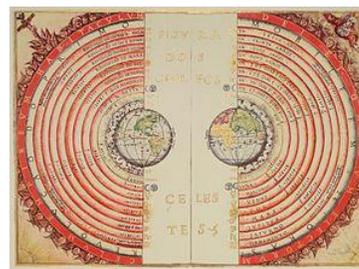


SC/NATS 1745.06 Section A
Fall-Winter 2016-2017

History of Astronomy



[Stonehenge](#)



[Figure of the Heavenly Bodies](#)

Welcome to SC/NATS 1745.06 “History of Astronomy”. This course follows the evolution of discoveries and theories about Astronomy from pre-historic times up to the present. We begin by looking at sites like Stonehenge and Newgrange, where we find evidence that the motions of the Sun and stars were understood in prehistoric times. We then look at the astronomical knowledge amassed by ancient civilizations such as the Mayans, Babylonians and Egyptians, followed by the Greek explanations for the cosmos and the beginnings of astronomy as a science. The first half of the course concludes with the early history of modern astronomy and covers figures like Copernicus, Brahe, Kepler, Galileo and Newton. The 2nd half of the course covers discoveries about our Solar System, stars, galaxies and the Universe from the 19th century up to the present day. This includes how astronomers decode light with the science of spectroscopy, the discovery of hundreds of new ‘exoplanets’ beyond our Solar System, theories and observations of black holes, dark matter and dark energy, and recent discoveries about the structure and evolution of our Universe.

Please note that there are **MULTIPLE SECTIONS** for this course. You are in Section A. Although topics covered are similar, each section will have different assignments and exams.

Contact Information:

Professor: Dr. Robin Kingsburgh

Office: 217B Bethune

Email: robin@yorku.ca (Please include ‘NATS 1745’ in the subject line, and use your full name including student number, in all correspondence.)

Office hours: Fri 10:30-11:15a.m. and by appointment

Webpage: course content managed on *moodle*: [Check moodle course page regularly](#)

Dates: Sept. 9, 2016 – Mar 31, 2017

Lecture Hours & Location: Friday 11:30-2:30pm, SLH D

Course Evaluation:

3 Assignments	20%	Assignment 1: Moon Observation Assignment DUE NOV 25
	10%	Assignment 2: Astronomical Images Assignment DUE FEB 10
	15%	Assignment 3: Exoplanet Assignment DUE MAR 17
Section Exams	15%	Section 1: NOV 4 (TBC)
	20%	Section 2: JAN 27 (TBC)
	20%	Section 3: MAR 31 (TBC- DO NOT BOOK TRAVEL UNTIL CONFIRMED)

Course Information:

- All assignments will be posted on *moodle*.
- Exams are mixed format (short answer/several sentences, multiple choice, true/false).
- Pdfs containing Figures will be posted on *moodle*, but generally notes will not be posted.
- Readings, worksheets, web references and lecture review questions will be posted regularly on moodle
- →check *moodle* regularly for updates

Reference Books: on reserve at Steacie Science Library (2-hr loan)

The Power of Stars, Penprase, B.E., 2011, Springer, New York.

Available as e-book from library: <https://www.library.yorku.ca/find/Record/2586265>

The History of Astronomy, Couper and Henbest, 2007, Cassel Illustrated, China. (out of print)

The Cambridge Concise History of Astronomy, Hoskin (ed.), 1999, Cambridge University Press, UK.

Conceptions of Cosmos, Kragh, 2007, Oxford University Press, UK.

Encyclopedia of the History of Astronomy & Astrophysics, Leverington, 2013, Cambridge University Press, USA.

Course Policies:

1. Please be respectful of your fellow classmates and instructor, and **do not talk or otherwise disturb the lecture**. Students who talk or otherwise disturb the lecture will be asked to leave.
2. **ANY PLAGARIZING OF TEXT (FROM BOOKS, ARTICLES OR WEB SITES) OR COPYING OF ANOTHER STUDENT'S WORK AND PRESENTING IT AS YOUR OWN WILL NOT BE TOLERATED. THE WORK WILL BE SEVERELY PENALIZED, DEPENDING ON THE NATURE AND EXTENT OF COPYING (INCLUDING A REDUCTION OF MARK OR MARK OF 0, AND/OR MEETING WITH HIGHER AUTHORITIES WITHIN YORK UNIVERSITY FOR JUDGEMENT OF CASE).**
Please make sure you are aware of the York University academic honesty policy:
<http://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/>
3. Turn off cell phones, etc. during class.
4. Laptops may be used for note-taking only during class. Emailing, texting, face-booking, watching movies etc. are not permitted. Students caught using laptop or other media inappropriately will have their electronics confiscated for the class and/or be asked to leave.
5. Any paper handed in for re-marking will be happily re-marked; however, there is a possibility for the mark to be revised upwards or downwards, so re-submit at your own risk!

Exam Policies:

1. Missed exams: If due to illness or unforeseen emergency, a student must miss a scheduled exam, the Professor (robin@yorku.ca) must be notified by the day the exam is to be written in order to arrange a make-up. If sufficient notice is not given, the student will receive a mark of 0 for the test. If exam is missed due to illness, please use the following form
http://www.registrar.yorku.ca/pdf/attend_physician_statement.pdf
2. All students must show valid student card during exams.
3. Dictionaries, cell phones and other electronic items are not allowed in exam. (Cell phones must be turned off and stored in students' bags during exams.)

Assignment Policies:

1. All assignments are due at the beginning of class in hardcopy format on their due dates.
2. All work must be handed in with assignment title, full name and student number clearly indicated on the front page.
3. All work must be stapled/fastened. Unstapled work will not be accepted. Please do not use individual plastic folders/protectors for every page of the assignment.
4. Late assignments are not accepted for marking.

Citing references: Please use the APA Style described in

<http://library.osu.edu/sites/guides/apagd.php> Failure to cite references at all will result in a mark of 0.

Incorrect/incomplete citations (including web references) will be penalized. Use correct format for in-text citations. List all references in proper format at the end of each assignment.

Other General Information

DISABILITY SERVICES: Students with physical, learning or psychiatric disabilities that may interfere with the successful completion of the course requirements are encouraged to discuss their concerns with a counsellor at York's Counselling and Disabilities Services (CDS; <http://www.yorku.ca/cds/>). Any special accommodations that have been granted to a student by CDS should be brought to the attention of the Course Director as soon as possible so that appropriate arrangements can be made.

COUNSELLING SERVICES: Many students face a variety of personal challenges throughout the year which may have a negative effect on their academic performance. In such cases, students can make use of York's Personal Counseling Services (www.yorku.ca/cds/pcs/). A Personal Counselor can help manage a student's coursework under difficult circumstances.

SESSIONAL DATES: The undergraduate calendar can be found at www.registrar.yorku.ca/enrol/dates/. This site includes the term start and end dates, holidays, exam periods, and add/drop deadlines. Please make sure you make all travel arrangements outside of term and exam dates.