

FORM FOR REQUEST FOR CHANGE IN UNDERGRADUATE PROGRAM

Program: Nuclear Medicine Technology

Formal Option: NA or Specialty Field: NA
(if applicable) (if applicable)

Department: Natural Science & Health Technologies College: Lexington Community College

Degree title: Associate in Applied Science Bulletin pp.: 228-229 (UK 03-04) & 57 (LCC 03-04)

CIP Code: 51 UK ID No.: _____ HEGIS CODE: _____

Accrediting Agency (if applicable): NA

I. PROPOSED CHANGE(S) IN PROGRAM REQUIREMENTS

Particular University Studies Requirements or Recommendations for this program

Not applicable to AAS curriculum.

<u>Current</u>	(credit hrs)	<u>Proposed</u>
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English Writing:

Communication:

Mathematics:

Area I (Natural Science)

Area II (Social Science)

Area III (Humanities)

Area IV (Cross-disciplinary component)

Area V (Non-western cultural component)

- College Depth and Breadth of Study Requirements (if applicable) (including particular courses required or recommended for this program) NOTE: To the extent that proposed changes in 2. through 6. involve additional courses offered in another program, please submit correspondence with the program(s) pertaining to the availability of such courses to your students.

Not applicable to AAS curriculum.

3. Premajor or Preprofessional Course Requirements (if applicable)

Not applicable to AAS curriculum.

Current (credit hrs) Proposed

Total Hours:

4. Credit Hours Required

Current: 68-72 Proposed: 69-71

a. Total Required for Graduation: 69-71

b. Required by level:

100 38 – 49* cr hrs 200 22 – 33* cr hrs
300 NA 400-500 NA

* The Communications course, Heritage/Humanities/Foreign Language course, and Social Interaction course might be either 100- or 200-level courses in this curriculum. The large number of prescribed 100-level math and science courses weight this curriculum with predominately introductory 100 level classes.

c. Premajor or Preprofessional (if applicable) NA

d. Field of Concentration (if applicable) NA

e. Division of Hours Between Major Subject and Related Field (if applicable) NA

f. Hours Needed for a Particular Option or Specialization (if applicable) NA

g. Technical or Professional Support Electives (if applicable).

h. Minimum Hours of Free or Supportive Electives [Required] NA

5. Major or Professional Course Requirements

Not applicable to AAS curriculum.

Current Proposed

6. Minor Requirements (if applicable)

Current: Proposed

NA

Total Hours: NA

7. Rationale for Change(s): (If rationale involves accreditation requirements, please include specific references to those requirements.)

The last major curriculum revision was in 1995 just after the last revision of the Nuclear Medicine Technology Certification Board (NMTCB) in 1994. For the most part, that revision has worked well for the program including the exam revision of 1999. There will be another periodic revision of the NMTCB in 2004, and this curriculum will have to change to accommodate topics that have been dropped and topics that have been added to the examination matrix.

Additionally, the Academic Committee of the Society of Nuclear Medicine Technologist Section has published a revised curriculum guide in 2003 for use by NMT programs. There are many good suggestions from this guide to be incorporated into this curriculum.

The computer literacy course is no longer a General Education requirement for the AAS degree. The vast majority of students come into the NMT program with a minimum of computer skills. Those few students who do not will be advised to complete an introductory computer course in the first semester of the program if not earlier when prerequisite courses are being taken.

The elective is no longer a curricular requirement and most students have a variety of courses that would qualify as an elective. The hours previously used for a computer course and an elective will best be used for additional NMT hours.

Currently the last course of the second year of the curriculum, NMT 280, involved assignments that overlapped the clinical assignments of the first-year students. As it has turned out with the increase in enrollment over the recent past, there is physically not space for that number of students to be in the local Nuclear Medicine departments at the same time. The adjustment in the credit hours for NMT 280 is to reflect what is currently the assigned time to the clinical affiliates.

Also, a small increase in the number of lecture hours from 3 hours/week to 4 hours/week will allow for the inclusion of some topics that have had to be carried over from one NMT course into subsequent NMT courses or to be abbreviated in the course content. Each NMT course has had 1 additional credit hour added for lecture (with the exception of NMT 230, the summer term course) in order to cover those topics recommended by the new curriculum guide more completely. Some current course content will be rearranged among the 5 NMT courses, e.g. cardiology procedures will be taught in NMT 150 rather than NMT 230 as well as hematologic studies will be moved to the final NMT course; some content will be omitted, e.g., radioimmunoassay which is rarely found in nuclear medicine departments today nor is it included in the certification exam matrix; and some content will be added, e.g., positron emission tomography (PET) imaging. More complete rationales are given on the individual course revision forms.

This program voluntarily withdrew programmatic accreditation by the Joint Review Committee on Educational Program in Nuclear Medicine Technology on 2 January 1998.

8. List below the typical semester by semester program for a major.

<u>Current</u>		<u>Proposed</u>	
First Year		First Year	
First Summer Term		First Summer Term	
ENG 101 Writing I*	3	ENG 101 Writing I*	3
BSL: 110 Human Anatomy & Physiology I*	4	BSL: 110 Human Anatomy & Physiology I*	4
Second Summer Term		Second Summer Term	
MA 109 College Algebra*	3	MA 109 College Algebra*	3
BSL 111 Human Anatomy & Physiology II	4	BSL 111 Human Anatomy & Physiology II	4
Fall Semester		Fall Semester	
CHE 104 Introductory General Chemistry I	3	CHE 104 Introductory General Chemistry I	3
ENG 102 Writing II*	3	ENG 102 Writing II*	3
PH 172 Physics for Health Sciences	2	PH 172 Physics for Health Sciences	2
NMT 140 Nuclear Medicine Technology I	5	NMT 140 Nuclear Medicine Technology I	6
Spring Semester		Spring Semester	
CHE 106 Intro to Inorganic, Organic, & Biochemistry	4	CHE 106 Intro to Inorganic, Organic, & Biochemistry	4
Computer Literacy Course	1-3	Communications Course*	3
NMT 150 Nuclear Medicine Technology II	5	NMT 150 Nuclear Medicine Technology II	6
Second Year		Second Year	
First Summer Term		First Summer Term	
NMT 230 Nuclear Medicine Technology III	6	NMT 230 Nuclear Medicine Technology III	6
Fall Semester		Fall Semester	
Oral Communications Course*	3	Humanities/Foreign Language Course*	3-4
Heritage/Humanities Course*	3	NMT 240 Nuclear Medicine Technology IV	8
NMT 240 Nuclear Medicine Technology IV	7		
Spring Semester		Spring Semester	
PY 110 General Psychology*	3	Social Interaction Course*	3-4
Elective Course	1-3	NMT 280 Nuclear Medicine Technology V	8
NMT 280 Nuclear Medicine Technology V	8		
Total Credit Hours	68-72		69-71

*Satisfies General Education requirement for AAS degree

Will this program be printed in the Bulletin? Yes No

Signatures of Approval:

Department Chair: *Suzanne Zell* Date: 10-16-03

For: Dean of the College: *[Signature]* Date: 11/20/03

Date of Notice to the Faculty: _____

Undergraduate Council: _____ Date: _____

Graduate Council: _____ Date: _____

Academic Council for the Med. Ctr: _____ Date: _____

Senate Council: _____ Date of Notice to Univ. Senate: _____
(Chair)

ACTION OTHER THAN APPROVAL: _____

Adopted: September, 1989

FORM FOR REQUEST FOR CHANGE IN UNDERGRADUATE PROGRAM
Additional Information on CCS Forms

1 Effective date: Fall 2004

2. Program competencies:

Present

The following program competencies were approved by the University of Kentucky Community College Council in 1995:

Upon completion of an associate of applied science degree in nuclear medicine technology, the graduate can:

- (1) communicate effectively using standard written English;
- (2) communicate in a clear oral and non-verbal fashion and employ active listening skills;
- (3) demonstrate basic skills in computer operations and/or software applications;
- (4) organize, analyze, and make data useful by employing mathematics;
- (5) demonstrate an awareness of one's interaction with the biological/physical environment;
- (6) demonstrate an awareness of self as an individual, as a member of a multicultural society, and/or as a member of the world community;
- (7) recognize the impact of decisive ideas and events in human heritage;
- (8) develop and perform basic search strategies and access information in a variety of formats, print and non-print;
- (9) analyze, summarize, and interpret a variety of reading materials;
- (10) think critically and make connections in learning across the disciplines;
- (11) elaborate upon knowledge to create new thoughts, processes and/or products;
- (12) demonstrate an awareness of ethical considerations in making value choices;
- (13) prepare, dispense, and administer routine radiopharmaceuticals under the supervision of appropriate personnel;
- (14) demonstrate proper use and care of nuclear medicine instrumentation and ancillary equipment;
- (15) perform routine diagnostic and therapeutic nuclear medicine procedures to include computer evaluation of patient data;
- (16) demonstrate appropriate radiation safety precautions in relation to patients, personnel, and the general public; and
- (17) record and maintain appropriate documentation for the operations of a nuclear medicine department.

Proposed

The following learning outcomes—Communicate effectively, Think critically, Learn independently and Examine relationships in diverse and complex environments—will be addressed in all general education courses. Under each of these headings, one or more of the bulleted items, which are measurable outcomes, will be chosen by area faculty and incorporated into every general education course.

General Education and Technical Learning Outcomes

Communicate effectively

Students should be able to

- Write clearly
- Speak clearly
- Read with comprehension
- Listen with comprehension
- Use symbolic language
- Work cooperatively with others
- Use technology to process information

Think critically

Students should be able to

- Demonstrate problem solving skills
- Analyze creative expressions, resources, and/or data
- Integrate knowledge
- Use logical thinking to draw conclusions

Learn independently

Students should be able to

- Find, evaluate, and use resources effectively
- Apply learning
- Think creatively
- Value new ideas and differing perspectives

Examine relationships in diverse and complex environments

Students should be able to

- Define the relationship of self to historical and cultural context
- Define the relationship of self to the biological/physical environment
- Define the relationship of self to the global community
- Use mathematics to analyze physical relationships

Function as a Nuclear Medicine Technologist

Students should be able to

- Prepare, dispense, and administer routine radiopharmaceuticals under the supervision of appropriate personnel;
- Demonstrate proper use and care of nuclear medicine instrumentation and ancillary equipment;
- Perform routine diagnostic and therapeutic nuclear medicine procedures to include computer evaluation of patient data;
- Demonstrate appropriate radiation safety precautions in relation to patients, personnel, and the general public; and
- Record and maintain appropriate documentation for the operations of a nuclear medicine department.

3. Curriculum outline:

NUCLEAR MEDICINE TECHNOLOGY

The nuclear medicine technology program prepares the individual to become a nuclear medicine technologist. Nuclear medicine is the medical specialty that utilizes the nuclear properties of radioactive and stable nuclides to make diagnostic evaluation of the anatomic or physiologic conditions of the body and to provide therapy with unsealed radioactive sources. The skills of the nuclear medicine technologist complement those of the nuclear medicine physician and other professionals in the field. Nuclear medicine technologists have responsibilities in the following areas: (a) patient care and monitoring, (b) technical skills related to radiation safety, radiopharmacy, clinical instrumentation, diagnostic and therapeutic procedures, quality control, and computers, and (c) administrative functions related to supplies and equipment, documentation of operations related to disposition of radioactive materials, quality control data, and patient records.

The nuclear medicine technology program is a selective admission program. A student must earn a grade of C or better in the prerequisite and concurrent mathematics and science courses to be admitted to and to remain enrolled in the program. Also, a student must earn a grade of C or better in each of the nuclear medicine technology courses to be retained in the program. After graduation from the program, the individual is eligible to write either the Nuclear Medicine Technology Certification Board (NMTCB) or the American Registry of Radiologic Technologists (ARRT) nuclear medicine technology examination to earn credentials. Please see the guidelines for the selective admission requirements to the nuclear medicine technology program, page 64.

For more information, visit the Nuclear Medicine Technology Web site at www.uky.edu/LCC/NMT.

First Year	
First Summer Term	<u>Credits</u>
ENG 101 Writing I*	3
BSL: 110 Human Anatomy & Physiology I*	<u>4</u>
	7
Second Summer Term	
MA 109 College Algebra*	3
BSL 111 Human Anatomy & Physiology II	<u>4</u>
	7
Fall Semester	
CHE 104 Introductory General Chemistry I	3
ENG 102 Writing II*	3
PH 172 Physics for Health Sciences	2
NMT 140 Nuclear Medicine Technology I	<u>6</u>
	14
Spring Semester	
CHE 106 Intro to Inorganic, Organic, & Biochemistry	4
Communications Course*	3
NMT 150 Nuclear Medicine Technology II	<u>6</u>
	13

Second Year

First Summer Term

NMT 230 Nuclear Medicine Technology III	6
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Fall Semester

Humanities/Foreign Language Course*	3-4
NMT 240 Nuclear Medicine Technology IV	<u>8</u>
	11-12

Spring Semester

Social Interaction Course*	3-4
NMT 280 Nuclear Medicine Technology V	<u>8</u>
	11-12

Total Credit Hours	69-71
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*Satisfies General Education requirement for AAS degree

4. Summary of how the proposed changes will result in changes in the level or source of funding:

There will be no change in either the level or source of funding for this program.