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

November 6, 2008

To: Presidents
              Chief Academic Officers

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

Subject: Curriculum Review Committee Action **(SUPERCEDES CC08-237)**

The Curriculum Review Committee (CRC) has the responsibility for maintaining the Combined Course Library (CCL). The CRC meets in the spring and fall to review requests that have been submitted by the colleges. The approved course requests from the Fall 2008 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, number, and/or hour changes** resulting from CRC action. The standards listed below have been revised as a result of such CRC-approved changes to one or more core courses:

Curriculum Title	Curriculum Code
Clinical Trials Research Associate	A45190
Fish and Wildlife Management Technology	A15160
Opthalmic Medical Assistant (Diploma)	D45510
Occupational Education Associate	A55320
Parks and Natural Resource Management	A15360
Physical Fitness Technology	A45610

The CRC also approved requests for several **core course description, prerequisite, and/or corequisite revisions**. The standards listed below contain these courses. Please note that the only change indicated on the standard will be the inclusion of the statement *CRC Revised-Electronic Only 9/23/08* since only the electronic version of the standard template will be revised.

Curriculum Title	Curriculum Code
Civil Engineering Technology	A40140
English Education/Associate in Arts Pre-Major	A1010F
Lateral Entry (Certificate)	C55430
Mathematics Education/Associate in Science Pre-Major	A1040F
Simulation and Game Development	A25450
Web Technologies	A25290

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The following curriculum standards involved CRC-approved core course revisions and **additional revision requests** that will need to be reviewed and acted upon at future State Board meetings:

Curriculum Title	Curriculum Code
Early Childhood Education	A55220
Early Childhood Education/Special Education	A5522A
Early Childhood Education/Teacher Associate	A5522B
Infant/Toddler Care (Certificate)	C55290
Surveying Technology	A40380

Revisions to the following courses that are included in the Comprehensive Articulation Agreement will be forwarded to the Transfer Advisory Committee (TAC) for information:

Prefix/Number	Title
EDU 216	Foundations of Education
EDU 221	Children with Exceptional
COM 130	Nonverbal Communication

The following newly approved courses will be sent to the TAC for consideration of college transfer designation:

Prefix/Number	Title
ANT 240A	Archaeology Field Lab
ARA 111	Elementary Arabic I
ARA 112	Elementary Arabic II
ARA 181	Arabic Lab I
ARA 182	Arabic Lab II
ARA 211	Intermediate Arabic I
ARA 212	Intermediate Arabic II
HUM 180	Internat Cultural Explor
SOC 245	Drugs and Society

The revised standards, which do not require State Board action, are attached for your convenience and are available on the NC Community College System Programs website at http://www.nccommunitycolleges.edu/programs. Due dates, forms, and procedures for submitting requests to the CRC are also at the above website, in Sections 15 and 22 of the *Curriculum Procedures Reference Manual*.

In addition, the CRC approved an obsolete status for all courses with the UNC prefix since they are no longer required for the conversion of historical data.

If you need assistance or clarification, please contact Dr. Judith C. Mann, Associate Vice President, Program Services, at mannj@nccommunitycolleges.edu or (919) 807-7108.

DAP/sds
Attachments
C: Curriculum Review Committee
    Dr. Judith C. Mann
    Ms. Jennifer Frazelle
    Ms. Tracy McPherson
    Program Coordinators
    Dr. John Pettitt

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Attachment: New and Revised Courses Approved By the CRC on September 23, 2008
(Corrected 11/6/08)

Curriculum Course Number	Curriculum Course Title	CRC Action September 2008	Effective Semester
ANT 240A	Archaeology Field Lab	New course approved	2009*01
ARA 111	Elementary Arabic I	New course approved	2009*01
ARA 112	Elementary Arabic II	New course approved	2009*01
ARA 181	Arabic Lab I	New course approved	2009*01
ARA 182	Arabic Lab II	New course approved	2009*01
ARA 211	Intermediate Arabic I	New course approved	2009*01
ARA 212	Intermediate Arabic II	New course approved	2009*01
ARC 236	Arch Mech/Elec Tech	Changed prerequisites from "ARC 230" to "None"; Changed corequisities from "None" to "ARC 230"	2009*03
BIO 094	Concepts of Human Biology	Changed corequisite from "RED 090" to "ENG 095 or RED 090"	2009*03
CMT 120	Codes and Inspections	New course approved	2009*01
CMT 224	Statics in Construction	New course approved	2009*01
CMT 226	Applications Project	New course approved	2009*01
COM 130	Nonverbal Communication	Changed prerequisities from "COM 120" to "COM 110 or COM 120"	2009*03
CST 244	Sustainable Bldg Design	New course approved	2009*01
CTR 210	Research Data and Reports	Changed title to "Intro to Clinical Data"; Changed prerequisites from "None" to CTR 130"; Changed course description	2009*03
CTR 281	Trends in Clinical Research	Changed title to "Professional Practice "; Changed prerequisites from "None" to "CTR 120, CTR 130 and CTR 210"; Changed course description	2009*03
EDU 114	Intro to Family Childcare	New course approved	2009*03
EDU 118	Teach Assoc Princ & Prac	Changed title to "Princ & Prac of Inst Asst" Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085" Changed course description	2009*03
EDU 119**	Intro to Early Child Educ	Changed course description	2009*03
EDU 125	Sign Lang. for Educators	Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085"	2009*03

	EDU 126	Early Childhood Seminar I	Changed prerequisites from "EDU 119 or EDU 111 and EDU 112; or EDU 111 and EDU 113" to "[(ENG 080 and RED 080) or ENG 085] and EDU 119" Changed corequisites from "COE 111, COE 112, COE 113, or COE 114" to "None" Changed course description	2009*03
	EDU 131	Child, Family, & Commun	Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085" Changed course description	2009*03
	EDU 144	Child Development I	Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085" Changed course description	2009*03
	EDU 145	Child Development II	Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085" Changed course description	2009*03
	EDU 146	Child Guidance	Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085" Changed course description	2009*03
	EDU 147	Behavior Disorders	Changed title from "EDU 147 Behavior Disorders" to "EDU 222 Learn w/ Behav Disord" Changed prerequisites from "None" to "[(ENG 090 and RED 090) or ENG 095] and [(EDU 144 and EDU 145) or (PSY 244 and PSY 245)]" Changed course description	2009*03
	EDU 148	Learning Disabilities	Changed title from "EDU 148 Learning Disabilities" to "EDU 223 Specific Learning Disab" Changed hours from 4-2-5 to 3-0-3 Changed prerequisites from "None" to "[(ENG 090 and RED 090) or ENG 095] and [(EDU 144 and EDU 145) or (PSY 244 and PSY 245)]" Changed course description	2009*03
	EDU 151	Creative Activities	Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085" Changed course description	2009*03

EDU 151A	Creative Activities Lab	Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085"	2009*03
EDU 152	Music, Movement, & Lang	Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085"	2009*03
EDU 152A	Music, Move, & Lang Lab	Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085"	2009*03
EDU 153	Health, Safety, & Nutrit	Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085" Changed course description	2009*03
EDU 153A	Health, Safety, & Nut Lab	Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085"	2009*03
EDU 154	Social/Emotion/Behav Dev	Changed prerequisites from "None" to "[(ENG 080 and RED 080) or ENG 085] and [(EDU 144 and EDU 145) or (PSY 244 and PSY 245)]" Changed course description	2009*03
EDU 155	Art & Drama for Children	Archived course	2009*03
EDU 156	Community as Classroom	Archived course	2009*03
EDU 157	Active Play	Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085"	2009*03
EDU 161	Intro to Exceptional Chil	Changed Hours from 3-3-4 to 3-0-3 Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085" Changed course description	2009*03
EDU 162	Early Exp/Prosp Teachers	Changed title to "Observ & Assess in ECE" Changed hours from 1-2-2 to 3-0-3 Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085" Changed course description	2009*03
EDU 163	Classroom Mgt & Instruct	Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085" Changed course description	2009*03
EDU 171	Instructional Media	Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085"	2009*03
EDU 172	Education Tools	Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085"	2009*03
EDU 173	Becoming a Prof'l in ECE	New course approved	2009*03

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EDU 175	Intro to Trade & Industri	Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085"	2009*03
EDU 176	Occ Analysis & Course Dev	Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085"	2009*03
EDU 177	Instructional Methods	Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085"	2009*03
EDU 178	Facilities Org & Planning	Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085"	2009*03
EDU 179	Vocational Student Organ.	Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085"	2009*03
EDU 184	Early Child Intro Pract	New course approved	2009*03
EDU 185	Cognitive & Lang Act	Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085"	2009*03
EDU 185A	Cognitive & Lang Act Lab	Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085"	2009*03
EDU 186**	Reading & Writing Methods	Changed title from "EDU 186 Reading & Writing Methods" to "EDU 281 Instruc Strat/Read & Writ" Changed hours from 3-0-3 to 2-2-3 Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095" Changed course description	2009*03
EDU 188	Issues in Early Child Ed	Changed prerequisites from "None" to "(ENG 080 and RED 080) or ENG 085"	2009*03
EDU 214	Early Child Interm Pract	New course approved	2009*03
EDU 216	Foundations of Education	Changed hours from 3-2-4 to 4-0-4 Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095" Changed course description	2009*03
EDU 220	Prog Poli in Early Interv	New course approved	2009*03
EDU 221	Children with Exceptional	Changed prerequisites from "(EDU 144 and EDU 145) or (PSY 244 and PSY 245)" to "[(ENG 090 and RED 090) or ENG 095] and [(EDU 144 and EDU 145) or (PSY 244 and PSY 245)]" Changed course description	2009*03

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	EDU 226	Early Childhd. Seminar II	Changed prerequisites from " COE 111 and (EDU 144 or EDU 145) and EDU 146" to "[(ENG 090 and RED 090) or ENG 095] and (EDU 144 or EDU 145) and EDU 146" Changed corequisites from "COE 121, COE 122, COE 123, or COE 124" to "None"	2009*03
	EDU 234	Infants, Toddlers, & Twos	Changed prerequisites from "None" to "[(ENG 090 and RED 090) or ENG 095] and EDU 119" Changed course description	2009*03
	EDU 234A	Infants/Toddlers/Twos Lab	New course approved	2009*03
	EDU 235	School-Age Dev & Program	Changed hours from 2-0-2 to 3-0-3 Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095" Changed course description	2009*03
	EDU 240	Wk-Based Lrning Prac & Te	Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095"	2009*03
	EDU 241	Adult-Child Relations	Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095"	2009*03
	EDU 242	Life Span Development	Archived course	2009*03
	EDU 243	Learning Theory	Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095"	2009*03
	EDU 244	Human Growth/Development	Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095"	2009*03
	EDU 245	Policies and Procedures	Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095"	2009*03
	EDU 247	Physical Disabilities	Changed title from "Physical Disabilities" to "Sensory & Physical Disab" Changed prerequisites from "EDU 144 or PSY 244" to "[(ENG 090 and RED 090) or ENG 095] and [(EDU 144 and EDU 145) or (PSY 244 and PSY 245)]" Changed course description	2009*03
	EDU 248	Mental Retardation	Changed title from "Mental Retardation" to "Developmental Delays" Changed hours from 2-2-3 to 3-0-3 Changed prerequisites from "EDU 221" to "[(ENG 090 and RED 090) or ENG 095] and [(EDU 144 and EDU 145) or (PSY 244 and PSY 245)] Changed course description	2009*03

	EDU 250	PRAXIS I Preparation	Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095"	2009*03
	EDU 251	Exploration Activities	Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095"	2009*03
	EDU 251A	Exploration Act Lab	Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095"	2009*03
	EDU 252	Math & Sci Activities	Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095"	2009*03
	EDU 252A	Math & Sci Act Lab	Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095"	2009*03
	EDU 253	Music for Children	Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095"	2009*03
	EDU 254	Music & Move for Child	Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095"	2009*03
	EDU 256	Sci & Soc Studies Methods	Changed title from "Sci & Soc Studies Methods" to "Inst Strat/Social Studies" Changed hours from 3-2-4 to 2-2-3 Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095" Changed course description	2009*03
	EDU 257	Math Methods & Materials	Changed title from "Math Methods & Materials" to "Inst Strat/Math" Changed prerequisites from "None" to "[(ENG 090 and RED 090) or ENG 095] and MAT 060" Changed course description	2009*03
	EDU 258	Inst Strategies/Science	New course approved	2009*03
	EDU 259	Curriculum Planning	Changed prerequisites from "EDU 112 or EDU 113 or EDU 119" to "[(ENG 090 and RED 090) or ENG 095] and EDU 119" Changed course description	2009*03
	EDU 261	Early Childhood Admin I	Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095" Changed corequisites from "None" to "EDU 119" Changed course description	2009*03

EDU 262	Early Childhood Admin II	Changed prerequisites from "EDU 261" to "[(ENG 090 and RED 090) or ENG 095] and EDU 261 Changed corequisites from "None" to "EDU 119" Changed course description	2009*03
EDU 263	Dev School-Age Prog	Changed course title from "Dev School-Age Prog" to "School-Age Program Admin" Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095" Changed course description	2009*03
EDU 271	Educational Technology	Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095"	2009*03
EDU 275	Effective Teach Train	Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095"	2009*03
EDU 280	Language & Literacy Exp	Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095" Changed course description	2009*03
EDU 280A	Literacy Exp Lab	Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095"	2009*03
EDU 282	Early Childhood Lit	Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095"	2009*03
EDU 284	Early Child Capstone Prac	New course approved	2009*03
EDU 285	Internship Exp-School Age	Changed hours from 1-0-1 to 1-9-4 Changed prerequisites from "ENG 111" to "[(ENG 090 AND RED 090) or ENG 095], EDU 144, EDU 145, EDU 118, and EDU 163" Changed corequisites from "COE 121 or COE 122" to "None" Changed course description	2009*03
EDU 286**	Early Childhood Issues	Changed corequisites from "COE 111 or COE 121" to "None"	2009*03

** Item has been corrected.   7

EDU 287	Leadership/Earl Child Ed	Changed prerequisites from "Choose one set: EDU 111, EDU 112, EDU 131, EDU 144 & EDU 145 OR EDU 111, EDU 113, EDU 131, EDU 144 & EDU 145 OR EDU 119, EDU 131, EDU 144 & EDU 145 OR EDU 111, EDU 112, EDU 131, PSY 244 & PSY 245 OR EDU 111, EDU 113, EDU 131, PSY 244 & PSY 245 OR EDU 119, EDU 131, PSY 244 & PSY 245" to "[(ENG 090 and RED 090) or ENG 095] and [(EDU 119, EDU 131, EDU 144 & EDU 145) or (EDU 119, EDU 131, PSY 244 & PSY 245)]"	2009*03
EDU 288	Adv Issues/Early Child Ed	Changed prerequisites from "None" to "(ENG 090 and RED 090) or ENG 095"	2009*03
EDU 289	Adv Issues/School Age	New course approved	2009*03
FWL 224	Ichthyology	Changed hours from "1-0-1" to "1-2-2"	2009*03
FWL 232	Terrestrial Ecology	Changed course description	2009*03
FWL 252	Wildlife Maint Techniques	Changed title to "Wildlife Mgmt Techniques"; Changed course description	2009*03
GRO 150	Substance Use and Aging	New course approved	2009*01
HUM 180	Internat Cultural Explor	New course approved	2009*01
LOG 211	Distribution Management	New course approved	2009*01
LOG 225	Logistics Systems	New course approved	2009*01
LOG 245	Logistics Security	New course approved	2009*01
MCM 112	Motorcycle Transmissions	New course approved	2009*01
OPH 105	Maintenance of Ophthalmic Instruments	Changed title to " Ophthalmic Clin Proc I"; Changed hours from "2-0-0-2" to "1-2-0-2"; Changed prerequisites from "None" to "OPH 150 and OPH 151"; Changed corequisites from "None" to "OPH 103, OPH 106, and OPH 109"; Changed course description	2009*03
OPH 107	Principal of Glaucoma/Cataracts	Changed title to " Ophthalmic Clin Proc II"; Changed hours from "2-0-0-2" to "1-2-0-2"; Changed corequisites from "OPH 108,OPH 109 and OPH 110" to "OPH 104, OPH 108 and OPH 110"; Changed course description	2009*03
PHM 265	Professional Issues	New course approved	2009*01
PSF 116	Pvnt & Care Exer Injuries	Changed hours from "2-0-0-2" to "2-2-0-3"	2009*03
RCT 112	Race Car Dynamics	New course approved	2009*01
RCT 258	Drag Race Veh/Track Prep	New course approved	2009*01
RCT 260	Race Veh Data Acquisition	New course approved	2009*01
SGD 115	Physically-Based Modeling	New course approved	2009*01

** Item has been corrected.   8

SGD 116	Graphic Design Tools	New course approved	2009*01
SGD 117	Art for Games	New course approved	2009*01
SGD 134	SG Quality Assurance	New course approved	2009*01
SGD 135	Serious Games	New course approved	2009*01
SGD 181	Machinima	New course approved	2009*01
SGD 215	Adv Phys-Based Modeling	New course approved	2009*01
SGD 232	Survey of Game Engines	New course approved	2009*01
SGD 237	Rigging 3D Models	New course approved	2009*01
SGD 244	3D Modeling III	New course approved	2009*01
SGD 271	Adv Flash Programming	New course approved	2009*01
SGD 285	SG Software Engineering	Changed prerequisities from "SGD 212, SGD 213, and SGD 214" to SGD 212, SGD 213, or SGD 214"	2009*03
SGD 289	SGD Project	Changed prerequisities from "SGD 285" to "SGD 212, SGD 213, SGD 214 or SGD 285"	2009*03
SOC 245	Drugs and Society	New course approved	2009*01
SRV 110	Surveying I	Changed prerequisites from "(ARC 111 or EGR 115) and (MAT 121 or MAT 161 or MAT 171 or MAT 175)" to "None"; Changed corequisites from "None" to "MAT 121 or MAT 161 or MAT 171 or MAT 175"	2009*03
WEB 250	Database Driven Websites	Changed prerequisites from "DBA 110 and WEB 140" to "DBA 110"	2009*03
ZAS 132	Operant Conditioning	New course approved	2009*01
ZAS 240	Animal Ethics	New course approved	2009*01

CURRICULUM STANDARD

Curriculum Program Title   **Civil Engineering Technology**   Code   **A40140**

Concentration   **(not applicable)**

Curriculum Description

The Civil Engineering Technology curriculum provides the application of relevant theory of engineering needed by technicians to carry out planning and supervisory tasks in the construction of transportation systems, residential and commercial buildings, bridges, dams, and water and wastewater treatment systems.

Course work includes the communication and computational skills required to support the fields such as materials testing, structures, estimating, project management, hydraulics, environmental technology, and surveying. Additional coursework will cover the operation of computers and application software including computer-aided drafting.

Graduates should qualify for technician-level jobs with both public and private engineering, construction, and surveying agencies.

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*Curriculum Requirements**

I.   **General Education.** Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.

II.   **Major Hours**. AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*

III.   **Other Required Hours.** A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

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

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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

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.

Civil Engineering Technology A40140			
	AAS	**Diploma**	**Certificate**
Minimum Major Hours Required	**49 SHC**	**30 SHC**	**12 SHC**
A. **CORE**	**29-30 SHC**	**NR**	
Required Courses:			
CIV 111 Soils and Foundations 3 SHC			
CIV 210 Engineering Materials 2 SHC			
CIV 211 Hydraulics and Hydrology 3 SHC			
CIV 230 Construction Estimating 3 SHC			
CIV 240 Project Management 3 SHC			
SRV 110 Surveying I 4 SHC			
SRV 111 Surveying II 4 SHC			
Required Subject Areas:			
Statics/Strength of Materials. Select one:			
CIV 110 Statics/Strength of Materials 4 SHC			
MEC 250 Statics and Strength of Materials 5 SHC			
Intro to Technology. Select one:			
ARC 111 Intro to Arch Technology 3 SHC			
EGR 115 Intro to Technology 3 SHC			
B. **CONCENTRATION** *(Not applicable)*			
C. **OTHER MAJOR HOURS** *To be selected from the following prefixes:* CIS, CIV, COE, CSC, CST, DFT, EGR, GIS, MAT, MEC, PHY, and SRV *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

Curriculum Program Title   **Clinical Trials Research Associate**   Code   **A45190**

Concentration   **(not applicable)**

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.

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*Curriculum Requirements**

I.   **General Education.** Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.

II. **Major Hours**. AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*

III. **Other Required Hours.** A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

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

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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

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**
Minimum Major Hours Required	**49 SHC**	**30 SHC**	**12 SHC**
A. **CORE**	**38 SHC**		
Required Courses:			
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. **CONCENTRATION** *(Not applicable)*			
C. **OTHER MAJOR HOURS** *To be selected from the following prefixes:* BIO, CIS, COE, CSC, CTR, HUM, MAT, PHM, PSY, and SOC *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.*			

English Education (A1010F)
Associate in Arts Pre-Major

Under the Comprehensive Articulation Agreement and the Independent Comprehensive Articulation Agreement, this template has been developed by university and community college faculty as a blueprint for guiding community colleges in developing programs for students who intend to major in English Education. Students who successfully complete this course of study and who meet the requirements for admission to the university are eligible to apply for admission to the major with junior standing.

All colleges will not offer all pre-major programs, and course selections may vary. Check college catalogs for course and program offerings.

General Education Core (44 SHC)* Forty-four semester hours of credit in general education core courses are required as outlined on the NCCCS Curriculum Standards for Associate in Arts degree programs. The general education core includes study in the areas of humanities and fine arts, social and behavioral sciences, natural sciences and mathematics, and English composition.

English Composition (6 SHC) *Two English composition courses are required.*
- English 111, Expository Writing, is required as the first composition course.
- One of the following courses is required to satisfy the second English requirement:
  ENG 112 Argument-Based Research (3 SHC) *or*
  ENG 113 Literature-Based Research (3 SHC)

Humanities/Fine Arts (12 SHC**) *Four courses from three discipline areas are required.*
- One course must be a literature course.
- Three additional courses from the following discipline areas are required: art, drama, dance, foreign languages, interdisciplinary humanities, literature, music, philosophy, and religion.
  One of the following fine arts courses is recommended:
  ART 111 Art Appreciation (3 SHC) *or*
  DAN 110 Dance Appreciation (3 SHC) *or*
  DRA 111 Theatre Appreciation (3 SHC) *or*
  HUM 160 Introduction to Film (3 SHC) *or*
  MUS 110 Music Appreciation (3 SHC)
  One of the following foreign language sequences is recommended:
  ASL 111 & 112 Elementary ASL I & II (6 SHC) *or*
  FRE 111 &112 Elementary French I & II (6 SHC) *or*
  GER 111 & 112 Elementary German I & II (6 SHC) *or*
  ITA 111 & 112 Elementary Italian I & II (6 SHC) *or*
  JPN 111 & 112 Elementary Japanese I & II (6 SHC) *or*
  LAT 111 & 112 Elementary Latin I & II (6 SHC) *or*
  POR 111 & 112 Elementary Portuguese I & II (6 SHC) *or*
  RUS 111 &112 Elementary Russian I & II (6 SHC) *or*
  SPA 111 &112 Elementary Spanish I & II (6 SHC)

Social/Behavioral Sciences (12 SHC) *Four courses from three discipline areas are required.*
- One course must be a history course.
- The following course is required (3 SHC):
  PSY 150 General Psychology (3 SHC)
- Two courses from the following discipline areas are required, to include one additional discipline: anthropology, economics, geography, history, political science, psychology, and sociology.
  One of the following courses is recommended:
  HIS 111 World Civilizations I (3 SHC) HIS 112 World Civilizations II (3 SHC)
  HIS 121 Western Civilization I (3 SHC) HIS 122 Western Civilization II (3 SHC)

Natural Sciences/Mathematics (14 SHC)

> *Natural Sciences (8 SHC):* Two courses from the biological and physical science disciplines, including accompanying laboratory work, are required.
> *Mathematics (6 SHC):* Two courses are required.

- One course must be in introductory mathematics (college algebra, trigonometry, calculus, etc.).
- The second course may be a higher level mathematics course or may be selected from among other quantitative subjects, such as computer science (CIS) and statistics (MAT).

A college may award a diploma under the A1010F for completion of the entire general education core, as outlined, with a grade of "C" or better in each course.

Other Required Hours (20-21 SHC)* One semester hour of credit may be included in a sixty-five semester hour credit associate in arts program. The transfer of the 65th hour is not guaranteed.

- The following course is required (4 SHC):
  - EDU 216   Foundations in Education (4 SHC)
- Sixteen (16) additional hours of approved college transfer courses are required.
  - The following course is recommended:
    - COM 231   Public Speaking (3 SHC)
  - An intermediate foreign language sequence is recommended:
    - ASL 211 and 212   Intermediate ASL I & II (6 SHC) *or*
    - FRE 211 and 212   Intermediate French I & II (6 SHC) *or*
    - GER 211 and 212   Intermediate German I & II (6 SHC) *or*
    - ITA 211 and 212   Intermediate Italian I & II (6 SHC) *or*
    - JPN 211 and 212   Intermediate Japanese I & II (6 SHC) *or*
    - LAT 211 and 212   Intermediate Latin I & II (6 SHC) *or*
    - POR 211 and 212   Intermediate Portuguese I & II (6 SHC) *or*
    - RUS 211 and 212   Intermediate Russian I & II (6 SHC) *or*
    - SPA 211 and 212   Intermediate Spanish I & II (6 SHC)
  - One of the following courses with multicultural or gender emphasis is recommended:
    - ENG 265   Thematic World Literature I (3 SHC) *or*
    - ENG 266   Thematic World Literature II (SHC) *or*
    - ENG 272   Southern Literature (3 SHC) *or*
    - ENG 273   African-American Literature (3 SHC) *or*
    - ENG 274   Literature by Women (3 SHC) *or*
    - HIS 151   Hispanic Civilization (3 SHC) *or*
    - HIS 162   Women and History (3 SHC) *or*
    - HIS 221   African-American History (3 SHC) *or*
    - SOC 225   Social Diversity (3 SHC) *or*
    - SOC 230   Race and Ethnic Relations (3 SHC)
  - Two additional 200-level survey courses in literature are recommended.

Total Semester Hours Credit (SHC) in Program: 64-65

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

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

English Education (A1010F) Associate in Arts Pre-Major
BOG approved 07/11/97; SBCC approved 07/18/97; revised 03/09/04; revised 08/27/04; revised 02/03/06;
revised 11/17/06; TAC revised 05/23/07; TAC revised 09/26/07; CRC Revised-Electronic Only 09/23/08.

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

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

CURRICULUM STANDARD

Curriculum Program Title **Fish and Wildlife Management Technology** Code **A15160**

Concentration **(not applicable)**

Curriculum Description

The Fish and Wildlife Management Technology curriculum is designed to prepare students for entry into the field of developing, conserving, and managing fish and wildlife resources.

Students will gain an understanding of the principles and develop competence in the production, utilization, and conservation of fish and wildlife resources. Students will also learn to communicate and deal effectively with the public.

Graduates should qualify as fish and wildlife management technicians with state and federal agencies and private enterprises involved in natural resource management.

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*Curriculum Requirements**

I. **General Education.** Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.

II. **Major Hours**. AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*

III. **Other Required Hours.** A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

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

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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

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.

Fish and Wildlife Management Technology A15160			
	AAS	**Diploma**	**Certificate**
Minimum Major Hours Required	**49 SHC**	**30 SHC**	**12 SHC**
A. CORE *Courses required for the diploma are designated with ** **Required Courses:**	**27 SHC**	**14 SHC**	

* FWL 126 Wildlife Ornithology   3 SHC
 * FWL 142 Wildlife Management   3 SHC
 * FWL 212 Wildlife Policy and Law   2 SHC
  FWL 222 Wildlife Mammalogy   3 SHC
 * FWL 242 Fishery Management   3 SHC
  FOR 121 Dendrology   4 SHC
  FOR 173 Soils and Hydrology   3 SHC
  FOR 223 Silviculture   3 SHC
 	
 Required Subject Areas:
 * **Maintenance. Select one:**
  FWL 252 Wildlife Management Techniques   3 SHC
  REC 217 Maintenance/Facility Management 3 SHC			

B. CONCENTRATION *(Not applicable)*			
C. OTHER MAJOR HOURS *To be selected from the following prefixes:* AGR, AQU, BIO, BUS, CHM, CIS, COE, CSC, FOR, FWL, GIS, PED, REC, and TXY *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

Curriculum Program Title	**Lateral Entry (Certificate)**	Code	**C55430**
Concentration	**(not applicable)**		

Curriculum Description

The Lateral Entry curriculum provides a course of study leading to the development of the general pedagogy competencies needed to become certified to teach by the North Carolina Department of Public Instruction.

Course work includes human growth and development, learning theory, instructional technology, school policies and procedures, home, school, and community collaborations, and classroom organization and management to enhance learning. Courses offered by partnering senior institutions include instructional methods, literacy, and diversity.

Graduates should meet the general pedagogy competencies within the first three years of teaching, including a minimum of six semester hours per school year. Additional requirements, such as pre-service training and passing the PRAXIS, are required for licensure.

*Curriculum Requirements**

I. **General Education.** Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.

II. **Major Hours**. AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*

III. **Other Required Hours.** A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

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

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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

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.

Lateral Entry (Certificate) C55430

	AAS	Diploma	Certificate
Minimum Major Hours Required	**49 SHC**	**30 SHC**	**12 SHC**
A. **CORE**			**18 SHC**
Required Courses:			
EDU 131 Child, Family, & Community 3 SHC			
EDU 163 Classroom Mgt & Instruct 3 SHC			
EDU 243 Learning Theory 3 SHC			
EDU 245 Policies and Procedures 3 SHC			
EDU 271 Educational Technology 3 SHC			
Required Subject Area: **Human Development. Select One:**			
EDU 244 Human Growth/ Development 3 SHC *or*			
PSY 241 Developmental Psych 3 SHC			
Required Subject Areas: Courses must be offered by partnering senior institution:			**(9 SHC)+ +**
Literacy/Reading Methods 3 SHC			
Instructional Methods 3 SHC			
Meeting Special Learning Needs, 3 SHC Exceptionalities, and Diversity			
B. **CONCENTRATION** *(Not applicable)*			
C. **OTHER MAJOR HOURS** *To be selected from the following prefixes:* None			

++This certificate program is offered jointly between the NC Community College System and Education Degree Granting Senior Institutions

Mathematics Education (A1040F)
Associate in Science Pre-Major

Under the Comprehensive Articulation Agreement and the Independent Comprehensive Articulation Agreement, this template has been developed by university and community college faculty as a blueprint for guiding community colleges in developing programs for students who intend to major in Mathematics Education. Students who successfully complete this course of study and who meet the requirements for admission to the university are eligible to apply for admission to the major with junior standing.

All community colleges will not offer all pre-major programs, and course selections may vary. Check college catalogs for course and program offerings.

General Education Core (44 SHC)* Forty-four semester hours of credit in general education core courses are required as outlined on the NCCCS Curriculum Standards for Associate in Science degree programs. The general education core includes study in the areas of humanities and fine arts, social and behavioral sciences, natural sciences and mathematics, and English composition.

English Composition (6 SHC) *Two English composition courses are required.*

       English 111, Expository Writing, is required as the first composition course.

       The second composition course must be selected from the following:

ENG 112	Argument-Based Research
ENG 113	Literature-Based Research
ENG 114	Professional Research and Reporting

Humanities/Fine Arts (9 SHC**) *Three courses from three discipline areas are required.*

      One course must be a literature course.

      Two additional courses from the following discipline areas are required:

      art, drama, dance, foreign languages, interdisciplinary humanities, music, philosophy and religion

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Social/Behavioral Sciences (9 SHC)

      One course must be a history course.

      The following courses are required (6 SHC):

PSY 150	General Psychology (3 SHC)
PSY 241	Developmental Psychology (3 SHC)

Natural Sciences/Mathematics (20 SHC)

    Natural Sciences (8 SHC):

      The following physics sequence is required:

PHY 251	General Physics I (4 SHC)
PHY 252	General Physics II (4 SHC)

    Mathematics (12 SHC):

      The following mathematics courses are required:

MAT 175	Precalculus I (4 SHC)
MAT 271	Calculus I (4 SHC)
MAT 272	Calculus II (4 SHC)

A college may award a diploma under the A1040F for completion of the entire general education core, as outlined, with a grade of "C" or better in each course.

Other Required Hours (20-21 SHC)* One semester hour of credit may be included in a sixty-five semester hour credit associate in science program. The transfer of the 65th hour is not guaranteed.

A minimum of 20 SHC of college transfer courses in general education, pre-major or elective courses are required.

The following courses are required (8 SHC):

EDU 216	Foundations in Education (4 SHC)	
MAT 273	Calculus III (4 SHC)	

One of the following courses is required (3 SHC):

MAT 280	Linear Algebra (3 SHC)	
MAT 285	Differential Equations (3 SHC)	

One of the following courses is required (3 SHC):

CSC 120	Computing Fundamentals I (4 SHC)	
CSC 134	C++ Programming (3 SHC)	
CSC 136	Fortran Programming (3 SHC)	
CSC 151	JAVA Programming (3 SHC)	

Three (3) additional hours from college transfer courses approved as general education humanities are required.

Three (3) additional hours from college transfer courses approved as general education social/behavioral sciences are required.

Total Semester Hours Credit (SHC) in Program: 64-65

* **Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.**
** **3 SHC in Speech/Communication may be substituted for 3 SHC in Humanities/Fine Arts. Speech/Communication may not substitute for the literature requirement.**

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

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

CURRICULUM STANDARD

Curriculum Program Title	**Occupational Education Associate**	Code	**A55320**
Concentration	**(not applicable)**		

Curriculum Description

The Occupational Education Associate curriculum is designed for individuals skilled and experienced in a trade or technical specialty who would like to receive an associate degree in preparation for teaching or other purposes.

Course work is designed to supplement previous education, training, and/or experience the individual has already attained.

Graduates of the program may find employment as instructors in the field of occupational education.

*Curriculum Requirements**

I. **General Education.** Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.

II. **Major Hours**. AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*

III. **Other Required Hours.** A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

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

*Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic use of computers.

Major Hours

A. **Core.** The subject/course core is comprised of subject areas and/or specific courses which are required for each curriculum program. A diploma program offered under an approved AAS program standard or a certificate which is the highest credential level awarded under an approved AAS program standard must include a minimum of 12 semester hours credit derived from the subject/course core of the AAS program.

B. **Concentration** *(if applicable).* A concentration of study must include a minimum of 12 semester hours 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.

Occupational Education Associate A55320			
	AAS	**Diploma**	**Certificate**
Minimum Major Hours Required	**49 SHC**	**30 SHC**	**12 SHC**
A. **CORE** *Courses required for the diploma are designated with an ** **Required Courses:** * EDU 175 Intro to Trade and Industrial Education 3 SHC EDU 176 Occupational Analysis & Course Development 3 SHC * EDU 177 Instructional Methods 3 SHC * EDU 271 Educational Technology 3 SHC * ISC 121 Environmental Health and Safety 3 SHC * EDU 281 Instructional Strategies in Reading and Writing 3 SHC **Required Subject Areas:** ***Education. Select one of the following:** EDU 179 Vocational Student Organizations 3 SHC EDU 240 Work-Based Learning Practices & Techniques 3 SHC	**21 SHC**	**18 SHC**	**18 SHC**
B. **CONCENTRATION** *(Not applicable)*			
C. **OTHER MAJOR HOURS** *To be selected from the following prefixes:* Prefixes for major courses for curriculums approved to be offered by the college.			

CURRICULUM STANDARD

Curriculum Program Title   **Ophthalmic Medical Assistant (Diploma)**   Code   **D45510**

Concentration   **(not applicable)**

Curriculum Description

The Ophthalmic Medical Assistant Program prepares individuals to perform ophthalmic procedures under the supervision of a licensed physician specializing in Ophthalmology. Course work includes lecture, laboratory, and clinical training in ocular measurements; ocular testing; lensometry; administering topical and oral medications; eye care; and caring for instruments.

Graduates are employed in medical institutions, clinics, or physician practices.

Graduates may qualify as candidates to take the Joint Commission on Allied Health Personnel, Ophthalmology National Certification Exam.

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*Curriculum Requirements**

I.   **General Education.** Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.

II.   **Major Hours**. AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*

III.   **Other Required Hours.** A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

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

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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

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.

Ophthalmic Medical Assistant D45510			
	AAS	**Diploma**	**Certificate**
Minimum Major Hours Required	**49 SHC**	**30 SHC**	**12 SHC**
A. **CORE** **Required Courses:** OPH 103 Intro to Diseases of Eye 2 SHC OPH 104 Basic Ophthalmic Pharma. 2 SHC OPH 105 Ophthalmic Clin Proc I 2 SHC OPH 106 Ophthalmic Med. Asst. Pract. I 9 SHC OPH 107 Ophthalmic Clin Proc II 2 SHC OPH 108 Ophthalmic Patient Care 2 SHC OPH 109 Ophthal. & Basic Refract 2 SHC OPH 110 Op Med Asst Practicum II 9 SHC OPH 150 Intro to Ophth Med Assist 2 SHC OPH 151 Ocular Anat. & Physiology 2 SHC **Required Subject Areas:** None		**34 SHC**	
B. **CONCENTRATION** *(Not applicable)*			
C. **OTHER MAJOR HOURS** BUS, CIS, COE, CSC, HSC, OPH, and PHY *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

Curriculum Program Title **Parks and Natural Resource Management** Code **A15360**

Concentration **(not applicable)**

Curriculum Description

The Parks and Natural Resource Management curriculum is designed to provide students with knowledge and experience in the areas of interpretation and environmental education, natural resource management, visitor needs, and other administrative duties and program development as they relate to an outdoor recreational setting.

Students will be trained to lead groups in various outdoor recreational activities and programs, as well as entry-level positions with natural resource-based agencies.

Graduates should qualify for entry-level positions as park rangers and outdoor recreation leaders and programmers. Employment opportunities may be found in state and local parks and recreational systems, privately operated forest reserves, commercial outfitters, and outdoor leadership schools.

Curriculum Requirements*

I.   **General Education.** Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.

II. **Major Hours**. AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*

III. **Other Required Hours.** A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

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

Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic use of computers.

Major Hours

A. **Core.** The subject/course core is comprised of subject areas and/or specific courses which are required for each curriculum program. A diploma program offered under an approved AAS program standard or a certificate which is the highest credential level awarded under an approved AAS program standard must include a minimum of 12 semester hours credit derived from the subject/course core of the AAS program.

B. **Concentration.** *(if applicable).* A concentration of study must include a minimum of 12 semester hours 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.

Parks and Natural Resource Management A15360	AAS	Diploma	Certificate
Minimum Major Hours Required	**49 SHC**	**30 SHC**	**12 SHC**
A. **CORE** *A diploma offered under this AAS degree requires a minimum of 12 SHC extracted from the required subject/course core of the AAS degree.*	**19 SHC**	**12 SHC**	
Required Courses: FOR 121 Dendrology 4 SHC; REC 113 Programming & Special Populations 4 SHC; REC 122 Program Administration 3 SHC; REC 211 Resource Interpretation 2 SHC **Required Subject Areas:** **Maintenance. Select One:** FWL 252 Wildlife Management Techniques 3 SHC; REC 217 Maintenance and Facility Management 3 SHC **Protection. Select One:** FOR 240 Forest Protection 3 SHC; FOR 241 Forest Fire Management 3 SHC			
B. **CONCENTRATION** *(not applicable)*			
C. **OTHER MAJOR HOURS** *To be selected from the following prefixes:* AGR, BIO, BUS, CIS, CJC, COE, CSC, ENV, FOR, FWL, GIS, HEA, HOR, LSG, PED, REC, TRF, and TXY *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

Curriculum Program Title   **Physical Fitness Technology**   Code   **A45610**

Concentration   **(not applicable)**

Curriculum Description

The Physical Fitness Technology program is designed to provide students with the knowledge and skills necessary for employment in the fitness and exercise industry.

Students will be trained in exercise science and be able to administer basic fitness tests and health risk appraisals, teach specific exercise and fitness classes and provide instruction in the proper use of exercise equipment and facilities.

Graduates should qualify for employment opportunities in commercial fitness clubs, YMCA' s/YWCA' s, wellness programs in business and industry, Parks & Recreation Departments and other organizations implementing exercise & fitness programs.

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*Curriculum Requirements**

I.   **General Education.** Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.

II.   **Major Hours**. AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*

III.   **Other Required Hours.** A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

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

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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

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.

Physical Fitness Technology A45610		AAS	Diploma	Certificate
Minimum Major Hours Required		**49 SHC**	**30 SHC**	**12 SHC**
A. CORE		**41 SHC**	**NR**	**16 SHC**
Required Courses:				
HEA 112 CPR & First Aid	2 SHC			
PSF110 Exercise Science	4 SHC			
PSF 111 Fitness & Exercise Testing I	4 SHC			
PSF 114 Physical Fitness Theory & Instruction	4 SHC			
PSF 116 Prevention & Care of Exercise Related Injuries	3 SHC			
PSF 120 Group Exercise Instruction	3 SHC			
PSF 210 Personal Training	3 SHC			
PSF 212 Exercise Programming	3 SHC			
PSF 218 Lifestyle Changes/Wellness	4 SHC			
Required Subject Areas:				
BIO 155 Nutrition	3 SHC			
BIO 168 Anatomy & Physiology I	4 SHC			
BIO 169 Anatomy & Physiology II	4 SHC			
B. CONCENTRATION *(Not applicable)*				
C. OTHER MAJOR HOURS *To be selected from the following prefixes:* BIO, BUS, COE, CIS, DAN, HEA, MUS, PED, PSF, PSY, RSM, and SOC *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

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, software engineering, database administration and programming for the purpose of creating simulations and games.

Graduates should qualify for employment as designers, artists, animators, programmers, database administrators, testers, quality assurance analysts, engineers and administrators in the entertainment industry, the health care industry, engineering, forensics, education, NASA and government agencies.

Curriculum Requirements*

I. General Education. Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.

II. Major Hours. AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*

III. Other Required Hours. A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

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

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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

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

	AAS	Diploma	Certificate
Minimum Major Hours Required	**49 SHC**	**30 SHC**	**12 SHC**
A. CORE	**27 SHC**	**NR**	**NR**
Required Courses: SGD 111 Introduction to SGD 3 SHC SGD 112 SGD Design 3 SHC SGD 113 SGD Programming 3 SHC SGD 114 3D Modeling 3 SHC SGD 212 SGD Design II 3 SHC SGD 213 SGD Programming II 3 SHC SGD 214 3D Modeling II 3 SHC SGD 285 SG Software Engineering 3 SHC SGD 289 SGD Project 3 SHC **Required Subject Area:**			
B. CONCENTRATION *(Not applicable)*			
C. OTHER MAJOR HOURS *To be selected from the following prefixes:* ARC, ART, BUS, CIS, COE, CSC, CTS, DAN, DBA, DDF, DEA, DES, DFT, DME, DRA, ECO, ENT, FVP, GAM, GRA, GRD, GIS, ITN, MUS, NET, NOS, PHO, SGD, SGR, and WEB *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

Curriculum Program Title   **Web Technologies**   Code   **A25290**

Concentration   **(not applicable)**

Curriculum Description

The Web Technologies curriculum prepares graduates for careers in the information technology arena using computers and distributed computing to disseminate and collect information via the web.

Course work in this program covers the terminology and use of computers, network devices, networks, servers, databases, applications, programming languages, as well as web applications, site development and design. Studies will provide opportunity for students to learn related industry standards.

Graduates should qualify for career opportunities as designers, administrators, or developers in the areas of web applications, websites, web services, and related areas of distributed computing.

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*Curriculum Requirements**

I.   **General Education.** Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.

II.   **Major Hours**. AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*

III.   **Other Required Hours.** A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

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

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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

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.** 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.

Web Technologies A25290

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

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

Required Courses:

CIS 115	Intro to Programming and Logic	3 SHC
DBA 110	Database Concepts	3 SHC
NOS 110	Operating Systems Concepts	3 SHC
SEC 110	Security Concepts	3 SHC
WEB 110	Internet/Web Fundamentals	3 SHC
WEB 115	Web Markup and Scripting	3 SHC
WEB 120	Intro Internet Multimedia	3 SHC
WEB 140	Web Development Tools	3 SHC
WEB 210	Web Design	3 SHC
WEB 230	Implementing Web Serv	3 SHC
WEB 250	Database Driven Websites	3 SHC

Required Subject Areas:
Basic Computer Skills. Select one:

CIS 110	Introduction to Computers	3 SHC
CIS 111	Basic PC Literacy	2 SHC **Business.**

Select one:

BUS 110	Introduction to Business	3 SHC
CTS 115	Info Sys Business Concepts	3 SHC

Networking. Select one:

NET 110	Networking Concepts	3 SHC
NET 125	Networking Basics	3 SHC

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

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

ACC, BUS, CJC, CIS, COE, CSC, CTS, DBA, DFT, DME, GIS, GRD, ITN, MKT, NET, NOS, OST, SEC, SGD, and WEB

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.