

LSC Use Only
Number: _____
Submission Date: _____
Action-Date: _____

UWUCC USE Only
Number: 02-123b
Submission Date: _____
Action-Date: App - 4/22/03

CURRICULUM PROPOSAL COVER SHEET
University-Wide Undergraduate Curriculum Committee

Senate App - 4/29/03

I. CONTACT

Contact Person Jodell L. Kuzneski Phone 73275 or 77647

Department Nursing and Allied Health Professions

II. PROPOSAL TYPE (Check All Appropriate Lines)

_____ COURSE _____
Suggested 20 character title

_____ New Course* _____
Course Number and Full Title

_____ Course Revision _____
Course Number and Full Title

_____ Liberal Studies Approval + _____
for new or existing course Course Number and Full Title

_____ Course Deletion _____
Course Number and Full Title

_____ Number and/or Title Change _____
Old Number and/or Full Old Title
New Number and/or Full New Title

_____ Course or Catalog Description Change _____
Course Number and Full Title

PROGRAM: Major Minor Track

_____ New Program* _____
Program Name

Program Revision* Nuclear Medicine Technology
Program Name

_____ Program Deletion* _____
Program Name

_____ Title Change _____
Old Program Name
New Program Name

III. Approvals (signatures and date)

Jodell Kuzneski 4-14-03

Department Curriculum Committee
Allied Health

Dr. Michelle Genwick

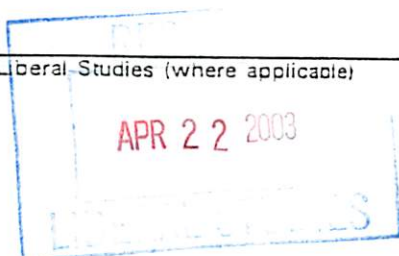
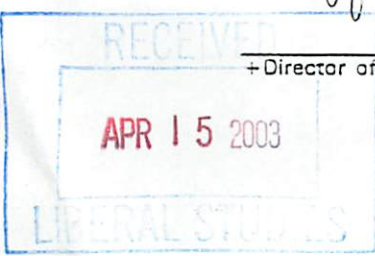
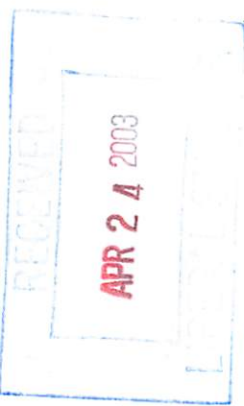
Department Chair

[Signature]
College Curriculum Committee

[Signature] 4-15-03
College Dean

+ Director of Liberal Studies (where applicable)

*Provost (where applicable)



Part II. Description of Curriculum Change

1A. Current Catalog Description for Nuclear Medicine Technology

Nuclear Medicine is the medical specialty that utilizes the nuclear properties of radioactive and stable nuclides to make diagnostic evaluations of the anatomic or physiologic conditions of the body and to provide therapy with unsealed radioactive sources. A nuclear medicine technologist's skills complement those of the nuclear medicine physician.

The nuclear medicine technologist is a highly trained individual who has completed an approved course of study in the theory of nuclear medicine technology. This allied health profession utilizes radioactive materials for the diagnosis of various pathological disease states and for the treatment of some specific disorders. The American College of Radiology, American Medical Association, American College of Medical Technology, American Society of Technologists, Society of Nuclear Medicine, and the Society of Medicine-Technologist Section cooperate to establish, maintain, and promote appropriate standards of quality for educational programs in nuclear medicine technology.

The program leading to a Bachelor of Science degree in Nuclear Medicine Technology consists of three years of study at IUP and one year at the University of Findlay/Nuclear Medicine Institute in Findlay, Ohio. Students must achieve a GPA of 2.25 in the Natural Sciences and Mathematics to be considered for admission to the Nuclear Medicine Institute. Since admission to the Nuclear Medicine Institute is competitive, IUP cannot guarantee admission into the institute's program.

Bachelor of Science--Nuclear Medicine Technology

Liberal Studies: As outlined in Liberal Studies section with the following specifications:

54-55

Mathematics: MATH 217

Natural Science: CHEM 101-102

Social Science: PSYC 101, SOC 151

Liberal Studies Electives: BTED/COSC/IFMG 101

Plus three Liberal Studies elective courses or two Liberal Studies elective courses and one Synthesis course

Major:

32

Required Courses: (1)

NMDT 427	Nuclear Scintigraphy	3sh
NMDT 428	Radiation Physics	3sh
NMDT 429	Nuclear Medicine Instrumentation	3sh
NMDT 430	Radiation Biology and Radiation Protection	2sh
NMDT 431	In Vivo/In Vitro Non-Imaging	1sh
NMDT 432	Radiopharmaceuticals	3sh
NMDT 433	Introduction to Tomographic Imaging	1sh
NMDT 434	Clinical Nuclear Medicine	16sh

Other Requirements:

21

Science Courses:

BIOL 105	Cell Biology	3sh
BIOL 150	Human Anatomy	3sh
BIOL 151	Human Physiology	4sh

PHYS 111	Physics I Lecture	3sh
PHYS 121	Physics I Lab	1sh
PHYS 112	Physics II Lecture	3sh
PHYS 122	Physics II Lab	1sh

Required courses (2)

ENGL 310	Public Speaking	3sh
----------	-----------------	-----

Free Electives

17

At least two of the selected courses must be

Writing Intensive

Total Degree Requirement124-125

- (1) These courses are offered at the University of Findlay/Nuclear Medicine Institute, Findlay, Ohio. These areas of study are consistent with requirements of the Joint Review Committee on Educational Programs on Nuclear Medicine Technology (JRCNMT). All eight of these areas of study are completed during the final twelve months of the degree program.
- (2) Students are also required to complete a medical terminology course/program. Options to fulfill this requirement must be approved by the Coordinator of Allied Health Professions.

1B. Revised Catalog Description for Nuclear Medicine Technology

Nuclear Medicine Technology is a medical specialty in which allied health care professionals, under the direction of a nuclear medicine physician, use radioactive materials in the diagnosis and treatment of disease. They are responsible for patient education and preparation regarding the nuclear medicine procedures, administration of radiopharmaceuticals, performing complex computer imaging studies, and radiation safety procedures for both patients and staff. The nuclear medicine technologist's skills complement those of the nuclear medicine physician.

The College of Health and Human Services offers a curriculum leading to the Bachelor of Science degree in Nuclear Medicine Technology. Students are admitted to the nuclear medicine technology major as freshmen. Transfer students and those with a previous degree may also be admitted. The program of study leading to a Bachelor of Science degree in Nuclear Medicine Technology consists of three years of pre-clinical study on the IUP main campus and one year of clinical study at the Nuclear Medicine Institute, University of Findlay, Findlay, Ohio. The Nuclear Medicine Institute program is fully accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology. Graduates of the program are eligible to take the Nuclear Medicine Technology national certificate examination offered by the Nuclear Medicine Technology Certification Board (NMTCB) and the American Registry of Radiologic Technologists (ARRT). The granting of the degree is not contingent upon passing the examinations.

Students must achieve a GPA of 2.25 in the Natural Sciences and Mathematics and an overall GPA of 2.5 to be considered for admission to the Nuclear Medicine Institute. Admission is competitive; IUP cannot guarantee admission into the institute's program. Information regarding special requirements for the clinical year is available in the department's office.

Bachelor of Science--Nuclear Medicine Technology

Liberal Studies: As outlined in Liberal Studies section with the following specifications:

51

Mathematics: MATH 105

Natural Science: CHEM 101-102

Social Science: PSYC 101, SOC 151, plus one

Liberal Studies Electives: 9 crs - BTED/COSC/IFMG 101, MATH 217, PHYS 111

Synthesis: not required

Major:

32

Required Courses: (1)

NMDT 427	Nuclear Scintigraphy	3sh
NMDT 428	Radiation Physics	3sh
NMDT 429	Nuclear Medicine Instrumentation	3sh
NMDT 430	Radiation Biology and Radiation Protection	2sh
NMDT 431	In Vivo/In Vitro Non-Imaging	1sh
NMDT 432	Radiopharmaceuticals	3sh
NMDT 433	Introduction to Tomographic Imaging	1sh
NMDT 434	Clinical Nuclear Medicine	16sh

Other Requirements:

18

Science Courses:

BIOL 105	Cell Biology	3sh
BIOL 150	Human Anatomy	3sh
BIOL 151	Human Physiology	4sh
PHYS 121	Physics I Lab	1sh
PHYS 112	Physics II Lecture	3sh
PHYS 122	Physics II Lab	1sh

Required courses (2)

ENGL 310	Public Speaking	3sh
----------	-----------------	-----

Free Electives: (3)

19

Total Degree Requirement

 120

- (1) These courses are offered at the University of Findlay/Nuclear Medicine Institute, Findlay, Ohio. These areas of study are consistent with requirements of the Joint Review Committee on Educational Programs on Nuclear Medicine Technology (JRCNMT). All eight of these areas of study are completed during the final twelve months of the degree program.
- (2) Students are also required to complete a medical terminology course/program. Options to fulfill this requirement must be approved by the Coordinator of Allied Health Professions.
- (3) Two writing intensive courses are required. Both courses may be from either liberal studies or free electives.

2. Summary of changes:

- Change in program catalog description
- Specify MATH 105 College Algebra as the Liberal Studies math requirement
- Specify MATH 217 and PHYS 111 as Liberal Studies electives
- Eliminate the option to take 3 LS electives plus Synthesis
- Number of liberal studies requirements changed from 54-55 to 51
- Change the number of credit hours for free electives from 17 to 19
- Change the number of credit hours for Other Requirements from 21 to 18
- Change the total number of credit hours from 124-125 to 120

3. Rationale for the change:

Catalog description change reflects an updating of the program, clarification of career choices, accreditation status.

The Joint Review Committee on Educational Programs in Nuclear Medicine Technology Essentials requires that all students take two courses in mathematics, MATH 105 College Algebra and MATH 217 Probability and Statistics. The current curricular sequence only requires MATH 217. This proposal puts the curricular sequence in compliance with the committee's essentials.

By allowing students to count MATH 217 and PHYS 111 as liberal studies electives the number of free electives is increased. This gives the student more options to pursue minors, certificates, or other areas of academic interest.

Previously, students were given the option of completing Microbased Computer Literacy plus three additional LS electives OR Microbased Computer Literacy plus 2 additional LS electives and Synthesis. This second option is eliminated. Rationale: NMDT students study off campus in their senior year leaving only the second semester junior year in which they could consider the Synthesis option. Few students have elected the Synthesis option because of scheduling demands. Increasing the number of free elective credits gives the student more options to pursue minors, certificates, or other areas of academic interest. Waiving the Synthesis requirement is consistent with the practice for the Medical Technology curriculum that also places students off campus during their final year.

Part III. Implementation

1. Students are currently being advised to use one of their free electives for the second mathematics course. The change in requirements will have little effect on them since they are already in compliance.
2. Faculty teaching loads will not be changed with this revision.
3. Resources are adequate for this change.
4. Student numbers should not change because of this revision.

Part IV. Course Proposals: There are no new course proposals for this revision.

Part V. Letters of Support: A letter of support from the chairperson of the Department of Mathematics is attached.

Comparison of Current and Proposed Curricula: Nuclear Medicine Technology

Current	Cr	Proposed	Cr
Liberal Studies: as outlined in Liberal Studies section with the following specifications:	54-55	Liberal Studies: as outlined in Liberal Studies section with the following specifications:	51
Mathematics: MATH 217	3	Mathematics: MATH 105	3
Natural Science: CHEM 101-102	8	Natural Science: CHEM 101-102	8
Social Science: PSYC 101, SOC 151	9	Social Science: PSYC 101, SOC 151	9
Liberal Studies Electives: BTED/COSC/IFMG 101 plus 3 LS electives or 2 LS electives and one Synthesis	12	Liberal Studies Electives: BTED/COSC/IFMG 101, MATH 217, PHYS 111	9
Major		Major	
Required Courses	32	Required Courses	32
Other Requirements	21	Other Requirements	18
BIOL 105 Cell Biology	3	BIOL 105 Cell Biology	3
BIOL 150 Human Anatomy	3	BIOL 150 Human Anatomy	3
BIOL 151 Human Physiology	4	BIOL 151 Human Physiology	4
PHYS 111 Physics I Lecture	3	PHYS 121 Physics I Lab	1
PHYS 121 Physics I Lab	1	PHYS 112 Physics II Lecture	3
PHYS 112 Physics II Lecture	3	PHYS 122 Physics II Lab	1
PHYS 122 Physics II Lab	1	ENGL 310 Public Speaking	3
Required Courses	3		
ENGL 310 Public Speaking			
Free Electives	17	Free Electives	19
Total Degree Requirements	124-125	Total Degree Requirements	120

Jodell Kuzneski

From: "Gary Stoudt" <gsstoudt@iup.edu>
To: "Jodell Kuzneski" <kuzneski@iup.edu>
Sent: Thursday, April 10, 2003 10:40 AM
Subject: Support for NMDT and MEDT

The Mathematics Department supports the revision of the Nuclear Medicine Technology program to include both MATH 105 and MATH 217.

We also support the change in the mathematics requirement of the Medical Technology from MATH 105 to MATH 217

MATH 217 is a good quantitative course for many fields, and many majors are now requiring it instead of other mathematics courses. We already have plans to shift resources from these courses to MATH 217. We will be able to accommodate the extra students from MEDT and NMDT in MATH 217 over the course of the three years they are at IUP.

Gary

Gary Stoudt, Chairperson
Mathematics