### Existing Graduate Course Modification Form

**University of Toledo**

**Existing Graduate Course Modification Form**

<table>
<thead>
<tr>
<th>Present</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contact Person</strong></td>
<td>E. Ishmael Parsai</td>
</tr>
<tr>
<td><strong>Email</strong></td>
<td><a href="mailto:e.parsai@utoledo.edu">e.parsai@utoledo.edu</a></td>
</tr>
<tr>
<td><strong>Dept/Academic Unit</strong></td>
<td><strong>Medicine</strong></td>
</tr>
<tr>
<td><strong>Course Alpha/Numeric</strong></td>
<td><strong>Radiation Oncology</strong></td>
</tr>
<tr>
<td><strong>Course title</strong></td>
<td><strong>MPHY 6010</strong></td>
</tr>
<tr>
<td><strong>Credit hours:</strong></td>
<td>Fixed 3</td>
</tr>
<tr>
<td><strong>Prerequisites(s)</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>Co-requisites(s)</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>Catalog Description (only if changed) 75 words max:</strong></td>
<td>This course considers the physical principles and instrumentation of radiation physics and diagnostic imaging including basic atomic and nuclear properties, production of x-rays, interaction or radiation with matter, radiographic and fluoroscopic imaging systems, and the principles of x-ray computed tomography</td>
</tr>
</tbody>
</table>

**Date Added:** 4-28-14 4-29-14 5-8-14

**Graduate Council Approved:**

**To Provost:**
Has course content changed? [Yes]
If yes, give a brief topical outline of the revised course below (less than 1500 words)

This course had a vague name of radiation physics I where it was not clear that it is a diagnostic survey course. Moreover we are restructuring our course curriculum to be more in line with CAMPEP and ABR requirements for national accreditation and to better prepare our students for board certification.

Proposed Effective Term 2014 40 (Fall) List any course(s) to be deleted

Date

Date

Attach new syllabus reflecting course modifications.
Attach additional documents if necessary.

Course Approval
Department Curriculum Authority
Department Chairperson
College Curriculum Authority or Chair [Kandace Williams, Kandace Williams]
College Dean
Graduate Council
Dean of Graduate Studies
Office of the Provost

Date 4-1-2014
Date 4-1-2014
Date 4-2-2014
Date 4-3-2014
Date 4-29-2014
Date 4-29-2014

For Administrative Use Only
Effective Date
CIP Code
Subsidy Taxonomy
Program Code
Instruction Level
APPENDIX A: FUNDAMENTAL PRINCIPLES OF PHYSICS

1. INTRODUCTION TO MEDICAL IMAGING
2. RADIATION AND THE ATOM
3. INTERACTION OF RADIATION WITH MATTER
4. X-RAY PRODUCTION, X-RAY TUBES, AND GENERATORS
5. SCREEN-FILM RADIOGRAPHY
6. FILM PROCESSING
7. MAMMOGRAPHY
8. FLUOROSCOPY
9. IMAGE QUALITY
10. COMPUTERS IN MEDICAL IMAGING
11. DIGITAL RADIOGRAPHY
12. ADJUNCTS TO RADIOGRAPHIC IMAGING
13. X-RAY COMPUTED TOMOGRAPHY