SCIENCE 238: INTRODUCTORY ASTRONOMY
(Tues. Thurs. 2:30 - 3:50 in Physics 145)

Instructor: Mike Fich
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Office: 255 Physics (ext 32725)
Office Hours: Wed. 2:00 - 3:30pm (or by appointment at other times – not on Mondays)
Textbook: Cosmic Perspective (Sixth Edition) by J. Bennett, etal

Grading: Assignments = 30%, Midterm = 30%, Final Exam = 40%
OR: Assignments = 15%, Midterm = 15%, Final Exam = 70%
(whichever gives the better grade)

MIDTERM EXAM: 17 February in class

Course Outline (# lectures is approximate)

1) naked-eye astronomy, constellations, motions of the earth and the moon, the historical development of astronomy - the Greeks through to Newton (3 lectures)
2) gravity, nuclear physics, time, physics of light, telescopes (2 lectures)
3) the Solar System (5 lectures)
4) stars - the Sun, observational properties, clusters of stars, the structure of a star, stellar evolution, end-points of stars (e.g. supernovae, black holes) (5 lectures)
5) our Galaxy, the Milky Way - structure of the Galaxy, the interstellar medium, star formation (2 lectures)
6) extragalactic astronomy - galaxies, quasars, etc. (2 lectures)
7) cosmology - theories of the Universe (e.g. big bang) (3 lectures)
8) extraterrestrial life (1 lecture)

There will be a few films shown in this course. Material presented in films is part of the course and there WILL be questions asked in the midterm and final exams on this material. As well, there will be some assignments to be done while watching the films (and handed in at the end of that lecture).

Note on avoidance of academic offences:
Academic Integrity: In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility.
Grievance: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy #70, Student Petitions and Grievances, Section 4.
Discipline: A student is expected to know what constitutes academic integrity, to avoid committing academic offenses, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offense, or who needs help in learning how to avoid offenses (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. For information on categories of offenses and types of penalties, students should refer to Policy #71, Student Discipline.
Appeals: Concerning a decision made under Policy #70 (Student Petitions and Grievances) (other than petitions) or Policy #71 (Student Discipline) a student may appeal the finding, the penalty, or both. A student who believes he/she has a ground for an appeal should refer to Policy #72 (Student Appeals)

Revised: 22 December, 2010