NORTH CAROLINA COMMUNITY COLLEGE SYSTEM
Peter Hans
President

April 1, 2020

MEMORANDUM

To: Presidents
Chief Academic Officers

From: Peter Hans
President

Subject: Curriculum Standard Revision Approval

Per 1D SBCCC 400.9 (b) *A revision of an existing curriculum standard shall:*

(1) Have written concurrence by two-thirds of colleges approved to offer the curriculum program; and
(2) Be in alignment with criteria outlined in 1D SBCCC 400.10(e).
(3) The President of the North Carolina Community College System shall have the authority to approve or deny the revision of an existing curriculum standard.

I am pleased to approve the requested revision for the following attached curriculum standard which is in compliance with 1D SBCCC 400.9 (b):

Boat Manufacture and Service Technology (Diploma) (D60330)

An outline of the specific curriculum standard revision is attached for your convenience. You may view all curriculum standards by visiting the Academic Programs website at:

https://www.nccommunitycolleges.edu/academic-programs/curriculum-standards

If you have any questions concerning the curriculum standard revision, please contact Dr. Frank Scuiletti at scuilettif@nccommunitycolleges.edu.

PH/FS/gr
c: Mr. Wesley E. Beddard
Dr. Lisa Eads
Dr. Frank Scuiletti
Program Coordinators

CC20-028
Email

Attachment

Outline of Curriculum Standard Revision

Boat Manufacture and Service Technology (Diploma) (D60330)

Revision:

- Added the additional course options to Marine Services under the Required Subject Area:
    - MRN 121 Marine Engines
    - MRN 147 Marine Power Trains
    - TRN 120 Basic Transp Electricity.

Rationale: The submitting college suggests that the additional coursework provides flexibility to the program that allows them to better meet local workforce needs. The courses also align with the college's currently offered diesel and heavy equipment coursework allowing the college to more efficiently utilize their resources.

**The proposed revision to the curriculum standard will not require colleges to change their program of study.*

CURRICULUM STANDARD

Effective Term
Fall 2020
*[2020*03]*

Curriculum Program Title	**Boat Manufacture and Service (Diploma)**	Program Code	**D60330**
Concentration	**(not applicable)**	CIP Code	**47.0616**

Curriculum Description

The Boat Manufacture and Service Technology program prepares students for employment in the manufacture and service of boats. Students learn the basics of boat design and the implementation of those designs in various components and/or complete boats or yachts.

Course work includes reading and interpreting marine blueprints, manuals, and other documents common to the industry; lofting; constructing forms and mold-making; application of concepts and techniques in composite, and fiberglass; marine woodworking; interior finishing; and marine mechanical, electrical, and plumbing systems.

Graduates may find employment with boat/yacht manufacturers, service yards, dealerships doing commissioning work, and companies doing custom boat building.

*Curriculum Requirements**

[for associate degree, diploma, and certificate programs in accordance with 1 D SBCCC 400.10]

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**

**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-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.

Boat Manufacture and Service (Diploma) D60330

	AAS	Diploma	Certificate
Minimum Major Hours Required	**49 SHC**	**30 SHC**	**12 SHC**
A. CORE		**25-26 SHC**	
Required Courses. Select a minimum of 12 hours:			
BMS 110 Intro to Marine Woodwork 3 SHC			
BMS 111 Marine Joinery 3 SHC			
BMS 112 Marine Blueprints/Lofting 4 SHC			
BMS 113 Hull & Deck Construction 5 SHC			
BTB 110 Fiberglass Boat Bldg I 5 SHC			
BTB 111 Fiberglass Boat Bldg II 5 SHC			
BTB 112 Fiberglass Boat Repairs 3 SHC			
Required Subject Area. Select a minimum of one subject area:			
Composite Boat Manufacturing. Select a minimum of 13 SHC:			
BMS 114 Intro to Composites 3 SHC			
BMS 115 Tooling/Mold Construction 5 SHC			
BMS 116 Composite Production 5 SHC			
BMS 117 Marine Spray Finishing 2 SHC			
Marine Services. Select a minimum of 12 SHC:			
BTB 106 Engine Install/Systems 5 SHC			
BTB 107 Boat Electrical Systems 5 SHC			
BTB 108 Boat Plumbing Systems 4 SHC			
MRN 121 Marine Engines 4 SHC			
MRN 147 Marine Power Trains 4 SHC			
TRN 120 Basic Transp Electrical Sys 5 SHC			
B. CONCENTRATION *(Not applicable)*			
C. OTHER MAJOR HOURS *To be selected from the following prefixes* ATR, BMS, BTB, BUS, CIS, DDF, DFT, ELN, FBG, HET, ISC, MPS, MRN , TRN 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.*			

Approved by the State Board of Community Colleges on July 20, 2007; SBCC Revised 09/21/07; Corrected 10/22/07; SBCC Template Revised 10/17/08; SBCC Revised 10/16/09; Editorial Revision 12/19/12; CRC Revised 11/07/13; Editorial Revision 03/23/15; CCRC Revised--Electronic Only (RISE Initiative) 10/24/19; Revised 4/5/20.