

Ivy Tech Community College Lafayette Campus Syllabus

COURSE INFORMATION

Course Title: Welding Fundamentals

Course Prefix & Section: WELD 100

Prerequisites/Corequisites: None

Course CRN:

Credit Hours: **Contact Hours:** 2-Lecture; 2-Lab

Days: Monday-Friday

Time:

Building: [Click here to enter text.](#)

Room: Fountain Central Welding Lab

Delivery Method: Blended, Primarily Traditional (More information below)

100% Refund Deadline: [Click here to enter text.](#)

Non-Attendance Drop Date: [Click here to enter text.](#)

Last Day to Withdraw: [Click here to enter text.](#)

CONTACT INFORMATION

Instructor Name: Charles Curtis Williams

Office Location: Fountain Central High School, Veedersburg, IN

E-mail Address: Ivy Tech Email cwilliams157@ivytech.edu FC Email williamsc@sefschools.org

Phone Number: 765-294-2206

Office Hours: Varied

School Office Location: Fountain Central High School

School Office Phone Number: 765-294-2206

Instructor Supervisor Name: James Burkhart

Instructor Supervisor Phone Number: [Click here to enter text.](#)

Instructor Supervisor E-mail Address: : jburkhartii@ivytech.edu

Instructor Supervisor Office Location: [Click here to enter text.](#)

Instructor Supervisor Office Hours:

NEED SUPPORT?

Ivy Tech Technical Support: Help Desk

Phone: 1-888-IVY-LINE (1-888-489-5463), select Option 4

Visit the Student Help Center <http://ivytech.edusupportcenter.com>

Submit a Help Ticket <https://helpdesk.ivytech.edu/SelfService/Create.html>

Ivy Tech Online Learning Support

Locate your campus online learning support <https://link.ivytech.edu/ed-techs>

REQUIRED TEXT OR OTHER INSTRUCTIONAL MATERIALS/SUPPLIES

Welding Principles and Applications, 7th Edition Larry Jeffus

Additional Resources

Miller Open Book

COURSE OUTLINE OF RECORD

Catalog Description: This course provides a basic study and application of commonly utilized welding processes as well as additional topics such as: welding blueprint reading, OSHA 10 hour and welding safety, weld joint design, welding terminology, and welding quality control. Students will prepare for their welding education, as well as their welding career through exposure to the welding lab environment and classroom. Students will also train with the latest in Virtual Welding Simulation. In addition, this course will prepare students to take nationally recognized certification exam(s).

Major Course Learning Objectives:

Upon successful completion of this course, the student will be expected to:

1. Understand and identify welding symbols and blueprints. [b,e]
2. Discuss the need for workplace safety and workplace safety training programs as covered by the OSHA 10 hour program [c,f] :
 - o Introduction to OSHA
 - o Walking and Working Surfaces
 - o Electrical Safety
 - o Hazard Communication
 - o PPE
 - o Fire Protection and Prevention
 - o Machine Guarding
 - o Hazardous Materials
 - o Fall Protection
0. Demonstrate basic welding techniques using virtual welding simulators. [e]
0. Learn proper AWS Standard Welding Terms and Definitions. [e,f]
0. Identify the five basic welding joints. [e,f,i]
0. Understand and identify welding defects and discontinuities. [e,f]
0. Understand how to interpret Weld Procedure Specifications (WPSs) and their purpose. [e,f]
0. Demonstrate the use of oxyfuel welding and cutting. [e,f]
0. Demonstrate the use of plasma arc cutting. [e,f]
0. Discuss the current trends and opportunities in the welding field. [f,g]
0. Attain readiness to take OSHA 10 Hour General Industry Certification exam [c,f]
0. Demonstrate ability to read and interpret technical documents. [b, e]
0. Demonstrate ability to use various types of software applicable to course. [a]

Note: Letters following objectives correspond to ATMAE Outcomes

Course Content:

- Communication in common welding terminology
- Metallurgy fundamentals OSHA 29 CFR 1910
- Electrical fundamentals
- MSDS
- Confined space
- Lock out/tag out
- Zero energy state

- Hazardous materials
- Storage of flammable materials
- Portable powered tool safety
- Hand tool safety
- Record keeping
- Training
- Enforcement of safety regulations
- Right to know
- Storage of fuel gas and high-pressure gas cylinders
- ANSI/ASC Z49.1 Code
- AWS (American Welding Society)

Course Policies & Procedures

This course will be taught in the welding lab. Each week's assignments will be summarized on Google Classroom. Grades will be posted in Harmony.

Additional Class Information (optional)

Computer access to internet sufficient to complete proctored exams via web technology, which may include the use of web cameras (portable or built into the computer). For technology specifications for completing assignments and assessment for this course, please refer to [XXXX](#). [Click here to enter text.](#)

HOW IS MY GRADE CALCULATED?

Grades in this course are determined by the following criteria:

Point Distribution			
Assignment Type	Number	Points	Total
Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.

Grading Scale

All scores will be maintained in Ivy Learn's online grade book. Students are responsible to track their progress by referring to the online grade book. Grades are entered into Mylvy at the midpoint of the term, based on the available graded items up to that point in time. Students should check their midterm grade and discuss any concerns with their instructors.

Insert percentage weights of each component and grading scale here. (optional)

Letter Grade	Percentage
A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	0-59%

In order to pass this class, students must earn [Click here to enter text.](#). (optional)

Course Grade

Midterm and final grades are available for students by logging into the College's online student system, MyIvy, at the following address: <https://my.ivytech.edu/>. Grades will not be distributed by mail.

INSTRUCTIONAL METHOD

TR – Traditional: Courses will be taught 100% from an on-site instructional location and students are expected to attend face-to-face.

BT - Blended: Blended courses are a combination of traditional instruction with the addition of online and/or virtual instruction methods. For a course to be identified as a blended course for purposes of counting enrollments, no less than 1/3 of the contact hours of the course must be assigned to activities at an on-site instructional location. The online and/or virtual component includes significant activities which require engagement between faculty and student as well as from student to student. If virtual instruction is included, students must have sufficient broadband access and a device with a microphone or headset. A webcam may be required. If test proctoring is required, this must be in addition to the contact hours scheduled at the on-site instructional location. Notes on specific dates and times of meetings as well as participation requirements need to be provided to students through the registration system at the time of registration as well as in the course syllabus in IvyLearn.

ASSIGNMENTS & GRADING

(For each and every kind of assignment, create a section below and write a short description – sample below for format only – not expected verbiage. If needed, specify any specific formatting requirements or where to find them. Customize based on your course and section. Below is an example.)

[Click here to enter text.](#)

Google Classroom

Videos of welding techniques for the specific joints and positions will be posted on Google Classroom weekly as a study aid/example for the students

Writing Assignments

N/A

Knowledge Checks

Quizzes, class discussions and visuals

Research Assignments

N/A

COURSE SCHEDULE

The calendar can be accessed from the main navigation area on the left-hand side of IvyLearn.

Due Dates & Deadlines

Students are required to submit work on time to receive credit. Deadlines for each week/assignment are summarized on the calendar. Students should check their course calendar frequently for deadlines and to be aware of what to expect next. Deadlines are listed in Eastern Time and are subject to change. If you

are in a time zone other than Eastern, please read how to update your time zone.

<https://guides.instructure.com/m/4212/l/717410-how-do-i-set-a-time-zone-in-my-useraccount->

Students are responsible for timely assignment submission. Should a computer system or network go down, students must still turn in work in a timely manner. Don't wait until the last minute. Plan ahead by seeking alternative means for submitting work before it is due. If you have any concerns about being able to complete an assignment due to current circumstances, please contact your instructor as soon as possible to discuss arranging an alternative

Attendance & Participation

****Explain the attendance policy for this specific course. **** Once a student reaches 5 non-certified absences, the instructor will have a discussion with the student and the vocational director will send an email to the parents and home school. At 10 non-certified absences, the student will enter into an attendance contract that states they will be removed from the class after their 14 absence with a grade of F.

Students are expected to attend and participate regularly in class meetings, online learning activities assigned as part of a course of instruction. Faculty are required to report student participation in compliance with institutional policies and federal financial aid guidelines. Faculty and staff shall be sensitive to students' religious beliefs and observances, including an expectation that instructors make reasonable arrangements when a student must miss an exam or other academic exercise due to their religious observance. When notified in advance, and when possible, faculty will make allowances for students to make up missed work.

Late & Make-Up Policy

Late assignments will be assigned a grade of "0" unless a student has received prior approval from the instructor. If a student has a problem or scheduling conflict that prevents the student from submitting an assignment on time, the student should contact the instructor immediately. The instructor will determine if the seriousness of the problem warrants an extension on the assignment. Unless absolutely unavoidable, students need to contact their instructor before missing the deadline – not after. Instructors have the right to decline accepting work for any credit after a deadline passes with a few specific exceptions, including but not limited to:

If there is an outage of the IvyLearn system that is verified, instructors will provide an extension for students to submit work at no penalty.

If the student has documentation of serious illness or death of a family member, instructors will work with the student to determine an alternate deadline, as appropriate.

Non-Attendance Drop – Don't Get Dropped from Class!

Ivy Tech performs administrative drops for students who do not "attend" class early in the semester. Students need to complete an assignment prior to Attendance Drop Deadline listed below in order to avoid being dropped for non-attendance. Examples may include, but are not limited to, such things as attending a live or synchronous session; posting in a graded discussion board, blog or wiki; or submitting a written assignment or taking a quiz. Posting any items not related to the graded assignments or communication with the instructor will be reviewed but may be disqualified for attendance purposes.

Attendance Drop Deadline: September 5, 2022

Last Day to Withdraw

Withdrawing from a course may delay progression toward program completion and may impact your financial aid. If a student wishes to withdraw from this course, students are responsible for officially withdrawing through Mylvy. If you must withdraw, consult with your faculty advisor and with a financial aid advisor, if applicable. There is no refund for withdrawn courses.

The last day to withdraw from this course: November 20, 2022

COURSE COMMUNICATION

Communication Etiquette & Expectations

Students are expected to uphold their responsibilities in terms of appropriate and professional communication with faculty and peers. Please review the 'Students Rights and Responsibilities' section of the student handbook (located within Mylvy) and review common netiquette (Internet etiquette) practices.

Ivy Tech Community College instructors are committed to responding to students' written inquiries sent via the Conversations tool in IvyLearn (instructions below), within 36 hours, including weekends.

Conversations (optional)

All students are recommended to use the Conversations feature of IvyLearn for course-related communications. Using conversations, students can send and receive messages from within IvyLearn. Conversations can be initiated through IvyLearn but can be replied to via email. Please check Conversations frequently.

Read how to access Conversations <https://community.canvaslms.com/docs/DOC-2666> (send and receive). These Canvas Guides will provide you with the necessary information to get started with conversations within IvyLearn.

Notifications

IvyLearn has a robust notification system that students can opt to use to receive course notifications for many course activities and events such as new announcements, due dates, and grade updates. Students can receive those notifications via many different channels including text messages and are highly encouraged to customize their notifications. Learn more about notification like how to setup and customize <https://guides.instructure.com/m/4212/l/710344-how-do-i-set-my-canvasnotification->

E-mail

E-mail communication from the College will be directed to the student's Mylvy e-mail account. Students are responsible for checking their Ivy Tech e-mail accounts, even if they also use other e-mail accounts. Please refer to the Student Handbook online through Mylvy for more information.

Students will also receive e-mail communication from IvyAdvising. These e-mails are generated to inform the student and the student's advisor about academic concerns and successes in the student's current classes. Please consult with your Academic Advisor if you have questions or to request more information.

ACADEMIC HONESTY STATEMENT

The College is committed to academic integrity in all its practices. The faculty value intellectual integrity and a high standard of academic conduct. Activities that violate academic integrity undermine the

quality and diminish the value of educational achievement and will result in Academic consequences ranging from failure on an assignment up to termination from the college.

Cheating on papers, tests or other academic works is a violation of College rules. No student shall engage in behavior that, in the judgment of the instructor of the class, may be construed as cheating. This may include, but is not limited to, plagiarism or other forms of academic dishonesty such as the acquisition without permission of tests or other academic materials and/or distribution of these materials and other academic work. This includes students who aid and abet as well as those who attempt such behavior.

CONDUCT

Cell Phones in Class: Cell phones and other electronic devices (laptops, music devices, etc.) should be used only as allowed by the instructor. If in doubt, ask the instructor before class begins if your planned usage is appropriate.

Any use of cell phones during a quiz or test is strictly prohibited. Any student who violates this policy will earn a zero on the quiz or test.

Emergency calls may be addressed to the Campus Reception Office at (765) 269-5277.

For off campus sites, emergency calls may be directed to their main office as follows:

Montgomery County Instructional Center in Crawfordsville: 765-359-0570

White County Instructional Center in Monticello: 574-583-4891

Frankfort Instructional Site: 765-269-5820

Classroom Rules:

1. Be ready to work when class starts.
2. Use all safety gear and follow safety procedures.
3. Do not throw anything in the welding classroom.
4. No electronics during work time.
5. No electronics to be taken to the restroom.
6. No headphones/earbuds.
7. Keep your hands to yourself.
8. No running in the welding classroom.
9. No horseplay.
10. No yelling, singing or whistling.
11. Complete tasks when first told.
12. Pick up your trash.
13. Sweep your area at the end of each class.
14. Put your tools and your things away where they belong.
15. Always be working during class time.
16. Stay in your designated area.
17. No pocketknives allowed at FC.
18. Bring Chromebook/device to class every day (for classroom work). (Explain any additional pertinent class policies regarding conduct here.)

DISABILITY SUPPORT SERVICES/ADA STATEMENT

Contact Disabilities Support Services (DSS) <http://ivytech.edu/dss/>

Ivy Tech Community College seeks to provide reasonable accommodations for qualified individuals with documented disabilities. If you need an accommodation because of a documented disability, please contact the Office of Disability Support Services in Room 1323 at the beginning of each semester. If you will require assistance during an emergency evacuation, notify your instructor immediately. Look for evacuation procedures posted in your classrooms.

TITLE IX STATEMENT/NOTIFICATION

Ivy Tech Community College is committed to providing all members of the College community with a learning and work environment free from sexual harassment and assault. Ivy Tech students have options for getting help if they have experienced sexual assault, relationship violence, sexual harassment or stalking. This information can be found at <https://www.ivytech.edu/prevent-sexual-violence/index.html>.

If students write or speak about having survived sexual violence, including rape, sexual assault, dating violence, domestic violence, or stalking, federal law and Ivy Tech policies require that instructors share this information with the Campus Title IX Coordinator. The Campus Title IX Coordinator will contact students to let them know about accommodations and support services at the College and in the community as well as options for holding accountable the person who harmed them. When contacted, students are not required to speak with the Campus Title IX Coordinator.

If students do not want the Title IX Coordinator notified, instead of disclosing this information to their instructor, students can speak confidentially with certain individuals at the College or in the community. A list of these individuals can be found at <https://www.ivytech.edu/prevent-sexual-violence/index.html> under Confidential Employees and/or Community Resources.

EXTRA ASSISTANCE

Learning Commons, Learning Resource Center, and Writing Row

Free tutoring is available online and on-campus in the Learning Commons (room 220) and the Learning Resource Center, both of which are located on the second floor of the Gipe Hall building housing the library, one floor above the Library. Trained student-peer tutors, course instructors, and Learning Resource instructors provide tutoring on-campus in a various subject areas including mathematics, English, computer science, anatomy and physiology, accounting, microbiology, physics, physical science, and Spanish. The Writing Row assists students in writing and improving papers for all classes offered at the College.

Online tutoring is available 24/7 at Tutor.com. This site offers live-tutoring for a wide range of courses including those in accounting, biology, business, chemistry, computer sciences, economics, English, French, history, HLHS, mathematics, political science, psychology, BOAT, SCIN, software development, sociology, and Spanish. For a complete list of courses supported by Tutor.com, go to <https://www.ivytech.edu/17031.html>.

Supplemental instruction for mathematics, chemistry, and physics classes also is available in room 219 on the second floor above the library. The supplemental instruction schedule is posted outside this room.

Some additional tutoring with limited hours is available at the Crawfordsville, Frankfort, and Monticello sites. Please check with the front desk at each site for information about tutoring hours and subject availability.

COMMUNITY RESOURCES

Looking for help with emergency funds, food, counseling, or transportation? Or just need to talk? Find help for these issues and more that are available in Lafayette and throughout the entire state. Go to MyIvy, look for Student Resources, then click on IvyAssist. Services include campus and community resources that are free or have sliding scale modest costs.

VETERANS/MILITARY NOTICE

If you are a Veteran, currently serving as a member of the Armed Forces (Active, Reserve or National Guard), or an immediate family member, promptly communicate with your instructor any potential commitments or deployments that may interfere with course requirements. If you are receiving GI Bill benefits or have questions about your benefits, contact the Veterans Affairs Office, located in the Express Enrollment Center or by email at lafayette-veteransaffairs@ivytech.edu.

Library:

The Campus Library, located in Lafayette, provides materials for college research assignments, computers, study rooms, course reserves and reference assistance. The Ivy Tech Virtual Library is available to students' on-and-off campus offering full-text magazines and journals, and books. For access to these and other resources, click on the Library tab in MyIvy.

Go to <http://www.ivytech.edu/library/> and choose the link for your campus.

COURSE EVALUATIONS

Course evaluations by students will be available to complete at the end of the course using an online survey.

EMERGENCY PROCEDURES

Please note emergency evacuation procedures posted in the classroom.

For local notifications, register your phone number with IvyAlert at <https://www.ivytech.edu/alert/>.

CERTIFICATION AND LICENSING STATEMENT

Ivy Tech cannot guarantee that any student will pass a certification or licensing exam. Your success will be determined by several factors beyond the instruction you are given in the classroom including your test-taking skills, your willingness to study outside of class, and your satisfactory completion of appropriate practice exams. Certification and licensure exam questions are drawn from databases of hundreds of possible questions; therefore, a thorough understanding of the subject matter is required. Ivy Tech's coursework is designed to assist you in understanding the material sufficiently to provide a firm foundation for your studies as you prepare for the exam.

COPYRIGHT

Students shall adhere to the laws governing the use of copyrighted materials. They must ensure that their activities comply with fair use and in no way infringe on the copyright or other proprietary rights of others and that the materials used and developed at Ivy Tech Community College contain nothing unlawful, unethical, or libelous, and do not constitute any violation of any right of privacy.

CHILDREN ON CAMPUS

So that each student may give full attention to the task of learning, and to comply with insurance regulations, children are prohibited from attending classes, exams, clinical, or laboratories with the parent or guardian. Children also may not accompany adults using the Learning Resource Center or open computer laboratory. Students are also discouraged from bringing children to scheduled meetings with a course instructor, faculty, or advisor so that the student's full attention may be focused on the topic of discussion.

If a student brings a child to class, an exam, or a clinical, the student and the child will be asked to leave. Exceptions may be made for instructional activities which meet the course objectives. The student will be responsible for any consequence detailed in the course syllabus for missing the class, exam, etc. Students are encouraged to make alternative arrangements for children in the event of school cancellations, childhood illnesses, and other issues. Unaccompanied children cannot be left in the library.

COVID-19

Guidance for the Health and Safety of Self and Others

Follow the most current ITCC Face Coverings Policy and other Covid-19 information at <https://www.ivytech.edu/coronavirus.html>.

- Follow college signage
- Practice good hand hygiene
- Follow instructions for cleaning protocols

RIGHT OF REVISION

This syllabus and the information contained within it are subject to change without notice.

Fall 2022 semester dates:

16-week classes: August 22, 2022 – December 18, 2022

ASSIGNMENTS AND COURSE SCHEDULE (add or delete rows as needed)

Class Meeting	Topic	Assigned Work	Work Due and Exams
1	Safety and Introduction to OSHA	Chapter 2 textbook	Quiz
2	Introduction to welding simulator	Use simulator	Simulator evaluates student work
3	AWS Standard Welding Terms	Lecture	Quiz
4	5 Basic Weld Joints	Chapter 20 textbook	Quiz
5	Welding Symbols and Blueprints	Appendix C: American Welding Society Standard Welding Symbols	Quiz
6	Identify Weld Defects	Chapter 23 textbook	Quiz
7	WPSs and PQRs	Lecture	Quiz
8	Oxyfuel Cutting	Straight Line Cut	Visual
9	Oxyfuel Cutting	30 degree bevel	Visual
10	Oxyfuel Cutting	Circle	Visual
11	Oxyfuel Welding	Brazing Corner Joint	Visual

12	Oxyfuel Welding	Oxy Acetylene Corner Joint	Visual
13	Plasma Arc Cutting	Hand Torch	Visual
14	Plasma Arc Cutting	Track Machine	Visual
15	Plasma Arc Cutting	CNC Plasma Table	Visual
16	OSHA Hour General Industry Certification	Certify Tester	Exam