

Agriculture Construction I

AGRI-2303

Fall 2020 Section 001 CRN-10984 3 Credits 08/24/2020 to 12/10/2020 Modified 08/18/2020

Meeting Times

Lecture/Lab

Tuesday, Thursday, 10:00 AM to 11:50 AM, Rankin Ag Shop 120

Contact Information

Instructor: Ben Burroughs

Email: ben.burroughs@blinn.edu

Office: Rankin Ag Shop

Phone: 979-830-4266

Office Hours

RACS 104

Office hours are virtual. You must schedule an appointment with me through email.

Description

Safety procedures, selection, use, and maintenance of hand and power tools; metal cutting and welding; and construction materials and principles.

Requisites

Prerequisites:

Corequisites:

Core Curriculum Statement

This course is not a core curriculum course.

Outcomes

1. Demonstrate proper safety procedures in an agricultural construction laboratory.
2. Determine the proper usage of common hand and power tools.

3. Demonstrate principles of project layout (e.g. measurements, squaring, leveling).
4. Demonstrate proper use of metal cutting and welding equipment.
5. Apply basic wiring and plumbing techniques.
6. Illustrate the principles of surveying and concrete layout.

Materials

Text: Identifying Lumber and Computing Bill of Materials 2003 Estimating Materials Needed For Concrete 2004 Electrical Wiring 2002 Safely Using Power Tools 1999 Selection of Wood and Other Building Materials 2005 all of the above materials are from Instructional Material Services

ICEV Online

Course Requirements

1. The student will prepare a bill of materials for a selected woodworking project. The bill of materials will be 90% accurate and will be completed before construction is begun on the semester project.
2. The student will demonstrate power tool safety and correctly pass a tool safety test with 90% accuracy.
3. The student will construct a power tool test project (the thing) to 1/16" accuracy
4. The student will demonstrate electrical wiring circuits on the electrical test panel to 1/16" accuracy.
5. The student will draw a complete set of plans for the semester wood construction project and the plans must match the constructed project to 1/16" per foot.

Evaluation

Breakdown

Classroom tests	400 points
Semester project/ Lab Exercises	100 Points
Drawings/ Drafting/BOM	300 points
Lab Proficiency Quizzes	250 points (hands on quizzes for wood and metal)

A= 900-1000

B= 800-899

C= 700-799

D= 600-699

F= <599

Blinn College Policies

All policies, guidelines, and procedures in the [Blinn College Catalog \(http://catalog.blinn.edu/\)](http://catalog.blinn.edu/), [Blinn College Board Policies \(http://pol.tasb.org/Home/Index/1204\)](http://pol.tasb.org/Home/Index/1204), and the [Blinn College Administrative Regulations \(https://www.blinn.edu/administrative-regulations/\)](https://www.blinn.edu/administrative-regulations/) are applicable to this course.

[Specific information on civility, attendance, add/drop, scholastic integrity, students with disabilities, final grade appeal, alternative retailers, campus carry and proctoring arrangements and cost. \(http://www.blinn.edu/syllabus-policies/\)](http://www.blinn.edu/syllabus-policies/)

Notice of any action taken under these protocol and procedures, by Blinn College or its employees, may be delivered by hand, through

the U.S. Postal Service, or electronically to the student's Blinn Buc e-mail account. Notice shall be deemed received upon actual receipt, on deposit in the U.S. Mail, or upon entering the information processing system used by Blinn College for Blinn Buc e-mail accounts, whichever first occurs.

Information about the changes Blinn has made to the Fall semester: [Back with Blinn \(https://www.blinn.edu/back-with-blinn/index.html\)](https://www.blinn.edu/back-with-blinn/index.html).

* Course Policies

Please read: [Fall 2020 General Course Policies. \(http://www.blinn.edu/back-with-blinn/course-policies.html\)](http://www.blinn.edu/back-with-blinn/course-policies.html)

📅 Schedule

Week			Meeting Details	Meeting Contact Hours	Weekly Contact Hours
1	T	8/25/2020	Class orientation and online login	1.5	3
	R	8/27/2020	Shop safety, Measuring Tape, and safety quiz	1.5	
	T	9/1/2020	Oxy -Fuel Safety and lighting quiz	1.5	3
	R	9/3/2020	Oxy Fuel Cutting quiz and station assignment	1.5	
3	T	9/8/2020	Intro to SMAW and practice	1.5	3
	W	9/9/2020	Day of Record		
	R	9/10/2020	Welding with Alternating Current (6011)	1.5	
4	T	9/15/2020	Welding with Direct Current (6010)	1.5	3
	R	9/17/2020	Welding with Direct Current (7018)	1.5	
5	T	9/22/2020	Exam over SMAW (AC & DC)	1.5	3
	R	9/24/2020	Intro to GMAW welding (MIG) and gases used	1.5	
6	T	9/29/2020	Quiz over parts of GMAW Machine and setup following chart	1.5	3
	R	10/1/2020	GMAW welding Flat and Vertical	1.5	
7	T	10/6/2020	GMAW welding Flat and Vertical	1.5	3
	R	10/8/2020	Exam over GMAW Flat push and pull	1.5	
8	T	10/13/2020	Quiz over GMAW Vertical Up and Down	1.5	3

		10/15/2020		Intro to Spool Gun maint and setup	1.5	
9	T	10/20/2020		GMAW Spool Gun welding (Al) and FCAW	1.5	3
	R	10/22/2020		Quiz over Spool Gun (Al) and FCAW welding	1.5	
	T	10/27/2020		Introduction to Wood Shop and safety	1.5	3
	R	10/29/2020		Types of Wood	1.5	
11	T	11/3/2020		Fastners and glues	1.5	3
	R	11/5/2020		Machine safety and proper use	1.5	
12	T	11/10/2020		Drafting and Bill of Materials	1.5	3
	R	11/12/2020		Drafting and Bill of Materials	1.5	
13	T	11/17/2020		Drafting and Bill of Materials	1.5	3
	R	11/19/2020		Machine ID and Drafting /Bill of Materials quiz	1.5	
14	T	11/24/2020		Draft and Start on Bill of materials for	1.5	3
	R	11/26/2020	Holiday		1.5	
15	T	12/1/2020	Online Meeting	Wood Machine Maintaince	1.5	3
	R	12/3/2020	Online Meeting	Wood Machine Maintaince	1.5	
16	M	12/7/2020	Online Final	Final online using Honorlock		3
	T	12/8/2020	Online Final			
	W	12/9/2020	Online Final			
	R	12/10/2020	Online Final			
					Total Contact Hours	48