NORTH CAROLINA COMMUNITY COLLEGE SYSTEM
R. Scott Ralls, Ph.D.
President

November 24, 2014

MEMORANDUM

TO: Presidents
                 Chief Academic Officers

FROM: Wesley E. Beddard, Associate Vice President
                 Programs

RE: State Board Action on November 21, 2014
                 Revised Curriculum Standards

On November 21, 2014 the State Board of Community Colleges approved the requested revisions to the following curriculum standards:

Interior Design (A30220)	Nursing Assistant (Certificate) (C45480)
Nanotechnology (A20190)	Practical Nursing (Diploma) (D45660)

The revisions approved for the Nursing Assistant (Certificate) (C45480) curriculum standard are replicated in the Nursing Assistant Program Major in the *Health Science: Therapeutic and Diagnostic Services* curriculum standard.

Please be aware that you must implement a revised standard no later than one year after the effective term. You must update your college's electronic program of study and receive approval from the System Office prior to implementation of the revised program.

The curriculum standard revisions for the Nursing Assistant (Certificate) (C45480) program and Practical Nursing (Diploma) (D45660) program are a result of Curriculum Revision Grant Projects. We would like to express our appreciation to Rowan-Cabarrus Community College for serving as the lead college for these projects and to the participants and reviewers at the other colleges approved to offer these programs.

If you have any questions concerning these State Board action items, please contact Ms. Jennifer Frazelle at 919.807.7120 or frazellej@nccommunitycolleges.edu. An outline of the specific curriculum standard revision and revised curriculum standards, are attached for your convenience. You may view all curriculum standards by visiting: http://www.nccommunitycolleges.edu/Programs/index.html

WB/JF/gr
Attachments
c: Dr. Lisa M. Chapman
     Ms. Jennifer Frazelle
     Ms. Elizabeth Self   CC14-038
     Program Coordinators   Email

Outline of Curriculum Standard Revisions
State Board of Community Colleges – November 21, 2014

Interior Design (A30220) Revisions:
- Revised the curriculum description.
- Removed the following course from the required Core:
    DES 225 Textiles for Interiors

The deletion of DES 225 from the Core results in a change of hours from 30-31 to 27-28 required semester hour credits (shc) for the Core.

Nanotechnology (A20190) Revisions:
- Removed the following course as an option to the required subject area of Mathematics:
    MAT 162 College Trigonometry

- Added the following course as an option to the required subject area of Mathematics:
    MAT 172 Precalculus Trigonometry

Nursing Assistant (Certificate) (C45480) Revisions:
- Changed curriculum standard title from *Nursing Assistant* to *Nurse Aide*.

    As a result of the revised curriculum standard title, the program code has been changed.

- Revised the curriculum description.

- Removed the following courses from the required Core:
    NAS 102 Nurse Aide II   *NAS 103 Home Health Care Nurse Aide*

- Added the following courses to the required subject area with instructions to select a minimum of six semester hour credits:
    NAS 102 Nurse Aide II   *NAS 106 Geriatric Aide*
    NAS 103 Home Health Care Nurse Aide   *NAS 107 Medication Aide*

The removal and addition of core courses results in a change of core hours from 14 SHC to 12-18 SHC.

The curriculum standard revisions are replicated in the Nursing Assistant Program Major in the Health Science: Therapeutic and Diagnostic Services curriculum standard.

Practical Nursing (Diploma) (D45660) Revision:
- Revised the curriculum description.

Note: The proposed curriculum standard revisions includes revised course titles and hours approved by the Curriculum Review Committee (CRC) on October 14, 2014.

CURRICULUM STANDARD

Curriculum Program Title	**Interior Design**	Code	**A30220**
Concentration	**(not applicable)**		*CIP Code: 50.0408*

Curriculum Description

The Interior Design curriculum is designed to prepare students for a variety of job opportunities in the field of both residential and non-residential interior design. The focus of the studies is technical knowledge, professional practices, and aesthetic principles and design process.

Curriculum content includes residential and non-residential interior design, architectural drafting, computer-aided design, and universal design. Also included are basic design, code standards, history of interiors and furnishings, color theory, products, professional practices, visual presentations, and sustainable principles.

Graduates should qualify for interior design opportunities in numerous residential and commercial environments such as hospitality, corporate, mercantile, educational, and healthcare. Interior designers also have employment opportunities in real estate, entertainment, visual merchandising, government, sales and marketing, and other specialties dealing with interiors.

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*Curriculum Requirements**
[for associate degree, diploma, and certificate programs in accordance with 1D SBCCC 400.97(3)]

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	12
Other Required Hours	0-7	0-4	0-1
Total Semester Hours Credit (SHC)	**64-76**	**36-48**	**12-18**

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*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
[ref. 1D SBCCC 400.97 (3)]

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.

Interior Design A30220

	AAS	Diploma	Certificate
Minimum Major Hours Required	**49 SHC**	**30 SHC**	**12 SHC**
A. **CORE**	27-28 SHC	12 SHC	

A. **CORE**
A diploma offered under this AAS degree requires a minimum of 12 SHC extracted from the required subject/course core of the AAS degree.

Required Courses:

DES 125	Visual Presentation I	2 SHC
DES 135	Prin & Elem of Design I	4 SHC
DES 210	Professional Practices/Int Des	2 SHC
DES 220	Interior Design Fundamentals	3 SHC
DES 230	Residential Design I	3 SHC
DES 235	Products	3 SHC
DES 240	Commercial/Contract Design I	3 SHC

Required Subject Areas:
Beginning Drafting. Select one:

ARC 111	Intro to Arch Technology	3 SHC
DES 110	Architectural Graphics	2 SHC
DFT 115	Architectural Drafting	2 SHC

History of Interiors and Furnishings. Select one:

DES 255	History of Interiors and Furn I	3 SHC
DES 256	History of Interiors and Furn II	3 SHC

CAD for Interior Design. Select one:

ARC 114	Architectural CAD	2 SHC
DES 120	CAD for Interior Design	2 SHC

B. **CONCENTRATION** *(Not applicable)*

C. **OTHER MAJOR HOURS**
To be selected from the following prefixes: ARC, ART, BUS, CIS, CSC, DES, DFT, GRA, GRD, OST, WBL and WEB.

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.

CURRICULUM STANDARD

Curriculum Program Title	**Nanotechnology**	Code	**A20190**
Concentration	**(not applicable)**		*CIP Code: 15.1601*

Curriculum Description

The Nanotechnology curriculum prepares students to characterize and fabricate materials for biological, textile, chemical, and electrical applications at the atomic level.

Course work includes biology, chemistry, physics, mathematics, and an extensive array of very detailed nanotechnology-specific courses, using high-tech equipment and complying with high-precision quality control and clean-room protocols with a multidisciplinary focus.

Graduates should qualify for various positions in industry and government, including research and development, materials testing and processing, optics and sensors, electron microscopy, and emerging nanotechnology industries.

*Curriculum Requirements**
[for associate degree, diploma, and certificate programs in accordance with 1D SBCCC 400.97 (3)]

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	12
Other Required Hours	0-7	0-4	0-1
Total Semester Hours Credit (SHC)	**64-76**	**36-48**	**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.

Major Hours
[ref. 1D SBCCC 400.97 (3)]

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.

Nanotechnology A20190

	AAS	Diploma	Certificate
Minimum Major Hours Required	**49 SHC**	**30 SHC**	**12 SHC**
A. CORE	**41-42 SHC**	**12 SHC**	

Required Courses:
NAN 111 Introduction to Nanotechnology	3 SHC	
NAN 112 Fundamentals of Nanoscience	3 SHC	
NAN 131 Nano Safety Practices	2 SHC	
NAN 132 Nano Regulations & Ethics	2 SHC	
NAN 241 Nanofabrication	4 SHC	
NAN 242 Nanofabrication of Thin Films	4 SHC	
NAN 243 Nanocharacterization	4 SHC	
NAN 244 Electron Microscopy	4 SHC	

Required Subject Areas:
Biology: Select one course.
BIO 110 Principles of Biology	4 SHC
BIO 111 General Biology I	4 SHC

Chemistry: Select one set.
CHM 131 Introduction to Chemistry **&**	3 SHC
CHM 131A Introduction to Chemistry Lab	1 SHC *or*
CHM 151 General Chemistry I	4 SHC

Mathematics: Select one course.
MAT 122 Algebra/Trigonometry II	3 SHC
MAT 172 Precalculus Trigonometry	4 SHC

Physics: Select one course.
PHY 131 Physics – Mechanics	4 SHC
PHY 151 College Physics I	4 SHC

B.   CONCENTRATION *(Not applicable)*

C.   OTHER MAJOR HOURS
To be selected from the following prefixes:

ATR, BIO, BPM, BTC, CET, CHM, CIS, CPT, CSC, CTC, CTR, CYT, EGR, ELC, ELN, ENV, HPC, ICT, ISC, LEO, MAC, MAT, MEC, MLG, NAN, NET, PHY, PLA, PTC, SGR, SUR, WAT, and WBL

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.

CURRICULUM STANDARD

Curriculum Program Title	**Nurse Aide (Certificate)**	Code	**C45840**
Concentration	**(not applicable)**		*CIP Code: 51.3902*

Curriculum Description

The Nurse Aide curriculum prepares individuals to work under the supervision of licensed nursing professionals in performing nursing care and services for persons of all ages.

Topics include growth and development, personal care, vital signs, communication, nutrition, medical asepsis, therapeutic activities, accident and fire safety, household environment and equipment management, family resources and services, and employment skills.

Upon completion, the student may be eligible for listing as a Nurse Aide I and other selected Nurse Aide registries as determined by the local program of study.

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*Curriculum Requirements**
[for associate degree, diploma, and certificate programs in accordance with 1D SBCCC 400.97 (3)]

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	12
Other Required Hours	0-7	0-4	0-1
Total Semester Hours Credit (SHC)	**64-76**	**36-48**	**12-18**

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*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

[ref. 1D SBCCC 400.97 (3)]

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.

Nurse Aide (Certificate) C45840			
	AAS	**Diploma**	**Certificate**
Minimum Major Hours Required	**49 SHC**	**30 SHC**	**12 SHC**
A. **CORE**			**12-18 SHC**
Required Courses: NAS 101 Nurse Aide I ... 6 SHC **Required Subject Areas:** **Select a minimum of 6 SHC:** NAS 102 Nurse Aide II ... 6 SHC NAS 103 Home Health Care Nurse Aide ... 6 SHC NAS 106 Geriatric Aide ... 6 SHC NAS 107 Medication Aide ... 1 SHC			
B. **CONCENTRATION** *(Not applicable)*			
C. **OTHER MAJOR HOURS** *To be selected from the following prefixes:* CIS, CSC, HSC, MED, NAS, PSY, and WBL *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.*			

CURRICULUM STANDARD

Curriculum Program Title	**Practical Nursing (Diploma)**	Code	**D45660**
Concentration	**(not applicable)**		*CIP Code: 51.3901*

Curriculum Description

The Practical Nursing curriculum provides knowledge and skills to integrate safety and quality into nursing care to meet the needs of the holistic individual which impact health, quality of life, and achievement of potential.

Course work includes and builds upon the domains of healthcare, nursing practice, and the holistic individual. Content emphasizes safe, individualized nursing care and participation in the interdisciplinary team while employing evidence-based practice, quality improvement, and informatics.

Graduates are eligible to apply to take the National Council Licensure Examination (NCLEX-PN) which is required for practice as a Licensed Practical Nurse. Employment opportunities include hospitals, rehabilitation/long term care/home health facilities, clinics, and physicians' offices.

*Curriculum Requirements**

[for associate degree, diploma, and certificate programs in accordance with 1D SBCCC 400.97 (3)]

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	12
Other Required Hours	0-7	0-4	0-1
Total Semester Hours Credit (SHC)	**64-76**	**36-48**	**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.

Major Hours
[ref. 1D SBCCC 400.97 (3)]

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.

Practical Nursing D45660			
	AAS	**Diploma**	**Certificate**
Minimum Major Hours Required	**49 SHC**	**30 SHC**	**12 SHC**
A. **CORE**		**30 SHC**	
Required Courses: NUR 101 Practical Nursing I 11 SHC NUR 102 Practical Nursing II 10 SHC NUR 103 Practical Nursing III 9 SHC **Required Subject Areas:** None			
B. **CONCENTRATION** *(Not applicable)*			
C. **OTHER MAJOR HOURS** *To be selected from the following prefixes:* BIO, CIS, CSC, ECO, HSC, MAT, NUR, NUT, PSY, SOC, and WBL *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.*			