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.

2016 -2017

Med Phys 4F03
Fundamentals of Health Physics
http://www.science.mcmaster.ca/medphys/courses.html

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<thead>
<tr>
<th>(Term 2)</th>
<th>D. TUCKER</th>
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</thead>
<tbody>
<tr>
<td>Mon 11:30 – 12:20 HH 217</td>
<td>E-mail: <a href="mailto:tuckerdm@mcmaster.ca">tuckerdm@mcmaster.ca</a></td>
</tr>
<tr>
<td>Wed 14:30 – 16:20 ABB/166</td>
<td>Ext.: 24099</td>
</tr>
<tr>
<td>Fri 15:30 – 16:20 ABB/166</td>
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Objective:

Introduces students to the fundamentals of occupational and environmental health physics encountered in the nuclear power, medical and research fields. Concepts include principles and regulatory framework for radiation safety; key dosimetric quantities, units and models; doses from internal and external exposures to ionizing radiation; elements of a radiation safety program; and environmental exposure pathways.

The course will examine the basis for the current estimates of risk associated with exposure to ionizing radiation and the application of systems of radiation protection in occupational, medical and public radiation exposure situations. Recent and current events and developments such as the response to the Fukushima accident and new guidelines for radon exposure will be examined.

Text:

Class notes will be provided. Students will be required to obtain pdf copies of publications available at no cost from the ICRP, IAEA, UNSCEAR and BEIR.

Evaluation:

- Quizzes: 20%
- Assignments: 25%
- Final Exam: 55%

Academic Dishonesty:

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 at: http://www.mcmaster.ca/senate/academic/ac_integrity.htm

The following illustrates only two forms of academic dishonesty:

1. Plagiarism, e.g. the submission of work that is not one’s own or for which other credit has been obtained.
2. Improper collaboration in group work. Copying or using unauthorized aids in tests and
examinations.