

# Curriculum and Instruction

2001 N. Dustin Ave. 87401  
(505) 324-9840 / fax (505) 599-8806 / email - mvallejo@fms.k12.nm.us  
*Michael Vallejo, Assistant Superintendent*  
*Candace Young, Director-Elementary Education*  
*Chris Pash, Director-Secondary Education*

## **High School Proposal to add Exploratory Welding III for 2 credits beginning with the 2010-2011 school year.**

### **Proposal:**

Establish a certification welding course that meets the requirements of the American Welding Society Structural Welding Code AWS D1.1/ D1.1M 2008 curriculum. Establish a certification course with the National Center for Construction Education and Research (NCCER) resulting in additional certifications upon completion of each module a student completes and passes from each module in the book and welding exam. NCCER is a nationally recognized program. These certifications are put onto a NCCER credit card and a student can take his or her NCCER credit card in to perspective employers to validate the certifications each student has earned. The NCCER credit card is a lifetime certification. NCCER is supported by an association of partners with the American Welding Society, CNM Community College, SkillsUSA, Associated Builders and Contractors Inc, Association for Career and Technical Education, Association of Skilled and Technical Sciences, Center for Improvement of Construction Management, Construction Industry Institute, Construction Users Roundtable, Design Build Institute of America, Green Advantage, The Manufactures Institute, NACE International, Metal Building Manufacturers Association, National Association of Minority Contractors, National Association of Women in Construction, National Systems Contractors Association, National Technical Honor Society, NAWIC Education Foundation, University of Florida, US Army Corps Engineers, Steel Erectors Association of America, Lincoln Electric Company, and many other schools and companies to numerous to list. NCCER's training programs comprise of over 50 construction, maintenance, and pipeline areas, and include skills assessments, safety training, and management education.

Exploratory Welding III

Advance Welding Level III

Credit 2

Grades 11 -12

Prerequisite: Two credits in Welding Exploratory I and Two credits in Welding Exploratory II with completion of all Welding Certifications from I and II.

Textbook: Core Curriculum-Introductory Craft Skills

Authors: Salvatore Benevegna, Peter Klapperich,,,

Prentice Hall

Boston

Course is designed to emphasize basic safety and hands on skills. Topics include basic safety, introduction to construction math, introduction to hand tools, introduction to power tools, introduction to construction drawings, basic rigging, basic communication skills, basic employability skills, and introduction to materials handling.

Textbook: Welding- Designed to support the American Welding Society Sense EG2.0 Standards and guidelines.  
Authors: Barry Breeden, Jeff Morris,,  
Prentice Hall  
Boston

Course is designed to emphasize welding safety, oxyfuel cutting, plasma arc cutting, air carbon arc cutting and gouging, base metal preparation, weld quality, Shielded Metal Arc Welding (SMAW) equipment and setup, shielded metal arc electrodes, SMAW beads and fillet welds, joint fit up and alignment, SMAW groove welds and backing, SMAW open V-groove welds.

**Cost:**

The costs of textbooks, instructor's solution manuals, test banks, PowerPoint presentations, equipment, steel and welding rod will be funded under Carl Perkins funding.

Textbook - Core Curriculum-Introductory Craft Skills- Trainee Guide: ISBN- 0136086365 (\$49.00)  
C.A.T.E. Welding Center (70) = **\$3,430.00**

Core Testing Software CD-ROM: ISBN: 0136090796(\$30.00) C.A.T.E. Welding Center (1) = **\$30.00**

Core PowerPoint Slides CD-ROM: ISBN: 013609080X (\$40.00) C.A.T.E. Welding Center (1) - **\$40.00**

Textbook - Welding Level 1 TG, Hardcover: ISBN- 013610651X (\$64.00) C.A.T.E. Welding Center (70)  
= **\$4,480.00**

Welding L1 Testing Software CD-ROM: ISBN: 0136090915 (\$30.00) C.A.T.E. Welding Center (1) =  
**\$30.00**

Welding L1 PowerPoint Slides CD-ROM: ISBN: 0136090923 (\$40.00) C.A.T.E. Welding Center (1) -  
**\$40.00**

Equipment: Plasma Cutting Machines, accessories, Carbon Arc Gouging Torches and accessories =  
**\$10,063**

Steel needed for testing = Costs **\$10,063.00**

Welding rod =\$**7,404.00**

Total Cost of proposal: **\$25,517**