



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

May 19, 2009

MEMORANDUM

TO: Presidents
Chief Academic Officers

FROM: Delores A. Parker
Senior Vice President
Chief Academic Officer

SUBJECT: State Board Action on May 15, 2009
Revised Curriculum Standards

On May 15, 2009, the State Board of Community Colleges approved the requested revisions to the following curriculum standards:

Associate in Fine Arts/Art (A1020A) Pre-major*
Computer Programming (A25130)
Fine and Creative Woodworking (A30160)
Telecommunications Installation and Maintenance (Diploma) (D50380)

Please be aware that you must implement the standard revision changes 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.

**Please note that the only change to this pre-major is the addition of an elective course (ART 244) and, therefore, does not require a revised program of study unless your college wishes to offer ART 244 as part of the program.*

The revised standards are attached for your convenience. You may view all curriculum standards by visiting the Programs website at:

http://www.nccommunitycolleges.edu/Programs/curriculum_standards.htm

If you have any questions concerning these State Board action items, please contact Dr. Judith C. Mann at 919-807-7108 or mannj@nccommunitycolleges.edu.

DAP/JF/swj
Attachments
c: Dr. Judith C. Mann
Dr. John Pettitt
Ms. Jennifer Frazelle
Ms. Tracy McPherson
Program Coordinators

CC09-013
Email

CURRICULUM STANDARD

Effective Term
Summer 2006
[2006*02]

Curriculum Program Title

Computer Programming

Code

A25130

Concentration

(not applicable)

Curriculum Description

The Computer Programming curriculum prepares individuals for employment as computer programmers and related positions through study and applications in computer concepts, logic, programming procedures, languages, generators, operating systems, networking, data management, and business operations.

Students will solve business computer problems through programming techniques and procedures, using appropriate languages and software. The primary emphasis of the curriculum is hands-on training in programming and related computer areas that provide the ability to adapt as systems evolve.

Graduates should qualify for employment in business, industry, and government organizations as programmers, programmer trainees, programmer/analysts, computer operators, systems technicians, or database specialists.

*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.

Computer Programming A25130

	AAS	Diploma	Certificate
Minimum Major Hours Required	49 SHC	30 SHC	12 SHC
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> Required Courses: CIS 115 Intro to Prog & Logic 3 SHC CTS 285 Systems Analysis & Design 3 SHC CSC 289 Programming Capstone Proj 3 SHC DBA 110 Database Concepts 3 SHC NOS 110 Operating Systems Concepts 3 SHC SEC 110 Security Concepts 3 SHC Required Subject Areas: Basic Computer Skills. Select one: CIS 110 Introduction to Computers 3 SHC CIS 111 Basic PC Literacy 2 SHC Business. Select one: BUS 110 Introduction to Business 3 SHC CTS 115 Info Sys Business Concepts 3 SHC Networking. Select one: NET 110 Networking Concepts 3 SHC NET 125 Networking Basics 3 SHC Operating Systems. Select one: NOS 120 Linux/UNIX Single User 3 SHC NOS 130 Windows Single User 3 SHC NOS 149 Operating System – MVS™ 3 SHC NOS 244 Operating System - AS/400 3 SHC	41-42 SHC	12 SHC	
<i>Continued on next page</i>			

Computer Programming A25130 (continued)

<p>Programming. Select two:</p> <p>CSC 133 C Programming 3 SHC CSC 134 C++ Programming 3 SHC CSC 135 COBOL Programming 3 SHC CSC 136 Fortran Programming 3 SHC CSC 138 RPG Programming 3 SHC CSC 139 Visual BASIC Progr 3 SHC CSC 141 Visual C++ Progr 3 SHC CSC 142 Visual COBOL Progr 3 SHC CSC 150 Visual RPG Progr 3 SHC CSC 151 JAVA Programming 3 SHC CSC 153 C# Programming 3 SHC</p> <p>Advanced Programming. Select two:</p> <p>CSC 233 Adv C Programming 3 SHC CSC 234 Adv C++ Programming 3 SHC CSC 235 Adv COBOL Programming 3 SHC CSC 236 Adv Fortran Programming 3 SHC CSC 238 Adv RPG Programming 3 SHC CSC 239 Adv Visual BASIC Prog 3 SHC CSC 241 Adv Visual C++ Prog 3 SHC CSC 242 Adv Visual COBOL Prog 3 SHC CSC 250 Adv Visual RPG Prog 3 SHC CSC 251 Adv JAVA Programming 3 SHC CSC 253 Adv C# Programming 3 SHC</p>			
<p>B. CONCENTRATION <i>(not applicable)</i></p>			
<p>C. OTHER MAJOR HOURS <i>To be selected from the following prefixes:</i></p>			
<p>ACC, BUS, CET, CIS, COE, CSC, CTS, DBA, ECM, ECO, GRA, GRD, ISC, MAT, NET, NOS, OMT, OST, SEC, SGD, SGR, and WEB</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
Fall 2009
[2009*03]

Curriculum Program Title

Fine and Creative Woodworking

Code

A30160

Concentration

(not applicable)

Curriculum Description

This curriculum prepares individuals to design and build high quality furniture and accessories. Students choose to work in either period styles, creative work, or both. This program provides an opportunity to expand skill level and creativity in building fine furniture.

Students will begin by developing a strong foundation in basic hand tool use and machining. Course work will progress to include study in finishing, turning, carving, jigs and fixtures, veneering, bending, equipment maintenance, principles of operating a business, and more.

Graduates should be prepared to establish a business of their own. In addition, graduates may find employment opportunities in high-end custom furniture shops or the furniture manufacturing industry.

*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.

Fine and Creative Woodworking A30160

	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: <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding-left: 20px;">*WWK 110</td> <td>Hand Tools/Basic Machines</td> <td style="text-align: right;">5 SHC</td> <td></td> </tr> <tr> <td style="padding-left: 20px;">*WWK 111</td> <td>Furn Construct I/Joinery</td> <td style="text-align: right;">6 SHC</td> <td></td> </tr> <tr> <td style="padding-left: 40px;">WWK 112</td> <td>Green Woodworking</td> <td style="text-align: right;">3 SHC</td> <td></td> </tr> <tr> <td style="padding-left: 20px;">*WWK 120</td> <td>Furniture Planning Process</td> <td style="text-align: right;">2 SHC</td> <td></td> </tr> <tr> <td style="padding-left: 40px;">WWK 121</td> <td>Furniture Drawing</td> <td style="text-align: right;">3 SHC</td> <td></td> </tr> <tr> <td style="padding-left: 20px;">*WWK 130</td> <td>Wood Turning</td> <td style="text-align: right;">3 SHC</td> <td></td> </tr> <tr> <td style="padding-left: 20px;">*WWK 136</td> <td>Basic Finishing</td> <td style="text-align: right;">3 SHC</td> <td></td> </tr> <tr> <td style="padding-left: 40px;">WWK 140</td> <td>Veneering, Carving & Bending</td> <td style="text-align: right;">3 SHC</td> <td></td> </tr> <tr> <td style="padding-left: 40px;">WWK 210</td> <td>Furniture Design</td> <td style="text-align: right;">3 SHC</td> <td></td> </tr> <tr> <td style="padding-left: 40px;">WWK 226</td> <td>Cash Flow Furniture</td> <td style="text-align: right;">3 SHC</td> <td></td> </tr> </table> Required Subject Areas: None	*WWK 110	Hand Tools/Basic Machines	5 SHC		*WWK 111	Furn Construct I/Joinery	6 SHC		WWK 112	Green Woodworking	3 SHC		*WWK 120	Furniture Planning Process	2 SHC		WWK 121	Furniture Drawing	3 SHC		*WWK 130	Wood Turning	3 SHC		*WWK 136	Basic Finishing	3 SHC		WWK 140	Veneering, Carving & Bending	3 SHC		WWK 210	Furniture Design	3 SHC		WWK 226	Cash Flow Furniture	3 SHC		34 SHC	19 SHC	
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WWK 210	Furniture Design	3 SHC																																									
WWK 226	Cash Flow Furniture	3 SHC																																									
B. CONCENTRATION <i>(Not applicable)</i>																																											
C. OTHER MAJOR HOURS <i>To be selected from the following prefixes:</i> BPR, BUS, CIS, COE, CSC, DDF, DFT, ISC, MAC, MEC, PCW, WLD, and WWK <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>																																											

Art (A1020A)
Associate in Fine Arts Pre-Major

The Associate in Fine Arts degree shall be granted for planned programs of study consisting of a minimum of 64 and a maximum of 65 semester hours of approved college transfer courses. (Ref. 23 NCAC 2E.0204) Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic use of computers.

GENERAL EDUCATION CORE (28 SHC)*

The general education core includes study in the areas of humanities and fine arts, social and behavioral sciences, natural sciences and mathematics, and English composition.

English Composition (6 SHC)

Humanities/Fine Arts (6 SHC)**

Select **two** courses from two of the following discipline areas: art, drama, dance, foreign languages, interdisciplinary humanities, literature, music, philosophy, and religion. One course must be a literature course.

Social/Behavioral Sciences (9 SHC)

Select **three** courses from three of the following discipline areas: anthropology, economics, geography, history, political science, psychology, and sociology. One course must be a history course.

Natural Sciences/Mathematics (7 SHC)

Natural Sciences (4 SHC): Select one course, including accompanying laboratory work, from among the biological and physical science disciplines.

Mathematics (3 SHC): Select one course in introductory mathematics (college algebra, trigonometry, calculus).

OTHER REQUIRED HOURS (36-37 SHC)*

One semester hour of credit may be included in a sixty-five semester hour credit associate in fine arts program. The transfer of the 65th hour is not guaranteed.

If a two- or three- dimensional studio course is to transfer as a pre-major course, it must have ART 121 or ART 122 as a prerequisite.

Major Core: 15 SHC from the following:

ART 114 Art History Survey I (3 SHC)

ART 115 Art History Survey II (3 SHC)

ART 121 Design I (3 SHC)

ART 122 Design II (3 SHC)

ART 131 Drawing I (3 SHC)

Electives: 21 SHC from the following:

ART 116 Survey of American Art (3 SHC)	ART 117 Non-Western Art History (3 SHC)
ART 132 Drawing II (3 SHC)	ART 135 Figure Drawing I (3 SHC)
ART 171 Computer Art I (3 SHC)	ART 222 Wood Design I (3 SHC)
ART 223 Wood Design II (3 SHC)	ART 231 Printmaking I (3 SHC)
ART 232 Printmaking II (3 SHC)	ART 235 Figure Drawing II (3 SHC)
ART 240 Painting I (3 SHC)	ART 241 Painting II (3 SHC)
ART 244 Watercolor (3 SHC)	ART 245 Metals I (3 SHC)
ART 246 Metals II (3 SHC)	ART 247 Jewelry I (3 SHC)
ART 248 Jewelry II (3 SHC)	ART 250 Surface Design: Textiles (3 SHC)
ART 251 Weaving I (3 SHC)	ART 252 Weaving II (3 SHC)
ART 261 Photography I (3 SHC)	ART 262 Photography II (3 SHC)
ART 263 Color Photography (3 SHC)	ART 264 Digital Photography I (3 SHC)
ART 265 Digital Photography II (3 SHC)	ART 266 Videography I (3 SHC)
ART 267 Videography II (3 SHC)	ART 271 Computer Art II (3 SHC)
ART 275 Intro to Commercial Art (3 SHC)	ART 281 Sculpture I (3 SHC)
ART 282 Sculpture II (3 SHC)	ART 283 Ceramics I (3 SHC)
ART 284 Ceramics II (3 SHC)	ART 289 Museum Study (3 SHC)

Studio art courses must meet the following criteria:

- 6 contact hours for each 3 credit studio class
- All two-dimensional studio art classes, except ART 131 Drawing I, must require a prerequisite of ART 121 Design I.

All three-dimensional studio art classes must require a prerequisite of ART 122 Design II.

***Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.**

****3 SHC in Speech/Communication may be substituted for 3 SHC in Humanities/Fine Arts. Speech/Communication may not substitute for the literature requirement.**

Validation of the level of achievement in studio course work may be determined through portfolio review at the receiving institution.

Application to a University

Admission application deadlines vary; students must meet the deadline for the senior institution to which they plan to transfer. Upon successful completion of the associate degree, students who meet the requirements outlined in this pre-major articulation agreement will be eligible to be considered for admission as juniors to the signatory institutions offering the baccalaureate degree as listed at www.northcarolina.edu/content.php/aa/planning/traditional.htm or in the NC Independent Colleges and Universities Handbook which is available online at www.ncicu.org/publications. Students are encouraged to contact the senior institution to confirm degree offerings.

Admission to the Major

Grade point average requirements vary, and admission is competitive across the several programs in Art. Admission to teacher licensure programs requires satisfactory scores on PRAXIS I and PRAXIS II.

CURRICULUM STANDARD

Effective Term
Fall 2010
[2010*03]

Curriculum Program Title

**Telecommunications Installation and
Maintenance (Diploma)**

Code

D50380

Concentration

(not applicable)

Curriculum Description

The Telecommunications Installation and Maintenance curriculum prepares individuals for jobs in the telecommunications industry. It provides fundamental training for new students and provides upgrade training for current employees of the telecommunications companies.

Course work includes basic electricity, cable splicing, fiber optics, LAN-copper, cable fault location and repair, central office administration and other related topics. Emphasis is placed on hands-on installation and maintenance training.

A graduate will be prepared to work in the telecommunication industry in outside plant operations, on central office equipment, and business communications equipment.

*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 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

[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.

Telecommunications Installation and Maintenance (Diploma) D50380

	AAS	Diploma	Certificate
Minimum Major Hours Required	49 SHC	30 SHC	12 SHC
A. CORE Required Courses: TCT 103 Installer Level 1 Cabling 2 SHC TEL 100 Telecommunications Basic Electricity 3 SHC TEL 105 Fiber Optics Splicing 2 SHC TEL 106 Fiber Optics Connectors 2 SHC TEL 108 Comdial Key Systems 1 SHC TEL 201 Station Installation and Repair 2 SHC TEL 202 Cable Splicing 2 SHC TEL 203 Cable Fault Location 1 SHC TEL 205 Digital Central Office Administration 2 SHC Required Subject Areas: None		17 SHC	
B. CONCENTRATION <i>(Not applicable)</i>			
C. OTHER MAJOR HOURS <i>To be selected from the following prefixes:</i> BPR, BUS, CIS, COE, CSC, CTS, DFT, ELC, ISC, MAT, NET, NOS, TCT and TEL <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>			