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| For Academic Affairs and Research Use Only | |
| CIP Code: |  |
| Degree Code: |  |

**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 2/19/2018 **Department Curriculum Committee Chair** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **COPE Chair (if applicable)** |
| Cheryl DuBose 2/19/2018 **Department Chair:** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **Head of Unit (If applicable)** |
| Deanna Barymon 2/26/2018 **College Curriculum Committee Chair** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **Undergraduate Curriculum Council Chair** |
| 2/26/2018 **College Dean** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **Graduate Curriculum Committee Chair** |
| |  |  | | --- | --- | | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Enter date |   **General Education Committee Chair (If applicable)** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **Vice Chancellor for Academic Affairs** |

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

Donna Caldwell

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

(870) 972-2952

2. Proposed Starting Term and Bulletin Year

Summer, 2018

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 4883

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).

Advanced Cardiovascular Intervention Imaging

Short title: Advanced CVI Imaging

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

Emphasizes and builds on the foundations of CVI imaging. Advanced concepts of cardiovascular anatomy, pathology and disease intervention.

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).

**[No]** Are there any prerequisites?

* 1. If yes, which ones?

Enter text...

* 1. Why or why not?

This course required admission to the RS program which is lock step

**[Yes]** Is this course restricted to a specific major?

* 1. If yes, which major? Admission to the Radiologic Science Program

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

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. **[No]** Is this course dual listed (undergraduate/graduate)?

11. **[No]** Is this course cross listed?

*(If it is, all course entries must be identical including course descriptions. Submit appropriate documentation for requested changes. It is important to check the course description of an existing course when adding a new cross listed course.)*

**11.1** – If yes, please list the prefix and course number of cross listed course.

Enter text...

**11.2** – **Yes / No** Are these courses offered for equivalent credit?

Please explain. Enter text...

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

a. If yes, what program?

Enter text...

13. **[No]** Does this course replace a course being deleted?

a. If yes, what course?

Enter text...

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

a. If yes, which course?

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

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

16. **[No]** Does this course affect another program?

If yes, provide confirmation of acceptance/approval of changes 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 1-3: Advanced Cardiovascular Anatomy

Week: 4-6: Advanced Cardiovascular Pathology

Weeks: 7-10: Advanced Cardiovascular Disease Intervention

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

Enter text...

19. Department staffing and classroom/lab resources

No additional resources needed

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

No

20**. [No]** Does this course require course fees?

*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)

Advanced didactic course which provides an opportunity for the CVI students to learn additional detailed cardiovascular anatomy, pathology and disease intervention and procedures. Concluding course of the CVI track will explore accumulation of cardiovascular knowledge while providing advanced information needed to prepare for the ARRT VI or CI Examination.

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 mission of the programs in medical imaging and radiation sciences is to produce competent entry level practitioners. RS 4883 will include additional education involving cardiovascular interventional technology providing the student with multimodality knowledge.

c. Student population served.

Cardiovascular Interventional Students

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

RS 4883 is an upper level course for an educational experience tailored to students who have completed the radiologic technology portion of the program as well as two semesters in the cardiovascular interventional track

**Assessment**

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

22. 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?

1. Students will be clinically competent

23. Considering the indicated program-level learning outcome/s (from question #22), 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 #22)** | Students will be clinically competent |
| Assessment Measure | Graduate satisfaction surveys |
| Assessment  Timetable | Three months post-graduation |
| Who is responsible for assessing and reporting on the results? | Program Director |

*(Repeat if this new course will support additional program-level outcomes)*

**Course-Level Outcomes**

24. 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 demonstrate knowledge of cardiovascular anatomy and pathology |
| Which learning activities are responsible for this outcome? | Identification and understanding of cardiovascular anatomy  Identification of cardiovascular pathology |
| Assessment Measure | Examinations and Mock Registries |

*(Repeat if needed for additional outcomes)*

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| **Outcome 2** | Students will demonstrate knowledge of cardiovascular procedures and disease intervention |
| Which learning activities are responsible for this outcome? | Case Studies  Case Study Presentations |
| Assessment Measure | Examinations and Mock Registries |

*(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.* |

**Major in Radiologic Sciences**

**Bachelor of Science in Radiologic Sciences**

**Emphasis in Cardiovascular-Interventional Technology**

A complete 8-semester degree plan is available at http://registrar.astate.edu/.

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| **University Requirements:** | |
| See University General Requirements for Baccalaureate degrees (p. 41) | |
| **First Year Making Connections Course:** | **Sem. Hrs.** |
| RT 1003, Making Connections in Radiology | **3** |
| **General Education Requirements:** | **Sem. Hrs.** |
| See General Education Curriculum for Baccalaureate degrees (p. 84)  **Students with this major must take the following:**  *MATH 1023, College Algebra or MATH course that requires MATH 1023 as a prerequisite*  *BIO 2203* ***AND*** *2201, Human Anatomy and Physiology I and Laboratory*  *PSY 2013, Introduction to Psychology*  *COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | **35** |
| **Major Requirements:** | **Sem. Hrs.** |
| HP 2013, Medical Terminology | 3 |
| ~~HP 3413, Cultural Competency~~ | ~~3~~ |
| RAD 2001, Intro to Medical Imaging | 1 |
| RAD 3103, Intro to Radiography | 3 |
| RAD 3113 **AND** RAD 3111, Radiographic Procedures I and Laboratory | 4 |
| RAD 3123, Radiation Physics and Imaging | 3 |
| RAD 3202, Imaging Equipment | 2 |
| RAD 3203 **AND** RAD 3201, Radiographic Procedures II and Laboratory | 4 |
| RAD 3213 **AND** RAD 3211, Image Acquisition & Evaluation I and Laboratory | 4 |
| RAD 3223, Sectional Anatomy | 3 |
| RAD 323~~3~~2, Radiography Clinical I | ~~3~~ 2 |
| RAD 4103 **AND** RAD 4101, Radiographic Procedures III and Laboratory | 4 |
| RAD 4113, Image Acquisition & Evaluation II | 3 |
| RAD 4123, Imaging Pathology | 3 |
| RAD 4132, Radiobiology | 2 |
| RAD 4143, Radiography Clinical II | 3 |
| RAD 4203, Radiography Clinical III | 3 |
| RAD 4213, Radiography Clinical IV | 3 |
| **Sub-total** | **~~54~~** 50 |
| **Emphasis Area (Cardiovascular-Interventional Technology):** | **Sem. Hrs.** |
| ~~RS 3122, Legal & Regulatory Environment of Radiology~~ | ~~2~~ |
| RS 3733, Geriatric Considerations in Radiology | 3 |
| ~~RS 4343, Radiologic Administrative Concepts~~ | ~~3~~ |
| RS 4413, Cardiovascular Equipment and Intervention | 3 |
| RS 4423, Cardiovascular-Interventional Procedures and Instrumentation | 3 |
| RS 4433, Cardiac Equipment and Intervention | 3 |
| RS 4443, Cardiac Physiology and Procedures | 3 |
| ~~RS 4443, Stats for Medical Imaging~~ | ~~3~~ |
| RS 4444, Cardiac Clinic | 4 |
| RS 4454, Cardiovascular-Interventional Clinical Education | 4 |
| RS 44~~64~~83, Cardiovascular-Interventional Internship | ~~4~~ 3 |
| RS 4822, Psychosocial Factors in Healthcare  RS 4883, Advanced Cardiovascular Interventional Imaging | 2  3 |
| ~~RSMR 4712, Imaging Information Management~~ | ~~2~~ |
| Sub-total | ~~39~~ 31 |
| Required Support Courses: | Sem. Hrs. |
| BIO 2223 AND 2221, Human Anatomy and Physiology II and Laboratory | 4 |
| Total Required Hours: | ~~135~~ 123 |

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**RS 4413. Cardiovascular Equipment and Intervention** Overview of cardiovascular intervention equipment and disease intervention. Prerequisite, formal acceptance into the profes­sional program. Fall.

**RS 4423. Cardiovascular-Interventional Procedures and Instrumentation** The course will discuss angiography and interventional procedures. The student will be introduced to the specialized equipment required to produce and acquire the images and for monitoring the patient. Patient care procedures, medical and legal implications, and pharmaceutical and contrast agents specific to each examination will be defined. Prerequisite, formal acceptance in to the professional program. Fall.

**RS 4433. Cardiac Equipment and Intervention** Overview of cardiac catheterization main and ancillary equipment and disease intervention. Prerequisite, formal acceptance into the profes­sional program. Spring

**RS 4443. Cardiac Physiology and Procedures** Emphasis on cardiac anatomy and physiology, electrocardiography, ECG, instrumentation, procedural performance, and elementary interpreta­tion. Diagnostic imaging procedures and interventional therapies related to coronary disease and dysfunction are also presented. Hands on experience with ECG equipment will be introduced. Prerequisite, formal acceptance in to the professional program. Spring.

**RS 4444. Cardiac Clinic** Clinical practice experiences designed for development, applica­tion, and evaluation of concepts and theories in cardiac catheterization procedures to prepare CIT students for entry-level practice. Prerequisites, formal admission to the professional program. Spring.

**RS 4454. Cardiovascular Interventional Clinical Education** Clinical practice experiences designed for development, application, and evaluation of concepts and theories in cardiovascular-interventional radiology to prepare CIT students for entry-level practice. Prerequisites, formal admission to the professional program. Fall.

**RS 4464. Cardiovascular Interventional Internship** Guided clinical practice to develop, apply, analyze, integrate, synthesize and evaluate concepts and theories in cardiovascular-inter­ventional radiology. Prerequisite, Admission to the Radiologic Science Program. Summer.

*RS* 4883 Advanced Cardiovascular Interventional Imaging Emphasizes and builds on the foundations of CVI imaging. Advanced concepts of cardiovascular anatomy, pathology and disease intervention. Prerequisite, formal acceptance into the professional program. Summer