Code # NHP 9

**Course Revision Proposal Form**

**[X] Undergraduate Curriculum Council**

**[ ] Graduate Council**

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 for inclusion in curriculum committee agenda.

|  |  |
| --- | --- |
| Deanna Barymon 10/27/2016**Department Curriculum Committee Chair** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**COPE Chair (if applicable)** |
| Ray Winters 10/27/2016**Department Chair:**  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**General Education Committee Chair (If applicable)**   |
| Deanna Barymon 10/27/2016**College Curriculum Committee Chair** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**Undergraduate Curriculum Council Chair** |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10/27/2016**College Dean** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**Graduate Curriculum Committee Chair** |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**Vice Chancellor for Academic Affairs** |

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

Donna Caldwell

dcaldwell@astate.edu

870 972-2952

2. Proposed Starting Term and Bulletin Year for Change to Take Effect

Course starts in Spring 2018 Bulletin 2017-2018

3. Current Course Prefix and Number

RS 4442

3.1 – [YES] Request for Course Prefix and Number change

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

 RS 4443

3.2 – If yes, has it been confirmed that this course number is available for use? YES

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

4. Current Course Title

RS4442 Cardiac Physiology and Procedures

 4.1 – [NO] Request for Course Title Change

 If yes, include new Course Title Below. *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).*

 Enter text...

5. – [NO ] Request for Course Description Change.

 If yes, please include brief course description (40 words or fewer) as it should appear in the bulletin.

 Enter text...

6. – [NO ] Request for prerequisites and major restrictions change.

*(If yes, 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 / No
	1. If yes, which ones?

Enter text...Why or why not?

Enter text...

1. Is this course restricted to a specific major? Yes / No
	1. If yes, which major?

7. – [NO ] Request for Course Frequency Change(e.g. Fall, Spring, Summer). *Not applicable to Graduate courses.*

 a. If yes, please indicate new frequency:

8. – [NO ] Request for Class Mode Change

*If yes, indicate if this course will 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.*

 Enter text...

9. – [NO ] Request for grade type change

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

 Enter text...

10. Is this course dual listed (undergraduate/graduate)? NO

 a. If yes, indicate course prefix, number and title of dual listed course.

 Enter text...

11. Is this course cross listed? NO

*(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.)*

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

 Enter text...

1. Are these courses offered for equivalent credit? NO

 Please explain. Enter text...

12. Is this course change 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 or the previous version of the course? NO

a. If yes, which course?

Enter text...

15. 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...

16. 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.*

**Revision Details**

17. Please outline the proposed revisions to the course.

*Include information as to any changes to course outline, special features, required resources, or in academic rationale and goals for the course.*

 Changing this course from a 2 SC course to a 3 SC course.

18. Please provide justification to the proposed changes to the course.

 A 3 hour course will enable the CIT student to learn about the new technologies in the cardiac procedure lab in addition to the regular procedures and cardiac physiology. Historically, CIT students only needed to focus on left heart information. New registry exam content outlines require students to also have knowledge concerning the right heart. Students need additional course time to cover this material..

19. Do these revisions result in a change to the assessment plan?

 [NO]

 *\*If yes: Please complete the Assessment section of the proposal on the next page.*

 *\*If no: Skip to Bulletin Changes section of the proposal.*

***\*See question 19 before completing the Assessment portion of this proposal.***

**Assessment**

**University Outcomes**

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

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

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

21. 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?

Enter text...

22. 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.*

|  |  |
| --- | --- |
| **Program-Level Outcome 1 (from question #23)** | Type outcome here. What do you want students to think, know, or do when they have completed the course? |
| Assessment Measure | Please include direct and indirect assessment measure for outcome.  |
| Assessment Timetable | What semesters, and how often, is the outcome assessed? |
| Who is responsible for assessing and reporting on the results? | Who (person, position title, or internal committee) is responsible for assessing, evaluating, and analyzing results, and developing action plans? |

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

 **Course-Level Outcomes**

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

|  |  |
| --- | --- |
| **Outcome 1** | Type outcome here. What do you want students to think, know, or do when they have completed the course? |
| Which learning activities are responsible for this outcome? | List learning activities. |
| Assessment Measure  | What will be your assessment measure for this outcome?  |

*(Repeat if needed for additional outcomes)*

**Bulletin Changes**

|  |
| --- |
| **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.* |

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RS 4343. Radiologic Administrative Concepts Introduction to the organization, operations, and management of a radiology department. Includes an introduction to health care delivery systems, decision making, and the management functions. Prerequisite, formal acceptance in to the professional program. Fall, Spring.

RS 436V. Independent Study in Radiologic Sciences Guided investigation of an advanced radiologic topic selected in consultation with a member of the radiologic sciences faculty. May be repeated with different topics for a total of 6 semester credits. Prerequisite, formal acceptance in to the professional program. Demand.

RS 4413 Cardiovascular Equipment and Intervention Emphasis of cardiovascular intervention equipment. Cardiovascular disease intervention is also covered. 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 Emphasis of cardiac catheterization main and ancillary equipment. Cardiac disease intervention is also covered. Prerequisite, formal acceptance into the professional program. Spring

RS 444~~2~~3. Cardiac Physiology and Procedures ~~This course~~ 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.

RS4444 Cardiac Clinic Clinical practice experiences designed for development, application, and evaluation of concepts and theories in cardiac catheterization procedures preparing CIT students for entry level practice. Prerequisites, formal admission to the professional program. Spring.

 RS 445~~3~~4. Cardiovascular Interventional Clinical Education ~~The course will provide content and clinical practice experiences designed for sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in cardiovascular-interventional radiology.~~ Clinical practice experiences designed for development, application, and evaluation of concepts and theories in cardiovascular-interventional radiology preparing CIT students for entry level practice. Prerequisites, formal admission to the professional program. Fall~~, Spring, Summer.~~

RS 4463. Statistics for Medical Imaging Methods used for data collection and statistical analysis in medical imaging procedures and education with a focus on the applications of data and statistics in reporting of clinical efficiency, image repeat rates, and educational outcomes. Fall, Spring.

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 4512. Mammography Instrumentation Components, operation and purpose of specialized mammographic equipment, including mammographic x-ray tube, digital imaging, automatic exposure control, image recording options, and laser readers. Prerequisite, Admission to the Radiologic Science Program. Summer.

RS 4502. Mammography Procedures Clinical concepts and applications of the various mammographic procedures performed and equipment used in the mammography suite, emphasizes the understanding of the equipment and the performance of all procedure. Prerequisite, Admission to the Radiologic Science Program. Spring.

RS 4532. Mammography Procedures and Instrumentation This course is designed to introduce the student to the technical and procedural aspects of mammography. Various aspects of mammography, breast anatomy, patient interaction and exam procedures will be covered. Prerequisite, formal acceptance in to the professional program. Spring.

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 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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Major in Radiologic Sciences Bachelor of Science in Radiologic Sciences

Emphasis in Computed Tomography/Cardiovascular-Interventional Technology

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

University Requirements: See University General Requirements for Baccalaureate degrees (p. 42)

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 3233, Radiography Clinical I 3

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

 Emphasis Area (CT/CIT): 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 444~~2~~3, Cardiac Physiology and Procedures ~~2~~ 3

RS 4443, Stats for Medical Imaging 3

RS 4444, Cardiac Clinic 4

RS 445~~3~~4, Cardiovascular-Interventional Clinical Education ~~3~~4

 RS 4464, Cardiovascular-Interventional Internship 4

~~RS 4622, CT Instrumentation 2~~

~~RS 4632, CT Procedures 2~~

~~RS 4644, CT Clinical Ed 4~~

RS 4822, Psychosocial Factors in Healthcare 2

RSMR 4712, Imaging Information Management 2

Sub-total ~~35~~ 39

Required Support Courses: Sem. Hrs.

BIO 2223 AND 2221, Human Anatomy and Physiology II and Laboratory 4

Additional Support Courses: Sem. Hrs. CS 1013, Introduction to Computers 3

Total Required Hours: ~~134~~138