NC COMMUNITY COLLEGES
CREATING SUCCESS

NORTH CAROLINA COMMUNITY COLLEGE SYSTEM
Mr. Peter Hans
President

November 19, 2018

MEMORANDUM

TO: Presidents
                Chief Academic Officers

FROM: Wesley E. Beddard, Associate Vice President
                Programs

SUBJECT: State Board Action on November 16, 2018
                Revised Curriculum Standards

On November 16, 2018, the State Board of Community Colleges approved revisions to the following curriculum standards:

Advanced Medical Coding (Certificate) (C45530)
Emergency Medical Science (A45340)

To implement the revised programs, you must update your college's electronic program of study and receive approval from the System Office prior to implementation. An outline of the specific curriculum standard revisions is attached for your convenience. You may view all curriculum standards and courses by visiting the Academic Programs website at:

http://www.nccommunitycolleges.edu/academic-programs

The State Board of Community Colleges also approved the addition of the following curriculum title to the list of titles approved for the Special (abbreviated) Curriculum Program Application process provided that the college already have approval for either the Industrial Systems Technology (A50240) or Automation Engineering Technology (A40120) program:

Mechatronics Engineering Technology (A40350)

Additional information about the abbreviated program application process is provided in Section 3A of the *Curriculum Procedures Reference Manual* on the Academic Programs website at:

https://www.nccommunitycolleges.edu/academic-programs/curriculum-procedures-reference-manual-cprm

If you have any questions concerning the November State Board action items listed above, please contact Ms. Jennifer Frazelle at 919.807.7120 or frazellej@nccommunitycolleges.edu.

WB/JF/gr
Attachments
c: Dr. Lisa M. Chapman
      Ms. Elizabeth Self
      Ms. Jennifer Frazelle
      Program Coordinators

Outline of Curriculum Standard Revision
State Board of Community Colleges
November 16, 2018

Advanced Medical Coding (Certificate) (C45530):

Revisions:

- Revised the curriculum description.

- Removed the following course from the core:
    AMC 208 Advanced Medical Coding Lab II

- Added the following anatomy & physiology pick list to the core:
    BIO 165 Anatomy and Physiology I &
    BIO 166 Anatomy and Physiology II or

    BIO 168 Anatomy and Physiology I &
    BIO 169 Anatomy and Physiology II or

    BIO 163 Basic Anatomy & Physiology

- Added the following pick list to the core:
    BIO 271 Pathophysiology
    HIT 226 Principles of Disease

Note: The additional courses will result in an increase in hours requiring the curriculum to be reclassified from a certificate to a diploma. The new curriculum title/code is Advanced Medical Coding (D45530).

Emergency Medical Science (A45340)

Revisions:

- Revised the curriculum core by making the following changes:

    o Added the following course as an option to the Anatomy & Physiology subject area:
        BIO 161 Intro to Human Biology

    o Removed the Terminology subject area.

    o Identified the required courses for a diploma as indicated with an "*".

Note: The proposed curriculum standard revision includes revised courses approved by the Curriculum Course Review Committee (CCRC) on October 9, 2018. The revision of core courses resulted in a change of core hours from 40 SHC to 48-50 SHC for the diploma program and a change of core hours from 49-52 to 48-50 for the associate degree program.

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CURRICULUM STANDARD

Curriculum Program Title	**Advanced Medical Coding (Diploma)**	Program Code	**D45530**
Concentration	**(not applicable)**	CIP Code	*51.0707*

Curriculum Description

The Advanced Medical Coding curriculum provides the didactic and clinical experience necessary to become competent credentialed coders.

Coursework includes reimbursement, advanced International Classification of Diseases-10th Revision-Clinical Modification/Procedure Coding System (ICD-10-CM/PCS), Current Procedural Terminology (CPT), and Healthcare Common Procedure Coding System (HCPCS).

Graduates may be eligible to take either of the Certified Coding Specialist exams: the Certified Coding Specialist and/or the Certified Coding Specialist-Physician Based (CCS/CCS-P).

Individuals entering this curriculum must hold a minimum of an associate's degree in a healthcare field or health informatics from a regionally accredited college or university.

*Curriculum Requirements**
[for associate degree, diploma, and certificate programs in accordance with 1D SBCCC 400.10]

I. **General Education.** Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.

II. **Major Hours**. AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work-based learning may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*

III. **Other Required Hours.** A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

	AAS	Diploma	Certificate**
Minimum General Education Hours	15	6	0
Minimum Major Hours	49	30	24
Other Required Hours	0-7	0-4	0
Total Semester Hours Credit in Program	**64-76**	**36-48**	**24**

*Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic use of computers.

Major Hours

A. Core. The subject/course core is comprised of subject areas and/or specific courses which are required for each curriculum program. A diploma program offered under an approved AAS program standard or a certificate which is the highest credential level awarded under an approved AAS program standard must include a minimum of 12 semester hours credit derived from the subject/course core of the AAS program.

B. Concentration *(if applicable).* A concentration of study must include a minimum of 12 semester hours of credit from required subjects and/or courses. The majority of the course credit hours are unique to the concentration. The required subjects and/or courses that make up the concentration of study are in addition to the required subject/course core.

C. Other Major Hours. Other major hours must be selected from prefixes listed on the curriculum standard. A maximum of 9 semester hours of credit may be selected from any prefix listed, with the exception of prefixes listed in the core or concentration. Work-based learning may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit.

Advanced Medical Coding (Diploma) (D45530)

	AAS	Diploma	Certificate
Minimum Major Hours Required	**49 SHC**	**30 SHC**	

A. CORE

Required Courses:

AMC	200	Health Information for Coders	2 SHC
AMC	201	Legal and Compliance	2 SHC
AMC	202	Coding for Reimbursement	2 SHC
AMC	203	Intermediate ICD Diagnoses	3 SHC
AMC	204	Intermediate ICD Procedures	3 SHC
AMC	205	Imtermediate CPT Coding	3 SHC
AMC	206	Clinical Documentation	3 SHC
AMC	207	Advanced Medical Coding Lab I	2 SHC
AMC	209	Professional Practice Exp.	2 SHC
BIO	271	Pathophysiology	3 SHC or
HIT	226	Principles of Disease	3 SHC

ANATOMY & PHYSIOLOGY Select one sequence:

BIO	165	Anatomy & Physiology I	4 SHC &
BIO	166	Anatomy & Physiology II	4 SHC or
BIO	168	Anatomy & Physiology I	4 SHC &
BIO	169	Anatomy & Physiology II	4 SHC or
BIO	163	Basic Anatomy and Physiology	5 SHC

B. CONCENTRATION *(not applicable)*

C. OTHER MAJOR HOURS *(not applicable)*
To be selected from the following prefixes: AMC, BIO, HIT, MED, and OST

Up to two semester hour credits may be selected from ACA.

Up to three semester hour credits may be selected from the following prefixes: ARA, ASL, CHI ,FRE, GER, ITA, JPN, LAT, POR, RUS and SPA.   .

**This program is approved by the State Board of Community Colleges to exceed maximum standard hours for a certificate program. [ref. 1D SBCCC 400.95(d)]

CURRICULUM STANDARD

Curriculum Program Title	**Emergency Medical Science**	Program Code	**A45340**
Concentration	**(not applicable)**	CIP Code:	*51.0904*

Curriculum Description

The Emergency Medical Science curriculum provides individuals with the knowledge, skills and attributes to provide advanced emergency medical care as a paramedic for critical and emergent patients who access the emergency medical system and prepares graduates to enter the workforce.

Students will gain complex knowledge, competency, and experience while employing evidence based practice under medical oversight, and serve as a link from the scene into the healthcare system.

Graduates of this program may be eligible to take state and/or national certification examinations. Employment opportunities include providers of emergency medical services, fire departments, rescue agencies, hospital specialty areas, industry, educational and government agencies.

*Curriculum Requirements**
[for associate degree, diploma, and certificate programs in accordance with 1D SBCCC 400.10]

I. **General Education.** Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.

II. **Major Hours**. AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work-based learning may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*

III. **Other Required Hours.** A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

	AAS	Diploma**	Certificate
Minimum General Education Hours	15	6	0
Minimum Major Hours	49	48	12
Other Required Hours	0-7	0-4	0-1
Total Semester Hours Credit (SHC)	**64-76**	**54-60**	**12-18**

*Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic use of computers.

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Major Hours
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A. Core. The subject/course core is comprised of subject areas and/or specific courses which are required for each curriculum program. A diploma program offered under an approved AAS program standard or a certificate which is the highest credential level awarded under an approved AAS program standard must include a minimum of 12 semester hours credit derived from the   subject/course core of the AAS program.

B. Concentration *(if applicable).* A concentration of study must include a minimum of 12 semester hours credit from required subjects and/or courses. The majority of the course credit hours are unique to the concentration. The required subjects and/or courses that make up the concentration of study are in addition to the required subject/course core.

C. Other Major Hours. Other major hours must be selected from prefixes listed on the curriculum standard. A maximum of 9 semester hours of credit may be selected from any prefix listed, with the exception of prefixes listed in the core or concentration. Work-based learning may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit.

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Emergency Medical Science A45340
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	AAS	Diploma	Certificate
Minimum Major Hours Required	**49 SHC**	**30 SHC**	**12 SHC**
CORE *(Courses required for the diploma are designated with *)*	**48-50 SHC**	**48-50 SHC**	

Required Course:

*	EMS	110	EMT	9 SHC

Required Subject Areas:
Anatomy & Physiology. Select one:

*	BIO	161	Intro to Human Biology	3 SHC	*or*
*	BIO	163	Basic Anatomy & Physiology	5 SHC	
	BIO	166	Anatomy and Physiology II	4 SHC	
	BIO	169	Anatomy and Physiology II	4 SHC	

Required Subject Area: Advanced EMT/Paramedic
(Choose one of the following sets)

Advanced EMT

	EMS	120	Advanced EMT	6 SHC
	EMS	121	AEMT Clinical Practicum	2 SHC

Paramedic

*	EMS	122	EMS Clinical Practicum I	1 SHC
*	EMS	130	Pharmacology	4 SHC
*	EMS	131	Advanced Airway Management	2 SHC
*	EMS	160	Cardiology I	3 SHC
*	EMS	220	Cardiology II	3 SHC
*	EMS	221	EMS Clinical Practicum II	2 SHC
*	EMS	231	EMS Clinical Practicum III	3 SHC
*	EMS	240	Patients with Special Challenges	2 SHC
*	EMS	241	EMS Clinical Practicum IV	4 SHC
*	EMS	250	Medical Emergencies	4 SHC
*	EMS	260	Trauma Emergencies	2 SHC
*	EMS	270	Life Span Emergencies	4 SHC
*	EMS	285	EMS Capstone	2 SHC

B. CONCENTRATION *(Not applicable)*

C. OTHER MAJOR HOURS

> *To be selected from the following prefixes: BIO, CIS, CSC, EMS, EPT, HSC, MED, ODL, OST, PED, and WBL.*
>
> *Up to two semester hour credits may be selected from ACA.*
>
> *Up to three semester hour credits may be selected from the following prefixes: ARA, ASL, CHI, FRE, GER, ITA, JPN, LAT, POR, RUS and SPA*

** This program is approved by the State Board of Community Colleges to exceed maximum standard hours for a diploma program [ref. 1D SBCCC 400.9 (c)].