NC COMMUNITY COLLEGES
CREATING SUCCESS

NORTH CAROLINA COMMUNITY COLLEGE SYSTEM
R. Scott Ralls, Ph.D.
President

October 31, 2014

To: Presidents
               Chief Academic Officers

From: Wesley Beddard, Associate Vice President
               Programs

Subject: Curriculum Review Committee Course Approvals

The Curriculum Review Committee (CRC) has the responsibility for maintaining the curriculum courses in the Combined Course Library (CCL). The approved course requests from the Fall 2014 CRC meeting, held on October 14, 2014, are attached for your information. *Course revisions may involve the removal of required prerequisites or corequisites. Please note that colleges may add local prerequisites and/or corequisites if they determine a need exists.*

Course Revision Impact to Curriculum Standards
The CRC approved requests to revise the **course description, prerequisite(s), corequisite(s), and/or class/lab hours** of core courses found on the curriculum standards listed below. Please note that the only change indicated on the printed standard will be the inclusion of the statement *"CRC Revised-Electronic Only 10/14/14",* since only the electronic version of the standard template will be revised.

> Early Childhood Education (A55220)
> Infant/Toddler Care (Certificate) (C55290)

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

> Aquarium Science Technology (A20260)   Recreational Therapy Assistant (A45150)
> Zoological Science Technology (A20250)

CC14-036
Email

The following curriculum standards involved CRC approved core course revisions **and *additional* standard revision requests** that will be presented at the November State Board meeting:

Interior Design (A30220)	Nursing Assistant (Certificate) (C45480)
Nanotechnology (A20190)	Practical Nursing (D45660)

Please be aware that you must implement the attached revised courses and standards no later than one year after the effective term. You must update your college's electronic program of study and receive approval from the System Office prior to implementation of the revised courses and programs. The revised standards are attached for your convenience.

Curriculum standards, curriculum courses and procedures for submitting requests to the CRC are available on the Academic Programs home page at http://www.nccommunitycolleges.edu/programs. If you need assistance or clarification, please contact Ms. Jennifer Frazelle, Director of Academic Programs at frazellej@nccommunitycolleges.edu or (919) 807-7120.

WB/dm
Attachments
c: Curriculum Review Committee
    Dr. Lisa Chapman
    Ms. Elizabeth Self
    Ms. Jennifer Frazelle
    Program Coordinators

CC14-036
Email

Course Prefix #	Title	Request	Effective Semester	Curriculum Standard Core Course
AET 131	Avionics Fundamentals	New CCL course	Spring 2015 (2015*01)	NA
DES 110	Architectural Graphics	Change course description	Fall 2015 (2015*03)	Interior Design (A30220)
DES 111	Creative Problem Solving	Change course description	Fall 2015 (2015*03)	NA
DES 120	CAD for Interior Design	Change course description	Fall 2015 (2015*03)	Interior Design (A30220)
DES 125	Graphic Presentation I	Change course description. Change title to "Visual Presentation I"	Fall 2015 (2015*03)	Interior Design (A30220)
DES 126	Graphic Presentation II	Change course description. Change title to "Visual Presentation II"	Fall 2015 (2015*03)	NA
DES 130	MacIntosh App/Int Design	Change course description. Change title to "Digital App/Interior Design"	Fall 2015 (2015*03)	NA
DES 135	Prin & Elem of Design I	Change course description	Fall 2015 (2015*03)	Interior Design (A30220)
DES 136	Prin & Elem of Design II	Change course description	Fall 2015 (2015*03)	NA
DES 210	Bus Prac/Interior Design	Change course description. Change title to "Professional Practices/Int Des"	Fall 2015 (2015*03)	Interior Design (A30220)
DES 220	Prin of Interior Design	Change course description. Change title to "Interior Design Fundamentals"	Fall 2015 (2015*03)	Interior Design (A30220)
DES 225	Textiles/Fabrics	Change course description. Change title to "Textiles for Interiors"	Fall 2015 (2015*03)	Interior Design (A30220)
DES 230	Residental Design I	Change course description	Fall 2015 (2015*03)	Interior Design (A30220)

Course Prefix #	Title	Request	Effective Semester	Curriculum Standard Core Course
DES 235	Products	Change course description	Fall 2015 (2015*03)	Interior Design (A30220)
DES 238	Sustainable Interior Prod	Change course description. Change title to "Sustainable Interiors"	Fall 2015 (2015*03)	NA
DES 240	Comm/Contract Design I	Change course description. Expand title to "Commercial/Contract Design I"	Fall 2015 (2015*03)	Interior Design (A30220)
DES 255	History/Int & Furn I	Change course description. Expand title to "History of Interiors & Furn I"	Fall 2015 (2015*03)	Interior Design (A30220)
DES 256	HIstory/Int & Furn II	Change course description. Expand title to "History of Interiors & Furn II"	Fall 2015 (2015*03)	Interior Design (A30220)
DES 265	Lighting/Interior Design	Change course description. Change hours from "2-0-2" to "1-2-2"	Fall 2015 (2015*03)	NA
DES 280	Codes & Standards/Int Des	Change course description. Expand title to "Codes & Standards/Interior Des"	Fall 2015 (2015*03)	NA
EDU 119	Introduction to Early Childhood Education	Change course description	Fall 2015 (2015*03)	Early Childhood Education (A55220) Infant/Toddler Care (Certificate) (C55290)
FIP 162	Fire FighterSafety & Wellness	New CCL course	Spring 2015 (2015*01)	NA
NAN 132	Nano Regulations & Ethics	Change course description	Fall 2015 (2015*03)	Nanotechnology (A20190)
NAN 241	Nanofab of Mixtures	Change course description Change title from "Nanofab of Mixtures" to "Nanofabrication"	Fall 2015 (2015*03)	Nanotechnology (A20190)
NAN 243	Atomic-Force Microscopy	Change course description Change title from "Atomic-Force Microscopy" to "Nanocharacterization"	Fall 2015 (2015*03)	Nanotechnology (A20190)

Course Prefix #	Title	Request	Effective Semester	Curriculum Standard Core Course
NAS 101	Nursing Assistant I	Change title from to "Nurse Aide I" Change description	Spring 2015 (2015*01) Early Implementation	Nursing Assistant (Certificate) (C45480)
NAS 102	Nursing Assistant II	Change title to "Nurse Aide II" Change description Change prequisite from "None" to "NAS 101"	Spring 2015 (2015*01) Early Implementation	Nursing Assistant (Certificate) (C45480)
NAS 103	Home Health Care	Change title to "Home Health Care Nurse Aide" Change description Change hours from "2-0-0-2" to "4-4-0-6" Change prerequisite from "None" to "NAS 101"	Spring 2015 (2015*01) Early Implementation	Nursing Assistant (Certificate) (C45480)
NAS 104	Home Health Clinical	Archive	End Term Fall 2015 (2015*03)	NA
NAS 105	Life Span Changes	Change description	Spring 2015 (2015*01) Early Implementation	NA
NAS 106	Geriatrics	Change title to "Geriatric Aide" Change description Change hours from "2-0-3-3" to "5-0-3-6" Change prerequisite from "None" to "NAS 101"	Spring 2015 (2015*01) Early Implementation	Nursing Assistant (Certificate) (C45480)

Course Prefix #	Title	Request	Effective Semester	Curriculum Standard Core Course
NUR 101	Practical Nursing I	Change description	Fall 2015 (2015*03)	Practical Nursing (D45660)
NUR 102	Practical Nursing II	Change description Change hours from "8-0-12-12" to "7-0-9-10" Change prerequisite from "None" to "NUR 101"	Fall 2015 (2015*03)	Practical Nursing (D45660)
NUR 103	Practical Nursing III	Change description Change hours from "6-0-12-10" to "6-0-9-9" Change prerequiste from "None" to "NUR 101"	Fall 2015 (2015*03)	Practical Nursing (D45660)
SPA 182	Spanish Lab 2	Change prerequisite from "SPA 181" to "SPA 111"	Fall 2015 (2015*03)	NA
TRE 110	Introduction to Therapeutic Recreation	Change title to "Intro to Recreational Therapy" Change course description	Spring 2015 (2015*01) Early Implementation	Recreational Therapy Assistant (A45150)
TRE 170	Threrapeutic Recreation Psych Lab	Change title to " Recreational Therapy Psych Lab" Change course description	Spring 2015 (2015*01) Early Implementation	NA
TRE 210	Therapeutic Recreation Programming	Change title to "Rec Therapy Programming" Change course description Change prequisite from "TRE 111" to "TRE 110"	Spring 2015 (2015*01) Early Implementation	Recreational Therapy Assistant (A45150)
TRE 211	Therapeutic Recreation Professionalism	Change title to "Recreational Therapy Prof" Change course description	Spring 2015 (2015*01) Early Implementation	Recreational Therapy Assistant (A45150)
TRE 221	Behavior Management in Therapeutic Recreation	Change title to "Behavior Mgmt in Rec Therapy" Change course description	Spring 2015 (2015*01) Early Implementation	NA

Course Prefix #	Title	Request	Effective Semester	Curriculum Standard Core Course
TRE 271	Therapeutic Recreation Geriatrics Lab	Change course description Change title to "Rec Therapy Geriatrics Lab"	Spring 2015 (2015*01) Early Implementation	NA
TRE 282	TRE Internship III Supervision	Change title to "Rec Ther InternshipIII Supervs Change course description Change corequiste from "None" to "TRE 288"	Spring 2015 (2015*01) Early Implementation	NA
TRE 288	TRE Internship III	Change title to "Rec Ther Internship III Change course description Change corequiste from "None" to "TRE 282"	Spring 2015 (2015*01) Early Implementation	Recreational Therapy Assistant (A45150)
ZAS 112	Intro to Zoo/Aquarium Science	Change course hours from "1-0-1" to "2-0-2"	Spring 2015 (2015*01) Early Implementation	Zoological Science (A20250) Aquarium Science Technology (A20260)
ZAS 114	Species Survival Plan	Change prerequisites from "ZAS 110" to "ZAS 112"	Spring 2015 (2015*01) Early Implementation	NA
ZAS 132	Operant Conditioning	Change corerequisite from "ZAS 131" to "None"	Spring 2015 (2015*01) Early Implementation	NA
ZAS 161	Aquarium Practicum I	New CCL course	Spring 2015 (2015*01)	NA
ZAS 162	Aquarium Practicum II	New CCL course	Spring 2015 (2015*01)	NA
ZAS 233	Zoo Ichthyology	Change prerequisite from "BIO 112" to "None" Change corequisite from "None" to "BIO 112"	Spring 2015 (2015*01) Early Implementation	Zoological Science (A20250) Aquarium Science Technology (A20260)

CURRICULUM STANDARD

Curriculum Program Title	**Early Childhood Education**	Program Code	**A55220**
Concentration	**(not applicable)**	CIP Code:	**13.1210**

Curriculum Description

The Early Childhood Education curriculum prepares individuals to work with children from birth through eight in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers.

Course work includes child growth and development; physical/nutritional needs of children; care and guidance of children; and communication skills with families and children. Students will foster the cognitive/language, physical/motor, social/emotional, and creative development of young children.

Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, Head Start Programs, and school-age programs.

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*Curriculum Requirements**

[for associate degree, diploma, and certificate programs in accordance with 1D SBCCC 400.97 (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-based learning may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*

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

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

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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. 1D SBCCC 400.9 (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-based learning 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.

Early Childhood Education A55220			
	AAS	**Diploma**	**Certificate**
Minimum Major Hours Required	**49 SHC**	**30 SHC**	**12 SHC**
A. **CORE** *Courses required for the diploma are designated with **	**38 SHC**	**25 SHC**	

Required Courses:

*	EDU 119	Intro to Early Child Edu	4 SHC
*	EDU 131	Child, Family, & Commun	3 SHC
*	EDU 146	Child Guidance	3 SHC
*	EDU 151	Creative Activities	3 SHC
*	EDU 153	Health, Safety & Nutrit	3 SHC
*	EDU 221	Children with Exceptional	3 SHC
	EDU 234	Infants, Toddlers & Twos	3 SHC
	EDU 271	Educational Technology	3 SHC
	EDU 280	Language & Literacy Exp	3 SHC
	EDU 284	Early Child Capstone Prac	4 SHC

Required Subject Area:
*Child Development. Select one set:

	EDU 144	Child Development I	3 SHC
&	EDU 145	Child Development II	3 SHC
	OR		
	PSY 244	Child Development I	3 SHC
&	PSY 245	Child Development II	3 SHC

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

C. **OTHER MAJOR HOURS**

The remaining other major hours may be chosen from the following   prefixes:

ACC, ANT, ART, ASL, AST, BIO, BUS, CHM, CIS, COE, COM, CSC, CTS, DAN, DBA, DRA, ECO, EDU, ENG, FRE, GEO, GER, HEA, HIS, HUM, MUS, OST, PED, PHI, PHS, POL, PSY, REL, SCI, SOC, SPA, WBL, and WEB

Up to three semester hour credits may be selected from the following prefixes: ARA, ASL, CHI, FRE, GER, ITA, JPN, LAT, POR, RUS and SPA.

CURRICULUM STANDARD

Curriculum Program Title	**Infant/Toddler Care (Certificate)**	Program Code	**C55290**
Concentration	**(not applicable)**	CIP Code:	**19.0706**

Curriculum Description

The curriculum prepares individuals to work with children from infancy to three years of age in diverse learning environments. Students will combine learned theories, competency-based knowledge, and practice in actual settings with infants and toddlers.

Course work includes infant/toddler growth and development: physical/nutritional needs of infants and toddlers; safety issues in the care of infants and toddlers; care and guidance; communication skills with families and children; design an implementation of appropriate curriculum; and other related topics.

Graduates should be prepared to plan and implement developmentally appropriate infant/toddler programs in early childhood settings. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, Early Head Start Programs, and other infant/toddler programs.

*Curriculum Requirements**

[for associate degree, diploma, and certificate programs in accordance with 1D SBCCC 400.97 (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-based learning may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*

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

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

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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. 1D SBCCC 400.97 (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-based learning 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.

Infant/Toddler Care (Certificate) C55290			
	AAS	**Diploma**	**Certificate**
Minimum Major Hours Required	**49 SHC**	**30 SHC**	**12 SHC**

A.   **CORE**
 	
Required Courses:
  EDU   119   Intro to Early Child Educ   4 SHC
  EDU   131   Child, Family, & Commun   3 SHC
  EDU   153   Health, Safety & Nutrit   3 SHC
  EDU   234   Infants, Toddlers, and Twos   3 SHC
 	
Required Subject Areas:
Child Development: Select one:
  EDU   144   Child Development I   3 SHC
  PSY   244   Child Development I   3 SHC
			16 SHC

B. **CONCENTRATION** *(Not applicable)*			
C. **OTHER MAJOR HOURS** *To be selected from the following prefixes:* ACC, ART, ASL, BIO, BUS, CHM, CIS, CSC, DAN, EDU, HEA, HIS, MUS, OST, PHS, PSY, SCI, SOC and WBL *Up to three semester hour credits may be selected from the following prefixes: ARA, ASL, CHI, FRE, GER, ITA, JPN, LAT, POR, RUS and SPA.*			

Curriculum Standard for Science and Math: Zoo and Aquarium Science Technology			
Career Cluster: Science, Technology, Engineering, and Math **			
Cluster Description: Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.			
Pathway: Science and Mathematics		**Effective Term:** Spring 2015 (2015*01)	
Program Majors Under Pathway			
Program Major / Classification of Instruction Programs (CIP) Code		**Credential Level(s) Offered**	**Program Major Code**
Zoological Science Technology	CIP Code: 26.0709	AAS/Diploma/Certificate	A20250
Aquarium Science Technology	CIP Code: 26.0799	AAS/Diploma/Certificate	A20260

Pathway Description:

The Science and Math curriculum prepares students for employment in zoological parks, aquaria, or other settings requiring animal care, breeding, education/conservation, or health of exotic animals.

Course work emphasizes anatomy, physiology, reproduction, behavior, and nutrition of exotic animals that are on exhibit for education and/or conservation purposes or for animals maintained for medical purposes. Students have practical experiences with basic husbandry skills, animal handling/capture/restraint skills, the ability to detect illness, and creative design of exhibits.

Graduates of the curriculum should qualify for entry-level employment opportunities in a variety of settings, including zoos, aquaria, nature science centers, and animal research facilities.

*Program Major Description: Choose one of the following **4th paragraphs** to use in conjunction with the first three paragraphs of the pathway description above for documentation used to identify each **Program Major**:*

Zoo Science Technology: A program that focuses on the application of biological principles to the study of vertebrate wildlife, wildlife habitats, and related ecosystems in remote and urban areas. Potential course work includes instruction in animal ecology; adaptational biology; urban ecosystems; natural and artificial habitat management; limnology; wildlife pathology; and vertebrate zoological specializations such as mammalogy, herpetology, ichthyology, ornithology, and others.

Aquarium Science Technology: A program that prepares individuals to conserve and manage wilderness areas and the flora, marine and aquatic life therein, and manage wildlife reservations and zoological/aquarium facilities for recreational, commercial, and ecological purposes. Potential course work includes instruction in wildlife biology, marine/aquatic biology, freshwater and saltwater ecosystems, the design and operation of natural and artificial wildlife habitats, limnology, wildlife pathology, and vertebrate zoological specializations such as mammalogy, herpetology, ichthyology, ornithology, and others.

I. General Education Academic Core
[*Curriculum Requirements for associate degree, diploma, and certificate programs in accordance with 1 D SBCCC 400.97(3)]:
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.*

Science and Math: Zoo and Aquarium Science Technology

Recommended General Education Academic Core			AAS	Diploma	Certificate
Minimum General Education Hours Required:			**15 SHC**	**6 SHC**	**0 SHC**

Courses listed below are recommended general education courses for this curriculum standard. Colleges may choose to include additional or alternative general education courses to meet local curriculum needs.

*Recommended certificate and diploma level curriculum courses. These courses may <u>not</u> be included in associate degree programs.

				AAS	Diploma	Certificate
Communication:				**6 SHC**	**3-6 SHC**	**Optional**
*COM	101	Workplace Communication	3 SHC			
COM	110	Introduction to Communication	3 SHC			
COM	120	Intro Interpersonal Com	3 SHC			
COM	231	Public Speaking	3 SHC			
*ENG	101	Applied Communications I	3 SHC			
*ENG	102	Applied Communications II	3 SHC			
ENG	110	Freshman Composition	3 SHC			
ENG	111	Expository Writing	3 SHC			
ENG	112	Argument-Based Research	3 SHC			
ENG	114	Prof Research & Reporting	3 SHC			
ENG	115	Oral Communication	3 SHC			
ENG	116	Technical Report Writing	3 SHC			
Humanities/Fine Arts:				**3 SHC**	**0-3 SHC**	**Optional**
*HUM	101	Values in the Workplace	2 SHC			
HUM	110	Technology and Society	3 SHC			
HUM	115	Critical Thinking	3 SHC			
HUM	230	Leadership Development	3 SHC			
PHI	230	Introduction to Logic	3 SHC			
PHI	240	Introduction to Ethics	3 SHC			
Social /Behavioral Sciences:				**3 SHC**	**0-3 SHC**	**Optional**
ECO	151	Survey of Economics	3 SHC			
ECO	251	Prin of Microeconomics	3 SHC			
GEO	110	Introduction to Geography	3 SHC			
GEO	111	World Regional Geography	3 SHC			
*PSY	101	Applied Psychology	3 SHC			
*PSY	102	Human Relations	2 SHC			
PSY	118	Interpersonal Psychology	3 SHC			
PSY	135	Group Processes	3 SHC			
PSY	150	General Psychology	3 SHC			
*SOC	105	Social Relationships	3 SHC			
SOC	210	Introduction to Sociology	3 SHC			
SOC	215	Group Processes	3 SHC			
Natural Sciences/Mathematics:				**3 SHC**	**0-3 SHC**	**Optional**
BIO	140	Environmental Biology	3 SHC			
BIO	160	Introductory Life Science	3 SHC			
*MAT	101	Applied Mathematics I	3 SHC			
MAT	110	Mathematical Measurement	3 SHC			
MAT	115	Mathematical Models	3 SHC			
MAT	120	Geometry and Trigonometry	3 SHC			
MAT	121	Algebra/Trigonometry I	3 SHC			
MAT	140	Survey of Mathematics	3 SHC			
MAT	151	Statistics I	3 SHC			
MAT	155	Statistical Analysis	3 SHC			

Approved by the State Board of Community Colleges on August 16, 2012; Editorial Revision 09/13/12; Editorial Revision 12/14/12; Editorial Revision 08/21/13; CRC Revised 11/07/13; CRC Revised 10/14/14.

PHY 110 Conceptual Physics	3 SHC		
PHY 121 Applied Physics I	4 SHC		

II. Major Hours. AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work-based learning 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. Below is a description of each section under Major Hours.

    A. Technical Core. The technical core is comprised of specific courses which are required for all Program Majors under this Curriculum Standard. 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 curriculum core courses or core subject area of the AAS program.

    B. Program Major(s). The Program Major must include a minimum of 12 semester hours credit from required subjects and/or courses. The Program Major is in addition to the technical 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 each prefix listed, with the exception of prefixes listed in the core.

Science and Math: Zoo and Aquarium Science Technology	AAS	Diploma	Certificate
Minimum Major Hours Required:	**49 SHC**	**30 SHC**	**12 SHC**

A. Technical Core:
  BIO 111 General Biology I   4 SHC
  BIO 112 General Biology II   4 SHC
  ZAS 112 Intro to Zoo/Aquarium Science   2 SHC
  ZAS 113 Animal Exhibits   1 SHC
  ZAS 120 Zoonotic Dieseases   2 SHC
  ZAS 130 Introduction to Ethology   3 SHC
  ZAS 234 Zoo Herpetology   3 SHC
	31 SHC		

B. Program Major(s).
Zoological Science Technology
Select a minimum of 12 SHC from the following courses for the
Zoological Science Technology AAS program:
  ZAS 110 Intro to Zookeeping   5 SHC
  ZAS 131 Applied Animal Psych   3 SHC
  ZAS 232 Zoo Invertebrates   3 SHC
  ZAS 235 Zoo Ornithology   3 SHC
  ZAS 236 Zoo Mammalogy   3 SHC
 	
Aquarium Science Technology
Select a minimum of 12 SHC from the following courses for the Aquarium
Science Technology AAS program:
  BIO 243 Marine Biology   3 SHC
  MSC 174 Marine Invertebrate Zoo   4 SHC
  ZAS 210 Intro to Aquarium Science   4 SHC
  ZAS 233 Zoo Ichthyology   3 SHC
  ZAS 243 Prin of Aquarium Science   3 SHC
  ZAS 272 Aquatic Pathophysiology 3 SHC			

C. Other Major Hours.
  T*o be selected from the following prefixes:*
  ACC, AGR, ANS, ARC, BIO, BTC, BUS, CHM, CIS, CSC, CST, CUL, DFT, ECO, ETR, FOR,
  GCM, GIS, HET, HOR, IVS, LAR, LID, LSG, MSC, SST, TRF, VEN, WBL and ZAS			

> *Up to three semester hour credits may be selected from the following prefixes: ARA, ASL, CHI, FRE, GER, ITA, JPN, LAT, POR, RUS and SPA.*

III. Other Required Hours

A college may include courses to meet graduation or local employer requirements in a certificate (0-1 SHC), diploma (0-4 SHC), or an associate in applied science (0-7 SHC) 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.

IV. Employability Competencies

Fundamental competencies that address soft skills vital to employability, personal, and professional success are listed below. Colleges are encouraged to integrate these competencies into the curriculum by embedding appropriate student learning outcomes into one or more courses or through alternative methods.

A. **Interpersonal Skills and Teamwork** – The ability to work effectively with others, especially to analyze situations, establish priorities, and apply resources for solving problems or accomplishing tasks.

B. **Communication** – The ability to effectively exchange ideas and information with others through oral, written, or visual means.

C. **Integrity and Professionalism –** Workplace behaviors that relate to ethical standards, honesty, fairness, respect, responsibility, self-control, criticism and demeanor.

D. **Problem-solving** – The ability to identify problems and potential causes while developing and implementing practical action plans for solutions.

E. **Initiative and Dependability** – Workplace behaviors that relate to seeking out new responsibilities, establishing and meeting goals, completing tasks, following directions, complying with rules, and consistent reliability.

F. **Information processing** – The ability to acquire, evaluate, organize, manage, and interpret information.

G. **Adaptability and Lifelong Learning –** The ability to learn and apply new knowledge and skills and adapt to changing technologies, methods, processes, work environments, organizational structures and management practices.

H. **Entrepreneurship –** The knowledge and skills necessary to create opportunities and develop as an employee or self-employed business owner.

An **Employability Skills Resource Toolkit has been developed by NC-NET for the competencies listed above. Additional information is located at: http://www.nc-net.info/employability.php*

**The *North Carolina Career Clusters Guide was developed by the North Carolina Department of Public Instruction and the North Carolina Community College system to link the academic and Career and Technical Education programs at the secondary and postsecondary levels to increase student achievement. Additional information about Career Clusters is located at: http://www.nc-net.info/NC_career_clusters_guide.php or http://www.careertech.org.*

Summary of Required Semester Hour Credits (SHC) for each credential:

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

CURRICULUM STANDARD

Curriculum Program Title | **Recreational Therapy Assistant** | Code | **A45150**

Concentration | **(not applicable)** | *CIP Code: 51.2309*

Curriculum Description

The recreational therapy assistant curriculum prepares individuals to plan, implement, and document therapeutic recreation interventions, according to national standards of practice. The curriculum emphasizes the use of recreation as treatment designed to (re)habilitate a client's level of functioning and independence.

Course work includes facilitating adaptive, inclusive and universal activities (ropes courses, creative arts, water sports, etc) and leading or co-leading recreational therapy sessions (social skills, team building, problem solving, leisure education etc.) for people with disabilities and their families.

Graduates should qualify for a LRTA license from the North Carolina Board for Recreational Therapy Licensure. Employment opportunities include group homes, retirement facilities, agencies serving people with developmental disabilities, psychiatric or mental health agencies, and other rehabilitation facilities.

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*Curriculum Requirements**
[for associate degree, diploma, and certificate programs in accordance with 1D SBCCC 400.97 (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–based learning may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*

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

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

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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. 1D SBCC 400.97 (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-based learning 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.

Recreational Therapy Assistant A45150			
	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.* **Required Courses:** TRE 110 Intro to Recreational Therapy 3 SHC TRE 112 Inclusive Programming 3 SHC TRE 210 Rec Therapy Programming 3 SHC TRE 211 Recreational Therapy Prof 3 SHC **Required Subject Areas:** **Therapeutic Recreation.** Select 10 SHC of TRE courses. 10 SHC **Clinical/work Experience. Select 8-12 SHC:** TRE 288 Rec Ther Internship III 8 SHC TRE 289 Therapeutic Recreation Internship IV 12 SHC	**30-34 SHC**	**12 SHC**	
B. **CONCENTRATION** *(Not applicable)*			
C. **OTHER MAJOR HOURS** *To be selected from the following prefixes:* BIO, CIS, CSC, GRO, HEA, HSC, MED, PED, PSY, REC, SAB, SOC, TRE and WBL. Up to three semester hour credits may be selected from the following prefixes: *ARA, ASL, CHI, FRE, GER, ITA, JPN, LAT, POR, RUS and SPA*			