

Complete List of Tech Prep Articulated Courses at ISDB 2010-2011

| HS COURSE # | HS COURSE TITLE | COLLEGE COURSE # | COLLEGE COURSE TITLE | CREDITS |
|-------------|------------------|------------------|---------------------------|---------|
| AG 0210 | Ag Welding | WELD 132 | Oxy Cut, Welding & Plasma | 2*† |
| AG 0211 | Advanced Welding | WELD 154 | Arc Welding I | 1*† |
| | | WELD 156 | MIG Welding I | 1*† |

*These courses require that students meet or surpass competency standards set by the CSI Welding instructor(s) and agreed upon by the high school Welding instructor(s), who acts as the assessor of student ability in relationship to these standards.

† High school instructors agree, as part of this articulation agreement, to enroll all participating students into the CATEMA database, and must complete an individual competency assessment of each student based on the attached competencies. The high school instructor must take the action to either approve or not approve each student in the CATEMA database based on that assessment. Students with no action taken or not entered into the database will not be awarded articulated credit. Based on the ability of the high school instructor to accurately assess abilities related to the attached competencies, the CSI Welding Department reserves the right to deny articulation with programs at any time. The CSI Welding department encourages all high school instructors to participate in a workshop that will assist in an instructor's ability to accurately assess student ability as they relate to the attached CSI Welding Department competencies. These workshops can be set up for small groups or individuals by contacting Kent Parish or Jon Hardesty at 732-6372.

REQUIRED TASK WELDS & CUTTING FOR

OXY/ACETYLENE & PLASMA

Oxy/acetylene welding and cutting

- 3 beads 3" long F
- 3" butt weld F
- 3" "T" weld F
- 3" lap weld F
- 3" corner weld F
- cut 6" pipe sections
- freehand drawn pattern / project

Brazing

- 3 beads 3" long F
- 3" butt weld F
- 3" "T" weld F
- 3" lap weld F
- 3" corner weld F

Plasma

- freehand drawn pattern / project

All welds and cuts are visually inspected by the instructor for heat control and cosmetics to insure the students are performing them correctly. Torch or plasma projects are encouraged for our yearly auction and it is good practice for the students.

Finals consist of performing a lap and "T" welds with oxy/acetylene and brazing. Torch and plasma test are done freehand to a predetermined pattern. Students are allowed one attempt at each for their grade.

F - Flat

Thank you,
CSI Welding Technology

REQUIRED TASK WELDS FOR ARC 1

The student should be familiar with how to set up his/her welder and understand and the differences in the polarities. The student should know what heats work the best for them with different rods and have a good understanding of how arc gap effects their weld. They should also know what the numbers on the rod mean and what applications they are best suited for.

We would like to see them familiar with 6010, 6011, 7018, and 7024 rods but understand some budgets and facilities may not allow for all of them. The two most common (6010 and 7018) are required.

The required welds for both rods will be:

- 4" x 6" pad welds - flat
- 6" "T" welds - flat
- 6" lap welds - flat
- 6" butt welds - flat

If the other rods are available we would like to see them run the same welds with them too so they are familiar with how they behave and what heats work the best for them.

After seeing some of the curriculums for your classes these welds should fit in without much problem. Cosmetics count with you as well as they do here so that should not be a problem ether.

We look forward to working with you in any way we can to help with this. The foundation you are giving the students makes their transition to the college much easier for them and gives us a good start with them.

Thank you,
CSI Welding Technology

REQUIRED TASK WELDS FOR MIG 1

The student should know how to set up their welder and understand how the heat and wire speed need to be balanced to obtain a good weld. They should be familiar with what gases are used and required metal preparation. As the ER 70S wire is the most common it is the one required for the tasks listed below.

- 4"x 6" pad weld - flat
- 6" "T" weld – flat
- 6" lap weld – flat
- 6" butt weld – flat

If you have access to other wires such as flux core or dual shield we would like to see the same tasks done with them. It gives them a better familiarity with how to set their welder up and good experience for when they come to the college as we run both of them here.

After seeing some of the curriculums for your classes these welds should fit in without much problem. Cosmetics count with you as well as they do here so that should not be a problem either.

We look forward to working with you in any way we can to help with these requirements. The foundation you are giving the students makes their transition to the college much easier for them and gives us a good start with them.

Thank you,
CSI Welding Technology