

PHYSICS 3A03 – Relativity – Winter TERM 2014 – COURSE OUTLINE

Instructor: Alan Chen, ABB-260A, x 27096, chenal@mcmaster.ca

When and Where: M, Th: 9:30 – 10:20, MDCL 1010

T: 10:30 – 11:20, MDCL 1010

Required Text: Gravity – An Introduction to Einstein’s General Relativity, by James B. Hartle

Website: <http://www.physics.mcmaster.ca/~chenal/3A03/>

Content: background and foundations (including Special Relativity), ch. 1-9; black holes and gravitational waves, ch. 12-16; Einstein field equations, ch. 20-21; cosmology, if time permits.

Marking Scheme: Assignments 35%

Midterm Exam: 25% (tentative date: February 10, 2015 – during class time)

Final Exam: 40%

Assignment Deadlines: Problem sets will be due by 4:30pm on the deadline date; please drop off the problem sets in the Physics Main Office (ABB-241). Assignments turned in one day late will be marked at 75% of the weight; those turned in two days late will be marked at 50%. Problem sets that are late by more than two days will not be accepted unless an MSAF is submitted.

Academic Ethics and Collaboration:

Academic dishonesty consists of misrepresentation by deception or by other fraudulent means and can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various kinds of academic dishonesty please refer to the Academic Integrity Policy, specifically Appendix 3, located here:

<http://www.mcmaster.ca/academicintegrity/>

The following illustrates only three forms of academic dishonesty:

1. Plagiarism, e.g. the submission of work that is not one's own or for which credit has been obtained.
2. Improper collaboration in group work.

3. Copying or using unauthorized aids in tests and examinations.

DISCLAIMER: The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.

MSAF Statement

McMaster Student Absence Form (MSAF):

This is an on-line, self-reporting tool for students to report absences due to minor medical situations that last up to 5 days and to request accommodation for any missed academic work that is worth less than 30% of the final grade. Please note that this tool cannot be used during any final examination period. It is the prerogative of the instructor to determine the appropriate relief for missed term work. You may submit a maximum of one request per term. The form should be filled out immediately when you are about to return to class after your absence. It is your responsibility to follow up with your instructor immediately (within two working days) about the nature of the accommodation.