Course Change Request

Indiana University

IUPUI Campus

Check Appropriate Boxes: Undergraduate credit [✓] Graduate credit [ ] Professional credit [ ]

1. School/Division: Radiologic Sciences/School of Medicine

2. Academic Subject Code: RADI

3. Current Course Number: RADI-R410

4. Current Credit Hours: 1

5. Current Title: Projects in Nuclear Medicine Technology

6. Effective Semester/Year for changes listed below: Fall 2010

7. Instructor: Michael Miller

Type of Change Requested (Check appropriate boxes and indicate changes)

☐ 8. Change course number to: ____________________________ (must be cleared with University Enrollment Services)

☐ 9. Current course title: Projects in Nuclear Medicine Technology

Change to: Projects in Nuclear Medicine Technology

Recommended abbreviation (optional): Projects in NMT

(Limited to 32 Characters including spaces)

☐ 10. Current credit hours fixed at: __________ or variable from: _______ to _______

Change to credit hours fixed at: __________ or variable from: _______ to _______

☐ 11. Current lecture contact hours fixed at: __________ or variable from: _______ to _______

Change to lecture contact hours fixed at: __________ or variable from: _______ to _______

☐ 12. Current non-lecture contact hours fixed at: __________ or variable from: _______ to _______

Change to non-lecture contact hours fixed at: __________ or variable from: _______ to _______

☐ 13. Is this course currently graded with S-F (only) grades? Yes ______ No [✓]

Change to S-F (only) grading? Yes ______ No

☐ 14. Does this course presently have variable title approval? Yes ______ No ______

Is variable title approval being requested? Yes ______ No [✓]

☐ 15. Is this course being discontinued? For all campuses ________ or for this campus only ________

☐ 16. Current course description: Independent readings and research on a selected topic in nuclear medicine technology. A paper in publishable form must be written as part of the project.

Change course description to (not to exceed 50 words): Basic knowledge required to become a critical consumer of medical literature, data handling and interpretation, plus application of basic medical research statistics.

17. Justification for change: Need a title to reflect it as 1st course in a progression and change description to match.

(Use additional paper if necessary)

18. Are the necessary reading materials currently available in the appropriate library? Yes ______

19. A copy of every new course proposal must be submitted to departments, schools, or divisions in which there may be overlap of this course with existing courses or areas of strong concern, with instructions that they send comments directly to the originating Curriculum Committee. Please append a list of departments, schools, or divisions thus consulted.

Submitted by: __________________________ Date: ________

Department Chairman/Division Director

Dean of Graduate School (when required)

Approved by: __________________________ Date: ________

Dean

Chancellor/Vice-President

University Enrollment Services

After School/Division approval, forward the last copy (without attachments) to University Enrollment Services for initial processing, and the remaining four copies and attachments to the Campus Chancellor or Vice-President.

UPS 725
RADI R410 - PROJECTS IN NUCLEAR MEDICINE TECHNOLOGY

COURSE INFORMATION:

Semester: Fall, 2010  
Class Hours: Monday, 2:30-3:20  
Class Room: CI 126

INSTRUCTOR INFORMATION:

Michael Miller  
Department of Radiology and Imaging Sciences  
Office: R2 E165  
Campus Phone: 317-278-0141  
Email address: mmiller3@iupui.edu  
Office Hours: Wed 10-11 AM and by appointment – I am typically available late in the day (4:30-6:00) and will be logged into the Oncourse chat room during office hours.

COURSE SUMMARY AND OBJECTIVES

The School of Medicine Bulletin describes RADI R410 as:

"Independent readings and research on a selected topic in nuclear medicine technology. A paper in publishable form must be written as part of the project."

The fall semester component of this course is intended to introduce you to science-based medical research methods as preparation for the project that you will carry out over the following spring and summer. The course presents the basic knowledge required for you to be a critical consumer of nuclear medicine literature (as well as general radiology and medicine literature) and to be a well-informed contributor to research studies. It will help prepare you to carry out the project part of this course next spring and summer and will begin to develop your ability to function as an active member of the health care team, broaden your knowledge through study in liberal arts and sciences and foster independent thinking that will serve you well as you continue your lifelong learning.

We will cover numerous topics including the structure and content of the scientific research article, critical reading of research articles, design and performance of experiments, data handling and interpretation, and basic medical statistics.

TEXTBOOK AND ADDITIONAL MATERIALS


The first edition of this book is available through the medical library’s online book collection at http://library.medicine.iu.edu/. The third edition is available in the Campus Center bookstore.

There will be additional required readings assigned for this class. Some will be provided in class or through Oncourse. Others will require that you to obtain them on your own in the library.
We will do statistical calculations in this class. The department has installed the statistical software package Minitab in the computer lab in the Clinical Building.

We will use the Oncourse site (oncourse.iu.edu) for distributing documents and data sets.

**Assignments and Grading**

Homework and readings will be assigned on a regular (weekly) basis. Readings and homework will require approximately 2-4 hours per week. Homework grades will account for 50% of the final grade.

Two take home quizzes will be given during the semester and will make up the other 50% of the final grade.

Assignments must be turned in on time, either electronically or in hardcopy. Hardcopy must be printed or written in ink and stapled together.

**Grading Scale:**

- 90-100% = A
- 80-89% = B
- 70-79% = C
- <70% = F

**Schedule**

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<th>Week</th>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>23-Aug</td>
<td>First day of class – introduction, science-based medicine</td>
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<tr>
<td>2</td>
<td>30-Aug</td>
<td>Observation and Measurement</td>
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<td>3</td>
<td>8-Sep</td>
<td>No Class – Labor Day</td>
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<tr>
<td>4</td>
<td>13-Sep</td>
<td>Data display, description and reporting – numbers</td>
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<tr>
<td>5</td>
<td>20-Sep</td>
<td>Data display, description and reporting – categories</td>
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<td>6</td>
<td>27-Sep</td>
<td>Distributions and sampling</td>
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<td>7</td>
<td>4-Oct</td>
<td>Confidence – how do we know how far we can trust our measurements?</td>
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<td>8</td>
<td>11-Oct</td>
<td>No Class – Fall break</td>
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<tr>
<td>9</td>
<td>18-Oct</td>
<td>Study Design – planning for successful research</td>
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<tr>
<td>10</td>
<td>25-Oct</td>
<td>Hypothesis testing – what does the data tell us?</td>
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<td>11</td>
<td>1-Nov</td>
<td>Hypothesis testing – comparing groups</td>
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<td>12</td>
<td>8-Nov</td>
<td>Hypothesis testing – categories and proportions</td>
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<td>13</td>
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<td>Hypothesis testing – comparing among categories</td>
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<td>14</td>
<td>22-Nov</td>
<td>Sample Size – how much data do we need?</td>
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<td>29-Nov</td>
<td>Diagnostic Tools – how do we know if they work?</td>
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<td>16</td>
<td>6-Dec</td>
<td>Review and case studies</td>
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<td>17</td>
<td>13-Dec</td>
<td>Review and case studies</td>
</tr>
<tr>
<td>18</td>
<td>20-Dec</td>
<td>Review and case studies</td>
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**Disclaimer**

The above schedule and procedures are subject to change in the event of extenuating circumstances.