Faculty of Science



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

SC/NATS 1740 M Astronomy Winter 2018

Lectures: Tuesdays and Thursdays, 7-10 pm in Steadman lecture hall D

Course Instructor(s) and Contact Information

- Professor R.Campeanu
- Email: campeanu@yorku.ca; this will be the address of first contact for all course-related matters; you will receive a response within 24 hours.
 - Note: students should send emails from @my.yorku.ca email as others including, hotmail, gmail, yahoo.... may be filtered and never make it to the intended yorku recipient.

Note: emails should contain in the subject line the student's name and student number.

Office hours: (in #3059 DB/TEL building): Tuesdays and Thursdays 5:30-7 pm

Expanded Course Description

A study of the universe and the science of astronomy. The course will include such topics as: modern astronomical tools and techniques, the solar system, the sun, stellar astrophysics, galaxies, relativity and the expanding universe, cosmology and the question of life in the universe. This is a general education course that fills quickly and has no prerequisites. Natural science courses are part of the general education requirements of York University.

Course Credit exclusions: SC/NATS 1880 6.00, SC/NATS 1570 3.00. NCR Note: No credit will be retained if this course is taken after the successful completion of SC/PHYS 1070 3.00. Not open to any students enrolled in the Astronomy stream.

Course Learning Outcomes

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

- Develop basic understanding of the scientific discoveries in astronomy and cosmology.
- Develop logical thinking about the evolution of astronomy and cosmology.
- Develop understanding of the interaction between experimental and theoretical research.
- Develop a suitable vocabulary when describing the progress of astronomy and cosmology.

Evaluation

 Test 1:
 20%

 Test 2:
 20%

 Assignments:
 15%

 Final Exam:
 45%

Test 1 and test 2 will be 90 minutes and will consist primarily of multiple choice questions.

- The final exam will be 3 hours and will contain multiple choice from the whole material covered in this course. It will also contain an essay on one of the topics in astronomy.
- There will be 3 assignments and for each assignment the students will have 2 weeks to prepare their answers.
- 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.

Course Materials

Required textbook:

R.I.Campeanu, "Exploration of the Universe", Pearson Pubs. 2017

Please buy the 5th edition from York's Bookstore.

Laboratory/Tutorial

- This course does not have a laboratory or tutorial component
- The TAs and their email addresses will be announced as soon as possible.
- The TAs will be responsible for marking the assignments.

Course Content and Format

- Lectures slides, videos and samples of multiple choice questions are available on Moodle.
- Most PowerPoint presentations start with a set of questions related to the previous lecture material, which are the basis for a recap class discussion.
- After each lecture students should first read the slides, then the relevant textbook section and then the samples of multiple choice questions.
- Videos complete the lectures when available, but they should be considered less important than the slides and textbook.

Math Content

Simple mathematics concepts are necessary (Ontario Grade 10 Math). For example: dealing with powers of 10 and calculating the length of a light-minute.

Course Policies

Questions and Concerns should be directed to

- All concerns related to tests and final exam marks should be addressed to the Course Director at campeanu@yorku.ca.
- All concerns related to the assignment marks should be addressed to the TA who did the marking.

Conduct during Assessments

 During tests and final exam all papers should be placed under your chair. Also all electronic devices should be turned off and placed under your chair.

Policy for Missed Tests

- The following situations will not be reasons for missed tests: employment conflicts, family vacations.
- Acceptable documentation for missed tests is: medical/APS [see NATS Moodle page or Registrar webpage for the most up-to-date form], letter from funeral director. This documentation must be presented to the course director within a week of the test date. In this case the weight of the corresponding test will be distributed to the other components of the course assessment.

Policy for a Missed Final Exam

- You may not petition for deferred final exam if you miss both term tests.
- The deferred final exam form should be presented to the NATS office within a week from the date of the final exam (which will be in the April exams session).
- The format of the deferred exam will be similar to that of the regular final exam.

• Late Submissions and Late Penalties

 Late assignments will be submitted electronically to the marking TA. The penalty for late assignment is 5% per day?

Reappraisal Requests

No reappraisal for the tests are possible (they are multiple choice type).

Copyright and Intellectual Property

- You are allowed to record lectures for personal use. However you are not allowed to upload those recordings to websites.
- You are not allowed to upload to websites the course slides, assignments and other material presented on Moodle.

University Policies

Important Sessional Dates

Classes start on 4 January and end 6 April 2018.

No classes during the Reading Week between 17-23 February 2018.

Last day to withdraw from the course without academic penalty is 9 March 2018.

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 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/).

Division of Natural Science Resources

NATS-AID

Free peer tutoring for students enrolled in Natural Science Courses. See http://natsci.info.vorku.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