

Paulsboro Schools



Curriculum

Woods I-II-III-IV

Grade: 9-12

2012 - 2013

* For adoption by all regular education programs
Board Approved: <Month Year>
as specified and for adoption or adaptation by
all Special Education Programs in accordance
with Board of Education Policy.

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PAULSBORO SCHOOL DISTRICT

Number Sense;

- (4.1): ALL STUDENTS WILL GAIN A PRACTICAL EXPOSURE TO MATHEMATICAL THEORIES AS RELATED TO THE CONSTRUCTION TRADES.

Measuring;

- (4.2): ALL STUDENTS WILL BE ABLE TO ACCURATELY USE MEASURING TOOLS TO PREPARE ASSIGNMENTS AS REQUIRED FOR ROUGH & FINAL PROJECT REQUIRMENTS.

Table & Graphs;

- (4.3): ALL STUDENTS WILL BE ABLE TO ACCESS WOOD TRADE INFORMATION.

Probability Estimate;

- (4.4): ALL STUDENTS WILL BE ABLE TO PROPERLY ESTIMATE PROJECT ASSIGNMENT.

Problem Solving;

- (4.5): ALL STUDENTS WILL BE ABLE TO DEVELOP BASIC PROBLEM SOLVING SKILLS AS RELATED TO THEIR INDIVIDUAL OR GROUP PROJECT ASSIGNMENTS.

Computer & Information Literacy

- (8.1): ALL STUDENTS WILL USE COMPUTER APPLICATIONS TO GATHER AND ORGANIZE INFORMATION AND SOLVE RELATED WOODWORKING PROBLEMS.

Career & Technical Education

- (9.1): ALL STUDENTS WILL DEVELOP CAREER AWARENENSS AND PLANNING, EMPLOYABILITY SKILLS, AND FOUNDATIONAL KNOWLEDGE NECESSARY FOR SUCCESS IN THE WORKFORCE.

Consumer, Family, and Life Skills

- (9.2): ALL STUDENTS WILL DEMONSTRATE CRITICAL LIFE SKILLS IN ORDER TO BE FUNCTIONAL MEMBERS OF SOCIETY.

Paulsboro Schools Mission Statement

The mission of the Paulsboro School District is to provide each student educational opportunities to assist in attaining their full potential in a democratic society.

Our instructional programs will take place in a responsive, community based school system that fosters respect among all people.

Our expectation is that all students will achieve the New Jersey Core Curriculum Content Standards (NJCCCS) at every grade level.

Marketing Period (1)

Woods I-II-III-IV:

(Enter major concept here)

Introduction to Woodworking is a fundamental course. It gives students an opportunity to explore an interest or vocation they may like to pursue in the future. This course will allow these students to become better informed consumers when purchasing woodworking equipment or furniture for their homes.

Marketing Period (2)

Woods I-II-III-IV:

(Enter major concept here)

This course will allow students to develop critical thinking, problem solving, manipulative skills and cooperative learning strategies, which will aid them in other areas of study, future woodworking courses, and in everyday life.

Marking Period (3)

Woods I-II-III-IV:

(Enter major concept here)

Woodworking I-II-III-IV is an introductory course designed to provide students the opportunity to develop skills necessary for proper, safe use and care of common hand tools and stationary power equipment used in the field of woodworking.

Marking Period (4)

Woods I-II-III-IV

(Enter major concept here)

Woodworking skills are introduced and acquired during the construction of a teacher assigned, multi-faceted project. Students will employ individual and group problem solving skills. Basic construction, joinery, fastening, and finishing materials will be included in this course.

Core Curriculum
Marking Period (1)

<p>Woods:I-II-III-IV Grade: 9-12</p>	<p>Suggested days of instruction Mon. Tues. Wed. Thur. Fri.</p>
<p>Quarter 1 Objective/ Cluster Concept/ Cumulative Progress Indicators Taken from CPI's in NJCCCS standards http://www.nj.gov/education/aps/cccs/</p> <p>NJCCCS: 9.4.12.I.(4).2 9.4.12.I.(4).3 9.4.12.I.(4).4 9.4.12.I.(4).5 9.4.12.B.40 9.4.12.B.41 9.4.12.B.42 9.4.12.B.43 9.4.12.B.44 9.4.12.B.45 9.4.12.B.46</p>	<p align="center"><u>MASTER GOAL FOR THE YEAR</u></p> <p>Students will review shop safety and tool usage, as well as learn the use of new tools and machines. Students will use this knowledge to design and create a woodworking project (other available materials may be used in combination with wood). Supplemental challenges include various woodworking projects to home construction skills and express artistic creativity, or engineering design challenges to develop problem-solving skills.</p> <p><u>Topic:</u> (name of unit) INTRODUCTION OF SAFETY PRINCIPLES</p> <p>Overarching Goals:</p> <p>* Students will be able to demonstrate proper safety Procedures. (Written & Hands-On)</p>

Goal 1:

Students will be able to:

I. Demonstrate the use and understanding of safety principles, which are applicable to the woodshop facility.

- State basic shop safety rules

- Explain how to avoid injury to themselves and others.

- Identify common hazards found in the woodshop setting.

- Demonstrate and explain the correct manner in which to proceed in the woodshop.

II. Demonstrate the safe and proper use of hand tools, portable power tools, and stationary machinery.

- Explain how to use tools and equipment safely and properly

- Identify and explain the correct function of all mechanical safety devices in the woodshop.

- Demonstrate the correct, safe procedures to use all hand tools, portable and stationary equipment in the shop.

Goal II:

Students will be able to:

- Demonstrate the correct use of tools and materials in planning an orthographic drawing of an object.
- Correctly produce an orthographic drawing of the objects given.
- Produce a model of a given orthographic drawing. This project will be done in groups.

Goal III:

Students will be able to:

- Explain the importance of knowing why and how to plan projects.
- Choose and identify the tools and materials used to complete the planning process.
- Demonstrate the understanding of good design in the planning.

Assessment Criteria:

- Written Tests
- Knowledge & Comprehension

Assessment of Critical Skills:

- Addressing safety
- Knowledge & Comprehension
- Planning projects

<ul style="list-style-type: none"> • Hands-on demo on hand tool use • Hands-on use of portable tools • Hands-on use of stationary tools • Finish projects 	<ul style="list-style-type: none"> • Hands-on demo on hand tool use • Hands-on use of portable tools • Hands-on use of stationary tools • Finish projects
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Core Curriculum
Marking Period (2)

<p>Woods: I-II-III-IV Grade: 9-12 Quarter 1</p>	<p>Suggested days of instruction Mon. Tues. Wed. Thur. Fri.</p>
<p>Objective/ Cluster Concept/ Cumulative Progress Indicators</p>	<p>Topic: (name of unit) IDENTIFICATION & USE OF COMMON HAND, PORTABLE & STATIONARY MACHINE TOOLS.</p>

aken from CPI's in NJCCCS
standards

<http://www.nj.gov/education/aps/cccs/>

NJCCCS:

3.4.B.3

9.1.F.1

9.1.F.2

9.1.F.3

5.1.C.1

9.1.B.4

9.2.B.2

9.2.B.1

9.1.B.4

9.2.B.2

9.2.C.1

Overarching Goals: (taken from Introduction, Philosophy and educational goals page, pg 4)

Students will be able to identify common hand, portable & stationary tools.

Goal 1:

Students will be able to:

- Identify and use hand tools associated with the woodworking industry.
- Sequence tasks to be performed using hand tools.

Goal II:

Students will be able to:

- Identify and use common portable machine tools used in the woodworking industry.
- Follow safety practices when using portable machine tools.
- Students will be able to use portable tools to complete specific tasks given.
- Use portable tools as part of the process to successfully complete their woodworking projects.

GOAL III:

Students will be able to:

- Use common stationary machine tools found in a woodworking setting.
- Follow safety practices when using portable machine tools.
- Choose the appropriate machine for the operation needed.

Learning Activities:

- Hands-On

Core Curriculum:
Marking Period (3)

Woods: I-II-III-IV

Grade; 9-12

Quarter 1

Objective/ Cluster

Concept/

Cumulative

Progress

Indicators

Taken from CPI's in NJCCCS standards

<http://www.nj.gov/education/aps/cccs/>

NJCCCS

3.4.B.1

3.4.B.2

3.4.B.3

Suggested days of instruction

Mon. Tues. Wed. thur. Fri.

Topic: (name of unit)

USING VARIOUS WOOD FASTENERS, BITS, and CLAMPS ADHESIVES.

Overarching Goals: (taken from Introduction, Philosophy and educational goals page, pg 4)

Students will be able to recognize various fasteners, clamps & adhesives used in woodworking.

Goal 1: (what the student will be able to do at the end of the unit)

Students will be able to:

- **Identify the common drill bits found in the woodworking industry.**

8.2.A.1
3.4.B.5
9.2.A.1
9.1.F.1
9.1.F.2
9.1.F.3
5.1.C.1
3.4.B.2

- Choose the correct drill bits found to perform specific given jobs.
- Use the correct bits needed to complete their projects.

GOAL I I:

Students will be able to:

- Identify common wood fasteners used in the wood working industry.
- Choose and apply the appropriate fasteners to given problems.
- Apply the correct fasteners to join various pieces of their project together.

GOAL III:

Students will be able to:

- Identify the various types of adhesives used in the woodworking industry.
- Choose and apply the appropriate type of adhesives for specific problems given.
- Apply the correct procedures for glueing up stock.

GOAL IV:

Students will be able to:

- Identify the various types of clamps used in the woodworking industry.
- Choose and use the appropriate type of clamps for gluing-up stock of various shapes and sizes.
- Use correct clamps in order to glue up projects.

Assessment Criteria:

- Written Tests
- Knowledge & Comprehension
- Hands-on demo on hand tool use
- Hands-on use of portable tools
- Hands-on use of stationary tools
- Finish projects

Learning Activities:

- Addressing safety rules
- Planning projects
- Using hand tools
- Using portable tools
- Using stationary tools
- Using common joints
- Using fasteners
- Joinery & gluing
- Finishing projects

Core Curriculum:
Marking Period (4)

Woods; I-II-III-IV
Grade: 9-12

Quarter 1

Objective/ Cluster
Concept/
Cumulative

Progress

Indicators

Taken from CPI's in NJCCCS
standards

<http://www.nj.gov/education/aps/cccs/>

NJCCCS:

3.4.B.1

3.4.B.2

3.4.B.3

8.2.A.1

3.4.B.5

Suggested days of instruction
Mon. Tues. Wed. Thur. Fri.

Topic: (name of unit)

VARIOUS WOOD PREPARATION PROCEDURES FOR FINISHING

Overarching Goals: (taken from Introduction, Philosophy and educational goals page, pg 4)

Proper awareness of procedures for wood finishing

Goal 1: (what the student will be able to do at the end of the unit)

Students will be able to:

- **Students will be able to identify the methods used to prepare the surface for the application of a finish.**
- **Students will be able to demonstrate an understanding of the various processes used to prepare wood for finish.**

9.2.A.1
9.1.F.1
9.1.F.2
9.1.F.3
5.1.C.1
3.4.B.2

- Students will be able to prepare their woodworking projects for finish

GOAL II:

Students will be able to:

- Choose the most appropriate method, tools and material for applying a finish to their project.
- Show efficiency in the use of a spray gun.
- Demonstrate the proper procedure for brushing a finish on their project.

GOAL III:

- Identify various types of wood finishes and stains used in woodworking.
- Correctly apply sample woodworking stains and finishes to given pieces of wood.
- Choose a finish and correctly apply to project.

Assessment Criteria:

- Written Tests
- Knowledge & Comprehension
- Hands-on demo on hand tool use

Learning Activities:

- Addressing safety rules
- Planning projects
- Using hand tools
- Using portable tools

	<ul style="list-style-type: none"> • Hands-on use of portable tools • Hands-on use of stationary tools • Finish projects 	<ul style="list-style-type: none"> • Using stationary tools • Using common joints • Using fasteners • Joinery & gluing • Finishing projects
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Core Curriculum:

Curriculum Management system. They are the things your students will be able to do when they are finished this course.

Students will be able to:

- 1. Work safely and efficiently in a shop environment with hand and power tools.**
- 2. Apply background info about the nature of the project.**
- 3. Use tools and machines for layout work and prototyping to complete the design challenge.**

4. Construct a project out of wood and other materials that will display the techniques learned and practiced.
5. Apply info learned about problem solving and tool usage to design and construct school and personal projects.

ASSESSMENT & EVALUATION

Students will be evaluated bases on the following criteria:

- I. Written Test,
 - Safety
 - Knowledge and Comprehension
- II. Application Related,
 - Teacher observation of the use of strategies, skills, and knowledge.
 - Successful completion of a quality grade project.
 - Teacher provided rubrics
- III. Group & Individual Activities.
 - Teacher observations of student participation during group activities.
 - Teacher observation of classroom participation during classroom discussions and demonstrations.
 - Students reflections based on rubrics.