



WITHLACOOCHEE TECHNICAL COLLEGE

Welding Technology

J400400

Course Syllabus 2019-2020

Instructors' Contact information:

J Shilling ShillingJ@citrus.k12.fl.us

D Sobol SobolD@citrus.k12.fl.us

Withlacoochee Technical College

Welding Department

1201 W Main St, Inverness, FL 34450

Phone: (352) 726-2430 x4358

Fax: (352) 249-2157

www.wtcollege.org

Program Description

Welding Technology is a 1050-hour program taught over two semesters. Instruction includes learning experiences in the joining and cutting of metal materials with the different welding and cutting processes which industry requires.

Laboratory experiences include the welding of many different joint designs and fabrication of projects such as frames, trailers, and tanks. Classroom activities include learning basic metallurgy, shielded metal arc welding (SMAW) (STICK, ARC), gas tungsten arc welding (GTAW) (TIG, Heliarc), gas metal arc welding (GMAW) (MIG), flux cored arc welding (FCAW), submerged arc welding (SAW), oxyacetylene processes (welding, brazing, soldering, cutting), plasma arc cutting (PAC), pipe welding, welding inspection, welding certification, blueprint reading, and the theory of welding and cutting processes. Related instruction includes safety, basic shop skills, employability skills, and entrepreneurship.

How You Are Evaluated

- Homework 10%
- Shop 30%
- Special Projects 10%
- Tests 20%
- Work Ethic 30%

How You Are Graded

- 100 – 90 A
- 89 – 80 B
- 79 – 70 C
- 69 – 60 D
- Below 60 F

Florida Department of Education Occupational Completion Points (OCPs)

OCP	Course No.	Course Title	Length	SOC Code
OCP A	PMT0070	Welder Assistant 1	150 Hours	51-9198
	PMT0071	Welder Assistant 2	150 Hours	51-9198
OCP B	PMT0072	Welder, SMAW 1	150 Hours	51-4121
	PMT0073	Welder, SMAW 2	150 Hours	51-4121
OCP C	PMT0074	Welder	450 Hours	51-4121

National Standards

[Industry or National Standards](https://www.nccer.org/industry-standards) corresponding to the standards and/or benchmarks for the Welding Technology program.
[bit.ly/2v5S21 g](https://bit.ly/2v5S21g)

Industry Certifications

All students are required to take the proctored National Center for Construction Education and Research (NCCER) Core and Welding Level exams and complete the required performance evaluations to receive the certifications associated with this curriculum.

Progress

All standards must be met to complete the program. Students do not progress in this program at the same pace. There are minimum pacing requirements in order to complete this program on time and prepare for the certification exams.

Physical Requirements

Physical requirements of welding demands strength and stamina. Must be able to lift as much as 100 pounds and carry 50 pounds. Must be able to spend hours stooping, kneeling, crawling, walking and standing. Must be able to work in very hot and very cold conditions.

Attendance

Refer to the WTC Student Handbook for information.

Discipline

Refer to the WTC Student Handbook for information.

Dress Code

- Students must wear work boots at all times in the shop
- Blue jeans or equivalent work pants will be worn at all times, NO polyester clothing or flannel shirts. Pants will not be worn "sagging", undergarments will not be exposed
- Long sleeve shirt must be worn and tucked in when welding; a short- sleeved shirt can be worn as under shirt or used when not welding
- No low cut, tank tops, or sleeveless t-shirts will be allowed

Safety

The use of Personal Protection Equipment (PPE) will be used at all times when in shop! Gloves, safety glasses and long sleeve shirts will be worn while in shop. Gloves must be worn when handling metal.

Unique to Program

Many companies now require drug screening and testing to be employed.

Housekeeping

Students are responsible for the cleanliness of classrooms, restrooms and individual booths. Shop will be cleaned on a daily basis. All students participate in end of day cleanup.