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

**NEW OR MODIFIED COURSE PROPOSAL FORM**

**[ x ] Undergraduate Curriculum Council**

**[ ] Graduate Council**

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

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

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| Deanna Barymon 8/16/2022 **Department Curriculum Committee Chair** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **COPE Chair (if applicable)** |
| Cheryl DuBose 8/16/2022 **Department Chair** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **Head of Unit (if applicable)** |
| \_\_\_\_\_\_Amy Hyman\_\_\_\_\_\_\_\_ 09/07/2022  **College Curriculum Committee Chair** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **Undergraduate Curriculum Council Chair** |
| Mary Elizabeth Spence 08/30/2022 **Office of Assessment (new courses only)** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **Graduate Curriculum Committee Chair** |
| \_\_\_\_Scott E. Gordon\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 9-7-22 **College Dean** | \_\_\_\_ Alan Utter \_\_\_\_\_\_\_\_ 9-12-22  **Vice Chancellor for Academic Affairs** |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **General Education Committee Chair (if applicable)** |  |

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

Donna Caldwell, [dcaldwell@astate.edu](mailto:dcaldwell@astate.edu), 972-2952

Jessica Cooper, [jmcooper@astate.edu](mailto:jmcooper@astate.edu), 972-2747

1. **Proposed starting term and Bulletin year for new course or modification to take effect**

Spring 2023

**Instructions:**

*Please complete all sections unless otherwise noted. For course modifications, sections with a “Modification requested?” prompt need not be completed if the answer is “No.”*

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|  | **Current (Course Modifications Only)** | **Proposed (New or Modified)**  *(Indicate “N/A” if no modification)* |
| **Prefix** |  | **RS** |
| **Number\*** |  | **4452** |
| **Title** |  | **Cardiovascular Research** |
| **Description\*\*** |  | **Project development of cardiovascular interventional technology topics using prior clinical and educational experience. Prerequisites, formal admission to the professional program, RS 4423 and RS 4454. Spring.** |

\*\*Forty words or fewer as it should appear in the Bulletin.

1. **Proposed prerequisites and major restrictions** **[Modification requested? No]**

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

RS 4423 Cardiovascular Interventional Procedures and Instrumentation

RS 4454 Cardiovascular Interventional Technology Clinic

* 1. Why or why not?

Knowledge and clinical experience necessary to conduct specific research

1. YES Is this course restricted to a specific major?
   1. If yes, which major? BSRS Radiography with emphasis in Cardiovascular Interventional Technology
2. **Proposed course frequency [Modification requested? No]**

(e.g. Fall, Spring, Summer; if irregularly offered, please indicate, “irregular.”) *Not applicable to Graduate courses.*

**Spring**

1. **Proposed course type [Modification requested? No]**

Will this course be lecture only, lab only, lecture and lab, activity (e.g., physical education), dissertation/thesis, capstone, independent study, internship/practicum, seminar, special topics, or studio? Please choose one.

**Capstone**

1. **Proposed grade type [Modification requested? No]**

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

**Standard Letter**

1. NO Is this course dual-listed (undergraduate/graduate)?
2. 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.)*

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

Enter text...

**b.** – **Yes / No** Can the cross-listed course be used to satisfy the prerequisite or degree requirements this course satisfies?

Enter text...

1. NO Is this course in support of a new program?

a. If yes, what program?

Enter text...

1. NO Will this course be a one-to-one equivalent to a deleted course or previous version of this course (please check with the Registrar if unsure)?

a. If yes, which course?

Enter text...

**Course Details**

1. **Proposed outline** **[Modification requested? N/A]**

(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 Introduction and expectations

Week 2 Research basics

Week 4 Topic due

Week 6 Abstract due

Week 8 Rough Draft #1

Week 10 Portfolio Draft #1

Week 12 Rough Draft #2

Week 14 Portfolio Draft #2

Week 16 Final Paper, presentation, and portfolio due

1. **Proposed special features** **[Modification requested? N/A]**

(e.g. labs, exhibits, site visitations, etc.)

N/A

1. **Department staffing and classroom/lab resources**

Instructor, online course

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

no

1. **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.*

**Justification**

**Modification Justification (Course Modifications Only)**

1. Justification for Modification(s)

N/A

**New Course Justification (New Courses Only)**

1. Justification for course. Must include:

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

* Students will use their prior education and clinical experience to conduct research and develop continuing education materials in the form of a portfolio.
* This course will provide students with necessary research skills.
* Goals:
  + Students will develop critical thinking skills
    - Students will interpret various peer-reviewed articles.
    - Students will develop a topic and conduct research related to that topic.
  + Students will communicate their research effectively
    - Students will demonstrate written communication skills.
    - Students will demonstrate oral communication skills.
  + Students will model professionalism
    - Students will develop continuing education material.
    - Students will summarize the value of life-long learning.

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

By completing this course, students will have the knowledge necessary for professional research in cardiovascular interventional technology. The mission of Medical Imaging and Radiation Sciences department specifically states “[MIRS will] provide a comprehensive, multi-skilled education… through collaborative education, research, and scientific efforts with the health care community.”

c. Student population served.

BSRS Radiography major with emphasis in Cardiovascular Interventional Technology

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

This course builds on knowledge and skills developed in lower level courses.

**Assessment**

**Assessment Plan Modifications (Course Modifications Only)**

1. Do the proposed modifications result in a change to the assessment plan? No

*If yes, please complete the Assessment section of the proposal*

**Relationship with Current Program-Level Assessment Process (Course modifications skip this section unless the answer to #18 is “Yes”)**

1. 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**:

* **Outcomes**

a. Students will provide appropriate patient care  
b. Students will be able to perform practice proper radiation safety  
c. Students will be able to produce and critique radiographs for quality  
d. Students will express satisfaction with educational experience  
e. Employers will express satisfaction with graduates

**2. Students will demonstrate acceptable problem solving skills.**

* **Outcomes**

a. Students will be able to identify a medical emergency  
b. Students will be able to adapt standard radiographic practices to varying clinical situations  
c. Students will be able to recommend corrective action for sub-optimal radiographs

**3. Students will communicate effectively with peers, medical staff, and patients.**

* **Outcomes**

a. Students will be able to explain radiologic procedures  
b. Students will be able to obtain accurate patient history or assessment  
c. Students will be able to prepare written critiques of radiographs

**4. Students will demonstrate professional behavior and attitudes.**

* **Outcomes**

a. Students will demonstrate professional appearance and conduct  
b. Students will demonstrate assumed clinical duties and assignments  
c. Students will be able to write a summary plan of professional continuing education  
d. Students will demonstrate appropriate punctuality and reliability in clinical attendance

* Goals:
  + Students will develop critical thinking skills
    - Students will interpret various peer-reviewed articles.
    - Students will develop a topic and conduct research related to that topic.
  + Students will communicate their research effectively
    - Students will demonstrate written communication skills.
    - Students will demonstrate oral communication skills.
  + Students will model professionalism
    - Students will develop continuing education material.
    - Students will summarize the value of life-long learning.

This course is designed to educate and encourage students of the research opportunities in cardiovascular interventional. Students will learn the research process and skills necessary to advance research in this field of medicine.

1. Considering the indicated program-level learning outcome/s (from question #19), 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.*

**n/a**

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

**Course-Level Outcomes**

1. 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 develop critical thinking skills |
| Which learning activities are responsible for this outcome? | Students will interpret various peer-reviewed articles.  Students will develop a topic and conduct research related to that topic. |
| Assessment Measure | Final Research Paper and portfolio |

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| **Outcome 2** | Students will communicate their research effectively. |
| Which learning activities are responsible for this outcome? | Students will demonstrate written communication skills.  Students will demonstrate oral communication skills. |
| Assessment Measure | Final Research Paper and portfolio |

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| **Outcome 3** | Students will model professionalism. |
| Which learning activities are responsible for this outcome? | Students will develop continuing education material.  Students will summarize the value of life-long learning. |
| Assessment Measure | Portfolio |

*(Repeat if needed for additional outcomes)*

**Bulletin Changes**

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| **Instructions** |
| **Please visit and select the most recent version of the bulletin. Copy and paste all bulletin pages this proposal affects below. Please include a before (with changed areas highlighted) and after of all affected sections.**  **\*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.** |

***Before:***

Emphasis Area (Cardiovascular-Interventional Technology): Sem. Hrs.

RS 4413, Cardiovascular Equipment and Intervention 3  
RS 4423, Cardiovascular-Interventional Procedures and Instrumentation 3  
RS 4443, Cardiac Physiology and Procedures 3  
RS 4444, Cardiac Clinic 4

RS 4452, Cardiovascular Research 2

RS 4454, Cardiovascular-Interventional Clinical Education 4  
RS 4483, Cardiovascular-Interventional Internship 3  
RS 4822, Psychosocial Factors in Healthcare 2

RS 4852, Advanced Pathophysiology I 2

RS 4862, Advanced Pathophysiology II 2  
Sub-total 28  
Required Support Courses: Sem. Hrs.  
BIO 2223 AND 2221, Human Anatomy and Physiology II and Laboratory 4  
Total Required Hours: 120

Certificate in Cardiovascular-Interventional Technology  
Core Requirements (BSRS courses completed previously):ARRT or ARDMS certification and registration in a primary pathway area  
 Sem. Hrs.   
See Core Requirements (p. 371) -  
Required Courses:Students must have previously earned a BSRS degree.

Sem. Hrs.

RS 4413, Cardiovascular Equipment and Intervention 3  
RS 4423, Cardiovascular-Interventional Procedures and Instrumentation 3  
RS 4443, Cardiac Physiology and Procedures 3  
RS 4444, Cardiac Clinic 4  
RS 4452, Cardiovascular Research 2

RS 4454, Cardiovascular-Interventional Clinical Education 4  
RS 4483, Cardiovascular-Interventional Internship 3  
Total Required Hours: 22

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

RS 4452. **Cardiovascular Research** Project development of cardiovascular interventional technology topics using prior clinical and educational experience. Prerequisites, formal admission to the professional program, RS 4423 and RS 4454. 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 CVI students for entry-level practice. Prerequisites, formal admission to the professional program. Fall.

***After:***

Emphasis Area (Cardiovascular-Interventional Technology): Sem. Hrs.

RS 4413, Cardiovascular Equipment and Intervention 3  
RS 4423, Cardiovascular-Interventional Procedures and Instrumentation 3  
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RS 4444, Cardiac Clinic 4  
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RS 4454, Cardiovascular-Interventional Clinical Education 4  
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