Code # Enter text…

**New Course Proposal Form**

**[x] Undergraduate Curriculum Council**

**[ ] Graduate Council**

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| **[x] New Course or [ ]Experimental Course (1-time offering) (Check one box)** |

Signed paper copies of proposals submitted for consideration are no longer required. Please type approver name and enter date of approval.

Email completed proposals to [curriculum@astate.edu](mailto:curriculum@astate.edu) for inclusion in curriculum committee agenda.

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| --- | --- |
| Deanna Barymon 10/20/2016 **Department Curriculum Committee Chair** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **COPE Chair (if applicable)** |
| Ray Winters 10/20/2016 **Department Chair:** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **General Education Committee Chair (If applicable)** |
| Deanna Barymon 10/20/2016 **College Curriculum Committee Chair** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **Undergraduate Curriculum Council Chair** |
| Susan Hanrahan, PhD 10/25/2016 **College Dean** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **Graduate Curriculum Committee Chair** |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **Vice Chancellor for Academic Affairs** |

1. Contact Person (Name, Email Address, Phone Number)

Cheryl DuBose, Ed.D., RT(R)(MR)(CT)(QM)

CT/MRI Program Director

[cdubose@astate.edu](mailto:cdubose@astate.edu)

ext. 2772

2. Proposed Starting Term and Bulletin Year

Fall 2017

3. Proposed Course Prefix and Number (Confirm that number chosen has not been used before. For variable credit courses, indicate variable range. *Proposed number for experimental course is 9*. )

RS 4601

4. Course Title – if title is more than 30 characters (including spaces), provide short title to be used on transcripts. Title cannot have any symbols (e.g. slash, colon, semi-colon, apostrophe, dash, and parenthesis). Please indicate if this course will have variable titles (e.g. independent study, thesis, special topics).

Overview of Computed Tomography

Short Title: Overview of CT

5. Brief course description (40 words or fewer) as it should appear in the bulletin.

Four content areas required by the ARRT for post-primary CT certification.

6. Prerequisites and major restrictions. (Indicate all prerequisites. If this course is restricted to a specific major, which major. If a student does not have the prerequisites or does not have the appropriate major, the student will not be allowed to register).

1. Are there any prerequisites? Yes
   1. If yes, which ones?

Instructor approval

* 1. Why or why not?

Enter text...

1. Is this course restricted to a specific major? Yes
   1. If yes, which major? Admission to the Radiologic Science Program

7. Course frequency(e.g. Fall, Spring, Summer). *Not applicable to Graduate courses.*

Fall, Spring, Summer

8. Will this course be lecture only, lab only, lecture and lab, activity, dissertation, experiential learning, independent study, internship, performance, practicum, recitation, seminar, special problems, special topics, studio, student exchange, occupational learning credit, or course for fee purpose only (e.g. an exam)? Please choose one.

Lecture

9. What is the grade type (i.e. standard letter, credit/no credit, pass/fail, no grade, developmental, or other [please elaborate])

Standard letter

10. Is this course dual listed (undergraduate/graduate)?

No

11. Is this course cross listed? (If it is, all course entries must be identical including course descriptions. It is important to check the course description of an existing course when adding a new cross listed course.)

No

1. If yes, please list the prefix and course number of cross listed course.

Enter text...

1. Are these courses offered for equivalent credit? Yes / No

Please explain. Enter text...

12. Is this course in support of a new program? No

a. If yes, what program?

Enter text...

13. Does this course replace a course being deleted? No

a. If yes, what course?

Enter text...

14. Will this course be equivalent to a deleted course? No

a. If yes, which course?

Enter text...

15. Has it been confirmed that this course number is available for use? Yes

*If no: Contact Registrar’s Office for assistance.*

16. Does this course affect another program? No

If yes, provide contact information from the Dean, Department Head, and/or Program Director whose area this affects.

Enter text...

**Course Details**

17. Outline (The course outline should be topical by weeks and should be sufficient in detail to allow for judgment of the content of the course.)

Week 1: Patient Interaction and Management

Weeks 2-3: Contrast Agents and Administering Techniques

Week 4: CT Dosimetry and Radiation Safety

Weeks 5-11: CT Instrumentation and Image Production

Weeks 12-14: CT Procedures

18. Special features (e.g. labs, exhibits, site visitations, etc.)

Instructor will link students to free resources from Medscape.com and Radiopaedia.org to supplement the textbook and as a reference for case presentations.

19. Department staffing and classroom/lab resources

No new faculty or resources needed.

1. Will this require additional faculty, supplies, etc.?

No

20. Does this course require course fees? No

*If yes: please attach the New Program Tuition and Fees form, which is available from the UCC website.*

**Course Justification**

21. Justification for course being included in program. Must include:

a. Academic rationale and goals for the course (skills or level of knowledge students can be expected to attain)

Academic rationale: New structured education requirements will be required by the American Registry of Radiologic Technologists (ARRT) beginning January 2018, and this course will help students to meet these new requirements. Goals include: 1. Discuss patient interactions and management of patient rights. 2. Describe the cycle of infection and various infection control techniques. 3. Demonstrate knowledge of patient assessment and routine monitoring. 4. Explain contrast administration and its effect on imaging. 5. Discuss CT screening and safety considerations. 6. Explain the basic physical principles of image formation. 7. Define sequencing parameters and options used in CT imaging. 8. Discuss various data acquisition and processing techniques. 9. Describe the basic principles of neuro, body, musculoskeletal, and invasive procedures.

This is a continuing medical education course. The ARRT requires registrants to perform 24 hours of continuing medical education every two years. In order for the ARRT to award credit for course work performed at a University, registrants must provide a copy of their transcript. The Medical Imaging and Radiation Sciences Department at Arkansas State University is striving to meet the needs of our communities of interest by offering opportunities for our graduates and clinical instructors to meet this requirement.

b. How does the course fit with the mission established by the department for the curriculum? If course is mandated by an accrediting or certifying agency, include the directive.

The course fits the mission of the department by educating students in the fundamental components of patient care, improving the quality of CT scans and ultimately, the care of the patient. Structured education requirements in computed tomography are prescribed in the national guidelines published by the American Registry of Radiologic Technologists.

c. Student population served.

Students who have completed initial training and certification in the radiologic sciences, but who would like to pursue advanced certification in computed tomography. Students completing their degree in Medical Imaging and Radiation Sciences will take this course or other CME specific courses like this as part of their continuing medical education requirement to maintain certification.

d. Rationale for the level of the course (lower, upper, or graduate).

This CT course is a senior level course designed for students returning to school for mandated structured education. The students enrolled in this course have already obtained a minimum of an associate’s degree.

**Assessment**

**University Outcomes**

22. Please indicate the university-level student learning outcomes for which this new course will contribute. Check all that apply.

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| * 1. **[ ]** Global Awareness | * 1. **[x]** Thinking Critically | * 1. **[x]** Information Literacy |

**Relationship with Current Program-Level Assessment Process**

23. What is/are the intended program-level learning outcome/s for students enrolled in this course? Where will this course fit into an already existing program assessment process?

Program Goal: Students will be clinically competent

24. Considering the indicated program-level learning outcome/s (from question #23), please fill out the following table to show how and where this course fits into the program’s continuous improvement assessment process.

*For further assistance, please see the ‘Expanded Instructions’ document available on the UCC - Forms website for guidance, or contact the Office of Assessment at 870-972-2989.*

|  |  |
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| **Program-Level Outcome 1 (from question #23)** | Students will be clinically competent. |
| Assessment Measure | Graduate surveys |
| Assessment  Timetable | After course completion |
| Who is responsible for assessing and reporting on the results? | CT program faculty. |

**Course-Level Outcomes**

25. What are the course-level outcomes for students enrolled in this course and the associated assessment measures?

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| **Outcome 1** | Students will evaluate radiation safety issues or concerns. |
| Which learning activities are responsible for this outcome? | Lecture and class activities |
| Assessment Measure and Benchmark | Students will complete the course with an average of 75% or higher. |

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| **Outcome 2** | Students will be able to explain intrinsic and extrinsic parameters that affect the CT image. |
| Which learning activities are responsible for this outcome? | Lecture, research article(s), and case studies specific to content |
| Assessment Measure and Benchmark | Students will complete the course with an average of 75% or higher. |

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| **Outcome 3** | Students will identify anatomy and explain scanning procedures for neuro, body, musculoskeletal, and invasive procedures. |
| Which learning activities are responsible for this outcome? | Lecture, case studies, presentations |
| Assessment Measure and Benchmark | Students will complete the course with an average of 75% or higher. |

*(Repeat if needed for additional outcomes)*

**Bulletin Changes**

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| **Instructions** |
| **Please visit** [**http://www.astate.edu/a/registrar/students/bulletins/index.dot**](http://www.astate.edu/a/registrar/students/bulletins/index.dot) **and select the most recent version of the bulletin. Copy and paste all bulletin pages this proposal affects below. Follow the following guidelines for indicating necessary changes.**  **\*Please note: Courses are often listed in multiple sections of the bulletin. To ensure that all affected sections have been located, please search the bulletin (ctrl+F) for the appropriate courses before submission of this form.**  - Deleted courses/credit hours should be marked with a red strike-through (~~red strikethrough~~)  - New credit hours and text changes should be listed in blue using enlarged font (blue using enlarged font).  - Any new courses should be listed in blue bold italics using enlarged font (***blue bold italics using enlarged font***)  *You can easily apply any of these changes by selecting the example text in the instructions above, double-clicking the ‘format painter’ icon 🡪 , and selecting the text you would like to apply the change to.*  *Please visit* [*https://youtu.be/yjdL2n4lZm4*](https://youtu.be/yjdL2n4lZm4) *for more detailed instructions.* |

**RS 4553. Mammography Clinical Education I** Guided clinical practice experiences to develop, apply, analyze, integrate, synthesize and evaluate concepts and theories in mammography. Prerequisite, Admission to the Radiologic Science Program. Spring.

**RS 4563. Mammography Clinical Education II** Guided clinical practice experience designed for sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in mammography. Prerequisite, Admission to the Radiologic Science Program. Summer.

***RS 4601. Overview of Computed Tomography Four content areas required by the ARRT for post-primary CT certification. Prerequisite, Instructor approval and admission to the Radiologic Science Program. Fall, Spring, Summer.***

**RS 4623. Computed Tomography Instrumentation** Components, operation and purpose of specialized Computed Tomography equipment, including computer mechanisms, imaging theory and equipment operation. Prerequisite, Admission to the Radiologic Science Program. Summer.

**RS 4633. Computed Tomography Procedures** Anatomy, pathology, scanning protocols, contrast administration, and contraindications for all CT procedures. Prerequisite, Admission to the Radiologic Science Program. Fall.

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