



**NORTH CAROLINA COMMUNITY COLLEGE SYSTEM**

*Ms. Jennifer Haygood*

*Acting President*

April 23, 2018

**MEMORANDUM**

TO: Presidents  
Chief Academic Officers

FROM: Wesley E. Beddard, Associate Vice President  
Programs

SUBJECT: State Board Action on April 20, 2018  
AFA Uniform Articulation Agreements  
New and Revised Curriculum Standards

On April 20, 2018, the State Board of Community Colleges approved the following new Associate in Fine Arts (AFA) Uniform Articulation Agreements:

*Uniform Articulation Agreement between the University of NC Baccalaureate of Music Programs and the NC Community College System AFA in Music Programs*

*Uniform Articulation Agreement between the University of NC Baccalaureate of Arts Programs and the NC Community College System AFA in Theatre Arts Programs*

The AFA in Music agreement is pending UNC Board of Governors action. As soon as it is approved, it will be placed alongside the other AFA agreements on the Academic Programs website at:

<http://www.nccommunitycolleges.edu/academic-programs-college-transferarticulation-agreements>

The AFA in Music agreement is accompanied by an approved revision to the following attached curriculum standard:

**Associate in Fine Arts in Music (A10700)**

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

<http://www.nccommunitycolleges.edu/academic-programs>

Please be aware that you must implement the revised curriculum standard no later than one year after the effective term. You must update your college's electronic program of study and receive approval from the System Office prior to implementation of the revised program.

Page 2  
Presidents  
Chief Academic Officers  
April 23, 2018

In addition, the State Board of Community Colleges approved the following new curriculum standard:

**Anesthesia Technology (A45330)**

A Tier 1A funding classification for the new Anesthesia Technology curriculum course prefix (ATC) has been approved. A copy of the new Anesthesia Technology curriculum standard and courses are attached.

If you have any questions concerning the April State Board action items listed above, please contact Ms. Jennifer Frazelle at 919.807.7120 or [frazellej@nccommunitycolleges.edu](mailto:frazellej@nccommunitycolleges.edu).

WB/JF/gr

Attachments

c: Dr. Lisa M. Chapman  
Ms. Jennifer Frazelle  
Ms. Elizabeth Self  
Program Coordinators

CC18-014  
Email

**Outline of Curriculum Standard Revision  
State Board of Community Colleges  
April 20, 2018**

**Associate in Fine Arts in Music (A10700)**

**Revision:**

- Added the following courses as requirements:
  - *MUS 125 Aural Skills I*
  - *MUS 126 Aural Skills II*

**Associate in Fine Arts in Music (A10700)  
Curriculum Standard**

The Associate in Fine Arts in Music degree shall be granted for a planned program of study consisting of a minimum of 60-61 semester hours of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic computer use.

**UNIVERSAL GENERAL EDUCATION TRANSFER COMPONENT (22-23 hours)**

*(All Universal General Education Transfer Component courses will transfer for equivalency credit.)*

**English Composition (6 SHC)**

ENG	111	Writing & Inquiry	(3 SHC)
ENG	112	Writing/Research in the Disciplines	(3 SHC)

**Communications and Humanities/Fine Arts: (3 SHC)**

*Select one course from the following disciplines:*

ART	111	Art Appreciation	(3 SHC)
ART	114	Art History Survey I	(3 SHC)
ART	115	Art History Survey II	(3 SHC)
COM	231	Public Speaking	(3 SHC)
ENG	231	American Literature I	(3 SHC)
ENG	232	American Literature II	(3 SHC)
ENG	241	British Literature I	(3 SHC)
ENG	242	British Literature II	(3 SHC)
MUS	110	Music Appreciation	(3 SHC)
MUS	112	Introduction to Jazz	(3 SHC)
PHI	215	Philosophical Issues	(3 SHC)
PHI	240	Introduction to Ethics	(3 SHC)

**Social/Behavioral Sciences (6 SHC)**

*Select two courses from two different disciplines:*

ECO	251	Principles of Microeconomics	(3 SHC)
ECO	252	Principles of Microeconomics	(3 SHC)
HIS	111	World Civilizations I	(3 SHC)
HIS	112	World Civilizations II	(3 SHC)
HIS	131	American History I	(3 SHC)
HIS	132	American History II	(3 SHC)
POL	120	American Government	(3 SHC)
PSY	150	General Psychology	(3 SHC)
SOC	210	Introduction to Sociology	(3 SHC)

**Math (3-4 SHC)**

*Select one course from the following:*

MAT	143	Quantitative Literacy	(3 SHC)
MAT	171	Pre-calculus Algebra	(4 SHC)

**Natural Sciences (4 SHC)** *Select 4 SHC from the following:*

AST	111	Descriptive Astronomy	(3 SHC)	and
AST	111A	Descriptive Astronomy Lab	(1 SHC)	
AST	151	General Astronomy I	(3 SHC)	and
AST	151A	General Astronomy I Lab	(1 SHC)	
BIO	110	Principles of Biology	(4 SHC)	
BIO	111	General Biology I	(4 SHC)	
CHM	151	General Chemistry I	(4 SHC)	
GEL	111	Geology	(4 SHC)	
PHY	110	Conceptual Physics	(3 SHC)	and
PHY	110A	Conceptual Physics Lab	(1 SHC)	

**ADDITIONAL GENERAL EDUCATION HOURS: (3 SHC)** Select one course from the following discipline areas: *All courses listed below are classified as UGETC with the exception of foreign language.*

ART	111	Art Appreciation	(3 SHC)
ART	114	Art History Survey I	(3 SHC)
ART	115	Art History Survey II	(3 SHC)
COM	231	Public Speaking	(3 SHC)
ENG	231	American Literature I	(3 SHC)
ENG	232	American Literature II	(3 SHC)
ENG	241	British Literature I	(3 SHC)
ENG	242	British Literature II	(3 SHC)
MUS	110	Music Appreciation	(3 SHC)
MUS	112	Introduction to Jazz	(3 SHC)
PHI	215	Philosophical Issues	(3 SHC)
PHI	240	Introduction to Ethics	(3 SHC)

Any foreign language course classified as general education/humanities on the Comprehensive Articulation transfer course list.

**OTHER REQUIRED HOURS (34-36 SHC)**

**Academic Transition:** *The following course is required (1 SHC):*

ACA	122	College Transfer Success	(1 SHC)
-----	-----	--------------------------	---------

**Music Theory:** *The following courses are required (8 SHC):*

MUS	121	Music Theory I	(3 SHC)
MUS	122	Music Theory II	(3 SHC)
MUS	125	Aural Skills I	(1 SHC)
MUS	126	Aural Skills II	(1 SHC)

**Applied Music:** *The following courses are required (4 SHC):*

MUS	161	Applied Music I	(2 SHC)
MUS	162	Applied Music II	(2 SHC)

**Class Music:** *The following courses are required (2 SHC):*

MUS 151	Class Music I	(1 SHC)
MUS 152	Class Music II	(1 SHC)

**Ensemble:** (2-4 SHC) *Select 2-4 SHC from the following courses:*

MUS 131	Chorus	(1 SHC)	MUS 132	Chorus II	(1 SHC)
MUS 231	Chorus III	(1 SHC)	MUS 232	Chorus IV	(1 SHC)
MUS 133	Band I	(1 SHC)	MUS 134	Band II	(1 SHC)
MUS 233	Band III	(1 SHC)	MUS 234	Band IV	(1 SHC)
MUS 135	Jazz Ensemble I	(1 SHC)	MUS 136	Jazz Ensemble II	(1 SHC)
MUS 235	Jazz Ensemble III	(1 SHC)	MUS 236	Jazz Ensemble IV	(1 SHC)
MUS 137	Orchestra I	(1 SHC)	MUS 138	Orchestra II	(1 SHC)
MUS 237	Orchestra III	(1 SHC)	MUS 238	Orchestra IV	(1 SHC)
MUS 173	Opera Production I	(1 SHC)	MUS 174	Opera Production II	(1 SHC)
MUS 273	Opera Production III	(1 SHC)	MUS 274	Opera Production IV	(1 SHC)
MUS 141	Ensemble I	(1 SHC)	MUS 142	Ensemble II	(1 SHC)
MUS 241	Ensemble III	(1 SHC)	MUS 242	Ensemble IV	(1 SHC)
MUS 181	Show Choir	(4 SHC)	MUS 253	Big Band	(1 SHC)

**An additional 15-19 SHC** (Depending on selection of math and ensemble courses) of courses should be selected from the courses classified as pre-major, elective, general education, or UGETC within the Comprehensive Articulation Agreement to total 60-61 semester hour credits. Students should select these courses based on their intended major and transfer institution.

**Total Semester Hours Credit (SHC) in Program: 60-61\***

*\*One semester hour of credit may be included in a 61 SHC Associate in Fine Arts in Music program of study. The transfer of this hour is not guaranteed.*

# CURRICULUM STANDARD

Effective Term  
Fall 2018  
[2018\*03]

Curriculum Program Title	<b>Anesthesia Technology</b>	Program Code	<b>A45330</b>
Concentration	<b>(not applicable)</b>	CIP Code	<b>51.0809</b>

## Curriculum Description

The Anesthesia Technology program prepares students to work as a vital member of the Anesthesia Care Team. The anesthesia technologist provides safe care at the direction of the anesthesia provider in the care of patients undergoing anesthesia.

Students will become proficient in fundamentals and advanced skills in the acquisition, preparation, and application of various types of equipment required for the delivery of anesthesia care.

Graduates are eligible to complete the Certified Anesthesia Technologists credentialing process through the American Society of Anesthesia Technologists and Technicians (ASATT). Employment opportunities are available in hospitals, surgical centers, imaging, emergency departments, dental suites, and ambulatory care centers.

## Curriculum Requirements\*

*[for associate degree, diploma, and certificate programs in accordance with 1D 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.

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

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

## Major Hours

- 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 of 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.

### Anesthesia Technology (A45330)

	AAS	Diploma	Certificate
<b>Minimum Major Hours Required</b>	<b>49 SHC</b>	<b>30 SHC</b>	<b>12 SHC</b>
<b>A. CORE</b> (Courses required for the diploma are designated with *)	<b>39 SHC</b>		
<b>Required Courses:</b>			
ATC 110 Intro to Anesthesia Technology 3 SHC			
ATC 112 Anesthesia Pharmacology 3 SHC			
ATC 115 The Anesthesia Machine 4 SHC			
ATC 125 Special Practice Lab 1 SHC			
ATC 210 Anesthesia Monitoring Equip 5 SHC			
ATC 215 Anesthesia Airway Equipment 5 SHC			
ATC 280 ATC Professional Practice 3 SHC			
<b>Clinical Education</b>			
ATC 150 ATC Clinical Practice I 3 SHC			
ATC 155 ATC Clinical Practice II 4 SHC			
ATC 240 ATC Clinical Practice III 4 SHC			
ATC 245 245 ATC Clinical Practice IV 4 SHC			
<b>B. CONCENTRATION</b> (if applicable)			
<b>C. OTHER MAJOR HOURS</b> To be selected from the following prefixes:  ATC, BIO, CHM, CIS, HIT, MED, and PHM  Up to two semester hour credits may be selected from ACA.  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.			



## **Anesthesia Technology Courses**

### **ATC 110 Intro to Anesthesia Technology**

Class: 3      Lab: 0      Clinical: 0      Credit: 3

Prerequisites:    None

Corequisites:    None

This course introduces the different roles in the Anesthesia Care Team, specifically the scope of practice and specific duties of the Anesthesia Technologist. Topics include: role of the Anesthesia Technologist, scope of practice, standards of patient care, introduction to basic equipment and monitors, and types of anesthesia. Upon completion, students should be able to describe the roles and functions of the members of the anesthesia care team and have a basic knowledge of anesthesia and its associated equipment.

### **ATC 112 Anesthesia Pharmacology**

Class: 3      Lab: 0      Clinical: 0      Credit: 3

Prerequisites:    None

Corequisites:    None

This course introduces anesthesia pharmacology, the drugs used for the induction and maintenance of anesthesia, and the drugs used for cardiovascular support. Topics include: inhalation agents, intravenous therapy, pharmacology, emergency medications, Basic and Advanced Life Support training. Upon completion, students should be able to have a basic knowledge of the common medications used in the anesthesia environment as well as their administration.

### **ATC 115 The Anesthesia Machine**

Class: 3      Lab: 3      Clinical: 0      Credit: 4

Prerequisites:    None

Corequisites:    None

This course introduces didactic and lab training on the components, function, setup, turn-over, and basic maintenance of the anesthesia machine. Emphasis is placed on individual components of the vaporizer, ventilator, and circuits of the anesthesia machine, this includes proper cleaning, setup and turn-over, as well as, basic trouble-shooting and maintenance. Upon completion, students should be able to have a thorough understanding of the components and function of the anesthesia machine and be able to perform a check-out, turn-over, cleaning and basic maintenance.

### **ATC 125 Special Practice Lab**

Class: 0      Lab: 3      Clinical: 0      Credit: 1

Prerequisites:    ATC 110 and ATC 115

Corequisites:    None

This course provides additional learning opportunities in anesthesia care. Emphasis is placed on equipment management and anesthesia care procedures. Upon completion, students should be able to demonstrate competence in concepts and procedures through laboratory evaluations.

### **ATC 150 ATC Clinical Practice I**

Class: 0      Lab: 0      Clinical: 9      Credit: 3

Prerequisites:    ATC 110, ATC 112, ATC 115 and ATC 210

Corequisites:    None

This course provides entry-level clinical experience. Emphasis is placed on basic anesthesia care in efficient ambulatory surgery anesthesia and similar settings. Upon completion, students should be able to provide anesthesia support and demonstrate clinical competence in required performance evaluations.

### **ATC 155 ATC Clinical Practice II**

Class: 0      Lab: 0      Clinical: 12      Credit: 4

Prerequisites:    ATC 110, ATC 112, ATC 115, ATC 150, and ATC 210

Corequisites:    None

This course provides entry-level clinical experience for anesthesia technologists in the high-acuity inpatient surgical setting on a large variety of surgical cases. Emphasis is placed on more complex anesthesia in a variety of surgical cases in a large hospital setting. Upon completion, students should be able to provide anesthesia support for a wide variety of surgeries in a high-acuity inpatient setting in a major hospital setting.

### **ATC 210 Anesthesia Monitoring Equip**

Class: 4      Lab: 3      Clinical: 0      Credit: 5

Prerequisites:    ATC 110

Corequisites:    ATC 115

This course covers the function and placement of non-invasive, invasive, and advanced monitoring equipment used during the administration of anesthesia. Emphasis is placed on standard monitors including blood pressure, ECG, pulse oximetry, temperature, End-Tidal CO<sub>2</sub>, neuromuscular blockade, invasive arterial and venous monitors and other specialized equipment. Upon completion, students should be able to setup and place, or assist in placement, anesthesia monitors as well as perform basic trouble-shooting and they will have basic knowledge of more advanced and complex equipment used in specialty anesthesia

### **ATC 215 Anesthesia Airway Equipment**

Class: 4      Lab: 3      Clinical 0      Credit: 5

Prerequisites:    ATC 110 and ATC 115

Corequisites:    None

This course covers the function and use of basic and advanced anesthesia airway equipment and the setup, trouble-shooting and assistance in placing endotracheal tubes. Emphasis is placed on equipment setup and processing of airway equipment including direct and indirect laryngoscopy, supraglottic airways, and fiberoptic endoscopes. Upon completion, students should be able to setup and assist with placing airways in a variety of situations and be able to assist the anesthesia care team in a case of a difficult airway.

### **ATC 240 ATC Clinical Practice III**

Class: 0      Lab: 0      Clinical 12      Credit: 4

Prerequisites:    ATC 150 and ATC 155

Corequisites:    None

This course provides advanced practitioner clinical experience for anesthesia technologists in the complex environment of neurosurgical and cardiac anesthesia. Emphasis is placed on complex anesthetics on neurosurgical and cardiac surgery patients. Upon completion, students should be able to provide anesthesia support for neurosurgical and cardiac anesthetics including setup and trouble-shooting of advanced monitoring equipment.

### **ATC 245 ATC Clinical Practice IV**

Class: 0      Lab: 0      Clinical 12      Credit: 4

Prerequisites:    ATC 150 and ATC 155

Corequisites:    None

This course provides advanced practitioner clinical experience for anesthesia technologists in the highly variable environment of outside and remote locations, and subspecialty anesthesia such as obstetrics, pediatrics, and regional anesthesia. Emphasis is placed on anesthetics not performed in the typical operating room location, including: obstetrics, pediatrics, remote locations, and regional anesthesia. Upon completion, students should be able to provide anesthesia support at remote and varied locations as well as for pediatric, obstetric, ad regional anesthesia.

### **ATC 280 ATC Professional Practice**

Class: 3      Lab: 0      Clinical 0      Credit: 3

Prerequisites:    ATC 150 and ATC 155

Corequisites:    None

This course includes a comprehensive overview of anesthesia technologist concepts and essential professional skills. Topics include healthcare law, professional ethics, career transition, professional and employability skills, and preparation for the certification examination. Upon completion, students should be able to demonstrate a comprehensive knowledge required for the anesthesia technologist to obtain employment and sit for the Certified Anesthesia Technologist examination.