

**Wallingford Public Schools - HIGH SCHOOL COURSE OUTLINE**

<b>Course Title:</b> Design & Production of Wood Products	<b>Course Number:</b> 7233
<b>Department:</b> Career and Technical Education	<b>Grade(s):</b> 9 - 12
<b>Level(s):</b> Academic	<b>Credit:</b> ½
<b>Course Description</b> This course will provide students with an opportunity to experience activities using materials, tools and processes within this production area. Students will use a variety of hand and machine tools; planning, layout, processing in assembly, and finishing techniques related to wood products.	
<b>Required Instructional Materials</b> <ul style="list-style-type: none"> <li><i>Modern Woodworking</i>, Goodheart-Wilcox, 1996</li> </ul>	<b>Completion/Revision Date</b> Revisions Approved by Board of Education on November 16, 2009

**Mission Statement of the Curriculum Management Team**

The mission of the Career and Technical Education Curriculum Management Team is to ensure that students, as a result of their experiences in K-12, will demonstrate transferable skills, knowledge, and attributes for successful life management, employment, career development, post-secondary educational opportunities, and life long learning.

**Enduring Understandings for the Course**

- Careful planning will save time, resources, and energy while ensuring the production of a high quality product.
- Researching multiple solutions is critical to the design process.
- Creating a plan of procedure and a bill of materials is essential to move from design to production.
- Understanding the quality of workmanship and the use of different materials will help consumers make better-informed choices.
- Cost, durability, appearance, and availability influence material selection.
- Improved forest management and lumber harvesting techniques are in direct response to environmental and sustainability concerns.
- Every person is responsible for his or her own safety and the safety of others.
- Skilled and safe use of material, equipment and tools will result in a safe working environment for all.
- Properly maintaining tools and equipment aides in safe and effective use.
- Math is a critical component of measurement and layout.
- Acceptable precision and tolerances vary according to materials, processes, implementation, and application.
- Understanding and using machines safely is a lifelong skill for the consumer, hobbyist, and the career professional.

<ul style="list-style-type: none"> <li>• Understanding the quality of workmanship and the use of different materials will help consumers make better-informed choices.</li> </ul>
<ul style="list-style-type: none"> <li>• Woodworkers can create intricate designs by combining basic machine operations.</li> </ul>
<ul style="list-style-type: none"> <li>• The difference between knowing and assuming you know can result in very costly mistakes and possible injuries.</li> </ul>
<ul style="list-style-type: none"> <li>• There are a variety of ways to create and strengthen wood joints.</li> </ul>
<ul style="list-style-type: none"> <li>• Modern adhesives can increase design flexibility and simplify assembly.</li> </ul>
<ul style="list-style-type: none"> <li>• Mechanical fasteners can increase the strength, longevity, and aesthetic value of a project.</li> </ul>
<ul style="list-style-type: none"> <li>• Coated abrasives are made from a variety of materials, both natural and synthetic, and have a wide range of uses.</li> </ul>
<ul style="list-style-type: none"> <li>• Proper surface preparation is necessary to achieve a professional-quality finish.</li> </ul>
<ul style="list-style-type: none"> <li>• The chemical composition of a finish affects its durability and aesthetic value.</li> </ul>
<ul style="list-style-type: none"> <li>• Environmental concerns and increased consumer awareness drive the development and use of green products</li> </ul>
<ul style="list-style-type: none"> <li>• Woodworking is a substantial bridge connecting manufacturing and construction career pathways.</li> </ul>
<ul style="list-style-type: none"> <li>• Transferable skills, content knowledge, and positive attributes help prepare students for employment and educational opportunities.</li> </ul>
<ul style="list-style-type: none"> <li>• An individual's earning potential is directly related to that individual's skill level, certification, and continuing education.</li> </ul>
<ul style="list-style-type: none"> <li>• Accurate measurement and layout is necessary for the success of any woodworking project.</li> </ul>

**LEARNING STRAND**

## 1.0 Fundamentals: Planning and Designing

### **ENDURING UNDERSTANDING(S)**

- Careful planning will save time, resources, and energy while ensuring the production of a high quality product.
- Researching multiple solutions is critical to the design process.
- Creating a plan of procedure and a bill of materials is essential to move from design to production.

### **ESSENTIAL QUESTION(S)**

- How does careful planning save time, money, and energy?
- How does the planning and design process directly affect product quality?
- Why do you try different ways of doing something?

### **LEARNING OBJECTIVES** The student will:

- 1.1 Use research techniques to support design development.
- 1.2 Develop several alternative design solutions to the same problem.
- 1.3 Apply organizational skills to classroom and laboratory activities.
- 1.4 Identify and describe the four design factors and their interrelationship.
- 1.5 Create a plan of procedure.
- 1.6 Create a bill of materials.
- 1.7 Create a series of Isometric, Oblique, and Working Drawings for a student project.

### **INSTRUCTIONAL SUPPORT MATERIALS**

- *Modern Woodworking* textbook
- Brochures and handouts
- [www.howstuffworks.com](http://www.howstuffworks.com)
- Home Time Series (several topics)
- [www.thewoodworkinshow.com](http://www.thewoodworkinshow.com)
- [www.crincoliwoodwork.com](http://www.crincoliwoodwork.com)
- [www.woodworkdesigns.com](http://www.woodworkdesigns.com)
- [www.instantplans.com](http://www.instantplans.com)
- Various woodworking videos

### **SUGGESTED INSTRUCTIONAL STRATEGIES**

- Cooperative learning
- Guest speakers who design and build various wood products (cabinetry: furniture; specialty products)
- Individualized instruction
- Demonstrations on development of drawings
- Demonstrate the correct use of specific tools utilized to develop design drawings

### **SUGGESTED ASSESSMENT METHODS**

- Quizzes/Tests
- Projects
- Oral Presentations
- Writing Assignments
- Participation

## **LEARNING STRAND**

## 2.0 Fundamentals: Selecting and Identifying Materials

### **ENDURING UNDERSTANDING(S)**

- Understanding the quality of workmanship and the use of different materials will help consumers make better-informed choices.
- Cost, durability, appearance, and availability influence material selection.
- Improved forest management and lumber harvesting techniques are in direct response to environmental and sustainability concerns.

### **ESSENTIAL QUESTION(S)**

- What factors influence material selection?
- How do materials affect the quality and integrity of a product?
- How are aesthetics affected by choice of materials?
- How have materials changed over time?

### **LEARNING OBJECTIVES** – The student will:

- 2.1 Classify raw materials according to their physical and mechanical properties.
- 2.2 List the techniques used to extract raw materials from the environment.
  - Lumber harvesting and forest management.
  - The milling process.
- 2.3 Identify secondary materials and processes through product analysis.
  - Oriented-Strand Board
  - Veneers
  - Plywood
  - Medium Density Fiber Board
  - Parallel Strand Lumber
- 2.4 Select the most appropriate materials for the project.
- 2.5 Evaluate the environmental impact related to harvesting and of various materials.

### **INSTRUCTIONAL SUPPORT MATERIALS**

- Brochures and handouts
- *Modern Woodworking* textbook
- [www.Woodcraft.com](http://www.Woodcraft.com)
- [www.mastrowoodworking.com/materials.htm](http://www.mastrowoodworking.com/materials.htm)
- [www.modernwoodworking.com](http://www.modernwoodworking.com)
- [www.woodworker.com](http://www.woodworker.com)
- [www.diynetwork.com](http://www.diynetwork.com)
- [www.hardwoodboardsource.com](http://www.hardwoodboardsource.com)
- [www.woodworking.com/links](http://www.woodworking.com/links)
- Multiple various wood materials
- [www.corrim.org](http://www.corrim.org)
- [www.timber.org](http://www.timber.org)
- [www.esf.edu/center/eis/woodmaterials.htm](http://www.esf.edu/center/eis/woodmaterials.htm)

### **SUGGESTED INSTRUCTIONAL STRATEGIES**

- Cooperative learning
- Guest speakers from lumberyard suppliers
- Individualized instruction
- Demonstrations to compare and contrast qualities and uses of various materials
- Demonstrate why certain materials are recommended or ignored based on physical and mechanical properties
- Compare various materials for cost, appropriate use, and aesthetics
- Evaluate environmental impact of all wood materials in the manufacturing process of all wood products

### **SUGGESTED ASSESSMENT METHODS**

- Quizzes/Tests

- Projects
- Oral Presentations
- Writing Assignments
- Participation

## **LEARNING STRAND**

### 3.0 Fundamentals: Occupational Safety

#### **ENDURING UNDERSTANDING(S)**

- Every person is responsible for his or her own safety and the safety of others.
- Skilled and safe use of material, equipment and tools will result in a safe working environment for all.
- Properly maintaining tools and equipment aides in safe and effective use.

#### **ESSENTIAL QUESTION(S)**

- How do you ensure safe working conditions?
- What are the rules, processes, and procedures, designed to product?
- Why is appropriate behavior critical to one's safety and well-being?
- What is the role of OSHA concerning one's safety?

#### **LEARNING OBJECTIVES** – The student will:

- 3.1 Recognize work habits and procedures that promote safety.
- Demonstrate safe and appropriate procedures for tools and machines.
  - Keep work area clean.
  - Do not distract others.
  - Plan your work ahead of time.
  - Wear safety glasses and proper attire in all shop/lab settings.
- 3.2 Identify location and use of emergency safety equipment.
- Fire extinguisher
  - Fire blanket
  - Eye wash station
  - Power shut off buttons
- 3.3 Summarize societal and industrial responsibilities for using proper hazardous waste disposal techniques.
- 3.4 Identify the government's role in setting and enforcing standards for personal and environmental safety.

#### **INSTRUCTIONAL SUPPORT MATERIALS**

- Brochures and handouts
- *Modern Woodworking* textbook
- [www.diynetwork.com](http://www.diynetwork.com)
- [www.osha.gov](http://www.osha.gov)
- [www.lsu.com/Pubsafety/oes](http://www.lsu.com/Pubsafety/oes)
- [www.thecraftmanspath.com](http://www.thecraftmanspath.com)
- [www.inthewoodshop.org/safety](http://www.inthewoodshop.org/safety)
- Building Trade Videos
  - a. Home Time Series (several topics)
- Snap-On Tools Safety Videos
- Hand and power tool safety videos
  - a. [www.webworldin.com](http://www.webworldin.com)
  - b. [www.cpssc.gov](http://www.cpssc.gov)
  - c. [www.mrsfixit.com](http://www.mrsfixit.com)

#### **SUGGESTED INSTRUCTIONAL STRATEGIES**

- Cooperative learning
- Group presentations on various safety risks, issues, accidents and precautions
- Independent reading
- Demonstrations
- Internet research
- Case studies
- Advice columns

#### **SUGGESTED ASSESSMENT METHODS**

- Quizzes/Tests
- Projects
- Oral Presentations
- Writing Assignments
- Participation

<b><u>LEARNING STRAND</u></b>	
4.0 Basic Processes: Measurement and Layout	
<b><u>ENDURING UNDERSTANDING(S)</u></b>	<b><u>ESSENTIAL QUESTION(S)</u></b>
<ul style="list-style-type: none"> <li>• Math is a critical component of measurement and layout.</li> <li>• Acceptable precision and tolerances vary according to materials, processes, implementation, and application.</li> <li>• Accurate measurement and layout is necessary for the success of any woodworking project.</li> </ul>	<ul style="list-style-type: none"> <li>• Why don't other countries use the measuring system that we do?</li> <li>• Why is accurate measurement vital to maintaining quality?</li> <li>• Why are mathematical conversions necessary in our global society?</li> <li>• How does inaccurate calculation and measurement affect overall cost of the manufacturing process?</li> </ul>
<b><u>LEARNING OBJECTIVES</u></b> – The student will:	<b><u>INSTRUCTIONAL SUPPORT MATERIALS</u></b>
<p>4.1 Identify common systems of measurement and be able to convert from one to another.</p> <p>4.2 Demonstrate the ability to measure in fractional form and perform basic mathematical operations (add, subtract, divide, and multiply) with fractional values.</p> <p>4.3 Analyze project components to create an accurate layout that ensures efficient use of materials.</p> <p>4.4 Demonstrate the appropriate use of templates to simplify the layout process and improve the quality of the component.</p>	<ul style="list-style-type: none"> <li>• Brochures and handouts</li> <li>• <i>Modern Woodworking</i> textbook</li> <li>• <a href="http://www.using-tools.com/layout-tools.htm">www.using-tools.com/layout-tools.htm</a></li> <li>• <a href="http://www.woodworkingsecrets.com">www.woodworkingsecrets.com</a></li> <li>• <a href="http://www.ehow.com">www.ehow.com</a></li> <li>• <a href="http://www.woodbin.com/misc/layout_tools.htm">www.woodbin.com/misc/layout_tools.htm</a></li> <li>• Various measurement tools and measurement converters</li> <li>• Various templates used in woodworking layout</li> </ul>
	<b><u>SUGGESTED INSTRUCTIONAL STRATEGIES</u></b>
	<ul style="list-style-type: none"> <li>• Cooperative learning</li> <li>• Group presentations on various uses of measurement tools</li> <li>• Group presentations that demonstrate accurate vs. inaccurate measurement and layout outcomes</li> <li>• Independent reading</li> <li>• Demonstrations</li> <li>• Internet research</li> </ul>
	<b><u>SUGGESTED ASSESSMENT METHODS</u></b>
	<ul style="list-style-type: none"> <li>• Quizzes/Tests</li> <li>• Projects</li> <li>• Oral Presentations</li> <li>• Writing Assignments</li> <li>• Participation</li> </ul>

## **LEARNING STRAND**

### 5.0 Basic Processes: Machine Safety and Usage

#### **ENDURING UNDERSTANDING(S)**

- Understanding and using machines safely is a lifelong skill for the consumer, hobbyist, and the career professional.
- Every person is responsible for his or her own safety and the safety of others.
- Skilled and safe use of material, equipment and tools will result in a safe working environment for all.
- Properly maintaining tools and equipment aides in safe and effective use.

#### **ESSENTIAL QUESTION(S)**

- What are the potential dangers of misusing tools, power tools, and equipment?
- How do you ensure safe working conditions?
- What precautions need to be taken when maintaining equipment?
- Why is it important to recognize the difference between knowing and assuming you know how to correctly use machine tools?

#### **LEARNING OBJECTIVES** – The student will:

5.1 Identify and use hand tools properly.

Such as;

- Screw drivers
- Hammers
- Chisels
- Files
- Squares
- Tape Measures

5.2 Identify and use portable power tools.

- Power Drills
- Routers
- Saws
- Biscuit Jointer

5.3 Demonstrate proper use of stationary power equipment.

- Table Saw
- Miter Saw
- Radial Arm Saw
- Drill Press
- Power Sanders
- Skill Saw
- Planner
- Jointer

5.4 Identify proper maintenance procedures and machine settings for all tools.

- Lockout/tagout
- Disconnect power
- Refer to manuals
- Reposition guards

#### **INSTRUCTIONAL SUPPORT MATERIALS**

- *Modern Woodworking* textbook
- [www.dewalt.com](http://www.dewalt.com)
- [www.occupationalhazards.com](http://www.occupationalhazards.com)
- Brochure handouts on the use and maintenance of tools and equipment
- Snap-On Tools Safety and Usage Videos
- Hand and power tool safety videos
- [www.webworldinc.com](http://www.webworldinc.com)
- [www.osha.gov/SLTC/handpowertools](http://www.osha.gov/SLTC/handpowertools)
- [www.wood-worker.com/articles/shopsafety.htm](http://www.wood-worker.com/articles/shopsafety.htm).

#### **SUGGESTED INSTRUCTIONAL STRATEGIES**

- Classroom discussion
- Cooperative learning
- Group presentations
- Internet research
- Independent reading
- Demonstrations
- Hands-on learning and guided practice

#### **SUGGESTED ASSESSMENT METHODS**

- Quizzes/Tests
- Projects
- Oral presentation on equipment operation and maintenance
- Writing assignments
- Teacher observation of group activity
- Participation
- Peer evaluation
- Self evaluation



## **LEARNING STRAND**

### 6.0 Basic Processes: Secondary Machine Operations

#### **ENDURING UNDERSTANDING(S)**

- Understanding the quality of workmanship and the use of different materials will help consumers make better-informed choices.
- Woodworkers can create intricate designs by combining basic machine operations.
- The difference between knowing and assuming you know can result in very costly mistakes and possible injuries.

#### **ESSENTIAL QUESTION(S)**

- What is a secondary machine operation?
- What justifies quality craftsmanship?
- How can secondary machine operations increase value and quality of a project?

#### **LEARNING OBJECTIVES** – The student will:

- 6.1 Analyze complex assemblies to identify the necessary operations to produce the desired outcome.
- Dovetail joints
  - Box joints
  - Mortise and tenon
- 6.2 Combine multiple basic machine operations for engineering or design purposes.
- 6.3 Identify the various joinery techniques available and evaluate their strengths and weaknesses. Such as;
- Lap joints
  - Dado joints
  - Rabbit joints
- 6.4 Summarize how various joinery techniques enhance the aesthetic value of a project.
- 6.5 Recognize that by incorporating irregular shapes, bevels, chamfers, edge treatments, and other modifications

#### **INSTRUCTIONAL SUPPORT MATERIALS**

- [www.woodworking.com/od/joinery](http://www.woodworking.com/od/joinery)
- [www.raygirling.com/wwjoints.htm](http://www.raygirling.com/wwjoints.htm)
- [www.provenwoodworking.com/woodworking-joints.html](http://www.provenwoodworking.com/woodworking-joints.html)
- [www.jigsandjoints.com](http://www.jigsandjoints.com)
- [www.wooden-biox-maker.com](http://www.wooden-biox-maker.com)

#### **SUGGESTED INSTRUCTIONAL STRATEGIES**

- Classroom discussion
- Cooperative learning
- Oral presentation
- Group presentations
- Internet research
- Independent reading
- Demonstrations
- Hands-on learning and guided practice

#### **SUGGESTED ASSESSMENT METHODS**

- Quizzes/Tests
- Projects
- Oral presentation on equipment operation and maintenance
- Writing assignments
- Participation
- Peer evaluation
- Self evaluation

## **LEARNING STRAND**

### 7.0 Assembly: Adhesives and Mechanical Fasteners

#### **ENDURING UNDERSTANDING(S)**

- There are a variety of ways to create and strengthen wood joints.
- Modern adhesives can increase design flexibility and simplify assembly.
- Mechanical fasteners can increase the strength, longevity, and aesthetic value of a project.

#### **ESSENTIAL QUESTION(S)**

- When would you use a mechanical fastener?
- When would you use an adhesive?
- How can you strengthen a wood joint?
- How can the use of mechanical fasteners be made more aesthetically pleasing?

#### **LEARNING OBJECTIVES** – The student will:

- 7.1 Identify the various types and uses of mechanical fasteners (i.e. nails, screws, bolts).
- 7.2 Identify the various types and uses of adhesives (i.e. Wood glue, two-part epoxies, contact cement).
- 7.3 Evaluate the benefits and drawbacks of adhesives versus mechanical fasteners.
- Longevity (assemble, disassemble)
  - Location
  - Durability
  - Appearance
- 7.4 Demonstrate the correct techniques and processes for use of fasteners and adhesives.
- Counter sink
  - Pilot drill
  - Shank hole
  - Clamping
  - Proper fit
  - Surface preparation

#### **INSTRUCTIONAL SUPPORT MATERIALS**

- [www.woodworkingteachers.com](http://www.woodworkingteachers.com)
- [www.newwoodworker.com/ref/gloss.html](http://www.newwoodworker.com/ref/gloss.html)
- [www.iqtrimboards.com/PDF/iqm\\_installation.pdf](http://www.iqtrimboards.com/PDF/iqm_installation.pdf)
- [www.lowes.com/lowes/lkn?action=howto](http://www.lowes.com/lowes/lkn?action=howto)
- [www.royal-wood.com/facs.shtml](http://www.royal-wood.com/facs.shtml)
- [www.advancedtrimwright.com/installation-TrimRail.htm](http://www.advancedtrimwright.com/installation-TrimRail.htm)
- Brochure handouts on the use and maintenance of tools and equipment
- Snap-On Tools Safety and Usage Videos

#### **SUGGESTED INSTRUCTIONAL STRATEGIES**

- Classroom discussion
- Cooperative learning
- Oral presentation
- Group presentations
- Internet research
- Independent reading
- Demonstrations
- Hands-on learning and guided practice

#### **SUGGESTED ASSESSMENT METHODS**

- Quizzes/Tests
- Projects
- Oral presentation on equipment operation and maintenance
- Writing assignments
- Participation
- Peer evaluation
- Self evaluation

**LEARNING STRAND**

8.0 Finishing: Surface Preparation and Finishing Processes

**ENDURING UNDERSTANDING(S)**

- Coated abrasives are made from a variety of materials, both natural and synthetic, and have a wide range of uses.
- Proper surface preparation is necessary to achieve a professional-quality finish.
- The chemical composition of a finish affects its durability and aesthetic value.
- Environmental concerns and increased consumer awareness drive the development and use of green products.

**ESSENTIAL QUESTION(S)**

- How does the material used to make a coated abrasive affect its performance?
- What is a coated abrasive?
- What does the abrasives number mean in relation to the development stage of the project?
- How do you select an appropriate finish?
- What are the characteristics of a green finish?

**LEARNING OBJECTIVES** – The student will:

- 8.1 Identify the different characteristics of coated abrasives and their applications.
- Flint
  - Garnet
  - Aluminum oxide
  - Silicon carbide
- 8.2 Demonstrate the proper maintenance and use of various sanding tools (power and hand).
- Palm sanders
  - Block sanders
  - Disc sanders
  - Belt sanders
  - Oscillating spindle sanders
- 8.3 Summarize the benefits of applying an assortment of finishes to a variety of projects to achieve durability and aesthetics.
- 8.4 List the tools and techniques available to safely apply finishes to a range of projects.
- Brushes
  - Sponges/Pads
  - Rollers
  - Sprayers
  - Mask
  - Gloves
- 8.5 Analyze the environmental and health impacts of using the following types of finishes; oil, water, low volatile organic compounds (VOC), polyurethane based products.

**INSTRUCTIONAL SUPPORT MATERIALS**

- [www.woodmagazine.com](http://www.woodmagazine.com)
- [www.woodsmith.com](http://www.woodsmith.com)
- [www.refinishfurniture.com/finishwood.htm](http://www.refinishfurniture.com/finishwood.htm)
- [www.diy.net.com](http://www.diy.net.com)
- [www.store.taunton.com/finishes-finishing-techniques.htm](http://www.store.taunton.com/finishes-finishing-techniques.htm)
- [www.shop.woodreview.com](http://www.shop.woodreview.com)
- [www.Valspar.com](http://www.Valspar.com)
- Brochures and handouts on selection of paints, wood finishes, and surface preparation techniques

**SUGGESTED INSTRUCTIONAL STRATEGIES**

- Classroom discussion
- Cooperative learning
- Oral presentation
- Group presentations
- Internet research
- Independent reading
- Demonstrations
- Hands-on learning and guided practice

**SUGGESTED ASSESSMENT METHODS**

- Quizzes/Tests
- Projects
- Oral presentation on equipment operation and maintenance
- Writing assignments
- Participation
- Peer evaluation
- Self evaluation

## **LEARNING STRAND**

### 9.0 Career Opportunities

#### **ENDURING UNDERSTANDING(S)**

- Woodworking is a substantial bridge connecting manufacturing and construction career pathways.
- Transferable skills, content knowledge, and positive attributes help prepare students for employment and educational opportunities.
- An individual's earning potential is directly related to that individual's skill level, certification, and continuing education.

#### **ESSENTIAL QUESTION(S)**

- How can developing woodworking skills open pathways to manufacturing and construction careers?
- How will the manufacturing and construction industries continue to change?
- What transferable skills would you need for success in the modern workplace?

#### **LEARNING OBJECTIVES** – The student will:

- 9.1 Discuss the differences between woodworking and construction career pathways.
- 9.2 Identify methods to research careers such as traditional resources, the Internet, and informal strategies.
- 9.3 Explain how part time work can help you gain insight in making future career plans.
- 9.4 Evaluate various career possibilities.
- 9.5 Identify the education and training you will need to reach a range of associated career goals.
- 9.6 Identify the 21<sup>st</sup> century skills that are critical in woodworking careers and are transferable to other career paths.
  - Teamwork
  - Project management
  - Critical thinking
  - Problem solving
  - Accountability
  - Communication skills

#### **INSTRUCTIONAL SUPPORT MATERIALS**

- Field trip
- Speakers
- [www.dol.gov](http://www.dol.gov)
- [www.ctdol.gov](http://www.ctdol.gov)
- Various handouts including *Occupational Outlook Handbook*

#### **SUGGESTED INSTRUCTIONAL STRATEGIES**

- Classroom discussion
- Cooperative learning
- Oral presentation
- Group presentations
- Internet research
- Independent reading
- Demonstrations
- Hands-on learning and guided practice

#### **SUGGESTED ASSESSMENT METHODS**

- Quizzes/Tests
- Projects
- Writing assignments
- Participation
- Peer evaluation
- Self evaluation