Welding and Metals - AGET 2236/2136
FALL 2023 - SYLLABUS

Instructor: Don McGuffin
Email: donald.mcguffin@sfasu.edu
Office Phone: (936) 468-4250
Office: Agricultural Engineering Technology building, enter on west side
Office Hours: Monday, Wednesday and Friday 9:00 am to 11:00 am, or by appointment
Department: Agriculture

Class meeting time and place: T 11:00 – 11:50 – Ag Mechanics Building, Room 110.
Lab meeting times and place:
T 2:00 – 3:50 – Ag Mechanics Building - Shop
R 3:30 – 5:20 - Ag Mechanics Building - Shop

Course Description
AGET 2236/2136 covers arc welding, oxyacetylene welding, hot and cold metal work, and sheet metal work.

Program Learning Outcomes
1. The student will demonstrate competence of technical subject matter (technical)
3. The student will exhibit problem solving skills. (Problem Solving)
4. The student will demonstrate effective communication skills. (Communication)
5. The student will exhibit leadership and other interpersonal skills needed for career placement and advancement. (Leadership)

Student Learning Outcomes
Students will gain a wide range of basic concepts, and skills associated with hot and cold metal processes.

Text and Materials There is no text required for this course. All course material will be disseminated through both lecture and lab portions of this course. D2L will be used for some parts of this course.

Course Requirements
Quizzes and Exams 300 points
Lab exercises 600 points
Semester Exam 100 points
TOTAL 1000 points
Course Calendar - Lecture
Week 1 8/29 Introduction and Shop Orientation
Week 2 9/5 Welding Safety
Week 3 9/12 Welding Processes
Week 4 9/19 Basic Metallurgy and Metal Identification
Week 5 9/26 Exam 1
Week 6 10/3 Shielded Metal Arc Welding (SMAW)
Week 7 10/10 Flux Cored Arc Welding (FCAW)
Week 8 10/17 Gas Metal Arc Welding (GMAW)
Week 9 10/24 Gas Tungsten Arc Welding (GTAW)
Week 10 10/31 Oxy-Fuel Cutting (OFC)
Week 11 11/7 Plasma Arc Cutting (PAC)
Week 12 11/14 Welding Carbon Steels

THANKSGIVING BREAK
Week 13 11/28 Welding Drawings and Symbols
Week 14 12/5 Why Welds Fail
Week 15 Tuesday December 12th – 10:30 am – 12:30 pm Exam 3

Course Calendar – Lab
Week 1 Introduction and Shop Orientation
Week 2 Safety Procedures in the Shop
Week 3 Welding Pad (SMAW)
Week 4 Fillet, Lap and Groove Welds (SMAW)
Week 5 Fillet, Lap and Groove Welds (SMAW)
Week 6 Welding Pad (GMAW)
Week 7 Fillet, Lap and Groove Welds (GMAW)
Week 8 Fillet, Lap and Groove Welds (GMAW)
Week 9 Gas Tungsten Arc Welding (GTAW)
Week 10 Gas Tungsten Arc Welding (GTAW)
Week 11 Oxy-Fuel Cutting (OFC)
Week 12 Oxy-Fuel Welding (OFW)
Week 13 Plasma-Arc Operations
Week 14 Final week to submit completed welding/cutting assignments

Grading Policy
Each quiz, exam, and lab exercise will be assigned a point value. Grades are calculated on a percentage basis. Thus, at the end of the semester the points you earned will be divided by the total points available. This point total will give your percentage.

A = 90% to 100% 900 – 1000 points
B = 80% to 89% 800 – 899 points
C = 70% to 79% 700 – 799 points
D = 60% to 69% 600 – 699 points
F = below 60% 599 points and below
ATTENDANCE AND PUNCTUALITY POLICY (SFA Policy 6.7)
Attendance and punctuality are core skills to have as an engaged student and for a successful career.
Attendance will be taken for each class meeting.
When possible, excused absences can be approved before the actual absence.
Excuses can be provided as a hard copy or electronically. **As per SFASU policy, documentation for excused absences is due within ten days of the absence.**

For reference, below are examples of excused absences.
1. Approved university activities (require documentation from sponsor and advanced notice, see below)
2. Death or major illness of an immediate family member (requires documentation and notice as soon as possible)
3. Major illness of yourself (requires a doctor’s note).

If you miss class for any other reason and feel your absence should be excused, you must provide an email memo explaining why the absence should be excused and provide appropriate documentation. **This memo must be provided within 10 days of the absence.** All other absences will be considered unexcused.

**Excessive absences can lead to poor class and lab performance.**

**IT WILL BE YOUR RESPONSIBILITY TO MAKE UP ALL ASSIGNMENTS, QUIZZES, TESTS OR LAB ASSIGNMENTS WITHIN ONE WEEK OF THE ABSENCE(S).**

Academic Integrity (4.1)
The Code of Student Conduct and Academic Integrity outlines the prohibited conduct by any student enrolled in a course at SFA. It is the responsibility of all members of all faculty, staff, and students to adhere to and uphold this policy.

Articles IV, VI, and VII of the new Code of Student Conduct and Academic Integrity outline the violations and procedures concerning academic conduct, including cheating, plagiarism, collusion, and misrepresentation.

Cheating includes, but is not limited to:
(1) Copying from the test paper (or other assignment) of another student
(2) Possession and/or use during a test of materials that are not authorized by the person giving the test
(3) Using, obtaining, or attempting to obtain by any means the whole or any part of a non-administered test, test key, homework solution, or computer program, or using a test that has been administered in prior classes or semesters without permission of the Faculty member
(4) Substituting for another person, or permitting another person to substitute for one’s self, to take a test
(5) Falsifying research data, laboratory reports, and/or other records or academic work offered for credit
(6) Using any sort of unauthorized resources or technology in completion of educational activities.

Plagiarism is the appropriation of material that is attributable in whole or in part to another source or the use of one’s own previous work in another context without citing that it was used previously, without any indication of the original source, including words, ideas, illustrations, structure, computer code, and other expression or media, and presenting that material as one’s own academic work being offered for credit or in conjunction with a program course or degree requirements.

Collusion is the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any provision of the rules on academic dishonesty, including disclosing and/or distributing the contents of an exam.

Misrepresentation is providing false grades or résumés; providing false or misleading information in an effort to receive a postponement or an extension on a test, quiz, or other assignment for the purpose of obtaining an academic or financial benefit for oneself or another individual or to injure another student academically or financially.

Student Conduct
Students are expected to assist in maintaining a classroom environment which is conducive to learning. In order to assure that all students have an opportunity to gain from time spent in class, unless otherwise approved by the instructor, students are prohibited from using cellular phones or beepers, eating in class, making offensive remarks, reading newspapers, sleeping, or engaging in any other form of distraction. Inappropriate behavior in the classroom shall result in, minimally, a request to leave the classroom. The use of all tobacco and vape products (included but not limited to cigarettes, cigars, pipes, smokeless tobacco, e-cigarettes, vaporizers, vape pens, hookahs, blunts, pipes, snuff, and all other tobacco or vape related products) is prohibited on all property that is owned, leased, occupied, or controlled by SFASU.

Acceptable Classroom Behavior
Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see Student Conduct Code, policy D-34.1). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic, or other penalties. This prohibition applies to all instructional forums. The instructor shall have full discretion over what is appropriate/inappropriate in all instructional forums. Students who do not attend classes regularly or who perform poorly may be referred to the SSC Campus Early
Alerts program [http://www.sfasu.edu/judicial/earlyalert.asp](http://www.sfasu.edu/judicial/earlyalert.asp) This program provides students with recommendations or other assistance that is available to help SFA students succeed.

**Responsible Use of Technology**

It is expected that all students will only use cell phones, PDAs, laptop or table computers, MPs players, and related devices outside of class time or when appropriate in class. Answering a cell phone, texting, listening to music, or using a laptop/tablet for matters unrelated to the course may be grounds for dismissal from class or other penalties.

**Withheld Grades Semester Grades Policy (5.5)**

Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the coursework because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course to compute the grade point average. For additional information, go to [https://www.sfasu.edu/policies/course-grades-5.5.pdf](https://www.sfasu.edu/policies/course-grades-5.5.pdf).

**Students with Disabilities**

To obtain disability-related accommodations, alternate formats, and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services promptly may delay your accommodations. For additional information, go to [http://www.sfasu.edu/disabilityservices/](http://www.sfasu.edu/disabilityservices/)

**Student Wellness and Well-Being**

SFA values students’ overall well-being, mental health and the role it plays in academic and overall student success. Students may experience stressors that can impact both their academic experience and their personal well-being. These may include academic pressure and challenges associated with relationships, emotional well-being, alcohol and other drugs, identities, finances, etc.

If you are experiencing concerns, seeking help, SFA provides a variety of resources to support students’ mental health and wellness. Many of these resources are free, and all of them are confidential.
On-campus Resources
The Dean of Students Office (Rusk Building, 3rd floor lobby) www.sfasu.edu/deanofstudents
936.468.7249
dos@sfasu.edu

SFA Human Services Counseling Clinic Human Services, Room 202
www.sfasu.edu/humanservices/139.asp
936.468.1041

The Health and Wellness Hub “The Hub”
Location: corner of E. College and Raguet St.
To support the health and well-being of every Lumberjack, the Health and Wellness Hub offers comprehensive services that treat the whole person – mind, body and spirit. Services include:
· Health Services
· Counseling Services
· Student Outreach and Support
· Food Pantry
· Wellness Coaching
· Alcohol and Other Drug Education www.sfasu.edu/thehub
936.468.4008
thehub@sfasu.edu

Crisis Resources
· Burke 24-hour crisis line: 1.800.392.8343
· National Suicide Crisis Prevention: 9-8-8
· Suicide Prevention Lifeline: 1.800.273.TALK (8255)
· johCrisis Text Line: Text HELLO to 741-741