



NORTH CAROLINA COMMUNITY COLLEGE SYSTEM
Dr. R. Scott Ralls, President

February 21, 2013

To: Presidents
Chief Academic Officers

From: Wesley Beddard, Associate Vice President
Student Learning and Success

Subject: Curriculum Review Committee Course Approvals

The Curriculum Review Committee (CRC) has the responsibility for maintaining the curriculum courses in the Combined Course Library (CCL). The approved course requests from the Spring 2013 meeting are attached for your information.

Course revisions may involve the removal of required prerequisites or corequisites. Please note that colleges may add local prerequisites and/or corequisites if they determine a need exists.

The CRC approved requests to revise the **course description, prerequisite(s), corequisite(s), and/or class/lab hours** of core courses found on the curriculum standards listed below. Please note that the only change indicated on the printed standard will be the inclusion of the statement *CRC Revised-Electronic Only 1/25/13*, since only the electronic version of the standard template will be revised.

| <u>Curriculum Title</u> | <u>Curriculum Code</u> |
|--|------------------------|
| Business Analytics | A25350 |
| Cardiovascular Sonography | A45160 |
| Digital Effects and Animation Technology | A30130 |
| Medical Sonography | A45440 |
| Photographic Technology/Photojournalism | A3028C |

Please be aware that you must implement the attached revised courses and standards 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 courses and programs. The revised standards are attached for your convenience.

CC13-003
E-mail

Presidents
Chief Academic Officers
Page 2
February 21, 2013

Curriculum standards, curriculum courses and procedures for submitting requests to the CRC are available on the Academic Programs home page at <http://www.nccommunitycolleges.edu/programs>.

If you need assistance or clarification, please contact Ms. Jennifer Frazelle, Director of Academic Programs, at frazellej@nccommunitycolleges.edu or (919) 807-7120.

WB/dm

Attachments

c: Curriculum Review Committee
Dr. Sharon E. Morrissey
Ms. Elizabeth Self
Ms. Cynthia Liston
Ms. Jennifer Frazelle
Program Coordinators

CC13-003
E-mail

**Curriculum Course Requests Approved By the Curriculum Review Committee (CRC)
on January 25, 2013**

| Course Prefix # | Title | Request | Effective Semester | Curriculum Standard Core Course |
|------------------------|--------------------------|---|---|--|
| ARC 225 | Architectural BIM I | New CCL course | Summer 2013 (2013*02) | na |
| ARC 225A | Architectural BIM I Lab | New CCL course | Summer 2013 (2013*02) | na |
| ARC 226 | Architectural BIM II | New CCL course | Summer 2013 (2013*02) | na |
| ARC 226A | Architectural BIM II Lab | New CCL course | Summer 2013 (2013*02) | na |
| BAS 121 | Analytics Methods I | Change corequisites "BUS 228, or MAT 151, or MAT 155" to "None" | Summer 2013 (2013*02) Early Implement | Business Analytics (A25350) |
| BAS 220 | Business Analytics II | Change prerequisites from "BUS 110 and BAS 120" to "BAS 120" | Summer 2013 (2013*02) Early Implement | Business Analytics (A25350) |
| BUS 260 | Business Communication | Change prerequisites from "ENG 111" to "ENG 110 or ENG 111" | Spring 2014 (2014*01) | na |
| CHM 263 | Analytical Chemistry | Change prerequisites from "CHM 132" to "CHM 132 or CHM 152" | Spring 2014 (2014*01) | na |
| CVS 160 | Clinical Ed I | Change course hours from "0-0-15-5" to "0-4-9-5" | Fall 2013 (2013*03) Early Implement | Cardiovascular Sonography (A45160) |

**Curriculum Course Requests Approved By the Curriculum Review Committee (CRC)
on January 25, 2013**

| Course Prefix # | Title | Request | Effective Semester | Curriculum Standard Core Course |
|------------------------|----------------------------------|---|---------------------------|---|
| DEA 230 | Implementation Project I | Change corequisites from "DEA 212 2D Design and Animation II and DEA 220 DEAT Compositing" to "DEA 212 2 D Design and Animation II" | Spring 2014 (2014*01) | Digital Effects and Animation Technology (A30130) |
| DES 112 | Bldg./Construc Sys | New CCL course | Summer 2013 (2013*02) | na |
| DES 242 | Kitchen/Bath Design | New CCL course | Summer 2013 (2013*02) | na |
| DES 243 | Adv. Kitchen/Bath Design | New CCL course | Summer 2013 (2013*02) | na |
| DMS 001 | Developmental Math Shell 1 | New CCL course | Fall 2013 (2013*03) | na |
| DMS 002 | Developmental Math Shell 2 | New CCL course | Fall 2013 (2013*03) | na |
| DMS 003 | Developmental Math Shell 3 | New CCL course | Fall 2013 (2013*03) | na |
| DMS 004 | Developmental Math Shell 4 | New CCL course | Fall 2013 (2013*03) | na |
| DRE 096 | Integ Reading & Writing I | New CCL course Previously approved for pilot colleges only. Now open to all colleges. | Summer 2013 (2013*02) | na |
| DRE 097 | Integ Reading & Writing II | New CCL course Previously approved for pilot colleges only. Now open to all colleges. | Summer 2013 (2013*02) | na |
| DRE 098 | Integ Reading & Writing III | New CCL course Previously approved for pilot colleges only. Now open to all colleges. | Summer 2013 (2013*02) | na |
| DRE 099 | Integ Reading/Writing III Option | New CCL course Previously approved for pilot colleges only. Now open to all colleges. | Summer 2013 (2013*02) | na |

**Curriculum Course Requests Approved By the Curriculum Review Committee (CRC)
on January 25, 2013**

| Course Prefix # | Title | Request | Effective Semester | Curriculum Standard Core Course |
|------------------------|-------------------------------|--|---------------------------|--|
| EDU 184 | Early Child Intro Pract | Allow an option for local suffixes to be used with EDU 184 . | Spring 2014 (2014*01) | na |
| FVP 240 | Introduction to Screenwriting | New CCL course | Summer 2013 (2013*02) | na |
| MAT-050 | Basic Math Skills | Archive Course (Developmental Education Initiative State Policy Team) | Endterm Fall 2013 | na |
| MAT-051 | Fast Track Basic Math | Archive Course (Developmental Education Initiative State Policy Team) | Endterm Fall 2013 | na |
| MAT-060 | Essential Mathematics | Archive Course (Developmental Education Math Redesign Task Force) | Summer 2013 Endterm | na |
| MAT-061 | Fast Track Essential Math | Archive Course (Developmental Education Math Redesign Task Force) | Summer 2013 Endterm | na |
| MAT-070 | Introductory Algebra | Archive Course (Developmental Education Math Redesign Task Force) | Summer 2013 Endterm | na |
| MAT-071 | Fast Track Intro Algebra | Archive Course (Developmental Education Math Redesign Task Force) | Summer 2013 Endterm | na |
| MAT-080 | Intermediate Algebra | Archive Course (Developmental Education Math Redesign Task Force) | Summer 2013 Endterm | na |
| MAT-081 | Fast Track Intermed Algebra | Archive Course (Developmental Education Math Redesign Task Force) | Summer 2013 Endterm | na |

**Curriculum Course Requests Approved By the Curriculum Review Committee (CRC)
on January 25, 2013**

| Course Prefix # | Title | Request | Effective Semester | Curriculum Standard Core Course |
|------------------------|-------------------------|--|---|---|
| PHO 217 | Photojournalism I | Change prerequisites from "PHO 224 Multimedia Production" to "PHO 110" | Fall 2013 (2013*03) Early Implement | Photographic Technology/Photojournalism (A3028C) |
| PHO 220 | Business of Photography | Change prerequisites from "PHO 110" to "None" | Fall 2013 (2013*03) Early Implement | na |
| SLP 215 | Treatment Intervention | New CCL course | Summer 2013 (2013*02) | na |
| SON 111 | Sonographic Physics | Change prerequisites from "CVS 163 or SON 110" to "None" | Fall 2013 (2013*03) Early Implement | Cardiovascular Sonography (A45160) Medical Sonography (A45440) |
| SON 250 | Vascular Sonography | Change prerequisites from "SON 111" to "None" | Fall 2013 (2013*03) Early Implement | Cardiovascular Sonography (A45160) Medical Sonography (A45440) |

CURRICULUM STANDARD

Effective Term
Fall 2012
*[2012*03]*

| | | | |
|--------------------------|---------------------------|------|--------|
| Curriculum Program Title | Business Analytics | Code | A25350 |
| Concentration | (not applicable) | | |

Curriculum Description

The Business Analytics curriculum is designed to provide students with the knowledge and the skills necessary for employment and growth in analytical professions. Business analysts process and analyze essential information about business operations and also assimilate data for forecasting purposes.

Students will complete course work in business analytics, including general theory, best practices, data mining, data warehousing, predictive modeling, project and operations management, statistical analysis, and software packages. Related skills include business communication, critical thinking and decision making.

Graduates should qualify for employment as data technicians, data scientists, business and data analytics engineers, and business analysts in the fields of finance, banking, logistics, marketing, healthcare, manufacturing, information technology, and government organizations.

Curriculum Requirements*

- 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 experience, including cooperative education, practicums, and internships, 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 in Program | 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

- 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 experience, including cooperative education, practicums, and internships, 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.

Business Analytics (A25350)

| | AAS | Diploma | Certificate |
|---|------------------|----------------|--------------------|
| Minimum Major Hours Required | 49 SHC | 30 SHC | 12 SHC |
| A. CORE <i>Courses required for the diploma are designated with *</i> Required Courses: <ul style="list-style-type: none"> * BAS 120 Business Analytics I 3 SHC * BAS 121 Analytics Methods I 3 SHC * BAS 150 Analytics Tools I 3 SHC * BAS 220 Business Analytics II 3 SHC BAS 270 Analytics Practicum 3 SHC BUS 110 Introduction to Business 3 SHC CTS 130 Spreadsheet 3 SHC DBA 110 Database Concepts 3 SHC Required Subject Areas: Basic Computer Skills(Select one): <ul style="list-style-type: none"> CIS 110 Introduction to Computers 3 SHC CIS 111 Basic PC Literacy 2 SHC OST 137 Office Software Applicat. 3 SHC *Statistics(Select One) <ul style="list-style-type: none"> BUS 228 Business Statistics 3 SHC MAT 151 Statistics I 3 SHC MAT 155 Statistical Analysis 3 SHC Data Management(Select one) <ul style="list-style-type: none"> DBA 115 Database Applications 3 SHC DBA 120 Database Programming I 3 SHC HBI 250 Data Mgmt and Utilization 3 SHC | 32-33 SHC | 15 SHC | |
| B. CONCENTRATION (if applicable) | | | |
| C. OTHER MAJOR HOURS <i>To be selected from the following prefixes:</i> ACC, AIB, BAF, BAS, BUS, CIS, CJC, COE, CSC, CTI, CTS, DBA, ECM, ECO, ETR, GIS, HBI, HRM, INS, INT, ISC, ITN, LOG, MAT, MKT, OMT, OST, PAD, RLS, and WEB <i>Foreign language courses (including ASL) that are not designated as approved other major hours may be included in all programs up to a maximum of 3 semester hours of credit.</i> | | | |

CURRICULUM STANDARD

Effective Term
Fall 2009
[2009*03]

Curriculum Program Title

Cardiovascular Sonography

Code

A45160

Concentration

(not applicable)

Curriculum Description

The Cardiovascular Sonography curriculum provides the individual with the knowledge and skills necessary to acquire, process, and evaluate the human heart and vascular structures. A cardiovascular sonographer uses high frequency sound waves to produce images of the heart and vascular structures.

Course work includes effective communication and patient care skills combined with a knowledge of physics, human anatomy, physiology, and pathology, all of which are essential to obtaining high quality sonographic images.

Graduates may be eligible to apply to the American Registry of Diagnostic Medical Sonographers for examinations in physics, cardiovascular physics, vascular physics, and adult echocardiography. Graduates may find employment in hospitals, physicians' offices, mobile services, and educational institutions.

Curriculum Requirements*

[for associate degree, diploma, and certificate programs in accordance with 23 NCAC 02E.0204(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 experience, including cooperative education, practicums, and internships, 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. 23 NCAC 02E.0204 (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 experience, including cooperative education, practicums, and internships, 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.

Cardiovascular Sonography A45160

| | AAS | Diploma | Certificate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|----------------------------|--------------------------|--------------------|---------|---------------------------|-------|---------|----------------------------|-------|---------|--------|-------|---------|---------|-------|---------|---------------------------|-------|---------|--------------------------|-------|---------|---------------------|-------|---------|---------------------|-------|---------|----------------------------|-------|---------|---------------------------|-------|---------|---------------------------|-------|------------------|---------------|--|
| Minimum Major Hours Required | 49 SHC | 30 SHC | 12 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>A. CORE <i>A diploma offered under this AAS degree requires a minimum of 12 SHC extracted from the required subject/course core of the AAS degree.</i></p> <p>Required Courses:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 15%;">CVS 160</td><td style="width: 65%;">CVS Clinical Education I</td><td style="width: 20%;">5 SHC</td></tr> <tr><td>CVS 161</td><td>CVS Clinical Education II</td><td>8 SHC</td></tr> <tr><td>CVS 162</td><td>CVS Clinical Education III</td><td>5 SHC</td></tr> <tr><td>CVS 163</td><td>Echo I</td><td>4 SHC</td></tr> <tr><td>CVS 164</td><td>Echo II</td><td>4 SHC</td></tr> <tr><td>CVS 260</td><td>CVS Clinical Education IV</td><td>8 SHC</td></tr> <tr><td>CVS 261</td><td>CVS Clinical Education V</td><td>8 SHC</td></tr> <tr><td>SON 111</td><td>Sonographic Physics</td><td>4 SHC</td></tr> <tr><td>SON 250</td><td>Vascular Sonography</td><td>2 SHC</td></tr> </table> <p>Required Subject Areas: Anatomy and Physiology. Select one:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 15%;">BIO 163</td><td style="width: 65%;">Basic Anatomy & Physiology</td><td style="width: 20%;">5 SHC</td></tr> <tr><td>BIO 166</td><td>Anatomy and Physiology II</td><td>4 SHC</td></tr> <tr><td>BIO 169</td><td>Anatomy and Physiology II</td><td>4 SHC</td></tr> </table> | CVS 160 | CVS Clinical Education I | 5 SHC | CVS 161 | CVS Clinical Education II | 8 SHC | CVS 162 | CVS Clinical Education III | 5 SHC | CVS 163 | Echo I | 4 SHC | CVS 164 | Echo II | 4 SHC | CVS 260 | CVS Clinical Education IV | 8 SHC | CVS 261 | CVS Clinical Education V | 8 SHC | SON 111 | Sonographic Physics | 4 SHC | SON 250 | Vascular Sonography | 2 SHC | BIO 163 | Basic Anatomy & Physiology | 5 SHC | BIO 166 | Anatomy and Physiology II | 4 SHC | BIO 169 | Anatomy and Physiology II | 4 SHC | 52-53 SHC | 12 SHC | |
| CVS 160 | CVS Clinical Education I | 5 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CVS 161 | CVS Clinical Education II | 8 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CVS 162 | CVS Clinical Education III | 5 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CVS 163 | Echo I | 4 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CVS 164 | Echo II | 4 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CVS 260 | CVS Clinical Education IV | 8 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CVS 261 | CVS Clinical Education V | 8 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SON 111 | Sonographic Physics | 4 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SON 250 | Vascular Sonography | 2 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BIO 163 | Basic Anatomy & Physiology | 5 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BIO 166 | Anatomy and Physiology II | 4 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BIO 169 | Anatomy and Physiology II | 4 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B. CONCENTRATION <i>(Not applicable)</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>C. OTHER MAJOR HOURS <i>To be selected from the following prefixes:</i></p> <p>BIO, BUS, CHM, CIS, COE, COM, CSC, CVS, ENG, HSC, MAT, PHY, PSY, SOC, and SON</p> <p><i>Foreign language courses (including ASL) that are not designated as approved other major hours may be included in all programs up to a maximum of 3 semester hours of credit.</i></p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

CURRICULUM STANDARD

*Effective Term
Spring 2007
[2007*01]*

Curriculum Program Title

Digital Effects and Animation Technology

Code

A30130

Concentration

(not applicable)

Curriculum Description

The Digital Effects and Animation Technology curriculum is designed to provide students with the training necessary to become competent in creating, manipulating, and animating digital images. These skills have application in the production of a variety of moving image forms.

Students will take courses covering computer hardware/software applications, computer animation, creation and manipulation of digital images and nonlinear editing. They will become proficient at using media industry standard hardware/software to generate and manipulate images, and create digital special effects.

Upon completion of this program, students will be able to generate moving images and manipulate captured images for a variety of media production applications. Graduates should qualify for employment in the creation and/or editing of a variety of media forms.

Curriculum Requirements*

[for associate degree, diploma, and certificate programs in accordance with 23 NCAC 02E.0204(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 experience, including cooperative education, practicums, and internships, 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. 23 NCAC 02E.0204(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 experience, including cooperative education, practicums, and internships, 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.

Digital Effects and Animation Technology A30130

| | AAS | Diploma | Certificate |
|---|---------------|----------------|--------------------|
| Minimum Major Hours Required | 49 SHC | 30 SHC | 12 SHC |
| A. CORE Required Courses: DEA 111 Introduction to DEAT 3 SHC DEA 112 2D Design and Animation I 3 SHC DEA 212 2D Design and Animation II 3 SHC DEA 213 3D Design and Animation I 3 SHC DEA 214 3D Design and Animation II 3 SHC DEA 220 DEAT Compositing 3 SHC DEA 221 DEAT Modeling 3 SHC DEA 230 Implementation Project I 4 SHC DEA 231 Implementation Project II 4 SHC DEA 240 DEAT Portfolio Review 4 SHC Required Subject Areas: None | 33 SHC | NR | |
| B. CONCENTRATION <i>(Not applicable)</i> | | | |
| C. OTHER MAJOR HOURS <i>To be selected from the following prefixes:</i> ACA, ART, BPT, CIS, COE, CSC, DEA, DES, FVP, GRA, ITN, SGD and WEB <i>Foreign language courses (including ASL) that are not designated as approved other major hours may be included in all programs up to a maximum of 3 semester hours of credit.</i> | | | |

CURRICULUM STANDARD

Effective Term
Fall 1997
[1997*03]

Curriculum Program Title

Medical Sonography

Code

A45440

Concentration

(not applicable)

Curriculum Description

The Medical Sonography curriculum provides knowledge and clinical skills in the application of high frequency sound waves to image internal body structures.

Course work includes physics, cross-sectional anatomy, abdominal, introductory vascular, and obstetrical/gynecological sonography. Competencies are attained in identification of normal anatomy and pathological processes, use of equipment, fetal growth and development, integration of related imaging, and patient interaction skills.

Graduates of accredited programs may be eligible to take examinations in ultrasound physics and instrumentation and specialty examinations administered by the American Registry of Diagnostic Medical Sonographers and find employment in clinics, physicians' offices, mobile services, hospitals, and educational institutions.

Curriculum Requirements*

[for associate degree, diploma, and certificate programs in accordance with 23 NCAC 02E.0204 (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.
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| | 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. 23 NCAC 02E.0204 (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 experience, including cooperative education, practicums, and internships, 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.

Medical Sonography A45440

| | AAS | Diploma | Certificate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|----------------------------|----------------------------|---------------|---------|---------------------|-------|---------|--------------------------|-------|---------|---------------------------|-------|---------|------------------------|-------|---------|-------------------------|-------|---------|------------------------|-------|---------|----------------------------|-------|---------|---------------------------|-------|---------|--------------|-------|---------|--------------------------|-------|---------|---------------------------|-------|---------|---------------------|-------|---------|--------------------|-------|---------|----------------------------|-------|---------|---------------------------|-------|---------|---------------------------|-------|------------------|---------------|--|
| Minimum Major Hours Required | 49 SHC | 30 SHC | 12 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>A. CORE <i>A diploma offered under this AAS degree requires a minimum of 12 SHC extracted from the required subject/course core of the AAS degree.</i></p> <p>Required Courses:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>SON 110</td><td>Introduction to Sonography</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>SON 111</td><td>Sonographic Physics</td><td style="text-align: right;">4 SHC</td></tr> <tr><td>SON 120</td><td>SON Clinical Education I</td><td style="text-align: right;">5 SCH</td></tr> <tr><td>SON 121</td><td>SON Clinical Education II</td><td style="text-align: right;">5 SHC</td></tr> <tr><td>SON 130</td><td>Abdominal Sonography I</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>SON 131</td><td>Abdominal Sonography II</td><td style="text-align: right;">2 SHC</td></tr> <tr><td>SON 140</td><td>Gynecologic Sonography</td><td style="text-align: right;">2 SHC</td></tr> <tr><td>SON 220</td><td>SON Clinical Education III</td><td style="text-align: right;">8 SHC</td></tr> <tr><td>SON 221</td><td>SON Clinical Education IV</td><td style="text-align: right;">8 SHC</td></tr> <tr><td>SON 225</td><td>Case Studies</td><td style="text-align: right;">1 SHC</td></tr> <tr><td>SON 241</td><td>Obstetrical Sonography I</td><td style="text-align: right;">2 SHC</td></tr> <tr><td>SON 242</td><td>Obstetrical Sonography II</td><td style="text-align: right;">2 SHC</td></tr> <tr><td>SON 250</td><td>Vascular Sonography</td><td style="text-align: right;">2 SHC</td></tr> <tr><td>SON 289</td><td>Sonographic Topics</td><td style="text-align: right;">2 SHC</td></tr> </table> <p>Required Subject Areas: Anatomy and Physiology. Select one:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>BIO 163</td><td>Basic Anatomy & Physiology</td><td style="text-align: right;">5 SHC</td></tr> <tr><td>BIO 166</td><td>Anatomy and Physiology II</td><td style="text-align: right;">4 SHC</td></tr> <tr><td>BIO 169</td><td>Anatomy and Physiology II</td><td style="text-align: right;">4 SHC</td></tr> </table> | SON 110 | Introduction to Sonography | 3 SHC | SON 111 | Sonographic Physics | 4 SHC | SON 120 | SON Clinical Education I | 5 SCH | SON 121 | SON Clinical Education II | 5 SHC | SON 130 | Abdominal Sonography I | 3 SHC | SON 131 | Abdominal Sonography II | 2 SHC | SON 140 | Gynecologic Sonography | 2 SHC | SON 220 | SON Clinical Education III | 8 SHC | SON 221 | SON Clinical Education IV | 8 SHC | SON 225 | Case Studies | 1 SHC | SON 241 | Obstetrical Sonography I | 2 SHC | SON 242 | Obstetrical Sonography II | 2 SHC | SON 250 | Vascular Sonography | 2 SHC | SON 289 | Sonographic Topics | 2 SHC | BIO 163 | Basic Anatomy & Physiology | 5 SHC | BIO 166 | Anatomy and Physiology II | 4 SHC | BIO 169 | Anatomy and Physiology II | 4 SHC | 53-54 SHC | 12 SHC | |
| SON 110 | Introduction to Sonography | 3 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SON 111 | Sonographic Physics | 4 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SON 120 | SON Clinical Education I | 5 SCH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SON 121 | SON Clinical Education II | 5 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SON 130 | Abdominal Sonography I | 3 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SON 131 | Abdominal Sonography II | 2 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SON 140 | Gynecologic Sonography | 2 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SON 220 | SON Clinical Education III | 8 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SON 221 | SON Clinical Education IV | 8 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SON 225 | Case Studies | 1 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SON 241 | Obstetrical Sonography I | 2 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SON 242 | Obstetrical Sonography II | 2 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SON 250 | Vascular Sonography | 2 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SON 289 | Sonographic Topics | 2 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BIO 163 | Basic Anatomy & Physiology | 5 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BIO 166 | Anatomy and Physiology II | 4 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BIO 169 | Anatomy and Physiology II | 4 SHC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B. CONCENTRATION <i>(Not applicable)</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>C. OTHER MAJOR HOURS <i>To be selected from the following prefixes:</i></p> <p>BIO, BUS, CHM, CIS, COE, CSC, CVS, ECO, HEA, HSC, MAT, PHS, PHY, and SON</p> <p><i>Foreign language courses (including ASL) that are not designated as approved other major hours may be included in all programs up to a maximum of 3 semester hours of credit.</i></p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

CURRICULUM STANDARD

Effective Term
Spring 2013
[2013*01]

Curriculum Program Title

Photographic Technology

Code

A3028C

Concentration

Photojournalism

Curriculum Description

Photojournalism is a concentration under the curriculum title of Photographic Technology. This curriculum provides in-depth coverage of professional photojournalism as it is currently practiced at newspapers and magazines.

Students will receive practical comprehensive instruction in the logistics and techniques of photojournalism. Courses include detailed study of photography of news, sports, and features; computer-based layout and design; and legal and ethical issues. Newspaper internships provide on-the-job training.

Graduates should be thoroughly prepared to successfully perform the duties required in entry-level positions in photojournalism.

*Curriculum Requirements**

[for associate degree, diploma, and certificate programs in accordance with 23 NCAC 02E.0204 (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 experience, including cooperative education, practicums, and internships, 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. 23 NCAC 02E.0204 (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 experience, including cooperative education, practicums, and internships, 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.

Photographic Technology/Photojournalism A3028C

| | AAS | Diploma | Certificate |
|--|------------------|---------------|---------------|
| Minimum Major Hours Required | 49 SHC | 30 SHC | 12 SHC |
| A. CORE Required Courses: PHO 110 Fundamentals of Photography 5 SHC PHO 139 Intro to Digital Imaging 2 SHC PHO 224 Multimedia Production 3 SHC Required Subject Areas: Lighting. Select 3-4 SHC: PHO 115 Basic Studio Lighting 4 SHC <i>or</i> PHO 125 Basic Object Lighting 1 SHC & PHO 126 Basic Portrait Lighting 1 SHC & PHO 135 Product Lighting 1 SHC | 13-14 SHC | NR | |
| B. CONCENTRATION <i>Courses unique to the concentration are designated with **</i> PHO 132 Small-Format Photography 4 SHC PHO 217 Photojournalism I 4 SHC ** PHO 227 Photojournalism II 8 SHC ** PHO 232 Photojournalism Portfolio Preparation 2 SHC | 18 SHC | 18 SHC | |
| C. OTHER MAJOR HOURS <i>To be selected from the following prefixes:</i> BUS, CIS, COE, CSC, GRA, GRD, JOU, PFN, and PHO <i>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.</i> | | | |