New Course Request

Check Appropriate Boxes: Undergraduate credit ✓
Graduate credit □
Professional credit □

1. School/Division College of Health and Human Services 2. Academic Subject Code

3. Course Number RADX-R304 (must be cleared with University Enrollment Services) 4. Instructor

5. Course Title Cross Sectional Anatomy

Recommended Abbreviation (Optional) (Limited to 32 Characters including spaces)

6. First time this course is to be offered (Semester/Year): Spring 2012

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: An analysis of human anatomy and physiology as identified in cross sectional imaging. Relationships between adjacent anatomical structures will be analyzed in axial, coronal, and sagittal planes. Computed Tomography (CT) Magnetic REsonance (MR) and sonographic images will be incorporated in lecture and case study. Pre-requisites BIOL 203-204, RADS 101 or equivalents

11. Lecture Contact Hours: Fixed at □ or Variable from □ to □

12. Non-Lecture Contact Hours: Fixed at □ or Variable from □ to □

13. Estimated enrollment: 20 □ of which 0 percent are expected to be graduate students.

14. Frequency of scheduling: once a year □ Will this course be required for majors? Yes □

15. Justification for new course: content currently taught in clinical course. removed and expanded into content specific course

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: [Signature] Date 2/5/11

Approved by:

Dean Date

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.

University Enrollment Services Final-White; Chancellor/Vice-President-Blue; School/Division-Yellow; Department/Division-Pink, University Enrollment Services Advance-White
Course Number: RADX-R304

Course Title: Cross Sectional Anatomy

Course Description: An analysis of human anatomy and physiology as identified in cross sectional imaging. Relationships between adjacent anatomical structures will be reviewed in the axial, coronal and sagittal planes. Computed tomography (CT), Magnetic Resonance (MR) and sonographic images will be incorporated in lecture and case study.

Pre-requisites: BIOL 203 and 204, RADS 101 or equivalent

Credit Hours: 3

Instructor: Amanda Brown

Text: Madden, Michael: Introduction to Sectional Anatomy 2nd Ed. Lippincott Publishing

Course Goals and Objectives: By the end of the course, the student will be able to:

1. Categorize sectional images as sagittal, coronal or axial
2. Identify the anatomical structures located within the head and neck.
3. Describe the relationship of each head and neck anatomical structure to surrounding structures.
4. Describe the function of each anatomical structure in the head and neck.
5. Locate each anatomical structure on CT, MR and ultrasound images in the transverse axial, coronal, sagittal and orthogonal (oblique) cross-sectional imaging planes.
6. Identify the anatomical structures located within the thorax.
7. Describe the relationship of each thoracic structure to surrounding structures.
8. Describe the function of each anatomical structure located within the thorax.
9. Locate each anatomical structure of the thorax on CT, MR and ultrasound images in the transverse axial, coronal, sagittal and oblique imaging planes.
10. Describe the function of each anatomical structure located within the abdomen and pelvis.
11. Describe the relationship of each anatomical structure in the abdomen and pelvis to surrounding structures.
12. Locate each anatomical structure of the abdomen and pelvis on CT, MR, PET and ultrasound images in the axial, coronal, sagittal and oblique planes.
13. Describe the function of each anatomical structure located in the upper and lower extremities.
14. Locate each anatomical structure in the upper and lower extremities on CT and MR images in the transverse axial, coronal, sagittal and oblique planes.
Course Outline:

Intro to cross sectional and case study
   Transverse axial
   Coronal
   Sagittal
   Oblique

Anatomy of the Thorax
   Anatomy and Physiology of thoracic cavity
   Cross sectional relationships of anatomical structure of the thorax
   Analysis of thoracic anatomy on CT, MR and Sonographic images

Anatomy of the Abdomen
   Anatomy and physiology of abdomen
   Cross Sectional relationships of anatomical structures of the abdomen
   Analysis of abdominal anatomy on CT, MR, and Sonographic images

Anatomy of the Male and Female Pelvis
   Anatomy and physiology of the male and female pelvis
   Cross sectional relationships of anatomical structures of the pelvis
   Analysis of pelvic anatomy on CT, MR and Sonographic images

Anatomy of the Head and Neck
   Anatomy and physiology of the head and neck
   Cross sectional relationships of anatomical structures of the head and neck
   Analysis of head and neck anatomy on CT, MR and Sonographic images

Anatomy of the Spine
   Anatomy and Physiology of the spine
   Cross sectional Relationships of anatomical structure of the spine
   Analysis of the spinal anatomy on CT, MR and Sonographic images

Anatomy of the Extremities with special emphasis on the joints
   Anatomy and Physiology of the extremities
   Cross sectional Relationships of anatomical structure of the extremities with emphasis on the joints
   Analysis of thoracic anatomy on CT, MR and Sonographic images