# 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.**

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| A.1. [Course or program](#Proposal) | **NMT 301 Introduction to NMT** |  |
| [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)  | **The reorganization of the BS in Medical Imaging, Nuclear Medicine Technology degree requires the shifting of some content into the new MEDI 202 course and redistribution of the credits. We are proposing to change NMT 301 from 4 credits to 3 credits, and updating the prerequisite to allow for either RADT 201 or MEDI 201.** |
| A.5. [Student impact](#student_impact) | **This course represents an effort to spread some of the NMT content over an additional semester. The benefit to the students is more time to adjust to working in the clinical environment.** |
| 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) | NewExamples are provided for guidance, delete the ones that do not apply |
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| B.1. [Course prefix and number](#cours_title)  | **NMT 301**  |  |
| B.2. Cross listing number if any |  |  |
| B.3. [Course title](#title)  | **Introduction to Nuclear Medicine Technology** |  |
| B.4. [Course description](#description)  |  |  |
| B.5. [Prerequisite(s)](#prereqs) | **RADT 201 and acceptance into the medical imaging with concentration in nuclear medicine technology program.** | **RADT 201 or MEDI 201, and acceptance into the medical imaging with concentration in nuclear medicine technology program.** |
| B.6. [Offered](#Offered) |  |  |
| B.7. [Contact hours](#contacthours)  | **4** | **3** |
| B.8. [Credit hours](#credits) | **4** | **3** |
| B.9. [Justify differences if any](#differences) |  |
| B.10. [Grading system](#grading)  | **Letter grade**  | **Letter grade**  |
| B.11. [Instructional methods](#instr_methods) | **Lecture | Practicum**  |  **Lecture | Practicum**  |
| B.12.[Categories](#required) | **Required for major/minor**  | **Required for major/minor**  |
| 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)**?** |
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| Orientation/Introduction to NMT Segment Objectives: * Orientation to clinical affiliates and School of Medical Imaging.
* Describe how to navigate on line record keeping system (Trajecsys).
* Define terms that relate to clinical education.
* Describe methods of assessment that can be used to measure cognitive, psychomotor and affective aspects of clinical education.
* Explain what is meant by clinical competency evaluation.
* Describe role of technologist in taking patient clinical histories.
* Describe desirable qualities of a good patient interviewer.
* Describe basic research methods.

Venipuncture Segment Objectives: * Describe goals of IV therapy.
* List types of IV solutions.
* Describe routes of administration.
* Describe he “Rights” of medication administration.
* Describe types of central catheters.
* Locate common veins for venipuncture.
* Describe methods of IV administration.
* List supplies and equipment needed for venipuncture.
* Describe methods for distending a vein.
* Describe proper aseptic skin preparation.
* List steps in performing venipuncture.
* Describe complications of IV therapy.
* Practice venipuncture techniques after demonstration (IV).
* Complete practical exam on IV training arm (IV).
* Successfully obtain clinical competencies following hospital protocol.

      Clinical Procedures Segment Objectives: * Describe typical format of a clinical protocol.
* Define terminology related to clinical protocols.
* Locate pertinent information in a clinical protocol.
* Review routine nuclear medicine protocols.
* Identify common nuclear medicine scans through film review.

     Introduction to Instrumentation Segment objectives: * List the different types of ionization chambers.
* List the different types of basic ionization chambers.
* Describe the principal of operation of a basic ionization chamber and Geiger-Mueller counter.
* Perform the daily quality control of survey meters.
* List and define dose calibrator QC.
* Describe the principle of operation of a scintillation detection device.
* Describe the principle of a well counter.
* Identify and label the parts of a gamma camera.
* List and define gamma camera quality control.
* Describe the basic principle of SPECT.
* Describe principle of annihilation coincidence detection.
* Describe the basic principle of PET.
 |  | Each objective will be assessed via assignments, written exams and practical exams. |

| B.19. [**Topical outline**](#outline)**: Do NOT insert whole syllabus, we just need a two-tier outline** |
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| Orientation  | Student Badges & Parking  |
| Orientation   | Tour RIH and NMT Michele Salzillo-Welcome   |
| Orientation  | Review Orientation Folders  |
| Intro to NMT  | Adler: Ch. 5 Introduction to Clinical Education  |
| Intro to NMT  | Active Shooter Training  |
| Orientation  | Tour of TMH NMT Dana Daye-Welcome  |
| Intro to NMT  | Fire Safety Quiz  |
| Intro to NMT  | Quiz Adler: Ch 5  |
| Orientation  | Lifespan Policies  |
| Clinical Procedures  | Review Procedure Format and  vocabulary Handout: Clinical Procedure Manual  |
| Intro to NMT  | RIH Orientation  |
| Intro to NMT  | Adler: Ch 12 History Taking for NMT  |
| Orientation  | RIH NMT Orientation  |
| Intro to NMT  | Trajecsys Training  Handouts: Observation Evaluation, Mid and end Semester Evaluation  |
| Intro to NMT  | Review Syllabus NMT 231 Discussion  |
| Intro to NMT  | Basic Research Methods Handout: Journal Article  |
| Math  | Mathematics Review Handout: Wells  |
| Clinical Procedures  | Protocol Review Bone-CSF Patency  |
| Math  | Mathematics Review Wells  |
| Clinical Procedures  | Protocol Review Gastric Emptying-Hepatobiliary  |
| Math  | Base/Prefix Conversions Wells   |
| Clinical Procedures  | Protocol Review MIBG - 131I Therapy  |
| Math  | Statistics Christian: Ch. 1 Wells  |
| Clinical Procedures  | Protocol Review WBC-Lung  |
| Math  | Statistics Christian: Ch. 1 Wells  |
| Clinical Procedures  | Protocol Review Lymphoscintigraphy-Parathyroid  |
| Math  | Statistics Christian: Ch. 1 Wells  |
| Clinical Procedures  | Protocol Review Renal-SIRT Therapy  |
| Math  | Computers Christian: Ch.4 Handout  |
| Clinical Procedures  | Final Exam-Cumulative  |
| Math  | Computers Health Informatics Christian: Ch 4 Wells  |
| Venipuncture  | Adler: Ch 22 Venipuncture Techniques  |
| Instrumentation   | Video Review-Dr. Yoo  |
| Math  | Review  |
| Venipuncture  | Catheter Video Tourniquets Demonstration Handout: Simulation Competency  |
| Instrumentation  | Waterstram-Rich: Ch 11 Radiation Detectors  |
| Instrumentation  | Clinical Lab: Survey Meters/Dose Calibrators Instructor: Glenn Donovan  |
| Math  | Final Exam  |
| Venipuncture  | Practice Simulation Arm  |
| Instrumentation  | Waterstram-Rich: Ch 11 Semiconductor Detectors Scintillation Detectors Gamma Camera and QC  |
| Venipuncture  | Practice Simulation Arm  |
| Instrumentation  | Waterstram-Rich: Ch 11 SPECT   |
| Instrumentation  | Clinical Laboratory: QC  |
| Venipuncture  | Practical Exam  |
| Instrumentation  | Waterstram-Rich: Ch 13 PET  |
| Instrumentation  | Final Exam  |
| Intro to NMT  | Supplemental Lecture: Research at Lifespan Wendy Smith  |
| Intro to NMT  | Supplemental Lecture: Quality at Lifespan Lila Camara  |

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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 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 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 |
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