

PHYSICS Complementary Astronomy

203-BWT-03 Winter 2020

Teachers Rim Dib 7B.19, local 4153, rdi b@dawsoncol l ege. qc. ca

Pre-requisites None
Co-requisites None

Ponderation 3-0-3 (3 hours of lecture and 3 hours of work outside class per week)

Course objectives

The objective of this course is to enable students to understand the general nature of current issues in science and technology and to explain some of these issues. To this end, students should learn how to characterize typical scienti c thought processes and methods, illustrate how science and technology are complementary, explain the context and stages involved in some scienti c and technological discoveries, and to deduce various consequences and questions arising from certain recent scienti c and technological developments.

Course competencies

This course will allow the student to partially achieve the competency:

000X: Explain the general nature of science and technology and some of the major contemporary scientic or technological issues.

- 1. Describe scienti c thinking and the standard scienti c method.
- 2. Demonstrate how science and technology are complementary.
- 3. Explain the context and the stages related to several scienti c and technological discoveries.
- 4. Deduce di erent consequences and questions resulting from certain recent scienti c and technological developments.

At the conclusion of the course, each student will be able to produce a 750-word paper giving a written commentary presenting a scienti c discovery or technological breakthrough.

Evaluation

The Institutional Student Evaluation Policy (ISEP) is designed to promote equitable and e ective evaluation of student learning and is therefore a crucial policy to read and understand. The policy describes the rights and obligations of students, faculty, departments, programs, and the College administration with regard to evaluation in all your courses, including grade reviews and resolution of academic grievance. ISEP is available on the Dawson website.

Quizzes60%Course work and homeworky25%Term project15%

Important Notes:

If the student receives a grade less than 60% in the term project, the maximum course grade they will be granted is 55%.

At the end of every episode (approx. 2 weeks) there will be a quiz on the material in that episode. Dates for the quizzes will be announced at least one class in advance.

On a regular basis, students will be asked to complete small in-class or homework assignments and activities.

The due dates for the term project (including elements that may be required before the nal project is due) will be specified by your teacher in the first full week of classes.

Course work not submitted by the due date may be penalized at the teacher's discretion.

In order to pass the course an average grade of 60% is required, calculated according to the evaluation scheme above.

Your teacher will provide a detailed breakdown of these components during the rst week of class.

Course content

This course is modular, divided into episodes that can last 1-4 weeks depending on topic complexity and class interest. There will be a quiz at the end of each episode. The following topics can be covered in class:

Intro: The scale of things. The Universe is HUGE. What does it mean to think like a scientist?