New Course Request

1. School/Division: School of Medicine
2. Academic Subject Code: RAON
3. Course Number: D 603 (must be cleared with University Enrollment Services)
5. Course Title: Clinical Oncology and Dosimetric Considerations
   Recommended Abbreviation (Optional): ClinOnc Dosimetric Considerations

6. First time this course is to be offered (Semester/Year): Fall Semester 2010
7. Credit Hours: Fixed at _______ or Variable from _______ to _______
8. Is this course to be graded S-F (only)? Yes ___ No X
9. Is variable title approval being requested? Yes ___ No X

10. Course description (not to exceed 50 words for Bulletin publication): The class will be comprised of a series of lectures given by invited oncology lecturers who specialize in various anatomical sites. Medical and dosimetric issues for anatomical sites will be discussed. A class coordinator will oversee the schedule and prepare competency requirements for each of the lectures.

11. Lecture Contact Hours: Fixed at _______ or Variable from _______ to _______
12. Non-Lecture Contact Hours: Fixed at _______ or Variable from _______ to _______
13. Estimated enrollment: _______ of which _______ percent are expected to be graduate students.
14. Frequency of scheduling: once/year Will this course be required for majors? Yes, for certificate program
15. Justification for new course: new certificate program developed in medical dosimetry
16. Are the necessary reading materials currently available in the appropriate library? Yes
17. Please append a complete outline of the proposed course, and indicate instructor (if known), textbooks, and other materials.
18. If this course overlaps with existing courses, please explain with which courses it overlaps and whether this overlap is necessary, desirable, or unimportant.
19. A copy of every new course proposal must be submitted to departments, schools, or divisions in which there may be overlap of the new 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 9/16/2019

Department Chairman/Division Director

Date

Dean of Graduate School (when required)

Approved by:

Dean

Date 7/24/09

Chancellor/Vice-President

Date

University Enrollment Services

Date

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 724
NEW COURSE REQUEST

I. Title: Clinical Oncology and Dosimetric Considerations
Course # RAON-D603
Course Director: Colleen DesRosiers, Ph.D.
Course Instructor/Coordinator: Marvene M. Ewing, B.S., CMD
Prerequisites: Acceptance into the "Graduate Certificate Program in Medical Dosimetry"

Suggested Course Abbreviation: ClinOnc Dosimetric Consideration
Fall Semester 1 credit hour 1 hour/week (15 weeks)(60 min) = 900 minutes

II. Course Description and Rationale
The class will be comprised of a series of lectures given by invited oncology lecturers who specialize in various anatomical sites. Medical and dosimetric issues for anatomic sites will be discussed. A class coordinator will oversee the schedule and prepare competency requirements for each of the lectures.

The expert medical dosimetrists should be familiar with the various sites of cancer and complications that can arise from each site. While it is the physician's responsibility to decide what kind of treatment to give and what anatomical sites need to be treated for a particular case, the dosimetrists should be able to join in that discussion and offer helpful suggestions when asked. This course will help the dosimetrists recognize standard treatments versus more complex or aggressive treatment for each site, as well as possible complications for each site of treatment.

All topics covered are part of the recommended curriculum published by the American Association of Medical Dosimetrists.

III. Educational Objectives
Upon completion of this course the student will be able to:

1. Demonstrate their knowledge of typical cancers for each anatomic area, including an overview of the anatomy, pathology, drainage sites and physiology for each site.

   Assessment: Written homework based on lecture to be reviewed and graded by a dosimetrist or physician (15% total grade).

2. Provide evidence of their knowledge of treatment techniques and ports used in the treatment of each area.

   Assessment: Written homework based on lecture to be reviewed and graded by a dosimetrist or therapist (15% total grade).

3. Show their familiarity with dosimetric considerations for simulation and positioning,
dose calculations and dose limiting factors for each site.

Assessment: Written homework based on lecture to be reviewed and graded by a dosimetrist or physicist (15% total grade).

4. Demonstrate their knowledge of age specific considerations for each site.

Assessment: Written homework based on lecture to be reviewed and graded by a dosimetrist or physician (15% total grade).

IV. Course Content – Syllabus
The course will consist of scheduled lectures by radiation oncology professionals who specialize in each treatment area.

1. Site Specific Oncology Lectures
   see AAMD Curriculum Guide version 2*
   a. Anatomy
   b. Pathology
   c. Lymphatic Drainage
   d. Physiology

2. Dosimetric Considerations for Each Site *
   a. Treatment Techniques and Beam Arrangements
   b. Treatment Simulations
   c. Dose Calculation Considerations
   d. Critical Organs and Limiting Dose Factors
   e. Positioning and Immobilization
   f. Age Specific Considerations
      Pediatric, Adult, Geriatric

* Sites from AAMD Curriculum Guide, v2 include: (1 hour/week each site)
  1. Head and Neck
  2. Central Nervous System
  3. Pituitary Gland
  4. Thorax
  5. Breast
  6. Abdomen and Pelvis
  7. Hodgkins Disease
  8. Extremities
  9. Total Body Irradiation (TBI)
 10. Total Skin Irradiation (TSI)
 11. Intraoperative Irradiation (IORT)
 12. Metastatic Disease
 13. Benign Disease

V. Required and Recommended Texts
   Required – not available at this time
   Recommended:
2. Portal Design in Radiation Therapy, 2nd edition. Dasher, Byron, MD; Vann, Anne Marie (author), et al. DWV Enterprises, 2006

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graded homework assignments (worth 60% of total grade) and final exam (worth 40% of total grade).

The Indiana University grading scale will be applied.

VI. Evaluation and Grading
Because this course will be given as a series of lectures by guest lecturers the course coordinator will provide examination materials to the students. The students' final grade will be determined by

VII. Cheating and Plagiarism:
Students are instructed to make themselves aware of University regulations concerning plagiarism, the maintenance of academic honesty and the definitions of unacceptable behavior and cheating. Academic misconduct of any sort will not be tolerated and will be dealt with as outlined in the IU/PUI Code of Student Rights, Responsibilities, and Conduct, which can be viewed at:

http://www.iupui.edu/code/

Examples of misconduct include but are not limited to:
1. Cheating
   A student must not use or attempt to use unauthorized assistance, materials, information, or study aids in any academic exercise.
2. Fabrication
   A student must not falsify or invent any information or data in an academic exercise including, but not limited to, records or reports, laboratory results, and citations to the sources of information.
3. Plagiarism
   A student must not adopt or reproduce ideas, words, or statements of another person without appropriate acknowledgment. A student must give credit to the originality of others and acknowledge an indebtedness whenever he or she does any of the following:
   a. Quotes another person's actual words, either oral or written.
   b. Paraphrases another person’s words, either oral or written.
   c. Uses another person’s idea, opinion, or theory, or
   d. Borrows facts, statistics, or other illustrative material, unless the information is common knowledge.
4. Interference
   a. A student must not steal, change, destroy, or impede another student’s work.
   b. A student must not give or offer a bribe, promise favors, or make threats with
      the intention of affecting a grade or the evaluation of academic performance.

Potential consequences for academic misconduct:

If the instructor has information that one of his/her students committed an act of
academic misconduct, the faculty member will hold an informal conference with the
student. The conference will be prompt and private. If the faculty member concludes
that the student is responsible for the misconduct, then the faculty member will impose
an appropriate academic sanction (i.e., lower or failing grade on the assignment, assessing
a lower or failing grade for the course).

VIII. Americans with Disabilities Act:
If you need any special accommodations due to a disability, please contact Adaptive
Educational Services at (317)-274-3241. The office is located in CA 001E.