MT. DIABLO UNIFIED SCHOOL DISTRICT COURSE OF STUDY DRAFT

COURSE TITLE:	Woodworking Technology II
COURSE NUMBER:	7040
CALPADS NUMBER:	5507
CST:	
DEPARTMENT:	Career and Technical Education
NCLB TEACHER	
CREDENTIAL REQUIREMENT:	To be determined by the Credential Analyst in
	Personnel
LENGTH OF COURSE	One Year
CREDITS PER SEMESTER	5
GRADE LEVEL(S)	10-12
GRADUATION REQUIREMENT	
OR ELECTIVE:	Elective
PREREQUISITES:	Successful Completion of Woodworking Technology I

BOARD OF EDUCATION ADOPTION:

COURSE DESCRIPTION:

Advanced Woodworking Technology will build upon skills developed in Woodworking Technology I. Students will create more intricate and complicated projects using current technologies including computer aided design and computer controlled machines. Using problem solving and critical thinking techniques the course is designed to help develop college and work ready students.

COURSE OUTLINE:

1. MAJOR GOALS

- 1.1 To reinforce and build upon the skills learned and developed in WoodworkingTechnology I.
- 1.2 To understand and apply basic programming skills for operation of computer controlled machines.
- 1.3 To learn how to design and plan projects using various computer applications.
- 1.4 To introduce to and explore various design criteria.
- 1.5 To recognize and understand the relationships and relevance between wood technologies and core academic subjects areas.
- 1.6 To improve academic subject related skill sets through problem/project based learning.
- 1.7 To explore career opportunities and industry trends in the woodworking and construction trades.

2. PERFORMANCE OBJECTIVES:

PATHWAY OBJECTIVES

- A1.0 Students understand measurement systems in the planning and layout process used in the cabinetmaking and wood products industry
 - A1.1 Know design solutions to common problems in cabinetmaking and wood products
 - A1.3 Know conventional measurement processes for cabinet making and wood products, linear measurements and conversations of fractions and decimals
 - A1.4 Know conventional measurement processes for cabinetmaking and wood products, linear measurements, and conversions of fractions and decimals
- A2.0 Students understand the safe and appropriate use of hand tools common to the cabinetmaking and wood products industry
 - A2.1 Use common hand tools and accessories, such as planers, shapers, clamping and gripping tools, pliers, wrenches, wood chisel, hammers, hand saws and squares, safely and properly
 - A2.2 Maintain and care for common hand tools
- A3.0 Students understand the safe and appropriate use of portable power tools common to the cabinetmaking and wood products industry
 - A3.1 Use portable power tools, such as single and compound miter saws, drills, sanders, saber saws, and routers safely and appropriately
 - A3.2 Use pneumatic tools, such as pneumatic clamps, grips, framing nails guns, and finishing and brad nail guns, safely and properly
 - A3.3 Maintain and care for portable power and pneumatic tools
- A4.0 Students understand the safe and appropriate use of stationary power machines and equipment common to the cabinetmaking and wood products Industry
 - A4.1 Understand the proper and safe use of stationary power tools used in the milling process, such as shapers, sanders, joiners, table saws, and band saw
 - A4.4 Know the basic care, maintenance, and lock-out procedures for stationary power tools
- A5.0 Students understand procedures and processes as they occur in the cabinetmaking and wood products industry
 - A5.1 Know how to read, understand, design and construct cabinets accurately from cabinetmaking fabrication and installation plans and specifications
 - A.5.2 Understand how to estimate a bill of materials from drawings and specifications for constructing cabinets
- A6.0 Students understand the value and necessity of practicing occupational safety in the cabinetmaking industry shop
 - A6.1 Know the safety rules in the cabinetmaking work environment
 - A6.2 Use hand tools (wood chisels, drills, coping saws) and power tools (routers,

sanders, planers) safely in the cabinet working environment

- A.6.3 Understand how to handle and dispose of toxic materials safely and use protective clothing as needed when using lacquers, acetone, thinners, staining materials, and so forth in an environmentally responsible manner
- A7.0 Students understand the variety of production process used in the cabinetmaking and wood products industry
 - A7.1 Design and create cabinet and wood products.
 - A7.2 Develop a production plan, including the layout, bill of materials and cost. Analyze for the production of cabinets or wood products.
 - A7.3 Use stationary and portable power tools in milling the components for cabinets and wood products
 - A7.4 Use stationary and portable power tools in the assembly of cabinet and wood product components
 - A7.5 Use finish tools (e.g., airless sprayers, palm sanders) and techniques for finishing cabinets and wood products
- A8.0 Students understand the impact of financial, technical, and environmental trends on the past and future of the cabinetmaking and wood products industry
 - A8.1 Understand significant historical trends in cabinetmaking and wood products technology
 - A8.2 Understand environmental regulations that influence the cabinetmaking and wood products industry
 - A8.3 Understand issues of the sustainable use of wood product resources
- A.9.0 Students understand career preparation and how it applies across all standards for students planning to enter and advance successfully in the cabinetmaking and wood products industry
 - A9.1 Understand the careers that are available in cabinetmaking and wood products manufacturing and related occupations (e.g., custom crafts, furniture making, marketing)
 - A9.2 Understand the need for professional growth across all aspects of the industry, including financial, leadership, and advancement elements

FOUNDATION OBJECTIVES

- 1.1 Mathematics
 - 2.1 Use estimations to verify the reasonableness of calculated results
 - 2.2 Apply strategies and results from simpler problems to more complex problems
 - 2.3 Estimate unknown quantities graphically and solve for them by using logical reasoning and arithmetic and algebraic techniques
 - 2.7 Indicate the relative advantages for exact and approximate solutions to problems and give answers to specified degree of accuracy
 - 2.8 Make precise calculations and check the validity of the results from the context of the problem
 - 3.1 Evaluate the reasonableness of the solution in the context of the original situation
 - 3.2 Note the method of deriving the solution and demonstrate a conceptual

understanding of the derivation by solving similar problems

- 3.3 Develop generalizations of the results obtained and the strategies used and apply them to new problem situations
- 8.0 Students know, derive, and solve problems involving the perimeter, circumference, area, volume, lateral areas, and surface area of common geometric figures
- 11.0 Students determine how changes in dimensions affect the perimeter, area, and volume of common geometric figures and solids
- 12.0 Students find and use measures of sides and of interior and exterior angles of triangles and polygons to classify figures and solve problems
- 15.0 Students use the Pythagorean Theorem to determine distance and find missing lengths of sides of right triangles
- 1.3 History- Principals of Economics
 - 12. 4.1 Understand the operations of the labor market, including the circumstances surrounding the establishment of principal American labor unions, procedures that unions use to gain benefits for their members, the effects on unionization, the minimum wage, and unemployment insurance
 - 12.4.2 Describe the current economy and labor market, including the types of goods an services produced, the types of skills workers need, the effects of rapid technological change and the impact of international competition
 - 12.4.3 Discuss wage differences among jobs and professions, using the laws of demand and supply and the concept of productivity
- 1.4 Visual and Performing Arts
 - 1.4 Analyze and describe how the composition of a work of art is affected by the use of a particular principle of design
 - 2.1 Solve a visual arts problem that involves the effective use of the elements of are and the principles of design
- 2.0 Communications
- 2.1 Reading
 - 2.1 Analyze the structure and format of function workplace documents, including the graphics and headers, and explain how authors use the features to achieve their purposes
 - 2.6 Demonstrate use of sophisticated learning tools by following technical directions (e.g., those found with graphic calculators and specialized software programs and access guides to World Wide Web sites on the internet)
 - 2.3 Verify and clarify facts presented in other types of expository texts by using a variety of consumer, workplace, and public documents
- 2.2 Writing
 - 1.4 Plan and conduct multiple-step information searches by using computer networks and modems
 - 1.5 Achieve an effective balance between researched information and original ideas
 - 1.7 Use systematic strategies to organize and record information (e.g., anecdotal scripting, annotated bibliographies)

2.4 Listening and Speaking

- 1.2 Paraphrase a speaker's purpose and point of view and ask relevant questions concerning the speaker's content delivery, and purpose
- 1.3 Organize information to achieve particular purposes by matching the message, vocabulary, voice modulation, expression, and tone to the audience and purpose

2.5 Multimedia

Understand the importance of technical and computer aided design and drawing technologies essential to the language of engineering and design industry, including reading, writing, interpreting, and creating drawings, sketches and schematics using engineering and design industry conventions and standards: interpreting and understanding detailed information provided from available technical documents, both print and electronic, and from experience people; and using computers calculators, multimedia equipment, and other devices in a variety of applications

3.0 Career Planning and Management

- 3.1 Know the personal qualifications, interests, aptitudes, knowledge, and skills necessary to succeed in careers
- 3.2 Understand the scope of career opportunities and know the requirements for education, training and licensure
- 3.3 Develop a career plan that is designed to reflect career interest, pathways, and postsecondary options
- 3.4 Understand the role and function of professional organizations, industry Associations and organized labor in a productive society
- 3.5 Understand the past, present, and future trends that affect careers, such as technological developments and societal trends, and the resulting need for lifelong learning
- 3.6 Know important strategies for self-promotion in the hiring process, such as job applications, resume writing, interviewing skills, and preparation portfolio
- 3.7 Understand the nature of entrepreneurial activities

4.0 Technology

- 4.1 Understand past, present, and future technological advances as they relate to a chosen pathway
- 4.2 Understand the use of technological resources to gain access to, manipulate and produce information, products and services
- 4.3 Understand the influences of current and emerging technology on selected segments of the economy

5.0 Problem Solving and Critical Thinking

- 5.1 Apply appropriate problems –solving and critical thinking skills to work issues and tasks
- 5.2 Understand the systematic problem-solving models that incorporate input, process, outcome, and feedback components
- 5.3 Use critical thinking skills to make informed decisions and solve problems
- 5.4 Apply trouble –shooting strategies, including failure-analysis procedures, in three dimensional product material and design work

- 5.5 Apply the design process in the design, development, evaluation, and refinement of a prototype for a construction industry product
- 6.0 Health and Safety
 - 6.1 Know the policies, procedures, and regulations regarding health and safety in the workplace, including employers' and employees' responsibilities
 - 6.2 Understand critical elements for health and safety practices related to storing, cleaning, and maintaining tools, equipment, and supplies
 - 6.3 Know procedures for and regulations concerning the handling, storage and disposal of hazardous materials
 - 6.6 Understand the importance of identifying health and safety problems as well as asking for help or approaching supervisors to discuss concerns
- 7.0 Responsibility and Flexibility
 - 7.1 Understand the qualities and behaviors that constitute a positive and professional work demeanor
 - 7.2 Understand the importance of accountability and responsibility in fulfilling personal, community and workplace roles
 - 7.3 Understand the need to adapt to a varied roles and responsibilities
 - 7.4 Understand that individual actions can affect the larger community
 - 7.5 Understand employer and employee responsibilities in the workplace
- 8.0 Ethics and Legal Responsibilities
 - 8.2 Understand the concept and application of ethical and legal behavior consistent with workplace standards
 - 8.3 Understand the role of personal integrity and ethical behavior in the workplace
 - 8.4 Understand how social, organizational, and technological systems work
- 9.0 Leadership and Teamwork
 - 9.1 Understand the characteristics and benefits of teamwork, leadership, and citizenship the school, community and workplace
 - 9.2 Understand the ways in which professional associations, such as the Skills USA, and completive career development activities enhance academic skills, promote career choices, and contribute to employability
 - 9.3 Understand how to organize and structure work individually and in teams for effective performance and the attainment of goals
 - 9.4 Know the multiple approaches to conflict resolution and their appropriateness for a variety of situations in the workplace
 - 9.5 Understand how to interact with other in ways that demonstrate respect for individual and cultural differences and for the attitudes and feelings of others
 - 9.6 Communicate ideas to justify positions, persuade and convince others, confirm responsibility, and evaluate existing policies and procedures
- 10.0 Technical Knowledge and Skill
 - 10.1 Understand construction processes and systems and their importance in construction technology
 - 10.2 Maintain and troubleshoot equipment used in the construction industry
 - 10.3 Use, store and allocate materials efficiently, and use space efficiently
 - 10.4 Understand the planning and design, construction and servicing of structures and electromechanically systems in relation to construction

activities

- 10.6 Understand universal graphic conventions and symbols and technical manuals and specifications
- 10.7 Understand the attributes of good design
- 10.9 Understand the need to participate in sector-related professional improvement activities, Skills USA, other career technical education leadership and skill associations, and related career pathway specializations

3. CONTENT OUTLINE:

- 3.1.a Pathway Standard A1.0 Students will understand measurement systems in the planning and layout process used in the cabinetmaking and wood products industry
- 3.1.b Foundation Standard 1.1 Mathematics
- 3.1.c Foundation Standard 2.1 Reading
- 3.1.d Foundation Standard 2.5 Multimedia
 - 3.1.1 Proper use of measurement and layout tools
 - 3.1.1.1 Review use of tape measures tri-squares, rulers, architectural scales, engineer's scales, t-bevel squares, framing squares
 - 3.1.1.2 Introduce use of micrometers and vernier calipers
 - 3.1.2 Review the transfer of measurements from plans to materials
 - 3.1.2.1 Demonstrate and practice transfer of scaled dimensions to wood
 - 3.1.3 Review mathematical estimations and calculations to verify project results 3.1.3.1 Compare finished project with written plans
 - 3.1.4 Review the reading and interpreting of plans to construct various projects 3.1.4.1 Build various fine woodworking pieces
 - 3.1.5 Continue to use computer aided design
 - 3.1.5.1 Require students to use the computer in designing projects
- 3.2.a Pathway Standard A2.0 Students understand the safe and appropriate use of hand tools common to the cabinetmaking and wood products industry
- 3.2.b Foundation Standard 2.1 Reading (safety packet)
- 3.2.c Foundation Standard 2.2 Writing
- 3.2.d Foundation Standard 2.4 Listening and speaking
 - 3.2.1 Review safe use and proper care of hand tools
 - 3.2.1.1 Wearing eye protection, bench vice, scratch awl, hammer
 - 3.2.2 Review the similarities to stationary equipment
 - 3.2.2.1 Compare hand saw/table saw, coping saw/jig saw, brace & bit/drill press
 - 3.2.3 Review the proper care of hand tools
 - 3.2.3.1 Returning tools to proper storage area, carrying tools correctly.
 - 3.2.4 Review safety Packet
 - 3.2.4.1 Read, discuss and write safety procedures
- 3.3.a Pathway Standard A3.0 Students understand the safe and appropriate use of portable power tools common to the cabinetmaking and wood products industry
- 3.3.b Foundation Standard 2.1 Reading (safety packet)
- 3.3.c Foundation Standard 2.2 Writing
- 3.3.d Foundation Standard 2.4 Listing and Speaking
 - 3.3.1 Review safe use and proper care of portable power tools

- 3.3.1.1 Demonstrate and practice the use and safety of drills, saws and sanders
- 3.3.2 Review the similarities to portable and stationary power tools
 - 3.3.2.1 Discuss the comparison of the circular saw/table saw, saber saw/jig saw
- 3.3.3 Review proper care, maintenance and repair of portable power tools
 - 3.3.3.1 Demonstrate and practice the replacement of cords on drills, circular saws, sanders
- 3.3.4 Review safety Packet
 - 3.3.4.1 Read, discuss and write safety procedures
- 3.4. a Pathway Standard A4.0 Students understand the safe and appropriate use of stationary power machines and equipment common the cabinetmaking and wood products industry
- 3.4.b Foundation Standard 2.1 Reading (safety packet)
- 3.4.c Foundation Standard 2.2 Writing
- 3.4.d Foundation Standard 2.4 Listing and Speaking
 - 3.4.1 Review the of safe use and proper care of stationary equipment
 - 3.4.1.1 Demonstrate and practice use of shaper, sanders, jointers, table saws, and band saws
 - 3.4.2 Review the squaring sequence
 - 3.4.2.1 Demonstrate, discuss and practice the use of the jointer, table saw, and planer
 - 3.4.3 Review the proper care, maintenance and repair of stationary power equipment 3.4.3.1 Demonstrate, and discuss lubrication, blade care, and safety attachments
 - 3.4.4 Review safety Packet
 - 3.4.4.1 Read, discuss and write safety procedures
- 3.5.a Pathway Standard A5.0 Students understand procedures and processes as they occur in the cabinet making and wood products industry
- 3.5.b Foundation Standard 1.1 Math
- 3.5.c Foundation Standard 2.1 Reading
- 3.5.d Foundation Standard 2.4 Listening and Speaking
- 3.5.e Foundation Standard 5.0 Problem solving and critical thinking
 - 3.5.1 Read and interpret construction plans
 - 3.5.1.1 Convert fractions to decimals to estimate material needed
 - 3.5.1.2 Read and identify information provided on plan
 - 3.5.1.3 Identify the proper procedures used to construct chosen project
 - 3.5.1.4 Discuss the proper sequence of procedures in building a piece of furniture
- 3.6 .a Pathway Standard A6.0 Students understand the value and necessity of practicing occupational safety in the cabinetmaking industry shop
- 3.6. b Foundation Standard 2.1 Reading
- 3.6. c Foundation Standard 2.2 Writing
- 3.6. d Foundation Standard 2.4 Listing and Speaking
- 3.6. e Foundations Standard 6.0 Health and Safety
 - 3.6.1 Review environmental safety
 - 3.6.1.1 Demonstrate and practice proper dust collection.
 - 3.6.1.2 Demonstrate and discuss the use and storage of hazardous materials

- 3.6.1.3 Read and discuss Material Safety Data Sheets. (Provided by material manufacturers)
- 3.6.2 Review woodshop management
 - 3.6.2.1 Demonstrate and practice clean-up procedures, project and material storage
 - 3.6.2.2 Demonstrate and practice shop / school schedule, rules and regulations
 - 3.6.2.3 Discuss grading matrix
 - 3.6.2.4 Review safety packet
 - 3.6.2.4.1 Read, discuss and write safety procedures
- 3.7.a Pathway Standard A7.0 Students understand the variety of production process used in the cabinetmaking and wood products industry
- 3.7.b Foundation Standard 1.1 Mathematics
- 3.7.c Foundation Standard 2.1 Reading
- 3.7.d Foundation Standard 2.3 Listening and Speaking
- 3.7.e Foundation Standard 5.0 Problem solving and critical thinking
- 3.7.f Foundation Standard 7.0 Responsibility and Flexibility
- 3.7.g Foundation Standard 9.0 Leadership and Teamwork
- 3.7.h Foundation Standard 10.0 Technical Knowledge and Skill
- 3.7.i Foundation Standard 2.5 Multimedia
 - 3.7.1 Review the use of proper gluing materials and clamping techniques
 - 3.7.1.1 Assemble a piece of fine furniture with appropriate clamps, glue
 - 3.7.2 Introduce the design and proper selection of fasteners used in furniture making 3.7.2.1 Assemble a piece of fine furniture with appropriate fasteners
 - 3.7.3 Read instructions and interpret printed plans
 - 3.7.3.1 Cut and machine project parts per blueprints
 - 3.7.4 Interpret mathematical ratios and measurement from plans to projects 3.7.4.1 Transfer scale dimensions from plans to materials
 - 3.7.5 Identify hardwood types and characteristic
 - 3.7.5.1 Compare / contrast walnut, oak, poplar for appropriate use
 - 3.7.6 Review project estimation
 - 3.7.6.1 Estimate the amount of materials needed for projects
 - 3.7.7 Proper selection of joinery
 - 3.7.5.1 Review and evaluate the use of the box joint, miter joint, and dovetail joint
 - 3.7.8 Proper selection of abrasives
 - 3.7.6.1 Demonstrate the progression of different abrasive grades and types
 - 3.7.9 Proper selection of finish materials
 - 3.7.7.1 Evaluate different types and proper application of finishing materials
 - 3.7.10 Identify advantages/ disadvantages of teamwork/ individual project management
 - 3.7.10.1 Provide opportunity for individual and group work
 - 3.7.10.2 Evaluate lessons learned with group / individual projects
 - 3.7.11 Identify technical components in good design
 - 3.7.11.1 Demonstrate and use the ratios of the golden ratio
 - 3.7.11.2 Demonstrate the live loads on material selection
 - 3.7.12 Identify computer controlled production processes
 - 3.7.12.1 Demonstrate and incorporate the use of computer controlled routers and lasers
- 3.8.a Pathway Standard 8.0 Students understand the impact of financial, technical, and

environmental trends on the past and future of the cabinetmaking and wood products industry

- 3.8.b Foundation Standard 1.3 History- Principles of economics
- 3.8.c Foundation Standard 2.4 Listening and speaking
- 3.8.d Foundation Standard 3.0 Career Planning and Management
- 3.8.e Foundation Standard 5.0 Problem solving and Critical thinking
- 3.8.f Foundation Standard 6.0 Health and Safety
 - 3.8.1 Review and identify new industry trends
 - 3.8.1.1 Examine and discuss the escalation of wages over time
 - 3.8.1.2 Explore and discuss sustainable materials
 - 3.8.1.3 Discuss the evolution of green technologies
 - 3.8.2 Provide opportunities to explore post secondary options
 - 3.8.2.1 Invite guest speakers from industry, technical schools, colleges, and universities
 - 3.8.2.2 Field trips to tour various production facilities, job sites, and offices
 - 3.8.3 Evaluate project designs, and production methods
 - 3.8.3.1 Compare / contrast student projects
 - 3.8.4 Explore the issues around the toxic materials used in a woodshop 3.8.4.1 Explain the differences in oil and water based finish materials
- 3.9 a Pathway Standard 9.0 Students understand career preparation and how it applies across all standards for students planning to enter and advance successfully in the cabinetmaking and wood products industry
- 3.9.b Foundation Standard 2.4 Listening and Speaking
- 3.9.c Foundation Standard 3.0 Career Planning and Management
- 3.9.d Foundation Standard 7.0 Responsibility and Flexibility
- 3.9.e Foundation Standard 8.0 Ethics and Legal Responsibility
- 3.9.f Foundation Standard 9.0 Leadership and Teamwork
- 3.9.g Foundation Standard 10.0 Technical Knowledge and Skill
 - 3.9.1 Provide opportunities to explore post secondary options
 - 3.9.1.1 Invite guest speakers from industry, technical schools, colleges, and universities
 - 3.9.1.2 Field trips to tour various production facilities, job sites, and offices.
 - 3.9.2 Explore soft skills needed
 - 3.9.2.1 Discuss and practice accountability, timeliness, and being a team player through the required daily routine
 - 3.9.2.2 Discuss and practice the need to be flexible with co-workers, customers, and suppliers by having to adapt to changes in directed activities
 - 3.9.3 Explore the necessity of ethical behavior in the workplace
 - 3.9.3.1 Discuss and explore the role of social, organizational and personal integrity as practiced in the classroom and job situations
 - 3.9.4 Explore the vital role of teamwork in the modern workplace
 - 3.9.4.1 Identify how the accomplishments of a group differ from the accomplishments of individuals
 - 3.9.5 Examine the workplace environment before and after the introduction of computers
 - 3.9.5.1 Compare / contrast workplace productivity before and after the introduction of computer technology
 - 3.9.5.2 Discuss the future of computers in industrial production facilities

4. TIME ESTIMATES:

- 4.1 Orientation 1 week
- 4.2 Safety 1 week
- 4.3 Review hand a portable power tools 2 days
- 4.4 Review stationary power tools 3 days
- 4.5 Materials 1 week
- 4.6 Measurement, Layout and Design 6 weeks
- 4.7 Joinery 2 weeks
- 4.8 Fabrication 20 weeks (dispersed throughout year)
- 4.9 Abrasives and Finishes 2 weeks
- 4.10 Career Information 1 week
- 4.11 Consumer Information 1 week

5. INSTRUCTIONAL MATERIALS:

- 5.1 District adopted textbooks and supplementary materials that comply with the California Education Code
- 5.2 Teacher prepared materials
- 5.3 Charts, models and multimedia, technology and software that comply with the California Education Code
- 5.4 Presentation from outside speakers in woodworking related industry

6. INSTRUCTIONAL METHODS AND/OR STRATEGIES:

- 6.1 Lecture and demonstration
- 6.2 Class written and oral work
- 6.3 Opportunity to build reading and writing skills
- 6.4 Opportunity to build mathematics skills
- 6.5 Woodworking projects and lab work
- 6.6 Computer technology and instruction
- 6.7 Informational worksheets

7. EVALUATION OF STUDENT PROGRESS:

- 7.1 Evaluation of Lab work/project work
- 7.2 Class written assignments
- 7.3 Tests and quizzes
- 7.4 Classroom participation

8. EXPECTATIONS FOR TEACHERS:

- 8.1 Instructors will continue professional development to keep current with changes in the woodworking industry
- 8.2 Instructors will provide a safe working/learning environment for all students

Sample Lesson Plan (using backward planning model)

Standard to be taught:

A 7.3 Use stationary and portable power tools in milling the components for cabinets and wood products

Assessment:

The top of a jewelry box will display proper design techniques and correct computer settings

Teaching Strategies:

- 1. Lecture
- 2. Demonstration
- 3. Guided practice
- 4. Computer tutorial

Student Activity:

Student will successfully program the laser using computer software to produce wooden engraving to be used as a top for a jewelry box

Resources:

Laser and related computer equipment (software and hardware)

Committee Members:

Melinda Hall	Director of Curriculum & Instruction		Curriculum & Instruction
Joanne Durkee	Director, Adult Education		Adult Education
Spoogmai Habibi	Curriculum Specialist		Curriculum and Instruction
Tom Towbridge	Teacher	Woodworking/Construction	Concord High School
Steve Seaman	Teacher	Woodworking/Construction	Mt. Diablo High School
Terry Toliver	Teacher	Woodworking	Ygnacio Valley High School
Paul Meyer	Teacher	Woodworking	Clayton Valley High School