Miami Dade College
Office Associate Provost, Academic Affairs

July 12, 2013

M E M O R A N D U M

TO: Rolando Montoya

FROM: Lenore Rodicio

SUBJECT: APPROVAL OF CURRICULUM REPORT #100-A

Attached for your approval is the approved curriculum presented at the July 9, 2013 CASSC meeting. The information in Curriculum Report #100-A includes the following items:

Curriculum Requiring Approval –

1. **English and Communication**
   - **Existing Course Modifications –**
     SPC2608 – Introduction to Public Speaking

2. **College Prep**
   English/Reading
   - **Add New Courses –**
     ENC0056 – Developmental Writing Module (2 credits)
     REA0056 – Developmental Reading Module (2 credits)

3. **College Prep**
   Mathematics
   - **Existing Course Modifications –**
     MAT0029 – Developmental Mathematics for Statistics

4. **School of Business**
   - **Program Modifications/Updates –**
     BAS – Supervision & Management
     1. **Degree Audit Revisions**

     2. **Add New Upper Division Elective Courses –**
        FIN4303 – Financial Markets and Institutions (3 credits)
        MAN3XYZ – Professional Development (1 credits)
        MAR4804 – Marketing Strategy (3 credits)
        MSL3201 – Leadership and Problem Solving (3credits)
        MSL3202 – Leadership and Ethics (3 credits)

5. **School of Health Sciences**
   - **Program Modifications/Updates –**
     AS – Nuclear Medicine Technology
     1. **Add New Course –**
        NMT 1002 – Introduction Nuclear Medicine

     2. **Add Existing Course –**
        PHY 1004 L – Physics with Applications 1 Lab (1 credit)

(OVER)

3. **Remove Existing Courses from Program Only –**
   CHM 1045/L – General Chemistry & Qualitative Analysis & Lab (5 credits)
   CHM 1046/L - General Chemistry & Qualitative Analysis & Lab (5 credits)
   CHM 2032/L – Survey of General Chemistry & Lab (6 credits) (**Note: Course was end-termed 2004-3)**
   PHY 1005 – Physics with Applications 2 (3 credits)
   PHY 1025 – Basic Physics (3 credits)
   RTE 1000 – Orientation to the Imaging Science (2 credits)

4. **Delete Existing Course –**
   RTE 1001 – Orientation to Radiographic Clinic

5. **Existing Course Modifications –**
   NMT 1002L – Intro to Nuclear Medicine Lab
   NMT 1312 – Radiation Protection
   NMT 1713 – Nuclear Medicine Procedures 1
   NMT 2102 – Nuclear Medicine Administration
   NMT 2130 – Nuclear Medicine Pharmacology
   NMT 2534 – Nuclear Medicine Instruction
   NMT 2573 – Nuclear Medicine QA/QC
   NMT 2613 – Nuclear Medicine Physics
   NMT 2723 – Nuclear Medicine Procedures 2
   NMT 2804C – Nuclear Medicine Clinic Practice & Conference 1 (**Increase Credits from 5 to 6**)
   NMT 2814C – Nuclear Medicine Clinic Practice & Conference 2 (**Reduce Credits from 7 to 6**)
   NMT 2824C – Nuclear Medicine Clinic 3
   NMT 2932 – Nuclear Medicine Seminar

If I can be of further assistance, please do not hesitate to contact me.

Attachment

Miami Dade College
College-wide CASSC Meeting July 9, 2013
CURRICULUM REPORT #100-A

1. English and Communication

Existing Course Modifications –
Description/Learning Outcomes

Course No.	Course Title	Credits	Campus	Eff. Term
SPC2608	Introduction to Public Speaking	3	1, 2, 3, 4, 5, 6, 7, 8	2013-1

Course Description: SPC 2608 is a course in which students will practice speaking to audiences as well as listening to and critically analyzing oral communication. Through oral and written communication, students will learn communication theory as applied to a variety of communication situations and social interactions. Prerequisite(s): Placement by Scholastic Assessment Test (SAT) verbal subtest score; American College Testing (ACT) English subtest score; Computerized Placement Test (CPT) English subtest score; or ENC 0025 with a grade of "S." Gordon Rule assigned. (3 hr. lecture)

Curriculum Action Rationale: Course updates to description, competencies, and learning outcomes. Also requesting to add the Gordon Rule Designation to this course. No other changes being requested, course fee remains the same.

APPROVE_____OPPOSE_____ MORE INFORMATION_____

2. College Prep (English/Reading)

Add New Courses –

Course No.	Course Title	Credits	Campus	Eff. Term
ENC0056	Developmental Writing Module	2	1, 2, 3, 4, 5, 6, 7, 8	2013-1

Course Description: This course is designed to develop written language skills for students whose entry placement scores do not meet requirements for degree credit courses (course not applicable for graduation requirements). This course may be taken in place of ENC 0025 for students who completed ENC 0025 in a prior term but did not earn a passing grade. Students will learn to focus on their individual grammar, usage, and writing needs to prepare for successful entry into college credit English courses. Prerequisite: Students must score 97-98 on the PERT or receive departmental permission.

Curriculum Action Rationale: In response to the Division of Florida College System request, MDC is requesting the creation of a modularized Developmental Education course that will provide students flexibility and an expedited transition to college credit coursework, enabling them to save time and money by enrolling in shortened course modules that address their individual deficiencies. The Developmental Education course module is specifically intended to assist students scoring in the higher level of Developmental Education to rapidly progress to college credit courses in the Florida College System.

Course No.	Course Title	Credits	Campus	Eff. Term
REA0056	Developmental Reading Module	2	1, 2, 3, 4, 5, 6, 7, 8	2013-1

Course Description: This course is designed to develop reading comprehension skills for students whose entry placement scores do not meet requirements for degree credit courses (course not applicable for graduation requirements). This course may be taken in place of REA0017 for students who completed REA0017 in a prior term but did not earn a passing grade. Students will learn to focus on their individual reading skills to prepare for successful entry into college credit English courses. Prerequisite: Students must score 102-103 on the PERT or receive departmental permission.

Curriculum Action Rationale: In response to the Division of Florida College System request, MDC is requesting the creation of a modularized Developmental Education course that will provide students flexibility and an expedited transition to college credit coursework, enabling them to save time and money by enrolling in shortened course modules that address their individual deficiencies. The Developmental Education course module is specifically intended to assist students scoring in the higher level of Developmental Education to rapidly progress to college credit courses in the Florida College System.

APPROVE_____OPPOSE_____ MORE INFORMATION_____

3. College Prep (Mathematics)

Existing Course Modifications –

Course No.	Course Title	Credits	Campus	Eff. Term
MAT0029	Developmental Mathematics for Statistics	3	1, 2, 3, 4, 5, 6, 7, 8	2013-1

Course Description: Students will investigate ratios, proportions, scaling, modeling with equations and inequalities, tables, graphs, linear functions, and exponential functions, in preparation for Statistics. Students will learn the language of mathematics and mathematical symbols, procedural fluency, strategic competence, adaptive reasoning, quantitative investigative techniques, and questioning and solution-building skills. (3 hr. lecture)

Curriculum Action Rationale: Removing STA 2023 co-requisite. No other changes being requested.

APPROVE_____OPPOSE_____ MORE INFORMATION_____

4. School of Business

Program Modifications/Updates –
BAS – Supervision & Management
Degree Audit Revisions/Add New Upper Division Elective Courses

Executive Summary

Program title: BAS, Supervision & Management
Program Code: P9200/P5200
Degree Type: Bachelor of Applied Science (BAS)
Effective Term: Fall 2013-1
Affected Campuses: 1, 2, 3, 5, 6, 7, 8
Modification: Degree Audit Revision

Rationale: The BAS in Supervision and Management (BAS-SM) accepts students from all academic backgrounds. Area 9 Lower Division Requirements were included in the program sheet and degree audit (DA) to ensure students had all the prerequisites for the upper division courses. However, now that the BAS-SM has become an established program, many of our students come from MDC with an AA pathway to a major in Business. As a result, they take QMB2100 or STA2023 as a Math in Area 6. This requires the QMB2100 in Area 9 Lower Division Requirements to be substituted with another Business course. During 2011-2012 almost 80% of Kendall BAS-SM graduates required a QMB2100 substitution. The program is growing rapidly and the number of substitutions increases every semester.

To eliminate this problem, we would like to include QMB2100 as a selection in the Mathematics General Education Area.

It is requested that all degree audit areas, except for the Elective Area, be met with a "C or higher".

CHANGES TO P9200 DEGREE AUDIT
AREA 6: MATHEMATICS – 6 CREDITS REQUIRED
Group A Must take 3 credits from the following group:
MAC*
MAD*
MAP*
MAS*
MGF*
MTG 2204Geometry for Educators 3

Group B Must take 3 credits from the following group:

QMB 2100	Basic Business Statistics	3	Co-Req QMB 2100L; Pre-Req MAT1033
STA 2023	Statistical Methods	3	Pre-Req MAT1033

NEW UPPER DIVISION ELECTIVE COURSES

FIN4303	Financial Markets/Institutions	3	Pre-Req FIN3400, ACG2071, ECO2013
MAN3XYZ	Professional Development	1	Pre-Req MAN2021
MAR4804	Marketing Strategy	3	Pre-Req MAR1011, or MAR2150
MSL3201	Leadership/Problem Solving	3	Pre-Req ROTC or MAN 2021
MSL3202	Leadership and Ethics	3	Pre-Req ROTC or MAN 2021

APPROVE_____OPPOSE_____ MORE INFORMATION_____

Add New Upper Division Elective Courses –

Course No.	Course Title	Credits	Campus	Eff. Term
FIN4303	Financial Markets & Institutions	3	1, 2, 3, 5, 6	2013-1

Course Description: Students will learn the importance of financial markets and the role financial intermediaries' play. Emphasis will be upon the objectives and policies of financial intermediaries within the constraints of the law and regulatory authorities. Prerequisites: grade of "C" or higher in FIN 3400, ECO 2013, and ACG 2071 or equivalents. (3 hr. lecture) Pre-requisites: FIN3400, ACG2071, ECO2013,

Curriculum Action Rationale: Provide an upper division elective course for the BAS in Supervision and Management that gives students an understanding of the financial institutions and markets they will be dealing with in the business world.

Proposed Fees: $45.00

Rationale/Justification: Students will be using Scantron forms.

Course No.	Course Title	Credits	Campus	Eff. Term
MAN3XYZ	Professional Development	1	1, 2, 3, 5, 6, 7, 8	2013-1

Course Description: Students will learn to implement basic business etiquette, work habits, and career planning strategies required for successful transition into the business profession. Focus is on setting professional goals, preparing for a job search, networking, finding job leads, applying for jobs, interviewing for jobs, following up, and evaluating job offers. (1 hr. lecture)

Pre-requisites: MAN2021,

Curriculum Action Rationale: New course being developed for the BAS-SM.

Course No.	Course Title	Credits	Campus	Eff. Term
MAR4804	Marketing Strategy	3	1, 2, 3, 5, 6, 7, 8	2013-1

Course Description: Students will learn to implement marketing elements within a strategic planning framework. Emphasis is on strategy formulation and integrated marketing decision-making. This course incorporates the use of case studies. (3 hr. lecture)

Pre-requisites: MAR1011, or MAR2150,

Curriculum Action Rationale: New upper division elective for the Bachelor of Applied Science with a major in Supervision & Management (P9200) program. Marketing is an integral part of every business. Students need to have a working knowledge of marketing, in order to be successful as supervisors and managers in the business world.

Proposed Fees: $45.00

Rationale/Justification: Students will receive support from staff and tutors. Students will use marketing simulation and market planning software in conjunction with this course.

APPROVE_____OPPOSE_____ MORE INFORMATION_____

Course No.	Course Title	Credits	Campus	Eff. Term
MLS3201	Leadership & Problem Solving	3	1, 2,	2013-1

Course Description: This is a leadership & problem solving course for ROTC Cadets. Students will learn to examine skills that underlie effective problem solving, analyze military missions and plan military operations, and execute squad battle drills. Prerequisite: Cadets Eligible to Contract per ROTC Enrollment Officer and/or MAN2021. (3 hr. lecture)

Curriculum Action Rationale: This course will be added to the existing Bachelor's degree in Supervision and Management as an Elective option for students who are ROTC members.

Course No.	Course Title	Credits	Campus	Eff. Term
MLS3202	Leadership & Ethics	3	1, 2,	2013-1

Course Description: This course explores leader responsibilities that foster an ethical command climate. Students will learn to develop Cadet leadership competencies, and apply principles and techniques of effective written and oral communication. Prerequisite: Cadets Eligible to Contract per ROTC Enrollment Officer and/or MAN2021. (3 hr. lecture).

Curriculum Action Rationale: This course will be added to the existing Bachelor's degree in Supervision and Management as an Elective option.

APPROVE_____OPPOSE_____ MORE INFORMATION_____

Miami Dade College
School of Business

Supervision and Management
Bachelor in Applied Science

Program # P5200/P9200
C.I.P. 52.0299

Total credits required for the degree is 120

The Bachelor of Applied Science Degree in Supervision and Management provides an opportunity for students completing an Associates degree to seamlessly complete a Bachelors degree. Graduates of the Bachelor in Applied Science in Supervision and Management will be prepared with the abilities and skills needed to succeed as a manager or supervisor in the dynamic and global business environment. The Bachelor in Applied Science in Management and Supervision prepares graduates with the hands-on training necessary to meet workforce demands.

Course	Course Title	Credits	Pre-/Co-Requisites
GENERAL EDUCATION REQUIREMENTS – 36 Credits Required (MET WITH A "C" LETTER GRADE OR HIGHER)			
Communications – 6 Credits Required			
ENC 1101	English Composition 1	3	
ENC 1102	English Composition 2	3	Pre-Req ENC 1101
Oral Communication – 3 Credits Required			
Select 3 Credits from the following			
ENC 2300	Advanced Composition & Communication	3	Pre-Req ENC 1101, 1102
LIT 2480	Issues in Literature & Culture	3	Pre-Req ENC 1102
SPC 1017	Fundamentals of Speech Communications	3	
Humanities – 6 Credits Required			
Group A – Select 3 Credits from the following:			
ARC 2701	History of Architecture	3	
ARH 1000	Art Appreciation	3	
ARH 2050	Art History 1	3	
DAN 2100	Dance Appreciation	3	
HUM 1020	Humanities	3	
IND 1100	History of Interiors 1	3	
MUH 2111	Survey of Music History1	3	
MUL 1010	Music Appreciation	3	
PHI 2604	Critical Thinking/Ethics	3	Pre-Req ENC 1102
	AND		
Group B – Select 3 Credits from the following:			
ARC 2702	History of Architecture 2	3	
ARH 2051	Art History 2	3	Pre-Req ARH 2050
ARH 2740	Cinema Appreciation	3	
DAN 2130	Dance History 1	3	
IND 1130	History of Interiors 2	3	
LIT 2120	A Survey of World Literature	3	Pre-Req ENC 1101 or ENC 1102 or Equivalent
MUH 2112	Survey of Music History 2	3	Pre-Req MUH 2112
MUL 2380	Jazz & Popular Music in America	3	
PHI 2010	Introduction to Philosophy	3	
THE 2000	Theatre Appreciation	3	
Behavioral and Social Science – 6 Credits Required			
Group A – Select 3 Credits from the following:			
ANT 2410	Introduction to Cultural Anthropology	3	
CLP 1006	Psychology of Personal Effectiveness	3	
DEP 2000	Human Growth & Development	3	
ISS 1161	Individual in Society	3	
PSY 2012	Introduction to Psychology	3	
SYG 2000	Introduction to Sociology	3	
	AND		
Group B – Select 3 Credits from the following:			
AMH 2010	History of the United States to 1877	3	
AMH 2020	History of the United States since 1877	3	
ECO 2013	Principles of Economics (Macro)	3	
ISS 1120	The Social Environment	3	

Course	Course Title	Credits	Pre-/Co-Requisites
POS 2041	American Federal Government	3	
WOH 2012	History of World Civilizations to 1715	3	
WOH 2022	History of World Civilizations from 1715	3	

Natural Science – 6 Credits Required

Group A – Select 3 Credits from the following

BOT 1010	Botany	3	Co-Req BOT 1010L
BSC 1005	General Education Biology	3	BSC 1005L (Optional Laboratory)
BSC 1030	Social Issues in Biology	3	
BSC 1050	Biology & Environment	3	
BSC 1084	Functional Human Anatomy	3	
BSC 2010	Principles of Biology 1	3	Pre/Co-Req BSC 2010L, CHM 1045
BSC 2020	Human Biology: Fundamental of Anatomy & Physiology	3	
BSC 2085*	Human Anatomy & Physiology 1	3	Co-Req BSC 2085L
BSC 2250	Natural History of South Florida	3	
HUN 1201	Essentials of Nutrition	3	HUN 1201L (Optional Laboratory)
OCB 1010	Introduction to Marine Biology	3	OCB 1010L (Optional Laboratory)
PCB 2033	Introduction to Ecology	3	Pre-Req BSC 2011 or PSC 1515
ZOO 1010	Zoology	3	Co-Req ZOO 1010L

* Students are strongly recommended to complete CHM 1033/1033L prior to course registration.

AND

Group B – Select 3 Credits from the following

AST 1002	Descriptive Astronomy	3	
CHM*		3	
GLY*		3	
ESC*		3	
MET*		3	
OCE*		3	
PHY*		3	
PSC 1121	General Education Physical Science	3	Pre-Req MAT 1033
PSC 1515	Energy in the Natural Environment	3	

* Any course with the following prefix excluding labs.

Mathematics – 6 Credits Required

Group A Must take 3 credits from the following group:

MAC*			
MAD*			
MAP*			
MAS*			
MGF*			
MTG 2204	Geometry for Educators	3	

Group B Must take 3 credits from the following group:

QMB 2100	Basic Business Statistics	3	Co-Req QMB 2100L; Pre-Req MAT1033
STA 2023	Statistical Methods	3	Pre-Req MAT1033

General Education Elective – 3 Credits Required (MET WITH A "D" LETTER GRADE OR HIGHER)

See Advisor for Approved Selection

LOWER DIVISION PREREQUISITE REQUIREMENTS – 24 Credits Required (MET WITH A "C" LETTER GRADE OR HIGHER)

Group A Must take 11 credits from the following group:

Course	Course Title	Credits	Pre-/Co-Requisites
ACG 2021	Financial Accounting	3	Co-Req ACG 2021L
ACG 2021L	Financial Accounting Lab	1	Co-Req ACG 2021
ACG 2071	Managerial Accounting	3	Pre- Req ACG 2011 and ACG 2001 or ACG 2021; Co-Req ACG 2071L
ACG 2071L	Managerial Accounting Lab	1	Co-Req ACG 2071
MAN 2021	Principles of Management	3	

Group B Must take 13 credits from the following group:

ACG*	FIN2*	MAR*	SBM*
BUL*	GEB*	MAR1011	QMB*
ECO*	MAN1*	MAR2150	TAX*
FIN1*	MAN2*	PUR*	OST*

UPPER DIVISION REQUIREMENTS – 39 Credits Required (MET WITH A "C" LETTER GRADE OR HIGHER)

Supervision and Management Core Requirements – 25 Credits Required

MAN 3025	Organization Management	3	Pre-Req MAN 2021
MAN 3065	Business Ethics	3	Pre-Req MAN 2021
MAN 3240	Organizational Behavior	3	Pre-Req MAN 2021
MAN 3301	Human Resources Management	3	Pre-Req MAN 2021
MAN 3894	Applied Case Studies in Management	3	Pre-Req MAN 2021
MAN 4120	Leadership Challenges and Supervision	3	Senior Status or Departmental Permission
MAN 4162	Customer Relations for Managers	3	Senior Status or Departmental Permission
MAN 4900	Capstone Project in Supervision and Management	4	Senior Status or Departmental Permission

Discipline Content Core – 11 Credits Required

FIN 3400	Finance for Non-financial Managers	3	Pre-Req ACG2071; STA2023 or QMB 2100
ISM 4011	Introduction to Management Information Systems	4	Senior Status or Departmental Permission
MAN 4720	Strategic Management Decision Making	4	Senior Status or Departmental Permission

Internship – 3 Credits Required

MAN 4941	Management Internship	3

ELECTIVES – 21 Credits Required (MET WITH A "D" LETTER GRADE OR HIGHER)

Electives may include any appropriate transferrable courses (with Advisor Approval) or may be chosen from the list below.

CHI*, FRE*, FRW*, GER*, HBR*, ITA*, JPN*, SPN*

FIN4303	Financial Markets and Institutions	3	Pre-Req FIN3400, ACG2071, ECO2013
MAN3XYZ	Professional Development	1	Pre-Req MAN2021
MAR4804	Marketing Strategy	3	Pre-Req MAR1011, or MAR2150
MSL3201	Leadership and Problem Solving	3	Pre-Req ROTC or MAN 2021
MSL3202	Leadership and Ethics	3	Pre-Req ROTC or MAN 2021

TOTAL CREDITS

General Education Requirements.....36 cr.
Lower Division Requirements.....24 cr.
Upper Division Requirements.....39 cr.
Electives.....21 cr.
Total.....120 cr.

Computer Competency: By the **16th earned** college level credit (excluding EAP and college preparatory courses), a student **must take** the Computer Competency Test and pass

Or

By the **31st earned** college level credit (excluding EAP and college preparatory courses), a student **must pass** CGS 1060, an equivalent continuing education or vocational credit course or retest with a **passing score on the Computer Competency Test**.

Foreign Language: Students admitted to the baccalaureate degree program without meeting the foreign language admission requirement of at least 2 courses (8-10 credit hours) of sequential foreign language at the secondary level or the equivalent of such instruction at the postsecondary level must earn such credits prior to graduation.

Additional Information:

Students should check their individualized Degree Audit Report to determine the specific graduation policies in effect for their program of study for the year and term they entered Miami Dade. This outline includes current graduation requirements.

A minimum cumulative grade point average of 2.0 is required for graduation.

Students must successfully complete 30 semester hours of 3000-4000 level course work.

Students should check their individualized Degree Audit Report to determine the specific graduation policies in effect for their program of study for the year and term they entered Miami Dade. This outline includes current graduation requirements

The final responsibility for meeting graduation requirements rests with the student.

5. School of Health Science

Program Modifications/Updates –
AS – Nuclear Medicine Technology

Executive Summary

Program title: AS, Nuclear Medicine Technology
Program Code: 23069/23068
Degree Type: Associate in Science (AS)
Effective Term: Fall 2013-1
Affected Campus: Medical
Rationale: Program modification (see attached program sheet). The requested changes meet the FLDOE Program Length Document requirements of **75 credits** for the program.

- **New Course Request:** NMT 1002 – Introduction to Nuclear Medicine (2 credits)
- **Add Existing Course:** PHY 1004 L – Physics with Applications 1 Lab (1 credit)
- **Remove from Program Only:**
  - CHM 1045/L – General Chemistry & Qualitative Analysis & Lab (5 credits)
  - CHM 1046/L - General Chemistry & Qualitative Analysis & Lab (5 credits)
  - CHM 2032/L – Survey of General Chemistry & Lab (6 credits)
    - Note: Course was end-termed 2004-3
  - PHY 1005 – Physics with Applications 2 (3 credits)
  - PHY 1025 – Basic Physics (3 credits)
  - RTE 1000 – Orientation to the Imaging Science (2 credits)
- **Course Deletion:** RTE 1001 – Orientation to Radiographic Clinic 1 (1 credit)
- **Credit Reduction:** NMT 2814C – Nuclear Medicine Clinic Practice & Conference 2 (from 7 to 6 credits)
- **Credit Increment:** NMT 2804C – Nuclear Medicine Clinic Practice & Conference 1 (from 5 to 6 credits)
- **Course Modifications:** The following courses will experience a course description (SLO), pre/co-requisites, and competencies updates. No other changes being requested.
  - NMT 1002L - Intro to Nuclear Medicine Lab
  - NMT 1312 - Radiation Protection
  - NMT 1713 - Nuclear Medicine Procedures 1
  - NMT 2102 - Nuclear Medicine Administration
  - NMT 2130 - Nuclear Medicine Pharmacology
  - NMT 2534 - Nuclear Medicine Instruction
  - NMT 2573 - Nuclear Medicine QA/QC
  - NMT 2613 - Nuclear Medicine Physics
  - NMT 2723 - Nuclear Medicine Procedures 2
  - NMT 2824C - Nuclear Medicine Clinic 3
  - NMT 2932 - Nuclear Medicine Seminar

Add New Course –

Course No.	Course Title	Credits	Campus	Eff. Term
NMT1002	Introduction to Nuclear Medicine	2	4	2013-1

Course Description: This course is designed to provide an introduction to the field of Nuclear Medicine. Students will learn about the history of the profession, terminology, hospital and patient safety, infection control, patient assessment, accessing and utilizing the patient's medical record, critical thinking, Nuclear Medicine protocols, and patient education. Prerequisites: CHM 1033, 1033L. Co-requisite: NMT 1002L. (2 hr. lecture)

Curriculum Action Rationale: New course request for the Nuclear Medicine (23068) program. This course will accompany the existing lab (NMT 1002L).

Existing Course Modifications –

Course No.	Course Title	Credits	Campus	Eff. Term
NMT1002L	Introduction to Nuclear Medicine Lab	1	4	2013-1

Course Description: The student will learn the fundamentals of clinical nuclear medicine before going to the hospital and/or clinical site for actual patient interaction. The student will be introduced to radio-pharmacology, radiopharmaceutical chemistry, and characterization of radiopharmaceuticals, localization, and FDA approval process. Prerequisites: CHM1033, 1033L. Corequisites: NMT 1002, 1312, 2613 (2 hr. lab)

Curriculum Action Rationale: Course description (SLO), pre/co-requisites, and competencies updates. Note: The course is attached to the existing Nuclear Medicine Technology (23068) program. No other changes being requested.

Course No.	Course Title	Credits	Campus	Eff. Term
NMT1312	Radiation Protection	2	4	2013-1

Course Description: This course covers all local, state and federal regulations related to Nuclear Medicine. Students will learn the appropriate protection procedures to limit exposure, the performance of area surveys and wipe tests, the proper decontamination procedures, the disposal of radioactive waste procedures, and personnel monitoring of radiation exposure. Corequisites: NMT 1002L, 1002, 2613. (2 hr. lecture)

Curriculum Action Rationale: Course description (SLO), pre/co-requisites, and competencies updates. Note: The course is attached to the existing Nuclear Medicine Technology (23068) program. No other changes being requested.

Course No.	Course Title	Credits	Campus	Eff. Term
NMT1713	Nuclear Medicine Procedures 1	2	4	2013-1

Course Description: This course will include the imaging parameters necessary to obtain images for the basic procedures performed in a Nuclear Medicine department. Students will learn about imaging procedures related to the following systems: skeletal, central nervous, cardiovascular genitourinary, respiratory and gastrointestinal. Instrumentation necessary to produce the required images as well as patient management during the procedures will be addressed. Prerequisites: BSC 2085, 2085L, 2086, 2086L, CHM1033, 1033L; Co-requisites: NMT 2130, 2534, 2804C. (2 hr. lecture)

Curriculum Action Rationale: Course description (SLO), pre/co-requisites, and competencies updates. Note: The course is attached to the existing Nuclear Medicine Technology (23068) program. No other changes being requested.

Course No.	Course Title	Credits	Campus	Eff. Term
NMT2102	Nuclear Medicine Administration	2	4	2013-1

Course Description: The student will learn the administrative duties required of a nuclear medicine technologist. Areas covered include patient scheduling, radioisotope ordering; scheduling and testing; communication; patient and clinician satisfaction. Prerequisites: NMT 2130, 2534; Corequisites: NMT 2723, 2573, 2814C. (2 hr. lecture)

Curriculum Action Rationale: Course description (SLO), pre/co-requisites, and competencies updates. Note: The course is attached to the existing Nuclear Medicine Technology (23068) program. No other changes being requested.

Course No.	Course Title	Credits	Campus	Eff. Term
NMT2130	Nuclear Medicine Pharmacology	2	4	2013-1

Course Description: Students will learn how to maintain radiopharmaceutical laboratory records and materials, obtain a generator eluate, prepare radiopharmaceuticals and perform quality control tests, as well as dispose of radioactive waste appropriately. The ordering of pharmaceuticals in appropriate dosage and effective time frames will also be included. Prerequisites: NMT 1002, 1002L, 1312, 2613; Corequisites: NMT 1713, 2534, 2804C. (2 hr. lecture)

Curriculum Action Rationale: Course description (SLO), pre/co-requisites, and competencies updates. Note: The course is attached to the existing Nuclear Medicine Technology (23068) program. No other changes being requested.

Course No.	Course Title	Credits	Campus	Eff. Term
NMT2534	Nuclear Medicine Instruction	2	4	2013-1

Course Description: This course will integrate and correlate the principles of electrical and nuclear physics associated with the operation and calibration of radiation detection devices employed in nuclear medicine. The student will learn the various types of devices that are used to provide information from which the diagnostic images are obtained. Prerequisites: NMT 1002, 1002L, 1312, 2613 and PHY1004; Corequisites: NMT 1713, 2130, 2804C (2 hr. lecture)

Curriculum Action Rationale: Course description (SLO), pre/co-requisites, and competencies updates. Note: The course is attached to the existing Nuclear Medicine Technology (23068) program. No other changes being requested.

Course No.	Course Title	Credits	Campus	Eff. Term
NMT2573	Nuclear Medicine QA/QC	2	4	2013-1

Course Description: The student will learn to perform quality assurance and quality control testing of imaging systems; calibrate and operate scintillation counters; calibrate and operate gas-filled detectors; and perform quality assurance testing of routine imaging and assay procedures. (2 hr. lecture) Pre-requisites: NMT1713, and NMT2534, and NMT2613, Co-requisites: NMT2102, and NMT2814C, and NMT2723,

Curriculum Action Rationale: Course description (SLO), pre/co-requisites, and competencies updates. Note: The course is attached to the existing Nuclear Medicine Technology (23068) program. No other changes being requested.

Course No.	Course Title	Credits	Campus	Eff. Term
NMT2613	Nuclear Medicine Physics	2	4	2013-1

Course Description: Students will learn the basic concepts of atomic, nuclear and radiation physics with an emphasis on the interactions of radiation with matter. Alpha, beta, and gamma sources are explained in this course. (2 hr. lecture) Pre-requisites: MAC1105, and PHY1004, Co-requisites: NMT1002L, and NMT1312,

Curriculum Action Rationale: Course description (SLO), pre/co-requisites, and competencies updates. Note: The course is attached to the existing Nuclear Medicine Technology (23068) program. No other changes being requested.

Course No.	Course Title	Credits	Campus	Eff. Term
NMT2723	Nuclear Medicine Procedures 2	2	4	2013-1

Course Description: A continuation of Nuclear Medicine Procedures 1, students will learn the imaging parameters necessary to obtain images as well as the use of instrumentation necessary to produce the required images performed in a nuclear medicine department. Exposure to patient management during the procedures will also be addressed. (2 hr. lecture)

Pre-requisites: NMT1713, and NMT2804C, Co-requisites: NMT2573, and NMT2814C,

Curriculum Action Rationale: Course description (SLO), pre/co-requisites, and competencies updates. Note: The course is attached to the existing Nuclear Medicine Technology (23068) program. No other changes being requested.

Course No.	Course Title	Credits	Campus	Eff. Term
NMT2804C	Nuclear Medicine Clinic Practice & Conference 1	6	4	2013-1

Course Description: This course will introduce the student to the fundamentals of clinical nuclear medicine primarily through hospital involvement. The student will learn practical experience in a Nuclear Medicine department by performing the principles taught in class. Pre-requisites: NMT1002L, NMT 1002, and NMT1312, NMT1713

Curriculum Action Rationale: Updating course title, course description (SLO) and course competencies. The course will also experience unit/credit hour modifications from 5 credits to 6 credits. Note: The course is attached to the existing Nuclear Medicine Technology (23068) program. No other changes being requested.

Course No.	Course Title	Credits	Campus	Eff. Term
NMT2814C	Nuclear Medicine Clinic Practice & Conference 2	6	4	2013-1

Course Description: This course is a continuation of NMT 2804C Clinic 1 and will provide the student the opportunity to participate in the fundamentals of clinical nuclear medicine in the hospital involvement. The student will learn practical experience in a Nuclear Medicine department by performing the principles taught in class. Pre-requisites: NMT2804C, NMT2130, NMT2534, NMT2613.

Curriculum Action Rationale: Updating course title, course description (SLO), pre/co-requisites, and course competencies. The course will also experience unit/credit hour modifications from 7 credits to 6 credits. Note: The course is attached to the existing Nuclear Medicine Technology (23068) program. No other changes being requested.

Course No.	Course Title	Credits	Campus	Eff. Term
NMT2824C	Nuclear Medicine Clinic 3	7	4	2013-1

Course Description: This is the final course in the series of three clinical courses. Students will learn to apply all didactic competencies in the Nuclear Medicine department setting, as well as perform all procedures from the two Nuclear Medicine Procedures courses with minimal supervision. The ARRT Competency Requirements must be completed in this course.
Pre-requisites: NMT2814C
Curriculum Action Rationale: Course description (SLO), pre/co-requisites, and competencies updates. Note: The course is attached to the existing Nuclear Medicine Technology (23068) program. No other changes being requested.

Course No.	Course Title	Credits	Campus	Eff. Term
NMT2932	Nuclear Medicine Seminar	2	4	2013-1

Course Description: The student will learn to incorporate all theory related to the production of a nuclear medicine image. The student will also learn about radiation protection, instrumentation, physics, pharmacology, and Quality Assurance/Quality Control. (2 hr. lecture) Pre-requisites: NMT1312, NMT2534, NMT2573, NMT2613, Co-requisites: NMT2824C,
Curriculum Action Rationale: Course description (SLO), pre/co-requisites, and competencies updates. Note: The course is attached to the existing Nuclear Medicine Technology (23068) program. No other changes being requested.

Miami Dade College

CURRENT

NUCLEAR MEDICINE TECHNOLOGY
Associate in Science

23068
C.I.P. (1317020800)

Total credits required for the degree is 75.

General Education Requirements – 15 credits:

Course	Course Title	Credits	Pre-/Co-Requisites
Communications			
ENC 1101	English Composition 1	3	
Oral Communication			
SPC 1017	Fundamentals of Speech Communications	3	
Humanities			
PHI 2604	Critical Thinking/Ethics	3	Pre-Req ENC 1101
Behavioral and Social Science			
CLP 1006	Psychology of Personal Effectiveness	3	
Mathematics			
MAC 1105	College Algebra	3	
Computer Competency			
CGS 1060	Introduction to Microcomputer Usage*		

***Note: The credits will go to First Term In Program.**

First Term In Program – 8 Credits Required

BSC 2085	Human Anatomy & Physiology 1	3	Co-Req BSC 2085L
BSC 2085L	Human Anatomy & Physiology 1 Lab	1	Co-Req BSC 2085
CGS 1060	Introduction to Microcomputer Usage	4	

Second Term In Program – ~~11~~ 12 Credits Required

CHM 1033	Chemistry for Health Sciences	3	Pre/Co-Req MAT 1033; Co-Req CHM 1033L
CHM 1033L	Chemistry for Health Sciences Lab	1	Pre/Co-Req MAT 1033; Co-Req CHM 1033
~~CHM 1045~~	~~General Chemistry & Qualitative Analysis~~	~~3~~	~~Pre/Co-Req MAC 1105; Co-Req CHM 1045L~~ **(REMOVE FROM PROGRAM ONLY)**
~~CHM 1045L~~	~~General Chemistry & Qualitative Analysis Lab~~	~~2~~	~~Pre/Co-Req MAC 1105; Co-Req CHM 1045~~ **(REMOVE FROM PROGRAM ONLY)**
~~CHM 1046~~	~~General Chemistry & Qualitative Analysis~~	~~3~~	~~Pre-Req MAC 1105, CHM 1045; Co-Req CHM 1046L~~ **(REMOVE FROM PROGRAM ONLY)**
~~CHM 1046L~~	~~General Chemistry & Qualitative Analysis Lab~~	~~1~~	~~Pre-Req MAC 1105, CHM 1045L; Co-Req CHM 1046~~ **(REMOVE FROM PROGRAM ONLY)**
~~CHM 2032~~	~~Survey of General Chemistry~~	~~3~~	~~Pre-Req CHM 1025, MAT 1033; Co-Req CHM 2032L~~ **(COURSE END-TERMED 2004-3)**
~~CHM 2032L~~	~~Survey of General Chemistry~~	~~3~~	~~Pre-Req CHM 1025, MAT 1033; Co-Req CHM 2032~~ **(COURSE END-TERMED 2004-3)**
PHY 1004	Physics with Applications 1	3	Pre-Req MAT 1033; Co-Req PHY 1004L
PHY 1004L	Physics with Applications 1 Lab	1	Pre-Req MAT 1033; Co-Req PHY 1004 **(ADD EXISITING COURSE)**
~~PHY 1005~~	~~Physics with Applications 2~~	~~3~~	~~Pre-Req MAT 1033, PHY 1004; Co-Req PHY 1005L~~ **(REMOVE FROM PROGRAM ONLY)**
~~PHY 1025~~	~~Basic Physics~~	~~3~~	~~Pre-Req MAC 1105~~ **(REMOVE FROM PROGRAM ONLY)**
BSC 2086	Human Anatomy & Physiology 2	3	Pre-Req BSC 2085; Co-Req BSC 2086L
BSC 2086L	Human Anatomy & Physiology 2 Lab	1	Pre-Req BSC 2085L; Co-Req BSC 2086

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Third Term In Program – ~~2~~ 7 Credits Required

NMT 1002	Introduction to Nuclear Medicine	2	Pre-Req CHM 1033/L; Co-Req NMT 1002L **(ADD NEW COURSE)**
NMT 1002L	Introduction to Nuclear Medicine Lab	1	Pre-Req CHM 1033/L; Co-Req NMT 1002, 1312, 2613 **(Shifted from Fourth Term)**
NMT 1312	Radiation Protection	2	Co-Req NMT 1002, 1002L, 2613 **(Shifted from Fourth Term)**
NMT 2613	Nuclear Medicine Physics	2	Pre-Req MAC 1105, ~~NMT 1002L,~~ PHY 1004; Co-Req NMT 1002L, 1312~~2130, 2534, 2804C~~ **(Shifted from Fifth Term)**
~~RTE 1000~~	~~Orientation to the Imaging Sciences~~	~~2~~	**(REMOVE FROM PROGRAM ONLY)**

Fourth Term In Program – ~~5~~ 12 Credits Required

NMT 1713	Nuclear Medicine Procedures 1	2	Pre-Req BSC 2085/L, 2086/L, CHM 1033/L; Co-Req NMT 2130, 2534, 2804C ~~1002L, 1312~~ **(Shifted from Fifth Term)**
NMT 2130	Nuclear Medicine Pharmacology	2	Pre-Req NMT 1002/L, 1312, 2613~~1713~~; Co-Req NMT 1713, 2534, ~~2613,~~ 2804C **(Shifted from Fifth Term)**
NMT 2534	Nuclear Medicine Instrumentation	2	Pre-Req NMT 1002L, 1312, 2613 ~~1713~~, PHY 1004; Co-Req NMT 1713, 2130, 2804C
NMT 2804C	Nuclear Medicine Clinic Practice and Conference 1 **(Title Change)**	~~5~~ 6	Pre-Req NMT 1002/L, 1312; Co-Req 1713, 2130, 2534

Fifth Term In Program – 12 Credits Required

NMT 2102	Nuclear Medicine Administration	2	Pre-Req NMT 2130, 2534; Co-Req NMT 2573, 2723, 2814C **(Shifted from Sixth Term)**
NMT 2573	Nuclear Medicine QA/QC	2	Pre-Req NMT 1713, 2534, 2613; Co-Req NMT ~~1713~~, 2102, 2723, 2814C **(Shifted from Sixth Term)**
NMT 2723	Nuclear Medicine Procedures 2	2	Pre-Req NMT 1713, 2804C; Co-Req NMT 2573, 2814C **(Shifted from Sixth Term)**
NMT 2814C	Nuclear Medicine Clinic Practice and Conference 2 **(Title Change)**	~~7~~ 6	Pre-Req NMT 2130, 2534, 2613, 2804C
~~RTE 1001~~	~~Orientation to Radiographic Clinic~~	~~1~~	**(REMOVE FROM ODYSSEY)**

Sixth Term In Program – ~~13~~ 9 Credits Required

NMT 2824C	Nuclear Medicine Clinic Practice 3 and Conference 3 **(Title Change)**	7	Pre-Req NMT 2814C **(Shifted from Seventh Term)**
NMT 2932	Nuclear Medicine Seminar	2	Pre-Req NMT 1312, 2534, 2573, 2613; Co-Req NMT 2824C **(Shifted from Seventh Term)**

Seventh Term In Program – (REMOVE AREA)

Computer Competency: By the **16th earned** college level credit (excluding EAP and college preparatory courses), a student **must take** the Computer Competency Test and pass

Or

By the **31st earned** college level credit (excluding EAP and college preparatory courses), a student **must pass** CGS 1060, an equivalent continuing education or vocational credit course or retest with a **passing score on the Computer Competency Test**.

Additional Information:

A minimum cumulative grade point average of 2.0 is required for graduation (Note: may be higher with appropriate rationale).

Students should check their individualized Degree Audit Report to determine the specific graduation policies in effect for their program of study for the year and term they entered Miami Dade. This outline includes current graduation requirements.

The final responsibility for meeting graduation requirements rests with the student.

Miami Dade College

FINAL/PROPOSED

NUCLEAR MEDICINE TECHNOLOGY
Associate in Science

23068
C.I.P. (1317020800)

Total credits required for the degree is 75.

General Education Requirements – 15 credits:

Course	Course Title	Credits	Pre-/Co-Requisites
Communications			
ENC 1101	English Composition 1	3	
Oral Communication			
SPC 1017	Fundamentals of Speech Communications	3	
Humanities			
PHI 2604	Critical Thinking/Ethics	3	Pre-Req ENC 1101
Behavioral and Social Science			
CLP 1006	Psychology of Personal Effectiveness	3	
Mathematics			
MAC 1105	College Algebra	3	
Computer Competency			
CGS 1060	Introduction to Microcomputer Usage*		

***Note: The credits will go to First Term In Program.**

First Term In Program – 8 Credits Required			
BSC 2085	Human Anatomy & Physiology 1	3	Co-Req BSC 2085L
BSC 2085L	Human Anatomy & Physiology 1 Lab	1	Co-Req BSC 2085
CGS 1060	Introduction to Microcomputer Usage	4	
Second Term In Program – 12 Credits Required			
CHM 1033	Chemistry for Health Sciences	3	Pre/Co-Req MAT 1033; Co-Req CHM 1033L
CHM 1033L	Chemistry for Health Sciences Lab	1	Pre/Co-Req MAT 1033; Co-Req CHM 1033
PHY 1004	Physics with Applications 1	3	Pre-Req MAT 1033; Co-Req PHY 1004L
PHY 1004L	Physics with Applications 1 Lab	1	Pre-Req MAT 1033; Co-Req PHY 1004
BSC 2086	Human Anatomy & Physiology 2	3	Pre-Req BSC 2085; Co-Req BSC 2086L
BSC 2086L	Human Anatomy & Physiology 2 Lab	1	Pre-Req BSC 2085L; Co-Req BSC 2086
Third Term In Program –7 Credits Required			
NMT 1002	Introduction to Nuclear Medicine	2	Pre-Req CHM 1033/L; Co-Req NMT 1002L
NMT 1002L	Introduction to Nuclear Medicine Lab	1	Pre-Req CHM 1033/L; Co-Req NMT 1002, 1312, 2613
NMT 1312	Radiation Protection	2	Co-Req NMT 1002L, 1002, 2613
NMT 2613	Nuclear Medicine Physics	2	Pre-Req MAC 1105, PHY 1004; Co-Req NMT 1002L, 1312
Fourth Term In Program –12 Credits Required			
NMT 1713	Nuclear Medicine Procedures 1	2	Pre-Req BSC 2085/L, 2086/L, CHM 1033/L; Co-Req NMT 2130, 2534, 2804C
NMT 2130	Nuclear Medicine Pharmacology	2	Pre-Req NMT 1002/L, 1312, 2613; Co-Req NMT 1713, 2534, 2804C
NMT 2534	Nuclear Medicine Instrumentation	2	Pre-Req NMT 1002L, 1312, 2613, PHY 1004; Co-Req NMT 1713, 2130, 2804C
NMT 2804C	Nuclear Medicine Clinic Practice and Conference 1	6	Pre-Req NMT 1002/L, 1312, Co-Req NMT 1713, 2130, 2534

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Fifth Term In Program – 12 Credits Required

NMT 2102	Nuclear Medicine Administration	2	Pre-Req NMT 2130, 2534; Co-Req NMT 2573, 2723, 2814C
NMT 2573	Nuclear Medicine QA/QC	2	Pre-Req NMT 1713, 2534, 2613; Co-Req NMT 2102, 2723, 2814C
NMT 2723	Nuclear Medicine Procedures 2	2	Pre-Req NMT 1713, 2804C; Co-Req NMT 2573, 2814C
NMT 2814C	Nuclear Medicine Clinic Practice and Conference 2	6	Pre-Req NMT 2130, 2534, 2613, 2804C

Sixth Term In Program – 9 Credits Required

NMT 2824C	Nuclear Medicine Clinic Practice 3 and Conference 3	7	Pre-Req NMT 2814C
NMT 2932	Nuclear Medicine Seminar	2	Pre-Req NMT 1312, 2534, 2573, 2613; Co-Req NMT 2824C

Computer Competency: By the **16th earned** college level credit (excluding EAP and college preparatory courses), a student **must take** the Computer Competency Test and pass

Or

By the **31st earned** college level credit (excluding EAP and college preparatory courses), a student **must pass** CGS 1060, an equivalent continuing education or vocational credit course or retest with a **passing score on the Computer Competency Test**.

Additional Information:

A minimum cumulative grade point average of 2.0 is required for graduation.

Students should check their individualized Degree Audit Report to determine the specific graduation policies in effect for their program of study for the year and term they entered Miami Dade. This outline includes current graduation requirements.

The final responsibility for meeting graduation requirements rests with the student.