Faculty of Science



Division of Natural Science http://natsci.info.yorku.ca/ Course Outline

SC/NATS 1675.06 A, Human Development Fall/Winter, 2018/2019 Tuesday, 4:30 -7:30 PM, Vari Hall A

Course Director and Contact Information

COURSE DIRECTOR: ROBERT W. CRIPPEN, Ph.D.

HOME PHONE: 519-941-3091

OFFICE: 308 Bethune College (located on the top floor in the SW corner)

OFFICE HOURS: TBA.

FIRST LECTURE: 11 September 2018

All communication between students and myself is to be **in person or by my home landline**. You are welcome to phone between the hours of 8 AM and 10 PM any day of the week. Since this is my home phone, I am unavailable Tuesday afternoons and evenings. If telephone charges present a problem, phone me and request I phone you back. When leaving phone messages, state your name, student number and phone number; repeat this information speaking slowly and distinctly and a call will be returned ASAP. It will take 7 – 8 rings before the answering machine turns on.

You will receive emails from me through Moodle, however, **do not** communicate with me through the Moodle email: this includes questions, reporting a missed exam, the term project, etc. This email address is used for no other purpose than Moodle and is not checked on a regular basis.

Expanded Course Description

The purpose of the course is to familiarize students with the structure and function of the human organism. The course will begin with discussions of cell structure and function; the concept of natural selection and modern theories of evolution to place humans in perspective with other organisms; cell division, including both mitosis and meiosis, and the formation of gametes, reproduction and fetal development (Topic 1).

Topic 2 will include genetics, including genetic diseases and chromosomal aberrations. The concepts of protein synthesis and genetic engineering will be introduced.

The remainder of the course (Topics 3 & 4) will cover a number of organ systems and relevant diseases associated with these systems, *e.g.* digestive, cardiovascular, respiratory, immune, etc. Cancer will be discussed as a separate topic. →

Some lectures will be supplemented by films that provide either related information or material from a slightly different perspective. Some time will be set aside during lecture for discussion and/or questions.

Sc/Nats 1675 A has no prerequisites, therefore, the topics covered in this course will be taught with this in mind, always starting with basic concepts and discussing/defining the necessary vocabulary to ensure the understanding of each topic.

Course Learning Outcomes

Upon successful completion of this course students should be able to:

- increase their knowledge and understanding of the structure and function of the human organism;
- expand their scientific vocabulary;
- better communicate with medical professionals concerning themselves and/or family members;
- appreciate the interdisciplinary relationship between science and other career disciplines;
- expand their awareness of the availability of information on human development and related topics in current news journals.

Evaluation

There will be four examinations, each worth 20%, eight pop guizzes worth a total of 10%, and a term project worth 10% (due Tuesday, 26 February 2019). Questions for the pop guizzes will come from material taken **only** from the previous lecture, and only the top five marks will be counted. The examination format will be multiple choice, matching and true/false. Approximately 50 exam questions will come from lecture material and the required text readings found in Topics 1 - 4 in Moodle. Exams cover only the material within the respective Topic and are not cumulative. Exams will be graded electronically using scantrons. The first three exams will be held during lecture, Tuesday, 23 October 2018, Tuesday, 4 December 2018 and Tuesday, 12 March 2019 for Topics 1, 2, & 3, respectively. The date, time and location for Exam 4, the final exam, is TBA as it will occur during the final examination period in April. A make-up exam for students with legitimate excuses who missed one of the three first exams will be announced or may be taken immediately after the final exam. The Course Director **must** be notified **by phone** (519-941-3091) within 48 hours of a missed exam (not a quiz), and documentation must be submitted the day the student returns to class. There are **no** make-ups for missed quizzes.

In order to be fair and consistent to the entire class, individual grades are not negotiable and "extra credit" assignments are not provided at any point during or after the course. Please contact the instructor about a grade **only** if there is a clear error (calculation, clerical, etc.) within two weeks of the grade being made available to you. However, students are encouraged to review their scantrons and exam questions in my office after the scantrons are returned.

Course Materials

REQUIRED TEXT:

Mader, Sylvia S. & Windelspecht, Michael, Human Biology, 15th edition, McGraw Hill, 2018. **Options:**

ISBN 9781260152487, Loose Leaf Version, \$109.95, or

ISBN 9781259689796, Bound Paper Version, \$160.20, or

ISBN 9781260066531, Alternative eBook option with Connect, \$99.00: Connect Access Code for Human Biology, 15th edition, by Mader, can be purchased separately at the York Bookstore. Connect access can also be purchased online when you register at the Connect course URL:

https://connect.mheducation.com/class/b-crippen-fall-2018.

Connect contains the online interactive eBook for Human Biology, 15th edition, by Mader plus LearnSmart, SmartBook, Practice Quizzes, Videos, Animations and other study resources.

For a short video introduction and overview of Connect, LearnSmart and SmartBook, visit www.improveyourgrades.ca.

NATS1675 Fall/Winter 2018/19 Connect Section Web Addresses:

http://connect.mheducation.com/class/b-crippen-fall-2018. Connect Registration opens Wednesday, 5 September 2018.

Connect Registration using your access code or purchase online:

- 1. Go to the Connect Web Address for this course.
- 2. Click on "Register Now."
- 3. Enter your email address (this will become your Connect username). If you already have a McGraw-Hill account, you will be asked for your password and will not be required to create a new account.
- 4. Enter a registration code or choose "Buy Online" to purchase access online.
- 5. Follow the on-screen directions.
- 6. When registration is complete, click on "Go to Connect Now."
- 7. You are now ready to use Connect.

Student Support for Connect:

Visit http://www.connectstudentsuccess.com/ for Connect registration instructions, Connect Student Q&A and Searchable Q&A, troubleshooting and system requirements.

To submit a support ticket with the McGraw-Hill Care Centre, visit www.mheducation.ca/support or call 1-800-565-5758.

This course does not have a laboratory or tutorial component.

Course Content and Format

SC/NATS 1675 A is a lecture course. Success in this course requires regular attendance. Not all lecture material is covered in the textbook; likewise, not all material covered in the textbook will be covered in lecture. For the most part, lecture material will not be posted on Moodle with the exception of material presented in overheads. This material will be posted on Moodle prior to lecture; it is recommended that this material be printed and brought to lecture to expedite note taking.

The material to be covered for each exam, including recommended and required text readings, is outlined on Moodle in Topics 1-4, respectively. The date and location for each exam is posted at the end of each Topic on Moodle, and under "Evaluation" above.

Overhead material and other relevant information will be posted under "Latest Announcements". This information is automatically emailed to all registered students, and can always be retrieved from this site. REMEMBER—do not communicate with me through the Moodle email: this includes questions, reporting a missed exam, the term project, etc. This email address is used for no other purpose than Moodle and is not checked on a regular basis.

Math Content

Ontario Grade 10 Math

Course Policies

- MUTUAL RESPECT—This is the one Classroom Rule. This includes respect between students and the Course Director, but most importantly, respect between fellow students. Examples of lack of respect include the use of cellphones and inappropriate use of personal computers during lecture.
- Students requiring academic accommodation must submit their documentation letters within two weeks of the commencement of this course in September. In situations where the student has not yet received their accommodation letter, they are to inform the Course Director of their status.
- One or more students will be selected to act as Class Representatives within the first few weeks of the course. Students interested in this position are asked to make their interest known to the Course Director.
- Questions and concerns of course polices should be directed to the Course Director, or the Class Representative(s) prior to contacting the Division of Natural Science. →
- Conduct during quizzes and exams and academic honesty are discussed in further detail below (University Policies). Please refer to this section. In

short, during quizzes and exams, the only items permitted on the writing surface are pens, pencils, an eraser, highlighters and your student card. All other items are to be placed under your chair. Keep your eyes on your own paper. The **first** thing to be done is to fill in your full name, last name first, and student number. On scantrons, the student number **must** also be bubbled-in. **Reminder**—there are no makeups for quizzes and missed exams **must** be reported in person or by phone (519-941-3091) within 48 hours. Appropriate documentation **must** be submitted upon return to class.

- Students are encouraged to review their scantrons and exam questions in my office after the scantrons are returned. Should a student experience difficulty with the course material, it is important that we meet early in the term, rather than later in the term, to ensure success in the course.
- You will find the subject material to be discussed in lectures, supporting text chapters, suggested and required readings, and exam dates under the headings for Topics 1 4 on the homepage of Moodle when you log-on to this course. The material I present as lecture overheads can be found in the Latest Announcements section of Moodle. This material will be emailed to you prior to lectures. Each 'overhead' will be numbered. I suggest that you bring a printed copy of the appropriate overheads to class to expedite notetaking of lecture material. Other relevant information such as a University cancellation due to a weather emergency, changes in assignments, etc., will also be communicated through Latest Announcements on Moodle.
- The term project is due at the <u>beginning</u> of class Tuesday, 26 February 2019, however, you are <u>encouraged</u> to turn it in earlier; it is worth 10% of your final grade. The TAs will collect the projects prior to lecture; projects submitted after this time will receive 1% penalty for every "business" day including 26 February.

Copyright and Intellectual Property

Lecture and related material fall under the category of copyright and intellectual property. You may tape lectures for your personal use and study, but this material **can not** be sold or uploaded to websites. Overhead material is available on Moodle, and most of the figures presented as overheads are found in your textbook. It is not necessary to photograph most of this material, and such actions can be distracting to both fellow students and myself.

TERM PROJECT—FALL/WINTER 2018/19 COLLECTION OF CURRENT NEWS ARTICLES

There will be one term project in SC/NATS 1675 A consisting of a collection of <u>current</u> news and journal articles that relate to the course. Articles can include any topic pertaining to human biology including health, medicine, disease, new or old medical technologies, environmental impacts to the health of the human species, evolution, etc. The term project is due at the <u>beginning</u> of class Tuesday, 26 February 2019, however, you are encouraged to turn it in earlier; it is worth 10% of your final grade. The TAs will collect the projects prior to lecture; projects submitted after this time will receive 1% penalty for every "business" day including 6 March.

Description of Project

The collection of articles is to consist of a <u>minimum</u> of 20 current (January 2018 – February 2019) newspaper and news journal articles discussing some aspect of human biology. Extra articles may be included that you find of interest or to substitute for an article that might be deemed unacceptable. The purpose of this assignment is two-fold: 1) to increase your exposure to current material pertaining to human biology; 2) to emphasize the dynamic aspects human biology, and science in general, and how this field affects our daily lives.

News articles may come from any number of sources such as the "Globe" and Mail", "Toronto Star", local newspapers, "Macleans", "Time", "Newsweek", etc. Articles from scientific journals are acceptable, but not necessary. A maximum of 5 articles may be taken from alternate sources such as medical pamphlets, non-journal internet articles (e.g. blogs), etc. On-line news journals are acceptable; they will **not** count as 'internet articles'. Include no more than one article per source per date. In theory this means that your 20 articles could come from 20 sources on the same date, or from a single source on 20 different dates, however, most projects will comprise a mix of sources and dates. You must provide proof that the articles have been read. You may underline or highlight key sentences within the article that provide the pertinent information. Another option is to write a short summary (3 - 4 sentences, not paragraphs) to accompany each article that includes the theme of the article and links to human biology. You can also use a combination of both highlighting and summaries if you prefer. The articles must be complete and attached to pages (stapled, glued or taped) in any type of notebook or scrapbook you find convenient. **Do not use clear page-protectors or** submit loose articles in a file folder. The articles must be numbered and consecutively arranged according to date. The source and the date must be included on each article; pen-in this information if it/they do not already appear on the article. A few photocopied (maximum of 5) articles are acceptable where one is unable to include the original. A 'Table of Contents' (TOC) must precede the articles and include the \rightarrow following: article number, title, source and date. A penalty of up to 25% will be applied to projects missing some or all of this information in the TOC. **NOTE**—for full marks, the source and date must appear **both** on the article and in the TOC.

University Policies

Important Sessional Dates

Includes sessional start and end dates, drop deadlines, and withdrawal dates.

See the Office of the Registrar website at

http://www.registrar.vorku.ca/enrol/dates/

Academic Honesty and Integrity

Academic honesty requires that persons do not falsely claim credit for the ideas, writing or other intellectual property of others, either by presenting such works as their own or through impersonation. Similarly, academic honesty requires that persons do not cheat (attempt to gain an improper advantage in an academic evaluation), nor attempt or actually alter, suppress, falsify or fabricate any research data or results, official academic record, application or document. Finally, academic honesty requires that persons do not aid or abet others to commit an offence of academic dishonesty, including intentional acts to disrupt academic activities.

Suspected breaches of academic honesty will be investigated and charges shall be laid if reasonable and probable grounds exist.

Academic Honesty and electronic devices during assessments (e.g. exams)

- Internet capable and personal storage devices of all kinds must be turned off, including vibrate. These and any other unauthorized material must be placed under the student's chair and should not be accessed at any point during the exam. Failure to comply with directive may be considered a break of academic honesty.
- See http://registrar.yorku.ca/exams/tipsheet

Please familiarize yourself with the full <u>Senate Policy on Academic Honesty</u>, found at http://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/

Please also familiarize yourself with the <u>SPARK Academic Honesty tutorial</u> found at https://spark.library.yorku.ca/academic-integrity-what-is-academic-integrity/

Academic Accommodation for Students with Disabilities

York University shall make reasonable and appropriate accommodations and adaptations in order to promote the ability of students with disabilities to fulfill the \rightarrow academic requirements of their programs.

The nature and extent of accommodations shall be consistent with and supportive of the integrity of the curriculum and of the academic standards of programs or courses.

Please familiarize yourself with the full <u>Senate Policy on Academic Accommodations for Students with Disabilities</u>, found at http://secretariat-policies.info.yorku.ca/policies/academic-accommodation-for-students-with-disabilities-policy/

Note: Students should submit accommodation letters from Counseling and Disability Services (CDS) to the course instructor within the first two weeks of the course or as soon as issued.

Counseling and Disability Services - http://cds.info.yorku.ca/

York Accessibility Hub - http://accessibilityhub.info.yorku.ca/

Note: A student registered with CDS, and choosing to write with Alternate Exams, is responsible for making the appropriate writing arrangements within the timeframes outlined by Alternate Exams.

Alternate Exams - http://altexams.students.yorku.ca/

Religious Observance Accommodation

York University is committed to respecting the religious beliefs and practices of all members of the community, and making accommodations for observances of special significance to adherents.

https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm.woa/15/wo/kmHGekTpzKLX6XYKBXYc8M/0.3.4.62.0

Note: Students who will have an academic conflict as a result of a religious observance, at any point in the term, should make the instructor aware of such at least three weeks prior to the conflict.

For conflicts occurring during an official examination period, please complete the Examination Accommodation Form available at

http://www.registrar.yorku.ca/pdf/exam_accommodation.pdf and submit to your instructor at least three weeks prior to the final exam.

Student Conduct in Academic Situations

Students and instructors are expected to maintain a professional relationship characterized by courtesy and mutual respect and to refrain from actions disruptive to such a relationship. Moreover, it is the responsibility of the instructor to maintain an appropriate academic atmosphere in the classroom and the responsibility of the student to cooperate in that endeavour. Further, the instructor is the best person to decide, in the first instance, whether such an atmosphere is present in the class. A statement of the policy and procedures regarding disruptive and/or harassing behaviour by students in academic situations is available on the website of the University Secretariat (http://secretariat.info.yorku.ca/).

NATS-AID

Free peer tutoring for students enrolled in Natural Science Courses. See http://natsci.info.yorku.ca/nats-aid/

M-AID in NATS (Math Aid)

Free math help for students enrolled in Natural Science Courses (TA tutors) See http://natsci.info.yorku.ca/m-aid-in-nats/

Other Resources

Learning Commons

The Learning Commons brings together key supports for your learning: writing, research, learning skills and career services. http://www.library.yorku.ca/cms/learning-commons/

goSAFE

goSAFE is a complimentary service provided to the York Community. At the Keele campus, goSAFE has two routes: North Route & South Route which will safely transport community members by vehicle from one specified hub to another on campus. goSAFE operates seven days a week, all year round, including University closures (with the exception at Glendon during the Christmas holiday closure).

Call the goSAFE office at 416-736-5454 or extension 55454 during hours of operation. Please give your name, location and destination. http://www.yorku.ca/goSAFE/

Mental Health and Wellness at York University

Outlines a variety of resources available to support mental health and wellness http://mhw.info.yorku.ca/resources/resources-at-york/students/

Good2Talk

Post-Secondary Student 24 hour Helpline http://www.good2talk.ca/ 1-866-925-5454