IMPERIAL VALLEY COLLEGE

Industrial Technology Division

Welding Technology Department

Course Title:	WELD 102 – Arc Welding on Plate
Credits/Units:	5 (3 hours lecture, 6 hours lab.)
Semester:	Fall 2012 August 20 - December 7
Class Schedule:	**Monday 6:15 pm -9:25pm Lect. Room 1300-1307** **W-R 6:15pm - 9:25pm Lab.**
Location:	Lab 1201 Room 1200 Office hours posted on front door
Instructor:	Oscar Cervantes
Phone:	1(760) – 336-0456
E-mail	Oscar.cervantes@imperial.edu
Substitute Instructors:	Fred Rivera, Samuel Colton, Gonzalo Huerta
Secretary/Division Office	760 – 355-6361
Secretary/Dean's Office	760 – 355-6217
Division Coordinator	760 – 355-6362 (Jose Lopez)

A. **FALL SEMESTER 2012 IMPORTANT DATES AND DEADLINES**

August 20 Classes begin. Beginning on first day each class meets, add authorization code from instructor required to register for that class, filled or open

August 20 – September 1 Late Registration. Beginning on first day each class meets, add authorization code from instructor required to register for that class, filled or open.

*****September 1***** Deadline to register for full-term courses. Deadline to drop full-term classes without owing fees and/or be eligible for refund. Deadline to select P/NP grading option for courses with that option (see section on Change Grading Options). Does not pertain to Non-credit Program courses.

September 3 Deadline to drop without course appearing on transcript (without receiving W). Note: fees will be charged and no refunds given for courses dropped on September 2 or 3. See Sept. 1.

September 3 " Holiday" – Labor Day; no classes

September 4 Census

September 4 Ticketing for parking violations in student spaces on main campus begins. Note: tickets are issued for reserved (faculty/staff), disabled, metered, 15-minute, and no-parking spaces year around.

September 28 Deadline to make up incomplete grade (I) granted Spring or Summer 2012

October 24 Financial Aid Return to Title IV drop deadline.

November 1 Deadline to submit Petition for Graduation for degree to be awarded Fall 2012. Completed petition must be received in Admissions & Records Office by this date. Students must meet with a Counselor and have an evaluation completed and petition signed before this date.

November 12 "Holiday" – In Honor of Veterans' Day; no classes.

*****November 10***** Deadline to drop full-term classes

November 22 – 24 " Holiday" – Thanksgiving – No Classes Thursday, Friday, and Saturday.

December 3-7 Last week of classes including final examinations.

December 10 – January 11 No Classes (College closed December 17 through January 1).
January 14 – May 10, 2013 Spring Semester 2013.

May 11, 2013 Commencement

B. **Course/ Catalog Description**

Shield Metal Arc Welding on carbon steel plate. The student develops welding skills to a professional entry level. Follow proper shop safety practices and Personal Protective Equipment (**PPE**). Review of OFC, filler electrode application, blueprint interpretation, welding symbols, joint designs, and proper use of filler gauges to follow the specifications required for fusion and heat input thru out the drawing.

C. **Institutional Student Learning Outcomes (SLO's):**

1. **Communication Skills (**Reading, Writing, and Speaking)

2. **Critical Thinking** (Problem Solving)
3. **Personal Responsibility** (meeting rules, procedures, employability skills, etc.)
4. **Information Literacy** (understanding information fro, sources such as internet, media, etc.)
5. **Global Awareness** (understanding our position within a Global context.)

D. **Measurable Course Objectives – Upon successful completion of this course, the student will:**

1. Demonstrate and apply appropriate safety protocols.
2. Recognize and apply various appropriate welding processes.
3. Recognize and apply the various weld joint designs used in plate welding.
4. Describe filler electrode identification and application.
5. Describe and apply appropriate welding techniques to be used in a variety of welding positions.
6. Interpret drawings, welding symbols, and utilize filler gauges.

E. **Course Instructional Schedule**

A. Safety in Welding
B. Welding processes
C. Welding joint designs
D. Filler Electrodes
E. Welding positions
F. Drawing interpretation/welding symbols/measuring fillet welds

Instructional Methodology: Lecture, Lecture/Demonstration, Group Discussion, Fieldtrip, Outside Class Assignments, and Media Presentations.

F. **Grading Criteria**

1. **Exams:** written exams and performance exams.

2. **Quizzes:** on welding process study.

3. **Attendance:** First day of class, regular attendance and withdrawal after exceeding the number of class hours per week.

4. **Tardiness:** Three times equals one absence (I.V.C. Gen. Catalog pg.24) 10-11

5. **Absences:** (I.V.C. Gen. Catalog pg.24) 10-11

6. **Student Conduct** (I.V.C Gen. Catalog pg. 22) 2010-11

7. **Grading System** (I.V.C. General Catalog pg. 17) 2010-11

   A = 90% - 100% of points = Excellent
   B = 80% - 89% of points = Good
   C* = 70% - 79% of points = Satisfactory
   D = 60% - 69% of points = Pass, Less than Satisfactory
   F = Less than 60% of points = Failing

   * Many programs require most or all courses to be completed with a " C " grade or better; not an average of " C."

8. **Overall Regulations** (I.V.C General Catalog, pgs. 13-24)

G. **Students with Disabilities**

Any student with a disability who may need accommodations should notify the instructor or the Disabled Student Programs & Services (DSPS) Office for assistance (Bldg. 2100)

H. **Sexual Harassment**

Harassment of any kind will not be tolerated in the lab or classroom. Respect for others builds good character.

I. **Equipment and Supplies**

1. Textbook
   Althouse, Turnquist, Bowditch, Bowditch, Bowditch. Modern Welding 11th Edition. Goodheart-Willcox Publicher. ISBN 978-1-60525-795-2

2. Personal Protective Equipment (PPE)

Safety Glasses
Helmet/Hood
Welding Cap
Welding Gloves
Leather Work Boots
Ear plugs/Protection
100% cotton long sleeve shirt & pants

Leather jacket or sleeves
(NO CONTACT LENSES IN THE LAB)

J. **Welding Standards**

The learning activities for the Imperial Valley College Welding Technology Program are based on accepted practices, procedures, specifications and standards of, but not limited to:

The American Welding Society (AWS)
The American Society for Testing and Materials (ASTM)
The American Petroleum Industry (API)
The American National Standards Institute (ANSI)
The American Society of Mechanical Engineers (ASME)
The American Society for Non-Destructive Testing (ASNT)

Rules in the Welding Lab

1. **Bring all your PPE to work**
2. **Do *Not* use equipment without asking for a demonstration.**
3. **Safety Glasses are *not* an option in the lab.**
4. **Do *not* play with the welding machines of others**
5. **Do *not* weld the fixtures to the welding tree**
6. **Do *not* weld on the welding tree**
7. **Always use double eye protection when using any kind of grinders**
8. ***All* students have to *clean up* the welding lab at the end of the class**
9. **Take back all the equipment you used during laboratory, and put them back where they belong**
10. **DO *NOT PLAY* with the oxy/ acetylene torch and regulators**