



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

January 21, 2009

**MEMORANDUM**

**TO:** Presidents  
Chief Academic Officers

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

**SUBJECT:** State Board Action on January 16, 2009  
Revised Curriculum Standards

On January 16, 2009, the State Board of Community Colleges approved the requested revisions to the following curriculum standards:

Funeral Service Education (A55260)  
Simulation and Game Development (A25450)  
Surveying Technology (A40380)

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.

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

<http://www.nccommunitycolleges.edu/Programs/index.html>

If you have questions concerning the revised standards, please contact Dr. Judith C. Mann at 919-807-7108 or [mannj@nccommunitycolleges.edu](mailto:mannj@nccommunitycolleges.edu).

DAP/jf

Attachments

c: Dr. Judith C. Mann  
Dr. John Pettitt  
Ms. Jennifer Frazelle  
Ms. Tracy McPherson  
Program Coordinators

CC09-002  
Email

# CURRICULUM STANDARD

*Effective Term*  
*Summer 2009*  
*[2009\*02]*

Curriculum Program Title

**Funeral Service Education**

Code

**A55260**

Concentration

**(not applicable)**

## *Curriculum Description*

The Funeral Service Education curriculum provides students with the opportunity to become proficient in basic funeral service skills.

In addition to the general education courses offered in the curriculum, technical courses such as human anatomy, embalming theory and practice, embalming chemistry, restorative arts, funeral law, and funeral home operations are taught.

Graduates of the curriculum, upon passing the state or national exam and completing an internship in a funeral home, will be qualified for employment as embalmers and/or funeral directors.

## *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.

	<b>AAS</b>	<b>Diploma</b>	<b>Certificate</b>
Minimum General Education Hours	15	6	0
Minimum Major Hours	49	30	12
Other Required Hours	0-7	0-4	0-1
<b>Total Semester Hours Credit (SHC)</b>	<b>64-76</b>	<b>36-48</b>	<b>12-18</b>

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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. 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.

### **Funeral Service Education A55260**

	<b>AAS</b>	<b>Diploma</b>	<b>Certificate</b>
<b>Minimum Major Hours Required</b>	<b>49 SHC</b>	<b>30 SHC</b>	<b>12 SHC</b>
<b>A. CORE</b> <i>Courses required for the diploma are designated with a *</i> <b>Required Courses:</b> <ul style="list-style-type: none"> <li>* ACC 111 Financial Accounting 3 SHC</li> <li>* BUS 110 Introduction to Business 3 SHC</li> <li>* BUS 115 Business Law I 3 SHC</li> <li>* BUS 230 Small Business Management 3 SHC</li> <li>* CIS 113 Computer Basics 1 SHC</li> <li>* FSE 112 Principles of Funeral Service 3 SHC</li> <li>* FSE 116 Funeral Law and Ethics 3 SHC</li> <li>* FSE 214 Pathology 3 SHC</li> <li>* FSE 215 Funeral Home Operations 4 SHC</li> <li>* PSY 141 Psychology of Death and Dying 3 SHC</li> </ul> <b>Required Subject Areas:</b> None	<b>29 SHC</b>	<b>29 SHC</b>	
<b>B. CONCENTRATION</b> <i>(Not applicable)</i>			
<b>C. OTHER MAJOR HOURS</b> <i>To be selected from the following prefixes:</i>  ACC, BUS, CIS, COE, CSC, FSE, and PSY  <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

**Simulation and Game Development**

Code

**A25450**

Concentration

**(not applicable)**

## *Curriculum Description*

The Simulation and Game Development curriculum provides a broad background in simulation and game development with practical applications in creative arts, visual arts, audio/video technology, creative writing, modeling, design, programming and management.

Students will receive hands-on training in design, 3D modeling, and programming for the purpose of creating simulations and games.

Graduates should qualify for employment as designers, artists, animators, programmers, testers, quality assurance analysts, engineers and administrators in the entertainment industry, health care, education, corporate training, and government organizations.

## *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.

	<b>AAS</b>	<b>Diploma</b>	<b>Certificate</b>
Minimum General Education Hours	15	6	0
Minimum Major Hours	49	30	12
Other Required Hours	0-7	0-4	0-1
<b>Total Semester Hours Credit in Program</b>	<b>64-76</b>	<b>36-48</b>	<b>12-18</b>

*\*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.

### **Simulation and Game Development A25450**

	<b>AAS</b>	<b>Diploma</b>	<b>Certificate</b>																											
<b>Minimum Major Hours Required</b>	<b>49 SHC</b>	<b>30 SHC</b>	<b>12 SHC</b>																											
<p><b>A. CORE</b></p> <p><b>Required Courses:</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">SGD 111</td> <td style="width: 60%;">Introduction to SGD</td> <td style="width: 25%; text-align: right;">3 SHC</td> </tr> <tr> <td>SGD 112</td> <td>SGD Design</td> <td style="text-align: right;">3 SHC</td> </tr> <tr> <td>SGD 114</td> <td>3D Modeling</td> <td style="text-align: right;">3 SHC</td> </tr> <tr> <td>SGD 212</td> <td>SGD Design II</td> <td style="text-align: right;">3 SHC</td> </tr> <tr> <td>SGD 289</td> <td>SGD Project</td> <td style="text-align: right;">3 SHC</td> </tr> </table> <p><b>Required Subject Area:</b> Programming. Select one:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">CSC 134</td> <td style="width: 60%;">C+ + Programming</td> <td style="width: 25%; text-align: right;">3 SHC</td> </tr> <tr> <td>CSC 151</td> <td>JAVA Programming</td> <td style="text-align: right;">3 SHC</td> </tr> <tr> <td>CSC 153</td> <td>C# Programming</td> <td style="text-align: right;">3 SHC</td> </tr> <tr> <td>SGD 113</td> <td>SGD Programming</td> <td style="text-align: right;">3 SHC</td> </tr> </table> <p>Select Additional 12 SHC from SGD courses <span style="float: right;">12 SHC</span></p>	SGD 111	Introduction to SGD	3 SHC	SGD 112	SGD Design	3 SHC	SGD 114	3D Modeling	3 SHC	SGD 212	SGD Design II	3 SHC	SGD 289	SGD Project	3 SHC	CSC 134	C+ + Programming	3 SHC	CSC 151	JAVA Programming	3 SHC	CSC 153	C# Programming	3 SHC	SGD 113	SGD Programming	3 SHC	<b>30 SHC</b>		
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<b>B. CONCENTRATION</b> <i>(Not applicable)</i>																														
<p><b>C. OTHER MAJOR HOURS</b> <i>To be selected from the following prefixes:</i></p> <p>ARC, ART, BUS, CIS, COE, CSC, CTS, DAN, DBA, DDF, DEA, DES, DFT, DME, DRA, ECO, ENT, FVP, GAM, GRA, GRD, GIS, MUS, NET, NOS, PHO, 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

**Surveying Technology**

Code

**A40380**

Concentration

**(not applicable)**

## *Curriculum Description*

The Surveying Technology curriculum provides training for technicians in the many areas of surveying. Surveyors are involved in land surveying, route surveying, construction surveying, photogrammetry, mapping, global positioning systems, geographical information systems, and other areas of property description and measurements.

Course work includes the communication and computational skills required for boundary, construction, route, and control surveying, photogrammetry, topography, drainage, surveying law, and subdivision design, with emphasis upon applications of electronic data collection and related software including CAD.

Graduates should qualify for jobs as survey party chief, instrument person, surveying technician, highway surveyor, mapper, GPS technician, and CAD operator. Graduates will be prepared to pursue the requirements necessary to become a Registered Land Surveyor in North Carolina.

## *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.

	<b>AAS</b>	<b>Diploma</b>	<b>Certificate</b>
Minimum General Education Hours	15	6	0
Minimum Major Hours	49	30	12
Other Required Hours	0-7	0-4	0-1
<b>Total Semester Hours Credit in Program</b>	<b>64-76</b>	<b>36-48</b>	<b>12-18</b>

*\*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.

### **Surveying Technology A40380**

	<b>AAS</b>	<b>Diploma</b>	<b>Certificate</b>
<b>Minimum Major Hours Required</b>	<b>49 SHC</b>	<b>30 SHC</b>	<b>12 SHC</b>
<b>A. CORE</b>  <b>Required Courses:</b> CIV 211 Hydraulics and Hydrology 3 SHC SRV 110 Surveying I 4 SHC SRV 111 Surveying II 4 SHC SRV 210 Surveying III 4 SHC SRV 220 Surveying Law 3 SHC SRV 230 Subdivision Planning 3 SHC SRV 240 Topo/Site Surveying 4 SHC  <b>Required Subject Areas:</b> <b>Statics &amp; Strength of Materials. Select one:</b> CIV 110 Statics/Strength of Materials 4 SHC MEC 250 Statics & Strength of Materials 5 SHC	<b>29-30 SHC</b>	<b>NR</b>	
<b>B. CONCENTRATION</b> <i>(Not applicable)</i>			
<b>C. OTHER MAJOR HOURS</b> <i>To be selected from the following prefixes:</i>  CIS, CIV, COE, CSC, DFT, EGR, GIS, MAT, MEC, PHY, and SRV  <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>			