# HINGHAM MIDDLE SCHOOL CURRICULUM SUMMARY

#### WOOD TECHNOLOGY

# DESCRIPTIVE OVERVIEW

This exploratory course provides the student with a basic introduction to woodworking using a variety of hands-on activities. The student will develop an understanding of the necessary skills to use a variety of hand and power tools safely. Creativity is encouraged through the design and construction of various projects including individual, mass production and problem-solving activities. This course is open to eighth-graders who did not take it as seventh-graders (space permitting).

# **GOALS**

Working within the framework and aims of general education, Industrial Technology develops an appreciation of a variety of tools, materials and processes. Consumer values are brought to students' attention. By exposure to experiences designed to explore various trade, management, and entrepreneurial experiences, academically-oriented students have the opportunity to elect Industrial Technology courses which will be of value. Students are introduced to essential skills and knowledge, which enable them to experience a broad spectrum of hands-on, process-based activities. Students are given an understanding of hands-on learning and implementation through the process of design, creation, problem-solving, and completion of real-world projects.

#### **OBJECTIVES**

As a result of experience gained in Wood Technology, students will:

- 1. Develop an understanding of the safe operation of various hand and power tools.
- 2. Explore opportunities to present the fundamental working principles of wood technology through description, example, demonstration, and actual practice.
- 3. Explore opportunities to develop within students a knowledge and understanding of the woodworking techniques and processes so that students will be better able to recognize its value as a vocation and art form.
- 4. Develop safe work habits when using equipment found in shops and facilities.
- 5. Encourage individual creativity through the safe use of machines and processes.

#### INSTRUCTIONAL MODEL

Method of instruction includes whole class, group work, differentiated instruction techniques, lecture/discussion, and individual/group projects. The major emphasis is on skill development and hands-on learning. The overall goal is to help students develop the skills to become life long learners with the intellectual curiosity, and real world application of learned hands-on skills to become informed, productive citizens. Critical thinking skills and hands-on techniques are stressed throughout the course.

# **ASSESSMENT**

Varied approaches are used to evaluate students. All assignments and projects are graded according to instructors' judgment of how they have demonstrated their abilities within school-wide rubrics as applied to specific projects, which are clearly stated at the beginning of each unit, students' ability to follow directions and their overall effort in every aspect of the course.

# HINGHAM MIDDLE SCHOOL CURRICULUM SUMMARY

#### TECHNOLOGY EDUCATION

# DESCRIPTIVE OVERVIEW

Technology Education in the eighth grade is designed to introduce students to the social, cultural, and environmental aspects of different technologies. These include, but are not limited to aerodynamics, rocketry and flight, structural design, graphic arts, communications, research and development. The student will further develop the necessary skills to use a variety of hand and power tools safely.

# **GOALS**

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# **OBJECTIVES**

As a result of experience gained in Technology Education, students will:

- 1. Develop good reading and writing skills
- 2. Become an insightful problem solver
- 3. Become a researcher of technical issues and innovations
- 4. Develop public speaking skills and present reports to groups
- 5. Become a critical thinker and discuss technical matters
- 6. Learn the correct and safe use of the tools and machines provided
- 7. Follow a prepared drawing to the completion of a project as specified
- 8. Design and construct projects from wood
- 9. Learn respect and proper care of equipment

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