

# WELDING (WELD)

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## WELD 50 Introduction to Welding (4.0 Units)

Survey course in all welding processes offered at VVC which covers safety practices, use of equipment, including: Oxy-Acetylene Welding, Shielded Metal Arc Welding, Gas Metal Arc Welding, Gas Tungsten Arc Welding, and Flux-Cored Arc Welding. 32-36 hours lecture and 96-108 hours lab. Offered Fall and Spring Semesters.

Lecture Hours: 36.0; Lab Hours: 108.0

Transfer: Not transferable

## WELD 51 Oxyacetylene Welding, Cutting & Brazing (4.0 Units)

Develops entry-level skills for the welder in gas welding, braze welding and oxy-fuel cutting. Offered Fall/Spring semesters. Two hours lecture, four hours laboratory per week.

Lecture Hours: 36.0; Lab Hours: 108.0

Transfer: Not transferable

## WELD 52 Shielded Metal Arc Welding Basic (4.0 Units)

Develops entry-level shielded metal arc welding (SMAW) skills for the welder.

Lecture Hours: 36.0; Lab Hours: 108.0

Transfer: Not transferable

## WELD 53 Shielded Metal Arc Welding Advanced (4.0 Units)

Develops skills to produce high quality multi-pass all position groove welds with and without backing.

Lecture Hours: 36.0; Lab Hours: 108.0

Transfer: Not transferable

## WELD 57A Gas Tungsten Arc Welding Basic (2.0 Units)

Develops entry level gas tungsten arc welding skills; setting up and adjusting equipment, and in position welding on mild steel, stainless steel and aluminum.

Lecture Hours: 18.0; Lab Hours: 54.0

Transfer: Not transferable

## WELD 57B Gas Tungsten Arc Welding Advanced (2.0 Units)

Develops advanced gas tungsten arc welding skills in out-of-position welding on mild steel, stainless steel and aluminum.

Lecture Hours: 18.0; Lab Hours: 54.0

Transfer: Not transferable

## WELD 58A Gas Metal Arc Welding Basic (2.0 Units)

Develops entry-level skills in gas metal arc welding. Specifically develops skills on all position groove and fillet welds, set-up, adjustment and equipment maintenance.

Lecture Hours: 18.0; Lab Hours: 54.0

Transfer: Not transferable

## WELD 58B Gas Metal Arc Welding Advanced (2.0 Units)

Develops advanced skills in gas metal arc welding. Specifically develops skills on single-vee groove butt joints in all positions and weld qualification practice.

Lecture Hours: 18.0; Lab Hours: 54.0

Transfer: Not transferable

## WELD 59 Welding Symbols and Blueprint Reading (1.0 Units)

Develops a technical understanding of engineering drawings and use of information to communicate instructions from the design to the welder and fitter to achieve design objectives.

Lecture Hours: 18.0

Transfer: Not transferable

## WELD 60A Welding Laboratory Shield Metal Arc Welding (1-2 Units)

A laboratory class to develop skills in arc welding and welder qualification preparation. Offered Fall, Spring, and Summer sessions.

Lab Hours: 54.0

Transfer: Not transferable

## WELD 60B Welding Laboratory Gas Tungsten Arc Welding (1.0 Units)

A laboratory class to develop skills in gas tungsten arc welding and welder performance qualification. Offered Fall/Winter/Spring/Summer sessions. Forty-eight hours of laboratory experience qualifies for 1 unit of credit.

Lab Hours: 54.0

Transfer: Not transferable

## WELD 60C Welding Laboratory Gas Metal Arc Welding (1-2 Units)

A laboratory class to develop skills in gas metal arc welding, and welder performance qualification. Offered Fall/Winter/Spring/Summer sessions. Forty-eight hours of laboratory experience qualifies for 1 unit of credit.

Lab Hours: 54.0

Transfer: Not transferable

## WELD 71 Flux Cored Arc Welding (4.0 Units)

Develops skills to produce high quality multi-pass all position groove welds with backing on varying thicknesses of base material utilizing Gas-Shielded and Self-Shielded Flux Core Wires.

Prerequisite(s): WELD 58A

Lecture Hours: 36.0; Lab Hours: 108.0

Transfer: Not transferable

## WELD 72 Gas Arc Welding (4.0 Units)

Develops introductory skills for pipe welding in the 1G and 2G positions without backing using the Shielded Metal Arc and Gas Tungsten Arc welding processes. 32-36 hours lecture and 96-108 hours laboratory.

Prerequisite(s): WELD 53, Minimum grade C

Lecture Hours: 36.0; Lab Hours: 108.0

Transfer: Not transferable

## WELD 73 Intermediate Pipe Welding (4.0 Units)

Develops intermediate skills for pipe welding in the 5G uphill and downhill positions without backing using the Shielded Metal Arc and Gas Tungsten Arc welding processes. 32-36 hours lecture and 96-108 hours laboratory.

Prerequisite(s): WELD 72; Minimum grade C

Lecture Hours: 36.0; Lab Hours: 108.0

Transfer: Not transferable

## WELD 74 Flux Cored Arc Weld (4.0 Units)

Develops advanced skills for pipe welding in the 6G position without backing using the Shielded Metal Arc and Gas Tungsten Arc welding processes. 32-36 hours lecture and 96-108 hours laboratory.

Prerequisite(s): WELD 73, Minimum grade C

Lecture Hours: 36.0; Lab Hours: 108.0

Transfer: Not transferable

## WELD 99 Independent Study (0.5-4 Units)

Transfer: Not transferable

**WELD 138 Cooperative Education Welding (1-8 Units)**

Cooperative Education is a key element of Victor Valley College's comprehensive approach to career development. Cooperative Education is a 16-, 12-, or 8-week course that enables students to receive college credit for paid or unpaid work opportunities. This course helps students gain valuable on-the-job work experience while providing practical education, best practices in professional development, and academic guidance through the course of their work opportunity. The combination of practical experience and curricular development empowers students to be more competitive, efficient and valuable employees upon completion of this program and/or their academic program trajectory. The course is ideal for students who are cross-training at their current worksite for upward mobility or seeking career changes, as well as those looking for entry-level occupational training through work-based learning experiences such as through an internship. Cooperative Education transforms community businesses, industries, and public agencies into expanded educational training laboratories. Credit is awarded on the basis of learning objectives completed and the number of hours the student trains. Students must create/complete new learning objectives each semester they enroll. Students may utilize their present work sites. More details are available in the Cooperative Education Office, (760) 245-4271, ext. 2281. The office, located in the Academic Commons, is open Monday-Thursday, 8:00 a.m.-1:00 p.m., 2:00-6:00 p.m., and by appointment.

Transfer: Transfers to CSU only