# Institutional Articulation Agreement

## Articulation Articles of Agreement Between

## Beckman High School and Northeast Iowa Community College

## I. Statement of Purpose

The purpose of this articulation agreement is to provide a mechanism that will enable students enrolled in career and technical and/or applied academic high school courses to transfer to Northeast Iowa Community College and receive college credit for competencies achieved.

## II. Criteria for Receiving Articulated Credit at Northeast Iowa Community College:

- 1. School district has a signed course articulation agreement with Northeast Iowa Community College.
- 2. For high school students to receive articulated credit:
  - 1. An official high school transcript and a <u>Request for Articulated Credit Form</u> must be provided to the NICC Registrar.
  - 2. Students must attend NICC within 12 months of high school graduation to be eligible for articulated credit.
  - 3. Credit will be entered on a NICC transcript after the student has accumulated 12 NICC credits post high school or GED.
  - 4. Articulation Agreements for AGA117, AGS118 and AGB328 require passing an end of course assessment.
  - 5. Articulated credit is given for NICC career and technical program classes, not 4year college transfer courses.
  - 6. Articulated courses do not contribute to the student's NICC grade point average, but do satisfy specific career program requirements.

## III. Recording of Credit

Credit(s) for articulated high school courses will be recorded on the college transcript as transfer coursework with the total hours earned. The grade is not recorded and will not be used in computing the student's cumulative college or program GPA.

#### IV. Cost

There will not be a charge for college credit awarded through this agreement.

#### V. Admission to the Program

Students completing the requirements outlined in this agreement will be considered for program entrance on the same basis as any other applicant.

## VII. Termination of Agreement

This agreement will be renewed annually and is valid July 1, 2018- June 30, 2023. This agreement becomes null and void upon termination of the secondary/postsecondary program or instructor.

High School Course: Ha Metals
NICC Course: John Deere Welding AGM504

8/20/2018 o:Hsrelations/articformcoverltr

High School Instructor:_Dawn Mausser NICC Requirements: Grade of C- or better					
Approval Signatures					
Mallheelir	8/20/18				
(Signature of Superintendent or Designee)	/ Date				
Signature of High School Instructor)	<u> </u>				
Duane & Borda	10/10/2018				
(NICC Facility)	/Date/				
Shaffull (NICC Department Dean)	Date Date				
Harty C. Shilling	10/11/19				
(NICC High School Partnerships)	Date				

Completed forms and signatures should be routed to LSS Information Analyst for posting on web at www.nice.edu/hspartnerships: Articulation Agreements.

## Common Course Number & Name: Ag Metals

Scmester: Fall 2018

Classroom & class time: Room 402, 401 10:36-11:21 daily

Name: <u>Dawn Mausser</u> Phone: <u>563-875-7188</u>

Email address: <a href="mailto:dmausser@beckman.pvt.k12.ia.us">dmausser@beckman.pvt.k12.ia.us</a>

Office: Room 402
Office hours: 7:30-3:15

### Course Description:

Students will have the opportunity to use oxyacetylene and electric arc welding equipment to make different types of welds required to make repairs or fabricate items. The primary focus of this class will be on gas metal arc welding (GMAW) and welding in 1F/1G/2F/2G positions. Various techniques of welding and cutting steel will be experienced to accomplish course objectives.

## Course Goals:

The goal of this course is to develop welding skills and knowledge of welding as applied to NICC course WEL:412 Basic Gas Metal Arc Welding (GMAW).

Required Materials: Safety Glasses

## Course Outline/Objectives

- I. Introduction to Metals
  - a. Welding Careers and Safety
    - i. Welding careers research
      - 1. Written/Presentation
    - ii. Welding Safety
      - 1. Safety equipment
      - 2. First Aid
      - 3. Proper use of PPE
      - 4. Ventilation
- II. Oxy Fuel Cutting
- III. GMAW operations and equipment
  - a. GMAW equipment
    - i. Welding station components
    - ii. Power sources
    - iii. Wire feeders
    - iv. Welding guns
    - v. Maintenance and care
  - b. GMAW operations
    - i. Machine settings
    - ii. Electrode specifications
    - iii. Grounding techniques
    - iv. Metal transfer
    - v. Shielding gasses
- IV. GMAW welding in the flat position

- a. Fillet welds (1F position)
- b. Groove welds (1G position)
- V. GMAW welding in the horizontal position
  - a. Fillet welds (2F position)
  - b. Groove welds (2G position)
- VI. Weld inspection
  - a. GMAW visual inspection
  - b. Visual inspection criteria
  - c. Common discontinuities in flat and horizontal positions
- VII. GMAW destructive weld testing
  - a. Weld test joint set up
  - b. Preparing test specimens
  - c. Destructive test criteria

#### COURSE COMPETENCIES:

#### Students will be able to use proper PPE for safe operation and maintenance of equipment.

#### RV.

- 1. Demonstrating proper inspection of welding equipment
- 2. Demonstrate proper use of PPE (Personal Protective Equipment)
- 3. Identifying potential hazards and safety issues in the work area
- 4. Troubleshooting and performing routine maintenance of welding equipment

#### Students will be able to identify multiple welding career paths.

#### RV:

- 1. Researching multiple career opportunities in the welding field
- 2. Presenting career research to class of peers

#### Students will be able to use an Oxyacetylene torch to cut project steel.

#### RV.

- 1. Identifying correct oxyacetylene equipment for cutting
- 2. Identifying and selecting proper tank pressures
- 3. Implement proper equipment setup

## Students will be able to safely operate and identify parts of GMAW (Gas Mctal Arc Welding) equipment.

- 1. Answering true statements concerning welding theory.
  - a. Topics:
    - i. Gas metal arc welding positions, torch angles, techniques, and applications
    - ii. AWS electrode classifications
    - iii. Considerations for storing spools and coils of electrode wire
    - iv. GMAW vocabulary and basic terminology
    - v. Techniques for ending a weld
    - vi. Bead types
- 2. Identifying different welding gun characteristics
- 3. Identifying welding gun parts with their functions
- 4. Demonstrating proper assembly of contact tips, gas diffusers, nozzles, and insulators.
- Understanding the relationship of CTWD (Contact Tip to Work Distance) and ESO (Electrical Stickout) in GMAW applications
- 6. Explaining characteristics of a quality weld
- 7. Explaining characteristics of a bad weld
- 8. Demonstrating proper procedures for preparing mild steel for GMAW
- 9. Demonstrating proper setup of CO2 Argon shielding gas regulator

- 10. Demonstrating laying stringer beads
- 11. Demonstrating GMAW fillet and groove welds in the 1F/IG position
  - a. Joint types: Lap joint 1F, Tee joint 1F, Butt joint 1G
- 12. Demonstrating GMAW fillet and groove welds in the 2F/2G position
  - a. Joint types: Lap joint 2F, Tee joint 2F, Butt joint 2G

Methods of Assessment: Welding safety, practice welds, welding project, quizzes, and tests

Grading scale & procedures: Student will be graded on quiz, practice welds and final project

Grade Percent Points

A	95-100	B- 85-86	D+	75-76
A-	93-94	C+ 83-84	D	72-74
B+	91-92	C 79-82	D-	70-71
В	87-90	C- 77-78	$\mathbf{F}$	69 and below

Methods of delivery: Hand-outs, Powerpoint, internet web resources, hands-on practice, projects

Course calendar: August 23 - December 18

Attendance/Participation: Attendance 5 points per day, quiz, project

Academic Dishonesty: Cheating - 0 credit

Late Work/Missing Assignments: Late & missing assignments can be made up for full credit

Cell Phone/Text Messaging Use: No cell phone use

Laptop Use: Laptop for electronic handouts

Emergency Procedures: Follow school procedure for lockdown, fire or weather emergencies.

#### Behavior:

- Eye Protection: Students are required at all times when in the shop environment to wear Approved Eye Protection. The students are allowed to use any form glasses or goggles as long as they are APPROVED safety eye protection. Regular prescription glasses or sunglasses alone are not approved eye protection.
- \* Misbehavior: Signs of horseplay by students will be viewed as a danger for themselves and others in the shop. If such misbehavior arises in the shop the student may be sent to classroom and may have to make up coursework before or after school.

- Attendance Policy: We will follow the policy that is in place set forth by Beckman High School. The students are expected to be to class on time each day unless they have a written pass either from the office or another teacher.
- Participation: The student is expected to come to class every day ready and prepared to work. The student should have their safety glasses, copy of plans and pencil every day when they come to class (these items can be kept in lockers located within the shop area). If students wish, they can also put their own lock on the locker that they select. The lock is the responsibility of the student). The student is expected to participate in class discussions and demonstrations, and working within the shop areas. When working on projects or other assignments, students need to stay on task and work on project/assignments.

#### Accommodation Policy:

The Americans with Disabilities Act (ADA) provides protection from illegal discrimination for qualified students with disabilities. Northeast Iowa Community College is committed to the equal provision of education for all students. Any student who needs instructional accommodation is encouraged to contact the Coordinator of Disability Services, Peosta Campus, at \$63-566-5110 or 1-800-728-7367. set 280 or Calmar Campus, at \$63-562-3263 or 1-800-728-2256. ext. 258.

#### Statement of Non-Discrimination:

Northeast Iowa Community College prohibits discrimination in educational programs, employment, and activities on the basis of age, race, creed, color, sex, sexual orientation, gender identity, national origin, religion, disability, pregnancy or genetic information as required by the 1964 Civil Rights Act, Titles VI and VII; the 1972 Education Amendments, Title IX; the Age Discrimination in Employment Act of 1975 (ADEA); the Federal Rehabilitation Act of 1973, Section 504; the Americans with Disabilities Act (ADA) of 1990, Title II; Titles I and V; the Civil Rights Act of 1991, the Genetics Information Nondiscrimination Act of 2008 and the Iowa Code, Chapter 216. It is also the policy of this District that the curriculum content and instructional materials utilized reflect the cultural and racial diversity present in the United States and variety of careers, roles and lifestyles open to women as well as men in our society. One of the objectives of the total curriculum and teaching strategies is to reduce stereotyping and to eliminate bias on the basis of age, race, creed, color, sex, sexual orientation, gender identity, national origin, religion or disability. The curriculum should foster respect and appreciation for cultural diversity found in our country and an awareness of the rights, duties and responsibilities of each individual as a member of a pluralistic society.

Inquiries and grievances regarding compliance with applicable state and federal laws may be directed to the executive director of human resources, P.O. Box 400, Calmar, Iowa 52132, or to the Director of the Iowa Civil Rights Commission, Des Moines, Iowa, or to the Director of the Region VII Office of Civil Rights, Department of Education, Kansas City, Missouri.