New Course Request

Indiana University
Indianapolis Campus

Check Appropriate Boxes:  Undergraduate credit ☑  Graduate credit ☐  Professional credit ☐

1. School/Division: Radiologic Sciences/School of Medicine
2. Academic Subject Code: RADI

3. Course Number: RADI-R416 (must be cleared with University Enrollment Services)
4. Instructor: Linda Cox

5. Course Title: Essential Radiology for the Imaging Technologist II
   Recommended Abbreviation (Optional): ________________________________
   (Limited to 32 Characters including spaces)

6. First time this course is to be offered (Semester/Year): Spring 2011

7. Credit Hours: Fixed at _______1______ or Variable from ___________ to ___________

8. Is this course to be graded S-F (only)? Yes ☐ No ☑

9. Is variable title approval being requested? Yes ☐ No ☑

10. Course description (not to exceed 50 words) for Bulletin publication: Through independent reading and case review students will gain an understanding of current medical imaging practices based on the latest research.

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

12. Non-Lecture Contact Hours: Fixed at _______1______ or Variable from ___________ to ___________

13. Estimated enrollment: _______22______ of which _______0______ percent are expected to be graduate students.

14. Frequency of scheduling: Once per year  Will this course be required for majors? Yes ☑

15. Justification for new course: The course is currently S/F and shares course number with other types of seminar courses. The new course will be graded.

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: 11/9/09

Department Chairman/Division Director

Dean of Graduate School (when required)

Approved by:  

[Signature]  Date: 12/10/09

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.

University Enrollment Services Final—White; Chancellor/Vice-President—Blue; School/Division—Yellow; Department/Division—Pink; University Enrollment Services Advance—White

UPS 724
Indiana University
Department of Radiology/Radiologic Sciences Programs
School of Medicine
R416 Essential Radiology for the Imaging Technologist II

Instructor: Linda A. Cox M.S., R.T. (R) (MR) (CT)

Phone Numbers: Work 274-5188
                Home 484-0592 (no calls after 9:00 p.m. please)
                Pager 541-7865
                Email: lcoxl@iupui.edu

Class Length: Arranged
Credit Hours: Spring-1 credit


The purpose of this course is to give students an understanding of how decisions are made regarding the selection of the appropriate medical imaging modality and exam performed in relation to various diseases and injuries. The course utilizes peer-reviewed journals as a source of current state of the art criteria for medical imaging exam selection. The course is self-study and self-paced during the semester.

Course Objectives:
By completion of this course, the student will:

- Acquire a broader understanding of the entire field of radiology.
- Explain some of the different disease states that are dealt with in the field of radiology.
- Explain which radiologic procedures are used in the diagnosis and treatment of many types of disease states.
- Acquire a general knowledge of how physicians use patient data and read images for use in patient case management.
- Understand what represents quality patient data and images for physician use in the overall management of patient cases.

Course Requirements:

1. Read and review ten (10) articles related to the field of Medical Imaging. Two of your articles must be from your major. The other eight must cover other imaging modalities. Articles
comparing your major and other modalities will count for your ‘other’ choices. Articles cannot be related to your R408 topic. Articles must be peer-reviewed and no older than 2009. The complete article, including all the reference pages must be turned in with each written review. Follow sample format (located at the end of the syllabus) for reviewing articles.

2. Review teaching files. Teaching files can be film or computer based. Five cases must be reviewed. When reviewing the teaching files you must use an additional resource to explain the findings of the case or give other pertinent information about the pathology. The Essential Radiology text can be your primary resource for most of your cases. If a case is not discussed in the Essential Radiology text, you must find another source of information. Other texts that might be helpful can be found in the RSP library or the library areas of each radiology department. If using a website for your resource, it can only be from a University, professional medical societies, national non-profit organizations (e.g. Komen Race for the Cure), etc. eMedicine is also an acceptable site. Places where you can look for information can be accessed through the library links [http://www.library.medicine.iu.edu/body.cfm?id=61](http://www.library.medicine.iu.edu/body.cfm?id=61). Cases cannot be related to your R408 topic. Document the cases by following the sample format at the end of the syllabus. This document should be typed and submitted through Oncourse.

**Teaching Files:**
Teaching files can be found in a number of different ways
- Film teaching files are available in the RSP area.
- [http://radtf.indyrad.iupui.edu](http://radtf.indyrad.iupui.edu) Select ‘Consolidated Teaching File Query Service’ Log in with Username: iums  Password: iumsradtf (this will get you to several teaching files, you must give a history of some kind abdominal pain, H/A, hemorrhage, etc)
- [http://info.med.yale.edu/intmed/cardio/image/contents.html](http://info.med.yale.edu/intmed/cardio/image/contents.html) Yale teaching file
- [http://brighamrad.harvard.edu/education/online/tcd/tcd.html](http://brighamrad.harvard.edu/education/online/tcd/tcd.html) Harvard teaching file
- [http://www.mypacs.net/repos/mypv3_repo/static/m/Home](http://www.mypacs.net/repos/mypv3_repo/static/m/Home) My PACS. Have interesting cases of the week
- [www.trauma.org](http://www.trauma.org) You need to register but it is free. It has great images of trauma both radiographic and photographic. Has some really good US images from the ER setting.
Grades:

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<th>Grade</th>
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<tr>
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A Grade below 80% will result in course failure.
Sample Article Review

Name
Article Title
Journal Name

1) Bibliography

2) Purpose of the Article
The purpose of this article was to show how sarcoidosis often is misdiagnosed and is diagnosed by exclusion.

3) Brief Description of Procedure and Findings/Results
This article describes a case report of a patient complaining of lower left quadrant pain, no other symptoms and a history of abdominal disorders. Abdominal CT scan revealed a suspicious density within the spleen. A biopsy was done and non-necrotizing granulomas were discovered. Sarcoidosis was diagnosed after excluding other known causes of granulomatous disease.

4) Conclusions or Comments
Sarcoidosis is an idiopathic disease that can affect any organ system. It is because of this that sarcoidosis can be misdiagnosed. The symptoms can be treated with cortico-steroids, and approximately 70% of patients have spontaneous remission.

5) Opinion of the Article
I thought this article was very easy to understand. It gave me a better understanding of how sarcoidosis is diagnosed, what is affected and how it is treated.
Sample Teaching File Review

Case 1

Name of teaching file
Aunt Minnie—Case of the day 1/8/08

HTTP of the teaching file
http://education.auntminnie.com/qmachine.asp?UID=2080M9ZV&userid=iudirt08

Patient History (if given)
Woman with headaches and blurred vision

Type of Image
Head CT

Reported Diagnosis and/or case findings
Epidural Hematoma

Explanation of case findings/pertinent facts
Ninety percent of epidural hematomas result from temporal bone fractures with tearing of the middle meningeal artery or veins. These bleeds typically take a biconvex or lens shape resulting in a fluid collection that bulges into the brain.

Resource used