# 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): [if not working select “COMMents on rollover” in your Word preferences under view] please read these.

**N.B. DO NOT USE HIGHLIGHT, where choices are given within categories, please DELETE those THAT DO NOT APPLY TO YOUR PROPOSAL. Do not delete numbered categories.**

**ALL numbers in section (A) to be completed, including the impact ones (#5-7), put “none” if that is the case.**

|  |  |  |
| --- | --- | --- |
| A.1. [Course or program](#Proposal) | **nmt 303 Nuclear Medicine Procedures I** |  |
| [Replacing](#Ifapplicable)  |  |
| A.2. [Proposal type](#type) | **Course: creation** |
| A.3. [Originator](#Originator) | **Eric Hall** | [Home department](#home_dept) | **Biology/Health Sciences** |
| A.4. [Context and Rationale](#Rationale)  | **With the revision to the medical imaging programs, this course represents one of many components in the redistribution of credits amongst courses in the new curriculum.** |
| A.5. [Student impact](#student_impact) | **Improved readiness for working in the hospital or clinical environment** |
| A.6. [Impact on other programs](#impact)  | **None** |
| A.7. [Resource impact](#Resource) | [*Faculty PT & FT*](#faculty):  | **This course will be taught by LSMI faculty.** |
| [*Library*:](#library) | **None** |
| [*Technology*](#technology) | **None** |
| [*Facilities*](#facilities): | **None** |
| A.8. [Semester effective](#Semester_effective) | **Fall 2020** | 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 single file along with this form. |

B. [NEW OR REVISED COURSES](#delete_if)  **DO NOT use highlight. Do not delete numbered categories, just leave blank if they do not apply. Delete this whole page if the proposal does not include a new or revised course. Always fill in b. 1 and B. 3 for context.**

|  | Old ([for revisions only](#Revisions))ONLY include information that is being revised, otherwise leave blank.  | NewExamples are provided within some of the boxes for guidance, delete just the examples that do not apply. |
| --- | --- | --- |
| B.1. [Course prefix and number](#cours_title)  |  | **NMT 303** |
| B.2. Cross listing number if any |  |  |
| B.3. [Course title](#title)  |  | **Nuclear Medicine Procedures I** |
| B.4. [Course description](#description)  |  | Students are provided with an understanding of nuclear medicine and molecular imaging procedures, including appropriate protocol selection, instrumentation, basic pathology, patient care skills, and interpretation of images.   |
| B.5. [Prerequisite(s)](#prereqs) |  | Acceptance into a Medical Imaging Clinical program  |
| B.6. [Offered](#Offered) |  | **Spring** |
| B.7. [Contact hours](#contacthours)  |  | **3** |
| B.8. [Credit hours](#credits) |  | **3** |
| B.9. [Justify differences if any](#differences) |  |
| B.10. [Grading system](#grading)  |  | **Letter grade**  |
| B.11. [Instructional methods](#instr_methods) |  | **Lecture** |
| B.12.[Categories](#required) |  | **Required for major**  |
| B.13. Is this an Honors course? |  | **NO** |
| B.14. [General Education](#ge)N.B. Connections must include at least 50% Standard Classroom instruction. |  | **NO |****category:** |
| B.15. [How will student performance be evaluated?](#performance) |  | **Exams** **Presentations****Assignments** |
| B.16 [Recommended class-size](#class_size" \o "Check appendix XVIII in the UCC Manual for Best Practices) |  | **24** |
| B.17. [Redundancy statement](#competing) |  | **N/A** |
| B. 18. Other changes, if any |  |

| B.19**.** [**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)**?** |
| --- | --- | --- |
| The student will: 1. Discuss the numerous methods and parameters used to acquire images and data in a nuclear medicine study.
2. Identify indications for different procedures and determine the most appropriate imaging study and method needed to provide high-quality nuclear medicine imaging.
3. Identify procedures and protocols for acquiring and processing images given pathological conditions discussed in this course.
4. Discuss the biodistribution, administration, dosage, and selection of radiopharmaceuticals or adjunct pharmaceutical for a nuclear medicine study.
5. Evaluate images and data for artifacts and accuracy given knowledge of nuclear medicine principles and standards.
 |  | Examination, Presentations, and Assignments |

| B.20. [**Topical outline**](#outline)**: DO NOT INSERT WHOLE SYLLABUS, JUST A TWO-TIER TOPIC OUTLINE. Proposals that ignore this request will be returned for revision.** |
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| --- |
| **Key:**Instrumentation: detector system, data acquisition, data analysis, ancillary equipmentRadiopharmaceutical and Pharmaceuticals: selection, dosage, administration, biodistributionPatient Preparation, Monitoring and Education: indications and contraindications, dietary restrictions, adverse reactions, age specific considerations, lab valuesImaging Techniques: anatomical landmarks, views, orientation, fusion imagingInterpretation: basic patterns that the technologists should be aware of |
| * Skeletal System: WB bone, 3-phase bone, SPECT, bone marrow
	+ Review Anatomy and Physiology and common pathologies
	+ Instrumentation, Radiopharmaceuticals, Patient Preparation, Monitoring, and Education, Imaging Techniques, and interpretation
 |
| * Respiratory System: Ventilation, Perfusion, quantitative analysis
	+ Review Anatomy and Physiology and common pathologies
	+ Instrumentation, Radiopharmaceuticals, Patient Preparation, Monitoring, and Education, Imaging Techniques, and interpretation
 |
| * Respiratory and Skeletal Student Presentation
	+ Student creates and presents a PowerPoint on assigned topics.
 |
| * Intro to GI
	+ Review Anatomy and Physiology and common pathologies
	+ Nuclear medicine procedures
 |
| * Gastrointestinal System (GI) for each listed below the following will be covered: Instrumentation, Radiopharmaceuticals, Patient Preparation, Monitoring, and Education, Imaging Techniques, and interpretation
	+ Liver Spleen Imaging
	+ Liver Hemangioma
	+ Hepatic Pump Patency
	+ Peritoneal Shunt Patency
	+ Gastric Emptying and Reflux
	+ GI Bleed
	+ Hepatobiliary Imaging
	+ Meckel’s Diverticulum
 |
| * GI student Presentations
	+ Student creates and presents a PowerPoint on assigned topics.
 |
| * Cardiac Intro
	+ A & P, pathology
	+ EKG – how to perform and basic interpretation
	+ Stress tests- types, uses, adjunct pharmaceuticals
 |
| * MPI Tracers and Imaging
	+ Instrumentation, Radiopharmaceuticals, Patient Preparation, Monitoring, and Education, Imaging Techniques
 |
| * Cardiac Interpretation and Artifacts
	+ Ischemia vs infarct
	+ Common artifacts and how to identify them
* First Pass and MUGA
	+ Instrumentation, Radiopharmaceuticals, Patient Preparation, Monitoring, and Education, Imaging Techniques, and interpretation
 |
| * Cardiac PET and Viability
	+ Instrumentation, Radiopharmaceuticals, Patient Preparation, Monitoring, and Education, Imaging Techniques, and interpretation
* Cardiac Student presentations
	+ Student creates and presents a PowerPoint on assigned topics
 |
| * Clinical PET oncology
	+ Review Anatomy and Physiology and common pathologies
	+ Instrumentation, Radiopharmaceuticals, Patient Preparation, Monitoring, and Education, Imaging Techniques, and interpretation PET Student presentations
* Student creates and presents a PowerPoint on assigned topics
 |
| * PET Procedures (other than oncology)
	+ Review Anatomy and Physiology and common pathologies
	+ Instrumentation, Radiopharmaceuticals, Patient Preparation, Monitoring, and Education, Imaging Techniques, and interpretation
 |

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## 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 their 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 and a printed signature copy of this whole 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 proposals.

| Name | Position/affiliation | [Signature](#_Signature" \o "Insert electronic signature, if available, in this column) | Date |
| --- | --- | --- | --- |
| Eric Hall | Program Director of Medical Imaging | e-mail confirmation to curriculum@ric.edu | 4/1/2020 |
| Eric Roberts | Chair of Biology | e-mail confirmation to curriculum@ric.edu | 4/1/2020 |
| Earl Simson | Dean of FAS | e-mail confirmation to curriculum@ric.edu | 4/6/2020 |

##### D.2. [Acknowledgements](#acknowledge): REQUIRED from OTHER PROGRAMS/DEPARTMENTS (and their relevant deans if not already included above) that are 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; all faculty are welcome to attend.

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