# http://www.ric.edu/webcommunications/images/SealWithText_Small_Black.pngUNDERGRADUATE CURRICULUM COMMITTEE (UCC) PROPOSAL FORM

## Cover page scroll over blue text to see further important [instructions](#instructions): please read.

**N.B. DO NOT USE HIGHLIGHT, please DELETE THE WORDS THAT DO NOT APPLY TO YOUR PROPOSAL**

**ALL numbers in section (A) need to be completed, including the impact ones.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| A.1. [Course or program](#Proposal) | **NMT 402 Instrumentation and radiobiology** | | | |  |
| [Replacing](#Ifapplicable) |  | | | |
| A.2. [Proposal type](#type) | **Course: revision** | | | |
| A.3. [Originator](#Originator) | **Eric Hall** | [Home department](#home_dept) | **Biology/Health Sciences** | | |
| A.4. [Context and Rationale](#Rationale) | **Renaming to Instrumentation and reducing credits from 2 to 1.5. The Radiobiology content is being redistributed into NMT 325 Radiation Physics.** | | | | |
| A.5. [Student impact](#student_impact) | **More accurate expectations for student content and increased time to master the topics.** | | | | |
| A.6. [Impact on other programs](#impact) | **None** | | | | |
| A.7. [Resource impact](#Resource) | [*Faculty PT & FT*](#faculty): | **NA** | | | |
| [*Library*:](#library) | **NA** | | | |
| [*Technology*](#technology) | **NA** | | | |
| [*Facilities*](#facilities): | **NA** | | | |
| A.8. [Semester effective](#Semester_effective) | **Fall 2018** | A.9. [Rationale if sooner than next Fall](#Semester_effective) | |  | |
| A.10. INSTRUCTIONS FOR CATALOG COPY: This single file copy must include ALL relevant pages from the college catalog, and show how the catalog will be revised. (1) Go to the “Forms and Information” page on the UCC website. Scroll down until you see the Word files for the current catalog. (2) Download ALL catalog sections relevant for this proposal, including course descriptions and/or other affected programs. (3) Place ALL relevant catalog copy into a single file. Put page breaks between sections and delete any catalog pages not relevant for this proposal. (4) Using the track changes function, revise the catalog pages to demonstrate what the information should look like in next year’s catalog. (5) Check the revised catalog pages against the proposal form, especially making sure that program totals are correct if adding/deleting course credits. If new copy, indicate where it should go in the catalog. If making related proposals a single catalog copy that includes all is acceptable. Send as a separate file along with this form. | | | | | |

B. [NEW OR REVISED COURSES](#delete_if)  **DO NOT use highlight. Delete this whole page if the proposal does not include a new or revised course.**

|  | Old ([for revisions only](#Revisions)) Only include information that is being revised, otherwise leave blank (delete provided examples that do not apply) | New Examples are provided for guidance, delete the ones that do not apply |
| --- | --- | --- |
| B.1. [Course prefix and number](#cours_title) | **NMT 402** | **NMT 402** |
| B.2. Cross listing number if any |  |  |
| B.3. [Course title](#title) | **Instrumentation and Radiobiology** | **Instrumentation** |
| B.4. [Course description](#description) | The principles of operation and quality control are defined for all nonimaging and imaging instruments in nuclear medicine. | The principles of operation and quality control are defined for all nonimaging and imaging instruments in nuclear medicine. |
| B.5. [Prerequisite(s)](#prereqs) |  |  |
| B.6. [Offered](#Offered) |  |  |
| B.7. [Contact hours](#contacthours) | **2** | **1.5** |
| B.8. [Credit hours](#credits) | **2** | **1.5** |
| B.9. [Justify differences if any](#differences) |  | |
| B.10. [Grading system](#grading) |  |  |
| B.11. [Instructional methods](#instr_methods) |  |  |
| B.12.[Categories](#required) |  |  |
| B.13. Is this an Honors course? |  |  |
| B.14. [General Education](#ge)  N.B. Connections must include at least 50% Standard Classroom instruction. |  |  |
| B.15. [How will student performance be evaluated?](#performance) |  |  |
| B.16. [Redundancy statement](#competing) |  |  |
| B. 17. Other changes, if any |  | |

| B.18**.** [**Course learning outcomes**](#outcomes)**: List each one in a separate row** | [**Professional Org.Standard(s)**](#standards)**, if relevant** | [**How will each outcome be measured**](#measured)**?** |
| --- | --- | --- |
| NMT 402- Instrumentation and Radiobiology   * Course objectives were split pertaining to content   + Instrumentation course objectives went to: NMT 402 Instrumentation   + Radiobiology course objectives went to: NMT 325 Radiation Physics |  |  |
|  |  | Click Tab from here to add rows |

| B.19. [**Topical outline**](#outline)**: Do NOT insert whole syllabus, we just need a two-tier outline** |
| --- |
| Class: Lecture: Assignment:  Introduction & Review Syllabus Ch. 1 Gas-Filled Detectors Ch.1 pp. 3-16  Review Ch.1 (Sample Calculations) Ch. 2 Scintillation Detectors Ch.2 pp.17-28  Review Ch.2 (Sample Calculations) Ch. 5 The Gamma Camera Ch. 6 Image Digitization and Display Ch.5 pp. 55-70 Ch.6 pp. 71-81  Quiz 1 Review of Ch. 5 & Ch. 6 Ch.1 & Ch. 2  Exam 1 Ch. 1, 2, 5, 6  Ch. 7 Collimators Ch. 8 Image Characteristics and Performance Measures in Planar Imaging Ch.7 pp. 83-93 Ch.8 pp. 95-108  Quiz 2 Ch. 9 Departmental Quality Assurance and Quality Control in Gamma Cameras Ch.7 & Ch.8 Ch. 9 pp. 111-125  Exam 2 Ch. 7-9  Ch. 10 Single-Photon Computed Tomography (SPECT) Ch.10 pp. 131-149  Review Ch. 10 (Sample Calculations) Ch. 11 Image Characteristics and Effect of Acquisition Parameters in SPECT Ch. 11 pp. 151-161  Quiz 3 Ch. 12 Improving SPECT Images Ch. 10 & Ch. 11 Ch. 12 pp. 163-  Review Ch. 12 & Ch. 13 Ch. 13 Quality Control and Artifacts in SPECT Ch. 13 pp. 179-194  No Class-Thanksgiving Break  Exam 3 Ch. 12, 13 & 18  Ch. 14 Principles of Positron Emission Tomography Ch. 15 PET Instrumentation Ch. 14 pp. 197-207 Ch. 15 pp. 209-226  Quiz 4 Ch. 16 Image Characteristics, Performance Measures and Quantification in PET Ch. 17 Quality Control and Artifacts in PET Ch. 14 & Ch. 15 Ch. 16 pp. 227-240 Ch. 17 pp. 243-251  Final Exam |

## D. Signatures

* Changes that affect General Education in any way MUST be approved by ALL Deans and COGE Chair.
* Changes that directly impact more than one department/program MUST have the signatures of all relevant department chairs, program directors, and relevant dean (e.g. when creating/revising a program using courses from other departments/programs). Check UCC manual 4.2 for further guidelines on whether the signatures need to be approval or acknowledgement.
* Proposals that do not have appropriate approval signatures will not be considered.
* Type in name of person signing and their position/affiliation.
* Send electronic files of this proposal and accompanying catalog copy to [curriculum@ric.edu](mailto:curriculum@ric.edu) and a printed or electronic signature copy of this form to the current Chair of UCC. Check UCC website for due dates.

##### D.1. Approvals: required from programs/departments/deans who originate the proposal. may include multiple departments, e.g., for joint/interdisciplinary prposals.

| Name | Position/affiliation | [Signature](#_Signature" \o "Insert electronic signature, if available, in this column) | Date |
| --- | --- | --- | --- |
| Eric Hall | Program Director of Medical Imaging |  |  |
| Rebeka Merson | Chair of Biology |  |  |
| Earl Simson | Dean of FAS |  | Tab to add rows |

##### D.2. [Acknowledgements](#acknowledge): REQUIRED from OTHER PROGRAMS/DEPARTMENTS IMPACTED BY THE PROPOSAL. SIGNATURE DOES NOT INDICATE APPROVAL, ONLY AWARENESS THAT THE PROPOSAL IS BEING SUBMITTED. CONCERNS SHOULD BE BROUGHT TO THE UCC COMMITTEE MEETING FOR DISCUSSION

| Name | Position/affiliation | [Signature](#Signature_2) | Date |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  | Tab to add rows |