



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

April 16, 2010

**To:** Presidents  
Chief Academic Officers

**From:** Sharon E. Morrissey, Ed. D.  
Senior VP & Chief Academic Officer

**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 CRC meets in the spring and fall to review course requests that have been submitted by the colleges. The approved course requests from the Spring 2010 meeting are attached for your information.

The State Board of Community Colleges has delegated authority to the Senior Vice President and Chief Academic Officer to approve curriculum standard changes involving **core course title and/or credit hour changes** resulting from CRC action. The standard listed below has been revised as a result of such CRC-approved changes to one or more core courses:

Interpreter Education (A55300)

The CRC also approved requests to revise the **course description, prerequisite(s), corequisite(s), and/or class/lab hours** of core courses found on the curriculum standard(s) and/or pre-majors listed below. Please note that the only change indicated on the printed standard will be the inclusion of the statement *CRC Revised-Electronic Only 03/16/10*, since only the electronic version of the standard template will be revised.

Agricultural Biotechnology (A20110)  
Alternative Energy Technology: Biofuels (A20130)  
Boat Building (Diploma) (D35120)  
Clinical Trials Research Associate (A45190)  
Industrial Engineering Technology (A40240)  
Marine Technology (A15320)  
Nanotechnology (A20190)  
Nuclear Medicine Technology (A45460)  
Surgical Technology (A45740)  
Viticulture and Enology Technology (A15430)

The revised standards noted above are attached for your convenience.

CC10-015  
E-mail

Presidents  
Chief Academic Officers  
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April 16, 2010

The following curriculum standard(s) involved CRC-approved core course revisions **and additional standard revision requests** that will be reviewed for action at the May 2010 State Board meeting:

Nondestructive Examination Technology (A50350)  
Professional Arts and Crafts: Sculpture (A30290)

The following curriculum standard(s) involved CRC-approved core course revisions **and additional standard revision requests** that will be reviewed for action at the July 2010 State Board meeting:

Surveying Technology (A50380)

Revision(s) to the following course(s) that are included in the Comprehensive Articulation Agreement (CAA) and the Independent Comprehensive Agreement (ICAA) will be forwarded to the Transfer Advisory Committee (TAC) and the Independent Transfer Advisory Committee (ITAC) for information:

BIO 280 Biotechnology

The following newly approved course(s) will be sent to the TAC and the ITAC for consideration of college transfer designation:

PHI 241 Introduction to Bioethics

Curriculum standards, curriculum courses and procedures for submitting requests to the CRC are available at <http://www.nccommunitycolleges.edu/programs>. If you need assistance or clarification, please contact Dr. Judith C. Mann, Associate Vice President, Program Services, at [mannj@nccommunitycolleges.edu](mailto:mannj@nccommunitycolleges.edu) or (919) 807-7108.

SEM/sds  
Attachments  
C: Curriculum Review Committee  
Dr. John Pettitt  
Mr. Bill Randall  
Dr. Judith C. Mann  
Ms. Jennifer Frazelle  
Program Coordinators

CC10-015  
E-mail

**New and Revised Curriculum Courses Approved By the Curriculum Review Committee (CRC)  
on March 16, 2010**

Course Prefix/Number	Title	CRC Action	Effective Semester	Curriculum Standard Core Course
AGR 268	Adv Organic Crop Prod	New course approved	2010*02	N/A
ALT 211	Biofuels Analytics	Changed prerequisites from "ALT 110 and (CHM 131 or CHM 151)" to "ALT 110"; Changed course description	2011*01	Alternative Energy Technology: Biofuels (A20130)
ASL 151	Numbers & Fingerspelling	New course approved	2011*01	N/A
ASL 250	Linguistics of ASL	New course approved	2011*01	Proposed for: Interpreter Education (A55300)
BIO 280	Biotechnology	Changed prerequisites from "BIO 111 or CHM 151" to "BIO 111 or CHM 131 or CHM 151"	2011*01	Agricultural Biotechnology (A20110) Industrial Engineering Technology (A40240)
BTB 105	Yacht Repair/Renovation	Changed corequisites from "FBG 100" to "None"; Changed course description	2010*02+	Boat Building (D35120)
BTB 114	Yacht Design	New course approved	2010*02	N/A
CCT 242	Drive Data Recovery	New course approved	2010*02	N/A
CCT 260	Mobile Phone Examination	New course approved	2010*02	N/A
CCT 271	Mac Digital Forensics	New course approved	2010*02	N/A
CCT 272	Forensic Password Recov	New course approved	2010*02	N/A
CCT 273	Registry Forensics	New course approved	2010*02	N/A
CTR 210	Intro to Clinical Data	Changed prerequisites from "CTR 130" to "None"	2011*01	Clinical Trials Research Associate (A45190)
ENG 081	Fast Track Writing Found	New course approved	2010*02	N/A
ENG 091	Fast Track Comp Strateg	New course approved	2010*02	N/A
FSE 211	Embalming Lab I	Changed hours from "0-4-0-2" to "0-2-0-1"	2011*01	N/A
FSE 213	Embalming Lab II	Changed hours from "0-4-0-2" to "0-2-0-1"; Changed prerequisites from "FSE 210 and FSE 211" to "(FSE 210 and FSE 211) or (FSE 210 and COE 111); Changed corequisites from "FSE 212" to "None"	2011*01	N/A

+ Early Implementation

**New and Revised Curriculum Courses Approved By the Curriculum Review Committee (CRC)  
on March 16, 2010**

Course Prefix/Number	Title	CRC Action	Effective Semester	Curriculum Standard Core Course
IPP 111	Intro to Interpretation	Changed hours from "2-0-0-2" to "3-0-0-3"; Changed course description	2011*01	Interpreter Education (A55300)
IPP 112	Comparative Cultures	Changed hours from "4-0-0-4" to "3-0-0-3"; Changed course description	2011*01	Interpreter Education (A55300)
IPP 150	Linguistics of ASL	Archived course	2011*03 (End Term)	N/A
IPP 151	ASL Numbers and Fingerspelling	Archived course	2011*03 (End Term)	N/A
IPP 243	Religious Interpreting	Changed hours from "1-2-0-2" to "2-2-0-3"; Changed course description	2011*01	N/A
IPP 245	Educational Int Issues	Changed hours from "2-0-0-2" to "3-0-0-3"; Changed course description	2011*01	N/A
LEX 281	Intellectual Property	New course approved	2010*02	N/A
LEX 282	Immigration Law	New course approved	2010*02	N/A
LEX 289	U.S. Constitutional Law	New course approved	2010*02	N/A
MAT 051	Fast Track Basic Math	New course approved	2010*02	N/A
MAT 061	Fast Track Essential Math	New course approved	2010*02	N/A
MAT 071	Fast Track Intro Algebra	New course approved	2010*02	N/A
MAT 081	Fast Track Intermed Alg	New course approved	2010*02	N/A
MSC 220	Marine GIS	Changed prerequisites from "CIS 111" to "CIS 110 or "CIS 111"	2011*01	Marine Technology (A15320)
MSC 254	Marine Data Processing	Changed prerequisites from "CIS 111 and MSC 152" to "(CIS 110 or CIS 111) and MSC 152"	2011*01	Marine Technology (A15320)
NAN 113	Nano Instrument Basics	New course approved	2010*02	N/A
NAN 241	Nanofab of Mixtures	Changed prerequisites from "NAN 131" to "None"; Change course description	2010*03+	Nanotechnology (A20190)
NAN 242	Nanofab of Thin Films	Changed prerequisites from "NAN 131" to "None"; Change course description	2010*03+	Nanotechnology (A20190)
NAN 243	Atomic-Force Microscopy	Changed prerequisites from "NAN 131" to "None"; Change course description	2010*03+	Nanotechnology (A20190)
NAN 244	Electron Microscopy	Changed prerequisites from "NAN 131" to "None"; Change course description	2010*03+	Nanotechnology (A20190)

+ Early Implementation

**New and Revised Curriculum Courses Approved By the Curriculum Review Committee (CRC)  
on March 16, 2010**

Course Prefix/Number	Title	CRC Action	Effective Semester	Curriculum Standard Core Course
NDE 141	Prin of Penetrant Testing	Changed title from "Prin of Penetrant Testing" to "Surface Testing (VT/PT)"; Changed course description	2010*02+	Nondestructive Examination Technology (A50350)
NDE 151	Prin of Mag Particle Test	Changed title from "Prin of Mag Particle Test" to "Electromag Test (MT/ET)"; Changed course description	2010*02+	Nondestructive Examination Technology (A50350)
NDE 252	Eddy Current Testing (ET)	New course approved	2010*02	N/A
NDE 261	PDI-UT-1, UT CS Pipe Wld	New course approved	2010*02	N/A
NDE 262	PDI-UT-2, UT SS Pipe Wld	New course approved	2010*02	N/A
NDE 263	PDI-UT-3, UT TWS CS/SS	New course approved	2010*02	N/A
NDE 264	PDI-UT-8, UT WOL DM TWS	New course approved	2010*02	N/A
NDE 265	PDI-UT-10, UT DM DLS	New course approved	2010*02	N/A
NET 130	Convergence Concepts	New course approved	2010*02	N/A
NMT 212	Proc for Nuc Med I	Changed prerequisites from "NMT 132" to "None"; Changed corequisites from "None" to "NMT 132"	2010*03+	Nuclear Medicine Technology (A45460)
NMT 212A	Proc for Nuc Med I Lab	Changed prerequisites from "NMT 132" to "None"; Changed corequisites from "NMT 212" to "NMT 212 and NMT 132"	2010*03+	N/A
ODL 140	Intro - Wilderness Therapy	New course approved	2010*02	N/A
ODL 245	Wilderness Therapy Models	New course approved	2010*02	N/A
ODL 248	Field Techniques in WT	New course approved	2010*02	N/A
ODL 267	Primitive Living Skills	New course approved	2010*02	N/A
ODL 288	Current Trends in ODL	New course approved	2010*02	N/A
PCC 121	Handbuilding I	New course approved	2010*02	Proposed for: Professional Arts and Crafts: Sculpture (A30290)
PCC 122	Handbuilding II	New course approved	2010*02	N/A

+ Early Implementation

**New and Revised Curriculum Courses Approved By the Curriculum Review Committee (CRC)  
on March 16, 2010**

Course Prefix/Number	Title	CRC Action	Effective Semester	Curriculum Standard Core Course
PCC 125	Clay Casting	Changed prerequisites from "PCC 110" to "PCC 110 or ART 283"	2010*03+	N/A
PCS 210	Intro to Clay Sculpture	Changed prerequisites from "PCC 110" to "None"; Changed course description	2010*03+	Professional Arts and Crafts: Sculpture (A30290)
RED 081	Fast Track Intro Coll Rdg	New course approved	2010*02	N/A
RED 091	Fast Track Imprv Coll Rdg	New course approved	2010*02	N/A
SAB 255	Environmental Prevention	New course approved	2010*02	N/A
SRV 211	Introduction to Hydrology	New course approved	2010*02	Proposed for: Surveying Technology (A40380)
SUR 135	SUR Clinical Practice II	Changed corequisites from "SUR 134 and SUR 137" to "SUR 134"	2010*03+	Surgical Technology (A45740)
SUR 210	Adv SUR Clinical Practice	Changed prerequisites from "SUR 137" to "None"	2010*03+	Surgical Technology (A45740)
SUR 211	Adv Theoretical Concepts	Changed prerequisites from "SUR 137" to "None"	2010*03+	Surgical Technology (A45740)
VEN 238	Grape Pests/Disea/Disorde	Changed prerequisites from "VEN 138" to None"	2011*01	Viticulture and Enology Technology (A15430)
WEB 225	Content Management Sys	New course approved	2010*02	N/A

+ Early Implementation

# CURRICULUM STANDARD

*Effective Term  
Spring 2011  
[2011\*01]*

Curriculum Program Title	<b>Interpreter Education</b>	Code	<b>A55300</b>
Concentration	<b>(not applicable)</b>		

## *Curriculum Description*

The Interpreter Education curriculum prepares individuals to work as entry-level Sign Language Interpreters who will provide communication access in interview and interactive settings. In addition, this curriculum provides in-service training for working interpreters who want to upgrade their skills.

Course work includes the acquisition of American Sign Language (ASL); grammar, structure, and sociolinguistic properties; cognitive processes associated with interpretation between ASL and English; the structure and character of the deaf community; and acquisition of consecutive and simultaneous interpreting skills.

Entry-level jobs for para-professional interpreters are available in educational systems or a variety of community settings. Individuals may choose from part-time, full-time, or self-employment/free lance positions or apply language skills to other human service related areas.

## *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>

\*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.

## Interpreter Education A55300

	AAS	Diploma	Certificate																														
<b>Minimum Major Hours Required</b>	<b>49 SHC</b>	<b>30 SHC</b>	<b>12 SHC</b>																														
<p><b>A. CORE</b>  <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><b>Required Courses:</b></p> <table style="width: 100%; border: none;"> <tr><td>ASL 111</td><td>Elementary ASL I</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>ASL 112</td><td>Elementary ASL II</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>ASL 250</td><td>Linguistics of ASL</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>COE 111</td><td>Cooperative Work Experience I</td><td style="text-align: right;">1 SHC</td></tr> <tr><td>COE 115</td><td>Work Experience Seminar I</td><td style="text-align: right;">1 SHC</td></tr> <tr><td>IPP 111</td><td>Introduction to Interpretation</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>IPP 112</td><td>Comparative Cultures</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>IPP 152</td><td>ASL/English Translation</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>IPP 161</td><td>Consecutive Interpreting</td><td style="text-align: right;">5 SHC</td></tr> <tr><td>IPP 221</td><td>Simultaneous Interpreting I</td><td style="text-align: right;">5 SHC</td></tr> </table> <p><b>Required Subject Areas:</b> None</p>	ASL 111	Elementary ASL I	3 SHC	ASL 112	Elementary ASL II	3 SHC	ASL 250	Linguistics of ASL	3 SHC	COE 111	Cooperative Work Experience I	1 SHC	COE 115	Work Experience Seminar I	1 SHC	IPP 111	Introduction to Interpretation	3 SHC	IPP 112	Comparative Cultures	3 SHC	IPP 152	ASL/English Translation	3 SHC	IPP 161	Consecutive Interpreting	5 SHC	IPP 221	Simultaneous Interpreting I	5 SHC	<b>30 SHC</b>	<b>12 SHC</b>	
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ASL 112	Elementary ASL II	3 SHC																															
ASL 250	Linguistics of ASL	3 SHC																															
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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>ANT, ASL, BIO, BUS, CIS, CJC, COE, CSC, DDT, DRA, EDU, GRO, HSE, HUM, IPP, MAT, MED, OST, POL, PSY, SAB, SOC, and SWK</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

<i>Effective Term</i> Fall 2007 [2007*03]
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Curriculum Program Title	<b>Agricultural Biotechnology</b>	Code	<b>A20110</b>
Concentration	<b>(not applicable)</b>		

## *Curriculum Description*

The Agricultural Biotechnology curriculum, which has emerged from molecular biology and chemical engineering, is designed to meet the increasing demands for skilled laboratory technicians in various fields of biological, chemical, and agricultural technology. The curriculum objectives are designed to prepare graduates to serve as a research assistant to a biologist or chemist; as a laboratory technician/ instrumentation technician; or as a quality control/quality assurance technician. The curriculum will also serve to identify/create new areas of opportunity for farmers and other potential clients in rural North Carolina.

Course work emphasizes biology, plant tissue culturing, biotechnology, agriculture, chemistry, horticulture, mathematics, and technical communication.

Graduates may find employment in various areas of industry and government, including research and development, manufacturing, sales, customer services, and production of alternative (bioengineered) crops.

## *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.

### **Agricultural Biotechnology A20110**

	<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 *</i>	<b>21 SHC</b>	<b>13 SHC</b>																																											
<p><b>Required Courses:</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="padding-left: 20px;">* BIO 280</td><td>Biotechnology</td><td style="text-align: right;">3 SHC</td></tr> <tr><td style="padding-left: 20px;">* BTC 150</td><td>Bioethics</td><td style="text-align: right;">3 SHC</td></tr> <tr><td style="padding-left: 20px;">* BTC 285</td><td>Cell Culture</td><td style="text-align: right;">3 SHC</td></tr> <tr><td style="padding-left: 20px;">* BTC 286</td><td>Immunological Techniques</td><td style="text-align: right;">4 SHC</td></tr> <tr><td style="padding-left: 20px;">BTC 288</td><td>Biotech Lab Experiences</td><td style="text-align: right;">2 SHC</td></tr> </table> <p><b>Required Subject Areas:</b></p> <p><b>Agriculture. Select 6 SHC</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="padding-left: 20px;">AGR 131</td><td>Market Garden Lab</td><td style="text-align: right;">2 SHC</td></tr> <tr><td style="padding-left: 20px;">AGR 160</td><td>Plant Science</td><td style="text-align: right;">3 SHC</td></tr> <tr><td style="padding-left: 20px;">AGR 170</td><td>Soil Science</td><td style="text-align: right;">3 SHC</td></tr> <tr><td style="padding-left: 20px;">AGR 261</td><td>Agronomy</td><td style="text-align: right;">3 SHC</td></tr> <tr><td style="padding-left: 20px;">ANS 110</td><td>Animal Science</td><td style="text-align: right;">3 SHC</td></tr> <tr><td style="padding-left: 20px;">ANS 150</td><td>Animal Health Management</td><td style="text-align: right;">3 SHC</td></tr> <tr><td style="padding-left: 20px;">HOR 134</td><td>Greenhouse Operations</td><td style="text-align: right;">3 SHC</td></tr> <tr><td style="padding-left: 20px;">HOR 166</td><td>Soils and Fertilizers</td><td style="text-align: right;">3 SHC</td></tr> <tr><td style="padding-left: 20px;">HOR 168</td><td>Plant Propagation</td><td style="text-align: right;">3 SHC</td></tr> </table>	* BIO 280	Biotechnology	3 SHC	* BTC 150	Bioethics	3 SHC	* BTC 285	Cell Culture	3 SHC	* BTC 286	Immunological Techniques	4 SHC	BTC 288	Biotech Lab Experiences	2 SHC	AGR 131	Market Garden Lab	2 SHC	AGR 160	Plant Science	3 SHC	AGR 170	Soil Science	3 SHC	AGR 261	Agronomy	3 SHC	ANS 110	Animal Science	3 SHC	ANS 150	Animal Health Management	3 SHC	HOR 134	Greenhouse Operations	3 SHC	HOR 166	Soils and Fertilizers	3 SHC	HOR 168	Plant Propagation	3 SHC			
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ANS 150	Animal Health Management	3 SHC																																											
HOR 134	Greenhouse Operations	3 SHC																																											
HOR 166	Soils and Fertilizers	3 SHC																																											
HOR 168	Plant Propagation	3 SHC																																											
<p><b>B. CONCENTRATION</b> (<i>Not applicable</i>)</p> <p style="text-align: center;"><i>Continued on next page</i></p>																																													

<b>C. OTHER MAJOR HOURS</b> <i>To be selected from the following prefixes:</i>			
<p>AGR, ANS, BIO, BTC, CHM, CIS, COE, CTC, HOR, MAT, PHY, SCI, and VEN</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 2008  
[2008\*03]

Curriculum Program Title	<b>Alternative Energy Technology: Biofuels</b>	Code	<b>A20130</b>
Concentration	<b>(not applicable)</b>		

## *Curriculum Description*

The Alternative Energy Technology: Biofuels curriculum is designed to provide individuals with the educational foundation and technical skills necessary to obtain employment in the biofuels industry or to create a new business dealing with biofuels.

Course work includes general education, alternative energy resource management, chemistry, industrial safety, and an array of coursework specific to all sectors of the biofuels industry.

Graduates of the curriculum should qualify for numerous positions within the industry. Employment opportunities include, but are not limited to, plant technician, plant manager, lab technician, sales manager, process coordinator, fuel purchaser, or business owner.

## *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.

### **Alternative Energy Technology: Biofuels (A20130)**

	<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 *</i> <i>Courses required for the certificate are designated with ^</i> <b>Required Courses:</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">*^</td> <td style="width: 15%;">ALT 110</td> <td style="width: 60%;">Biofuels</td> <td style="width: 20%; text-align: right;">3 SHC</td> </tr> <tr> <td>*^</td> <td>ALT 120</td> <td>Renewable Energy Technology</td> <td style="text-align: right;">3 SHC</td> </tr> <tr> <td>*^</td> <td>ALT 210</td> <td>Biofuels II</td> <td style="text-align: right;">4 SHC</td> </tr> <tr> <td>*^</td> <td>ALT 211</td> <td>Biofuels Analytics</td> <td style="text-align: right;">4 SHC</td> </tr> <tr> <td>*</td> <td>ALT 230</td> <td>Biofuels Waste Management</td> <td style="text-align: right;">2 SHC</td> </tr> </table> <b>Required Subject Areas:</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">*</td> <td colspan="2"><b>Chemistry. Select 4 SHC:</b></td> <td></td> </tr> <tr> <td></td> <td>CHM 131</td> <td>Intro to Chemistry</td> <td style="text-align: right;">3 SHC</td> </tr> <tr> <td></td> <td>CHM 131A</td> <td>Intro to Chemistry Lab</td> <td style="text-align: right;">1 SHC</td> </tr> <tr> <td></td> <td>CHM 151</td> <td>General Chemistry I</td> <td style="text-align: right;">4 SHC</td> </tr> </table>	*^	ALT 110	Biofuels	3 SHC	*^	ALT 120	Renewable Energy Technology	3 SHC	*^	ALT 210	Biofuels II	4 SHC	*^	ALT 211	Biofuels Analytics	4 SHC	*	ALT 230	Biofuels Waste Management	2 SHC	*	<b>Chemistry. Select 4 SHC:</b>				CHM 131	Intro to Chemistry	3 SHC		CHM 131A	Intro to Chemistry Lab	1 SHC		CHM 151	General Chemistry I	4 SHC	<b>20 SHC</b>	<b>20 SHC</b>	<b>14 SHC</b>
*^	ALT 110	Biofuels	3 SHC																																				
*^	ALT 120	Renewable Energy Technology	3 SHC																																				
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	CHM 131	Intro to Chemistry	3 SHC																																				
	CHM 131A	Intro to Chemistry Lab	1 SHC																																				
	CHM 151	General Chemistry I	4 SHC																																				
<b>B. CONCENTRATION</b> <i>(Not applicable)</i>																																							
<b>C. OTHER MAJOR HOURS</b> <i>To be selected from the following prefixes:</i> <p style="margin-left: 20px;">AGR, ALT, AUT, BIO, BPM, BPR, BTC, BUS, CHM, CIS, COE, CTC, DDF, EGR, ELC, ELN, ENV, HET, HYD, ISC, MAC, MEC, MNT, PAD, and WLD</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>																																							

# CURRICULUM STANDARD

Effective Term  
Spring 2010  
[2010\*01]

Curriculum Program Title

**Boat Building (Diploma)**

Code

**D35120**

Concentration

**(not applicable)**

## *Curriculum Description*

The Boat Building curriculum prepares individuals for employment in the boat manufacturing and repair industry. Today's boat builders are skilled craftspeople who can create complex shapes out of wood.

Course work includes reading marine blueprints, lofting, rigging, constructing bird cages, building forms, and the safe and proper use of hand and power tools. Wooden boat building, production moldmaking, and interior cabinetry and joinery are also covered.

Graduates may find employment with yacht manufacturers or with other companies needing wood furniture or moldings fabricated and installed. Other employment opportunities can be found in boat maintenance and repair yards.

## *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>

*\*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.

## Boat Building (Diploma) D35120

	AAS	Diploma	Certificate
<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> BTB 101    Boat Building I                    10 SHC BTB 102    Boat Building II                            9 SHC BTB 103    Yacht Joiner Practices I                4 SHC BTB 104    Yacht Joiner Practices II                3 SHC BTB 105    Yacht Repair/Renovation                5 SHC BTB 109    Yacht Rigging                                2 SHC DFT 100    Marine Drafting                              2 SHC  <b>Required Subject Areas:</b> None		<b>35 SHC</b>	
<b>B. CONCENTRATION</b> (Not applicable)			
<b>C. OTHER MAJOR HOURS</b> <i>To be selected from the following prefixes</i>  BTB, CIS, COE, DDF, DFT, FBG, and ISC  <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	<b>Clinical Trials Research Associate</b>	Code	<b>A45190</b>
Concentration	<b>(not applicable)</b>		

## *Curriculum Description*

The Clinical Trials Research Associate curriculum prepares individuals to assist physicians and clinical researchers in the initiation, administration, coordination, and management of clinical research studies for the development of new drugs, clinical products, and treatment regimens.

Course work includes in-depth study of drug development, Federal regulations, and clinical research processes. Supervised fieldwork provides skill application in subject recruitment, regulatory compliance, accountability for drugs/devices, and documentation of subject involvement in clinical research studies.

Graduates may be eligible to sit for national certification examinations. Research employment opportunities may include medical centers, hospitals, pharmaceutical industries, clinics, research facilities, biotechnology or device companies, and physicians' offices.

## *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.

### Clinical Trials Research Associate (A45190)

	AAS	Diploma	Certificate
<b>Minimum Major Hours Required</b>	<b>49 SHC</b>	<b>30 SHC</b>	<b>12 SHC</b>
<b>A. CORE</b>	<b>38 SHC</b>		
<b>Required Courses:</b> CTR 110 Intro to Clinical Research 3 SHC CTR 112 Clinical Research Terminology 3 SHC CTR 115 Clinical Research Regulations 3 SHC CTR 120 Research Protocol Design 3 SHC CTR 130 Clinical Research Management 4 SHC CTR 150 Research Fieldwork I 5 SHC CTR 210 Introduction to Clinical Data 3 SHC CTR 220 Research Site Management 3 SHC CTR 250 Research Fieldwork II 8 SHC CTR 281 Professional Practice 3 SHC			
<b>B. CONCENTRATION</b> ( <i>Not applicable</i> )			
<b>C. OTHER MAJOR HOURS</b> <i>To be selected from the following prefixes:</i>  BIO, CIS, COE, CSC, CTR, HUM, MAT, PHM, PSY, and SOC  <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 2006*  
*[2006\*03]*

Curriculum Program Title	<b>Industrial Engineering Technology</b>	Code	<b>A40240</b>
Concentration	<b>(not applicable)</b>		

## *Curriculum Description*

The Industrial Engineering Technology curriculum prepares graduates to perform as technical leaders in manufacturing and service organizations. The curriculum incorporates the study and application of methods and techniques for developing, implementing, and improving integrated systems involving people, material, equipment, and information.

The course work emphasizes analytical and problem-solving techniques for process development and improvement. The curriculum includes systems analysis, quality and productivity improvement techniques, cost analysis, facilities planning, organizational management, effective communications, and computer usage as a problem-solving tool.

Graduates of the curriculum should qualify for positions in a wide range of manufacturing and service organizations. Employment opportunities include industrial engineering technology, quality assurance, supervision, team leadership, and facilities management. Certification is available through organizations such as ASQC, SME, and APICS.

## *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>

\*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.

### Industrial Engineering Technology A40240

	AAS	Diploma	Certificate
<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> ISC 132 Mfg Quality Control 3 SHC ISC 136 Productivity Analysis I 3 SHC ISC 243 Prod & Oper Management I 3 SHC  <b>Required Subject Areas:</b> <b>Safety. Select one:</b> ISC 112 Industrial Safety 2 SHC ISC 121 Envir Health & Safety 3 SHC  <b>Industrial Management. Select one:</b> BUS 137 Principles of Management 3 SHC ISC 128 Industrial Leadership 2 SHC ISC 135 Principles of Industrial Mgmt 3 SHC  <b>Manufacturing. Select one:</b> BIO 280 Biotechnology 3 SHC BPM 110 Biomanufacturing Practice 3 SHC MEC 111 Machine Processes I 3 SHC MEC 145 Mfg Materials I 3 SHC MEC 161 Manufacturing Processes I 3 SHC MEC 242 Value/Supply Chain Mgmt 3 SHC  <b>Graphics. Select one:</b> DFT 111 Technical Drafting I 2 SHC DFT 170 Engineering Graphics 3 SHC	<b>18-21 SHC</b>	<b>NR</b>	
<b>CONCENTRATION</b> (Not applicable)	<b>NA</b>	<b>NA</b>	<b>NA</b>

**Industrial Engineering Technology A40240 (Continued)**

<p><b>C. OTHER MAJOR HOURS</b> <i>To be selected from the following prefixes:</i></p> <p>ACC, ATR, BIO, BPM, BTC, BUS, CIS, CIV, CHM, CMT, COE, CSC, CST, CTS, DBA, DFT, ECO, EGR, ELC, ISC, MAC, MAT, MEC, NOS, OMT, PHY, and PTC</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>			
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# CURRICULUM STANDARD

*Effective Term*  
*Spring 2007*  
*[2007\*01]*

Curriculum Program Title

**Marine Technology**

Code

**A15320**

Concentration

**(not applicable)**

## *Curriculum Description*

The Marine Technology curriculum is designed to provide the practical and academic skills essential for success in marine scientific support. Students will receive training in observational and measurement techniques aboard a variety of vessels including an ocean-going research vessel.

Course work includes a unique blend of traditional and contemporary vocational, technical, and scientific marine education. Students are trained in the use of physical, chemical, meteorological, biological, and geological oceanographic instrumentation and sampling equipment.

Graduates should qualify for entry-level field or laboratory positions with industries, state and federal agencies, and educational facilities associated with marine science and research. Career opportunities include oceanography, environmental science, marine biology, geophysical exploration, and fisheries-related employment.

## *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.

### Marine Technology A15320

	AAS	Diploma	Certificate
<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 *</i>	<b>52 SHC</b>	<b>32 SHC</b>	
<b>Required Courses:</b> CIS 111 Basic PC Literacy 2 SHC ELN 114 Marine Electronics 2 SHC * MSC 110 Training Cruise I 1 SHC * MSC 112 Training Cruise II 1 SHC * MSC 114 Training Cruise III 1 SHC * MSC 122 Boat Handling/Seamanship 3 SHC * MSC 124 Industrial Skills 3 SHC * MSC 126 Marine Engines 2 SHC * MSC 132 Fishing Gear Technology I 3 SHC * MSC 134 Fishing Gear Technology II 2 SHC * MSC 150 Marine Navigation 3 SHC * MSC 152 Marine Instrumentation 2 SHC * MSC 160 Oceanography 4 SHC * MSC 172 Marine Biology 3 SHC * MSC 174 Marine Invertebrate Zoology 4 SHC MSC 180 Water Analysis 3 SHC MSC 216 Training Cruise IV 1 SHC MSC 218 Training Cruise V 1 SHC MSC 220 Marine GIS 3 SHC MSC 254 Marine Data Processing 2 SHC MSC 256 Cartography/Hydrographic Surveying 2 SHC MSC 276 Marine Vertebrate Zoology 4 SHC <b>Required Subject Areas:</b> None			
<b>B. CONCENTRATION</b> ( <i>Not applicable</i> )			

**Marine Technology A15320 (Continued)**

**C. OTHER MAJOR HOURS**

*To be selected from the following prefixes:*

BIO, CHM, CIS, COE, CSC, DFT, ELN, HEA, MAT, MSC, PHO,  
PHY, and WLD

*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.*

# CURRICULUM STANDARD

Effective Term  
Fall 2004  
[2004\*03]

Curriculum Program Title

Nanotechnology

Code

A20190

Concentration

(not applicable)

## *Curriculum Description*

The Nanotechnology curriculum prepares students to characterize and fabricate materials for biological, textile, chemical, and electrical applications at the atomic level in entry-level positions in engineering, manufacturing and/or medical research and development.

Course work includes biology, chemistry, physics, mathematics, manufacturing engineering technology, 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.

Graduates should qualify for various positions of 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 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>

*\*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.

### Nanotechnology A20190

	AAS	Diploma	Certificate
<b>Minimum Major Hours Required</b>	<b>49 SHC</b>	<b>30 SHC</b>	<b>12 SHC</b>
<b>A. CORE</b>	<b>50 SHC</b>	<b>12 SHC</b>	
<b>Required Courses:</b>			
NAN 111 Introduction to Nanotechnology	3 SHC		
NAN 112 Fundamentals of Nanoscience	3 SHC		
NAN 131 Materials, Safety, and Equipment	2 SHC		
NAN 132 Controlled Materials	2 SHC		
NAN 241 Nanofabrication of Mixtures	4 SHC		
NAN 242 Nanofabrication of Thin Films	4 SHC		
NAN 243 Atomic-Force Microscopy	4 SHC		
NAN 244 Electron Microscopy	4 SHC		
<b>Required Subject Areas:</b>			
<b>Biology: Select one course.</b>			
BIO 110 Principles of Biology	4 SHC		
BIO 111 General Biology I	4 SHC		
<b>Chemistry: Select one set.</b>			
CHM 131 Introduction to Chemistry &	3 SHC		
CHM 131A Introduction to Chemistry Lab	1 SHC <i>or</i>		
CHM 151 General Chemistry I	4 SHC		
<b>Mathematics: Select one course.</b>			
MAT 122 Algebra/Trigonometry II	3 SHC		
MAT 162 College Trigonometry	3 SHC		
<b>Physics: Select one course.</b>			
PHY 131 Physics – Mechanics	4 SHC		
PHY 151 College Physics I	4 SHC		
<i>Continued on next page</i>			

**Nanotechnology A20190 (continued)**

<p><b>Mechanical Engineering/Manufacturing: Select 9 hours.</b></p> <p>MEC 145 Manufacturing Materials                      3 SHC</p> <p>MEC 172 Introduction to Metallurgy                      3 SHC</p> <p>MEC 180 Engineering Materials                      3 SHC</p> <p>MEC 251 Statics                      3 SHC</p> <p>MEC 252 Strength of Materials                      3 SHC</p> <p>MEC 260 Fund of Machine Design                      3 SHC</p> <p>MEC 265 Fluid Mechanics                      3 SHC</p> <p>MEC 267 Thermal Systems                      3 SHC</p>			
<p><b>B. CONCENTRATION</b> <i>(Not applicable)</i></p>			
<p><b>C. OTHER MAJOR HOURS</b></p> <p><i>To be selected from the following prefixes:</i></p> <p>ATR, BIO, BPM, BTC, CET, CHM, CIS, COE, CPT, CSC, CTC, CTR, CVS, CYT, EGR, ELC, ELN, GRA, HPC, ICT, ISC, LEO, MAC, MAT, MEC, MLG, NAN, NET, NMT, NUR, PHY, PLA, PTC, RAD, RCP, RTT, SON, SGR, and SUR</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 1997*  
*[1997\*03]*

Curriculum Program Title

**Nuclear Medicine Technology**

Code

**A45460**

Concentration

**(not applicable)**

## ***Curriculum Description***

The Nuclear Medicine Technology curriculum provides the clinical and didactic experience necessary to prepare students to qualify as entry-level Nuclear Medicine Technologists.

Students will acquire the knowledge and skills necessary to properly perform clinical procedures. These skills include patient care, use of radioactive materials, operation of imaging and counting instrumentation, and laboratory procedures.

Graduates may be eligible to apply for certification/registration examinations given by the Nuclear Medicine Technology Certification Board and the American Registry of Radiologic Technologists.

## ***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>

*\*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.

### **Nuclear Medicine Technology A45460**

	<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>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>  <b>Required Courses:</b> NMT 110 Introduction to Nuclear Medicine 2 SHC NMT 132 Overview-Clinical Nuclear Medicine 4 SHC NMT 134 Nuclear Pharmacy 2 SHC NMT 211 NMT Clinical Practice I 7 SHC NMT 212 Procedures for Nuclear Medicine I 2 SHC NMT 215 Non-Imaging Instrumentation 2 SHC NMT 221 NMT Clinical Practice II 7 SHC NMT 222 Procedures for Nuclear Medicine II 2 SHC  <b>Required Subject Areas:</b> None	<b>28 SHC</b>	<b>12 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>  BIO, CIS, COE, CSC, HSC, NMT, PET, and PHY  <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  
Spring 2009  
[2009\*01]

Curriculum Program Title

**Surgical Technology**

Code

**A45740**

Concentration

**(not applicable)**

## ***Curriculum Description***

The Surgical Technology curriculum prepares individuals to assist in the care of the surgical patient in the operating room and to function as a member of the surgical team.

Students will apply theoretical knowledge to the care of patients undergoing surgery and develop skills necessary to prepare supplies, equipment, and instruments; maintain aseptic conditions; prepare patients for surgery; and assist surgeons during operations.

Graduates of accredited programs will be eligible to apply to take the national certification exam for Surgical Technologists which is administered by the National Board of Surgical Technology and Surgical Assisting. Employment opportunities include labor/delivery/emergency departments, inpatient/outpatient surgery centers, dialysis units/facilities, physicians' offices, and central supply processing units.

## ***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>

*\*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.

### **Surgical Technology A45740**

	<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 *</i>  <b>Required Courses:</b> <ul style="list-style-type: none"> <li>* SUR 110 Introduction to Surgical Technology 3 SHC</li> <li>* SUR 111 Perioperative Patient Care 7 SHC</li> <li>* SUR 122 Surgical Procedures I 6 SHC</li> <li>* SUR 123 SUR Clinical Practice I 7 SHC</li> <li>* SUR 134 Surgical Procedures II 5 SHC</li> <li>* SUR 135 SUR Clinical Practice II 4 SHC</li> <li>* SUR 137 Professional Success Preparation 1 SHC</li> <li>SUR 210 Advanced SUR Clinical Practice 2 SHC</li> <li>SUR 211 Advanced Theoretical Concepts 2 SHC</li> </ul> <b>Required Subject Areas:</b> None	<b>37 SHC</b>	<b>33 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>  BIO, BUS, CIS, COE, CSC, ECO, ENG, HSC, MED, PSY, SOC, STP, and SUR  <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*  
*Spring 2005*  
*[2005\*01]*

Curriculum Program Title	<b>Viticulture and Enology Technology</b>	Code	<b>A15430</b>
Concentration	<b>(not applicable)</b>		

## *Curriculum Description*

This curriculum is designed to prepare individuals for various careers in the grape growing and wine making industry. Classroom instruction, practical laboratory applications of viticulture/enology principles and practices are included in the program of study.

Course work in viticulture includes aspects of plant science, vineyard stock selection and propagation, soils, vine nutrition and pest management, planning, layout, economics and management of vineyards. Those interested in enology will receive training in the classroom, laboratory and field in the tools and techniques of wine making. Related courses in microbiology and fermentation science, sensory analysis, winery economics and marketing are offered.

Graduates should qualify for employment opportunities in vineyards, wineries, garden centers, greenhouses, related sales areas and government agencies. Graduates should also be prepared to take the North Carolina Pesticide Applicators Examination and the North Carolina Certified Plant Professional Examination.

## *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>

\*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.

### **Viticulture and Enology Technology A15430**

	<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> Courses required for the diploma are designated with * <b>Required Courses:</b> * VEN 133 Intro to Winemaking 3 SHC * VEN 135 Intro to Viticulture 4 SHC * VEN 138 Vineyard Estab. and Dev. 3 SHC * VEN 238 Grapevine Pest, Diseases, and Disorders 3 SHC  <b>Required Subject Areas:</b> None	<b>13 SHC</b>	<b>13 SHC</b>	
<b>B. CONCENTRATION</b> (Not applicable)			
<b>C. OTHER MAJOR HOURS</b> To be selected from the following prefixes:  AGR, BUS, CIS, COE, CSC, HOR, VEN, and WLD  <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>			