

**North Carolina High School to Postsecondary Articulation Agreement
Between the
North Carolina Department of Public Instruction (DPI)
and the
North Carolina Community College System (NCCCS)**

NORTH CAROLINA COLLEGE TECH PREP

I. Definition

Articulation is a systematic, seamless student transition process from secondary to postsecondary education that maximizes use of resources and minimizes duplication.

II. Goal

Students will make a seamless transition of identified courses from secondary to postsecondary education.

III. Guiding Principles

- A. The statewide articulation agreement will build on existing College Tech Prep courses of study.
- B. In selection of courses for articulation, first priority will be the North Carolina Department of Public Instruction standard courses of study.
- C. Local articulation efforts and local flexibility in responding to new and emerging areas are encouraged. This agreement shall not supersede local articulation agreements based upon national skill standards, external program certification, or accreditation requirements.
- D. The curriculum alignment committees will consist of five experienced community college teachers, five experienced high school teachers, one community college program curriculum specialist, and one public school curriculum specialist. The number of participants may be modified under special considerations. Criteria to award college credit for identified high school courses must be simple and uniform for all career technical areas.
- E. The state offices of NCDPI and NCCCS will monitor the number of articulated students, their progression rate, and their progress toward graduation, employment and/or transfer to postsecondary institutions.
- F. For credit to be awarded in any individual course, all criteria of the Commission on College, Southern Association of College and Schools (SACS) must be met.
- G. Guidelines will be monitored on an as needed basis.

IV. Components

A. Identification and alignment of courses to be articulated in the future

The curriculum alignment committees will use the following procedures to identify courses for articulation:

1. Review high school and community college course descriptions.
2. Review high school course blueprints and community college course outlines to compare competencies.
3. Review existing local articulation agreements.
4. Determine if articulation is course to course, courses to course, courses to courses, or course to courses, and if competencies are similar.
5. Follow policies and regulations of licensing/accrediting bodies.

B. Criteria to award college credit

1. The following criteria will be used to award college credit for identified high school courses:
 - a. Grade of B* or higher in the course, and;
 - b. A raw score of 80* or higher on the standardized VoCATS post-assessment.
2. To receive articulated credit, students must enroll at the community college within two years of their high school graduation date.

C. Process to document credit

1. The official high school transcript and all official standardized VoCATS post-assessment scores will be required to verify that the criteria to award credit for articulated course work has been met. Where indicated, students will submit supporting documentation to the community college.
2. Community college officials will have the responsibility for verifying eligibility and acceptance of the articulated course or courses on the high school transcript for college credit.
3. A technical committee will be appointed to determine how articulated courses and corresponding VoCATS scores will be reflected on the high school electronic transcript in order to make the high school-to-community college transition more efficient. This committee will be comprised of NCDPI and NCCCS information system personnel and representatives from local schools and colleges.

D. Process of Evaluation

1. The following elements will be considered in the evaluation:
 - a. Evaluate the criteria for awarding credit (Grade of B* or higher in the course and a raw score of 80* or higher on the standardized VoCATS post-assessment) to ensure student success in the subsequent course(s) at the community college.
 - b. Evaluate the process to document credit from high school to the community college.
 - c. Review the Recommended Course List for course additions and deletions to insure the Recommended Course List reflects current curricula.
 - d. Measure use of the NC High School-to-Postsecondary Articulation Agreement to include the number of students receiving articulation credit, number of articulated credits earned, cost savings to students, and graduation rates of College Tech Prep students.
2. A technical committee will be appointed to determine how the above data elements may be collected annually utilizing the NCDPI and NCCCS information management systems. This committee will be comprised of NCDPI and NCCCS staff and information systems personnel.

Matrix of Evaluation Elements

Evaluation Element	Responsible Party	Method for Evaluation	Time Element
Evaluate the criteria for awarding credit to ensure student success in the subsequent course(s) at the community college	NCDPI & NCCCS Staff	Computer assessment and survey to review success rate of students in classes subsequent to articulated classes.	Annually
Evaluate the process to document credit from high school to the community college	NCDPI and NCCCS Staff	Survey of college registrars, counselors, admissions officers, high school counselors, and SIMS operators	Every 3 years
Review of the Recommended Course List for course additions and deletions to insure the Recommended Course List reflect current curricula	NCDPI and NCCCS Staff	Administrative Review Curriculum Alignment Committee Meetings (as needed/requested)	Annually As requested
Measure use of the <i>NC High School to Postsecondary Articulation Agreement</i> to include the number of students earning articulation credit, number of students awarded articulation credit, cost savings to students, and graduation rates of College Tech Prep students	Community College Information Systems Personnel Associate Director for Tech Prep NCCCS	Computer Assessment Survey	Annually

Procedure for the curriculum work teams:

- Curriculum Work Teams will meet one day.
- Curriculum Work Teams will have 12 members. The number may be modified if warranted by special considerations.
- All team members will receive uniform charge/instructions.
- Breakout sessions to compare competencies/content.
- Recommendations submitted.
- All recommendations compiled and distributed electronically for review and comments.
- Responses consolidated. State staff responsible for incorporating any needed revisions. Referred as needed to teams for additional considerations.
- Final Draft developed and submitted to Leadership Steering Committee for final review and action.

Procedure for obtaining endorsement:

- Drafts distributed to community colleges and public school systems for input.
- DPI & CC staff provide periodic updates to Boards.
- Presidents and Superintendents informed.
- Drafts for review and comments distributed to Community Colleges, LEAs, Superintendents, Presidents, Presidents Association, Academic Deans, and members of the curriculum review teams. (It is SUGGESTED that the President and Superintendents with the respective academic officers review and discuss the Agreement Draft together.)
- Working draft for review at the March 2004 College Tech Prep Conference.
- Records kept of people involved, numbers involved, and the input provided from the various stakeholders.
- Drafts published and final document on the web.

Agriculture Mechanics/Equipment Operations

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
6831	Agricultural Mechanics I	MNT 110	Intro to Maintenance Procedures
6832	Agricultural Mechanics II	WLD 112	Basic Welding Processes

Animal Science

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
6821 and 6822	Animal Science I Animal Science II	ANS 110	Animal Science

Automotive Service Technology

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
7511 and 7512	Automotive Service Technology I And Automotive Service Technology II	AUT 110 and AUT 111 and AUT 161*	Intro to Auto Technology Basic Auto Technology Electrical Systems
7512 and 7513	Automotive Service Technology II Automotive Service Technology III	AUT 151*	Brake Systems
<p><i>For articulated credit the student must verify skills by submitting to the automotive department chair Vehicle Inspecting Certificate for AUT 110 Credit NATEF Brakes Task List signed by High School Instructor for AUT 151Credit NATEF Electrical Task List signed by High School Instructor for AUT 161Credit</i></p>			

Business Management/Business Administration

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
6200 or 6600	Principles of Business (Business) Personal Finance (Marketing)	BUS 125	Personal Finance
6535	Business & Electronic Communications	BUS 260	Business Communications (Eng. 111 prerequisite)
6235 or 6615	Small Business Entrepreneurship (Business) Small Business Entrepreneurship (Marketing)	BUS 230	Small Business Management

Collision Repair

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
7521 and 7522	Collision Repair Technology I Collision Repair Technology II	AUB 121	Non-Structural Damage I

Construction Technology

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
7721 and 7722	Construction Technology I Construction Technology II	CAR 110	Introduction to Carpentry

Cosmetology

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
7811	Cosmetology I – (includes 450 hours of class time)	COS 111 and COS 112	Concepts I Salon I
7812	Cosmetology II - (includes 450 hours of class time)	COS 113 and COS 114	Concepts II Salon II

Culinary Technology

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
7121 and 7122	Culinary Arts I Culinary Arts II	CUL 110	Sanitation & Safety
7046	Foods II Advanced	CUL 110	Sanitation & Safety
7075	Foods II Food Science	CUL 150	Food Science
7045 and 7046	Foods I Fundamentals Foods II Advanced	CUL 112	Nutrition for Food Service

Drafting

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
7921	Drafting I (135-180 hrs)	DFT 111 and DFT 111A	Technical Drafting I and Technical Drafting I Lab
7921 and 7962	Drafting I and Drafting II Architectural	DFT 115 or DFT151 or DFT 119 or ARC 114	Architectural Drafting or CAD I or Basic CAD or Architectural CAD
7921 and 7962 and 7963	Drafting I and Drafting II Architectural and Drafting III Architectural	DFT 151 or ARC 114	CAD I or Architectural CAD
7921 and 7972	Drafting I and Drafting II Engineering	DFT 151	CAD I
7973	Drafting III Engineering	DFT 112 and DFT 112A	Technical Drafting II and Technical Drafting II Lab
* Upon acceptance to college, the student will submit a portfolio to the department head for review and consideration for articulated credit.			

Early Childhood Education

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
7111 and 7112	Early Childhood Education I Early Childhood Education II	EDU 111 and EDU 112	Early Childhood Credentials I Early Childhood Credentials II

Electrical Trades

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
7741 and 7742	Electrical Trades I Electrical Trades II	ELC 113	Basic Wiring I

Electronics

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
7631 and 7632	Electronics I Electronics II	ELC 112 and ELC 126 and EGR 131 and CET 110	DC/AC Electricity Electrical Computations Intro to Electronics Tech Intro to CET

Environmental and Natural Resources

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
6851	Environmental & Natural Resources I	ENV 110	Environmental Science
6851 and 6852	Environmental & Natural Resources I Environmental & Natural Resources II	ENV 228 and ENV 220	Environmental Issues Applied Ecology
6851	Environmental & Natural Resources I	ENV 110	Environmental Science

Furniture and Cabinetmaking

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
7621 and 7622	Furniture & Cabinetmaking I	CAB 111	Cabinetmaking I
	Furniture & Cabinetmaking II		

Graphics

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
7911	Graphics I	GRA 110	Graphic Arts Orientation
7911 and 7912	Graphics I	GRA 110 and GRA 121 and GRA 151	Graphic Arts Orientation
	Graphics II		Graphic Arts I
			Computer Graphics I

Health Care / Health Sciences

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
7221 or 7211	Medical Sciences I	MED 110 and MED 112	Orientation to Med Assist
	Allied Health Sciences I		Orientation to Clinic Setting I
7222 or 7212	Medical Sciences II	MED 121 and MED 122	Medical Terminology I
	Allied Health Sciences II		Medical Terminology II
Student may take Medical Sciences I and II or Allied Health Sciences I and II or a combination of I and II to receive credit for Med 110, Med112, Med 121, and Med 122.			

Horticulture

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
6841 and 6842	Horticulture I Horticulture II	HOR 150	Introduction to Horticulture
6841 and 6882	Horticulture I Horticulture II-Landscape Construction	LSG 111	Landscape Gardening

Information Technology

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
7981 (Cisco)	Cisco - Network Engineering II	NET 125 and NET 126	Routing & Switching I Routing & Switching II
7982 (Cisco)	Cisco - Network Engineering III	NET 225 and NET 226	Advanced Router & Switching I Advanced Router & Switching II
6340 or 6411	Foundations of Information Technology Computer Applications I	CIS 111/CTS 111 or CIS 113/CTS 113	Basic PC Literacy Computer Basics
6412	Computer Applications II	CIS 165/OST 233 or CIS 172/WEB 110 or CIS 169/CTS125	Desktop Publishing I Intro to the Internet Business Presentation
6415	e-Commerce I	CIS 172/WEB 110	Intro to the Internet
7991	Computer Engineering I	CTS 120	Hardware/Software Support
7992	Computer Engineering II	CTS 220	Advanced Hardware/Software Support
BE6341 or 7980	Networking I	NET 110	Networking Concepts
6416	e-Commerce II	ITN 160/WEB 210	Web Design

Note: For articulated credit in the Networking area, students can receive a raw score of 80% or level 3 in VoCATS to get articulated credit.

Marketing

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
6621 and 6622	Marketing Marketing Management	MKT 120	Principles of Marketing
6626	Strategic Marketing	MKT 120	Principles of Marketing

Metals Manufacturing

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
7641 and 7642	Metals Manufacturing Technology I Metals Manufacturing Technology II	BPR 111 and MAC 111 and MAC 151	Blueprint Reading Machining Technology I Machining Calculations

Office and Information Systems

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
6411	Computer Applications I	CIS 111 and CIS 113 and OST 136	Basic PC Literacy Computer Basics Word Processing
6412	Computer Applications II	OST 137 and CIS 169 and CIS 172	Office Software Applications Business Presentations Intro to the Internet
6311	Computerized Accounting I	ACC 111 or ACC 115 Or ACC 118	Financial Accounting College Accounting Accounting Fundamentals I
6312	Computerized Accounting II	ACC 119	Accounting Fundamentals II

Welding

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
7661	Welding Technology I Includes satisfactory completion of Wheels of Learning modules: 29101 Oxyfuel Cutting 20102 Air Carbon ARC Cutting & Gouging 29103 Plasma ARC Cutting (PAC)	WLD 110	Cutting Processes
7661	Welding Technology I Includes satisfactory completion of Wheels of Learning modules: 00101-00 Basic Safety 00102-00 Basic Math 00103-00 Introduction to Hand Tools 00104-00 Introduction to Power Tools 00105-00 Introduction to Blueprints 00106-00 Basic Rigging	WOL 110	Basic Construction Skills
7661 and 7662	Welding Technology I Welding Technology II Includes satisfactory completion of Wheels of Learning modules: 29104 Base Metal Preparation 29106 SMAW Equipment & Setup 29107 Shielded Metal ARC Electrodes & Selection 29108 SMAW Beads & Fillet Welds 29112 SMAW Groove Welds & Backing 29110 Welding Symbols 29111 Reading Welding Detail Drawings	WLD 115	SMAW (Stick) Plate

7661 and 7662 and 7663	Welding Technology I Welding Technology II Welding Technology III and Satisfactory completion of Wheels of Learning and NC Construction Industry Alliance w/ NCCER: 29105 Joint Fit Up & Alignment 29109 Weld Quality 29113 SMAW Open V Butt Welds 29301 Physical Characteristics & Mechanical Properties of Metals 29201 Preheating and Postheating of Metals 29114 SMAW Open Root Pipe Welds	WLD 116	SMAW (Stick) Plate/Pipe
7662	Welding Technology II Includes satisfactory completion of Wheels of Learning modules: 29303 GMAW Plate 29302 GMAW - FCAW	WLD 121	GMAW (MIG) Plate/Pipe
2	Welding Technology III Includes satisfactory completion of Wheels of Learning modules: 29204 Welding Symbols 29206 Reading Welding Detail Drawings	WLD 141	Symbols & Specifications
7663	Welding Technology III Includes satisfactory completion of Wheels of Learning modules: 29202 GTAW Carbon Steel Pipe 19203 GTAW Low Alloy Steel Pipe	WLD 132	GTAW (TIG) Plate/Pipe
7663	Welding Technology Level III Includes satisfactory completion of Wheels of Learning modules: 29202 GTAW Equipment & Filler Metals 29203 GTAW Plate	WLD 131	GTAW (TIG) Plate
7663	Welding Technology III Includes satisfactory completion of Wheels of Learning modules: 09114 SMAW Open-Root Pipe Welds 09115 SMAW Stainless Steel Groove Welds	WLD 215	SMAW (Stick) Pipe

APPENDIX A

LEADERSHIP STEERING COMMITTEE ON ARTICULATION 2003-2004

Bill	Aiken	President	Sampson Community College
Bob	Boyce	Assistant Superintendent	Edenton-Chowan Schools
Don	Cameron	President	Guilford Technical Community College
Randy	Collier	Health Science Academy	Pitt County Schools
Edward	Croom	Assistant Superintendent	Johnston County Schools
Janyth	Fredrickson	Ex. Vice President, Ed. Programs	Alamance Community College
Emily	Freeland	Charlotte-Mecklenburg CTP Coordinator	Charlotte-Mecklenburg Schools
Gene	Hemby	Director, Tech Prep, Coop	Pitt Community College
Morris	Kornegay	Principal	Eastern Wayne High School
Sandra	McCullen	Associate Superintendent	Wayne County Public Schools
Sue	Miller	Vice President of Academic Affairs	Sampson Community College
Jeff	Moss	Superintendent	Stanley County Schools
Sheryl	Nixon	Curriculum Spec. CTP	Lincoln County Schools
Linda	Phillips	VP Academic and Student Affairs	Catawba Valley Community College
Charles	Perry	Director CTE	Union County Schools
Bill	Price	Apprenticeship, Business and Mkt.	NC Dept. of Public Instruction
Shirley	Ray	Regional Coordinator	CTE Western Region
Kay	Rogers	Forsyth Tech Prep	Winston-Salem/Forsyth Schools
Frank	Sells	President	Surry Community College
Ken	Smith	Section Chief, Business and Mkt.	NC Dept. of Public Instruction
Robert	White	Coordinator of Workforce Development	Guilford County Schools
Ken	Whitehurst	Associate Vice President, Academic and Student Services	NC Community College System
Bob	Witchger	Associate Director, Tech Prep	NC Community College System
Gayle	Kabes	President/Facilitator	Kabes and Associates, Inc.
Phillis	Ostheim	President/Facilitator	True Vine Associates, Inc.

APPENDIX B

Curriculum Review Teams determined that the following course competencies aligned. These community college courses appear on the approved *Comprehensive Articulation Agreement between the North Carolina University System and the North Carolina Community College System* and therefore are **NOT** included in this Agreement. Local community colleges and local educational units may consider these courses for inclusion on local articulation agreements.

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
6215	Business Law	BUS 115	Business Law I
6411	Computer Applications I	CIS 110	Introduction to Computers

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
6851 and 6852	Environmental & Natural Resources I	BIO 140	Environmental Biology
	Environmental & Natural Resources II	BIO 140A	Environmental Biology Lab
		ENV 228	Environmental Issues
		ENV 220	Applied Ecology

Appendix C

A Curriculum Review Team determined that the following course competencies aligned. However, due to the stipulations applied, the course was not included in the Agreement. Local community colleges and local educational units may consider these courses for inclusion on local articulation agreements.

Biotechnology

HIGH SCHOOL		COMMUNITY COLLEGE	
COURSE NUMBER	COURSE TITLE	COURSE PREFIX AND NUMBER	COURSE TITLE
6872	Biotechnology	BTC 181 or BPM 110 or PTC 110	Basic Lab Techniques Bioprocess Practices Industrial Environment
The Curriculum Review Team stipulated prerequisite of Algebra II, Physical Science, CP Chemistry and CP Biology. Demonstrated FDA protocols are to be part of the final project in 2872.			