Manufacturing and Fabrication, woodworking *Course Syllabus*

LEXINGTON HIGH SCHOOL Instructor: Mr. Hoyt Gmail: jim.hoyt@lexschools.org

Course Description

Students will use advanced tools, equipment, and techniques to gain knowledge and skills in advanced working. Students will safely and efficiently use equipment to produce parts and projects to industry standards and specifications.

Course Objectives / Units of Study

• Investigation of Career Opportunities – Students will explore job opportunities in the manufacturing and construction industries

- Apply safety principles, practices and guidelines to the work environment.
- Planning Basic planning techniques and materials selection will be discussed.
- Demonstrate the use of manufacturing communication.
- Identify the tools and equipment needed to manufacture a product.
- Manufacture a product using applied knowledge.

Attendance Expectations

Consistent attendance is important for student success. If students are sick or absent, THE STUDENT is responsible for completing any missed work. Power-school online grading is used—the student is expected to visit the course page and make sure all work has been submitted and entered correctly into the gradebook. Students are responsible for coming in before and/or after school or by emailing Mr. Hoyt to catch up with assignments that may have been missed.

Points Distribution

Each quarter grade will be worth 45% of the total semester grade. Semester tests will be 10% of total semester grade GRADING AREA DESCRIPTION % OF GRADE GRADING SCALE Projects 65% Daily Work Assignments 25% Semester test will be 10% of total semester grade NOTE: SYLLABUS &SCHEDULE SUBJECT TO CHANGE.

Classroom Expectations

Students should be familiar with the behavior guidelines listed in the Lexington High School student handbook. Students are expected to:

Put forth their best effort each and every class period

- Come to class prepared to learn
- Be cooperative with their peers & treat others with respect
- Participate in class discussions
- Turn in work on time
- Sign and abide by the LHS technology contract
- Refrain from having food, beverage, ear-buds and cell phones in the classroom

Students are responsible for maintaining their assigned workstation and are to report any problems or if any damage is noticed, immediately.

Units Covered

Unit: Health and Safety

Unsafe acts, hazardous conditions, fire protection, PPE, and first aid will be covered on all machines, proper techniques will be demonstrated and emphasized. Occupational Safety and Health standards will be discussed and assessed.

Unit: Career opportunities

Demonstrate knowledge of careers in the woodworking industries and the products that they produce.

Unit: <u>Planning</u>

Apply concepts from mathematics, science and communications in the context of project design.

Demonstrate knowledge and understanding of project planning and layout.

Unit: Production

Demonstrate the core competencies in the efficient use of tools, machines, materials, processes and applications.

Unit: Lay Out

Apply concepts from mathematics, science and communications in the context of project design. Demonstrate knowledge and understanding of project planning and layout

Unit: Material Processing

Demonstrate the core competencies in the efficient use of tools, machines, materials, processes and applications.

Unit: Fasteners, Adhesives and Clamping

Apply the skills and competencies in determining proper wood joints, fasteners and adhesives used in construction of projects

Unit: Automated Manufacturing, Careers and Manufacturing Enterprise

Identify opportunities in woodworking and demonstrate basic construction techniques.

Demonstrate knowledge to the careers in the woodworking industries and the products that they produce

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Demonstrate employability and social skills relevant to careers.