of Anatomy and Physiology*. John Wiley and Sons
 - *You can choose one of two options:*
 1. *Binder Ready Book (your purchase includes the e-book)*
 2. *E-book*
- Custom Lab Manual
- i-Clicker (must be registered as per instructions on Avenue for this course)
- Lab coat

Optional resources:

- Mosby's Anatomy and Physiology Coloring Book, 2nd Edition (ISBN: 9780323226110)

EVALUATION

Weekly tests: **40%** (10 tests x 4%) 11 tests are written but the lowest score is dropped.

Prelab Quizzes: **5%** (5 quizzes x 1%). Biweekly lab attendance is mandatory. Lab quizzes will automatically be replaced by a 0% without proof of lab attendance. **Prelab quizzes are released the Thursday before your lab and are due the following Monday at noon.**

iclicker **5%** Due to the possibility of absences or technical difficulties, 90% of the questions correct over the term will equal 100% (e.g. if 40 questions are asked, 36 correct responses will count as 100%). Marks will then be calculated as a percentage of this maximum.

Final Exam: **50%** (covering all course content)

ATTENDANCE

Attending all sections of the course will be key to your success. All students are expected attend lecture and lab as well as complete all prelab quizzes, Friday tests, and exams. **Attendance is MANDATORY at your lab.** If you do not attend your scheduled lab, you will not be given the grades you achieved on your prelab quiz.

Labs (IAHS 451): Labs take place **biweekly**:

Labs first week

L01 Tues 9:30
L03 Tues 11:30
L05 Tues 1:30
L07 Wed 9:30
L09 Wed 11:30
L11 Thurs 11:30
L13 Thurs 1:30

Labs second week

L02 Tues 9:30
L04 Tues 11:30
L06 Tues 1:30
L08 Wed 9:30
L10 Wed 11:30
L12 Thurs 11:30
L14 Thurs 1:30

Laboratory Safety

WHMIS 1A00 and ROUTINE PRACTICES are required safety courses for KIN 1AA3/1YY3/2YY3. If you completed these courses in the past there is no need to repeat them.

It is the responsibility of the student to complete these courses PRIOR TO THE FIRST LAB. WHMIS 1A00 completion is tracked centrally but ROUTINE PRACTICES is tracked by the instructor. The procedure for proving completion of ROUTINE PRACTICES is as follows:

- Go to mosaic.mcmaster.ca > Important Links > Health and Safety Training > search by course name > type routine practices
- Sign up for the course and wait for it to appear on Avenue
- Complete the course successfully
- Go back to mosaic.mcmaster.ca > Important Links > Health and Safety Training > Training Summary > take a screen capture of your summary, produce a pdf and upload it to the Assignments drop box in Avenue
- **UPLOADING A BLANK OR OUT OF DATE TRAINING SUMMARY WILL BE CONSIDERED ACADEMIC DISHONESTY** (see below for details)

Laboratory Safety procedures will be reviewed during the first lab of the year. A number of the labs involve the use of human and animal specimens. You are expected to adhere to the laboratory guidelines at all times. Failure to do so will result in removal from the laboratory setting. Several labs will also involve examination of physiological responses on student volunteers. All risks and procedures are outlined in the lab manual and it is your responsibility to review these prior to attending the lab.

Tests

Tests are held in weekly 20-minute slots every Friday 8:30 -2:10. They are written on computers located in a computer lab in **KTH B121/123**. You will only be allowed to write your test during this time slot so please be on time to ensure you have adequate time to write your test. **Your valid McMaster picture ID must be brought to each test or you will not be permitted to write it.** During your 20 minute test time you are to **only access Avenue**. Visiting websites or accessing other documents other than Avenue (including email) during the testing times in KTH is strictly prohibited and will be considered as academic dishonesty. Please the Friday test rules for further explanation of violations.

Friday Test Times:

T01 F 8:30 - 8:50
T02 F 8:50 - 9:10
T03 F 9:10 - 9:30
T04 F 9:30 - 9:50
T05 F 9:50 - 10:10
T06 F 10:10 - 10:30
T07 F 10:30 - 10:50
T08 F 10:50 - 11:10
T09 F 11:10 - 11:30
T010 F 11:30 - 11:50
T011 F 11:50 - 12:10
T012 12:10 – 12:30
T013 12:30 – 12:50
T014 12:50 – 1:10
T015 1:10 - 1:30
T016 1:30 -1:50
T017 1:50 – 2:10

Friday Test Rules:

- Come to your assigned slot only
- No talking, AT ALL, in the test room
- Should be seated with a space between you and the next person, if possible
- All bags/notes/personal items must be left at the front of the room and must remain closed until you leave the room after your test (including cell phones)
- NO other windows or applications are allowed to be open on the computer at any time in the test room, this includes email or even the content section of this course.
- You are not allowed to use spell check
- You are not allowed to copy test questions at any time for any reason.
- The test is 15 minutes in length. Any questions answered after the 15 min mark will be given a grade of zero.
- If you leave your computer during/after the test, you are not allowed to return
- The TAs will not answer content questions, only technical problems with Avenue/logging in etc.
- If you have an issue with the content of a question, email Adrienne or Dr. Howarth after the test and we will review it.
- **IF YOU ARE CAUGHT VIOLATING ANY OF THESE RULES, YOU CAN BE CHARGED WITH ACADEMIC DISHONESTY**

POLICY REGARDING DEFERRED TESTS AND EXAMS

Tests, prelab quizzes or labs that are missed for any reason other than a legitimate medical/legal/religious reason automatically receive a grade of 0. There will be **no make-up tests** for the Friday tests or prelab quizzes. If you miss a test/prelab/lab due to a minor medical or personal reason, lasting up to 3 days, you may report your absence, without documentation, using the McMaster Student Absence Form (as long as the missed work is worth less than 25% of the final course grade). The MSAF can only be used **once per term**. Absences for a longer duration or for other reasons (e.g. religious) must be reported to the Faculty of Science Associate Dean's office, with documentation, and relief from term work may not necessarily be granted. Upon receipt of your MSAF or approval of your documentation from the Dean's office, the final exam will take on the value of the final exam plus the test(s)/prelab(s) you missed. When using the MSAF, please address it to tearlea@mcmaster.ca. NOTE: if your situation involves a prolonged absence and numerous missed tests, please contact the instructor as soon as possible.

clicker questions missed for ANY reason will receive a grade of 0. Missed work documentation will not be entertained.

Students who miss a Registrar-scheduled final exam can apply to the Associate Dean's office for permission to write in the deferred final exam schedule. In all cases, appropriate documentation must be submitted to the Office of the Associate Dean, Faculty of Science, for consideration of deferred examination permission. Under no circumstances will the instructor re-schedule a final exam for individual students.

ON-LINE LEARNING RESOURCES

Avenue to Learn: avenue.mcmaster.ca

- Students are expected to check Avenue to Learn at **each day**. Avenue will be the instructor's main method of communication with students.
- It is the responsibility of the student to turn on notifications in Avenue if they wish to receive them
- Students are responsible for any course content that is delivered via Avenue. Details regarding this online content will be given in class.
- It is the responsibility of the student to take all necessary steps to find out about course changes including, but not limited to, class attendance, changes to schedules, announcements and instructions.
- Any instructions/announcements that are verbally given in lecture are the responsibility of the student.
- The instructor will only communicate with students via their official McMaster email account.
- Do not email instructors through Avenue email as these accounts will not be checked on a regular basis.

USE OF COURSE MATERIALS

Course materials provided by the instructor are for use by students registered in this class only. Under no circumstances are these materials to be shared, posted or sold to a third party without permission from the instructor. This includes, but not limited to, online posting of lecture/lab notes, online lectures, recordings of lectures, or any lab materials on a website other than the Avenue site designed for the course.

MODIFICATIONS TO COURSE

The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes. Also, the course instructor will maintain an Avenue to Learn component for the course and students are expected to monitor (i.e., check the Avenue to Learn notice board and postings) at least twice per week and be aware of any changes that are made.

ACADEMIC INTEGRITY

Academic dishonesty consists of misrepresentation by deception or by other fraudulent means and can result in serious consequences (e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript reading "Grade of F assigned for academic dishonesty", and/or suspension or expulsion from the university). It is your responsibility to understand what constitutes academic dishonesty. For information on the various kinds of academic dishonesty please refer to the Academic Integrity Policy, specifically Appendix 3, located at: <http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicIntegrity.pdf>.

The following illustrates only three forms of academic dishonesty:

- Plagiarism (e.g. the submission of work that is not one's own or for which other credit has been obtained),
- Improper collaboration in group work.
- Copying or using unauthorized aids in tests and examinations.

MCMASTER ETHICS

Please visit <http://reo.mcmaster.ca/> for more information on ethical issues related to the course and labs in particular.

ACADEMIC ACCOMMODATION OF STUDENTS WITH DISABILITIES

Academic Accommodation of Students with Disabilities Students who require academic accommodation must contact Student Accessibility Services (SAS) to make arrangements with a Program Coordinator. Academic accommodations must be arranged for each term of study. Student Accessibility Services can be contacted by phone 905-525-9140, ext. 2865 or e-mail sas@mcmaster.ca. For further information, consult McMaster University's Policy for Academic Accommodation of Students with Disabilities.

STUDENT SUCCESS CENTRE

The Student Success Centre (SSC) is a resource for all McMaster students and offers services in several areas including Academic Concerns. SSC is located in Gilmour Hall (GH) 110 and their website can be found at: <http://studentsuccess.mcmaster.ca>

Students can speak to academic counselors or review materials online to help with:

- Marks, test results, academic performance
- Motivation, interest in courses, sense of direction
- Time management, study habits, personal organization
- Stress in dealing with the academic workload
- Listening and note taking in university lectures
- Reading for university courses
- Preparing for or writing tests and exams; multiple-choice tests

FEEDBACK

It really helps us improve our services when we hear from our students, faculty and staff about what we can do better. A feedback process brings to our attention situations in which we may not have adequately considered accessibility and allows us to better plan for accessibility in the future.