

Grade 7 Industrial Arts Course Outline

Course Overview

- In the grade 7 Industrial Arts program, students will be exposed to two areas, drafting and carpentry with an emphasis on “hands on work”.
- In the drafting area, Grade 7 students will develop skills using AutoCAD drafting programs. They will learn how to create Isometric, Oblique, and Orthographic drawings.
- In the carpentry area, students will have the opportunity to build projects. Students will be exposed to a variety of stationary power tools, portable power tools, and hand tools.
- The main focus of every class is SAFETY.

Mark Breakdown:

Student marks for the course will be determined in the following manner.

Area Weighting	Assessment Weighting
Drafting	25%
	<ul style="list-style-type: none"> • Isometric #1 - Formative • Isometric #2 - Summative • Isometric #3 - Summative • Oblique #2 - Summative • Oblique #3 – Summative • Orthographic #1 - Formative • Orthographic #2 - Summative • Orthographic #3 - Summative • Isometric #6 – Summative • Orthographic #6 – Summative • 3D Design – Formative • 3D Printing Project - Summative
Carpentry	50 %
	<p>Assignments</p> <ul style="list-style-type: none"> • Tool Identification - Formative • Safety - Thickness Planner / Jointer - Formative • Safety- Drill Press - Formative • Safety – Compound Mitre Saw - Formative • Safety – Belt Sander - Formative • Safety – Band saw - Formative • Safety – Router - Formative • Project Planning <p>Projects</p>
Work Habits	25%

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	1	2	3	4	5
Measurement <i>Mistake is 2mm</i>	All project dimensions are more than 2mm off. <i>Missing project plans</i>	25% of the dimensions are within 2mm of the project plans	60% of the dimensions are within 2mm of the project plans	80% of the dimensions are within 2mm of the project plans	All project dimensions are within 2mm of the project plan
Square <i>Within 1 mm over 300mm</i>	20% of the angles and cuts are perfect	40% of the angles and cuts are perfect	60% of the angles and cuts are perfect	80% of the angles and cuts are perfect	All angles and cuts are perfect.
Glue and Fasteners		25% of the fastening and glue ups were done to a Level 5.	60% of the fastening and glue ups were done to a Level 5.	80% of the fastening and glue ups were done to a Level 5.	Correct fasteners were used throughout. All glued joints are tight. No glue squeeze out.
Project surfaces and edges	Surface finish is overall rough with unfinished edges. Layout marks showing in more than 80% of the project.	Surface finish is rough in spots and/or with layout marks showing in no more than 60% of the project.	Almost all surfaces are filed and sanded smooth; edges are finished with layout marks showing in no more than 40% of the project.	Almost all surfaces are filed and sanded smooth; edges are finished with layout marks showing in no more than 20% of the project.	All surfaces are filed and sanded smooth, edges are finished. A minor layout mark may appear.
Tool Independence	Need multiple tool demonstrations. The teacher performed many cuts.	Asked questions every time a tool was going to be used. Teacher/peer performed 4-5 tasks of the project.	Needed to ask questions for each tool. Teacher/peer performed 2-3 tasks.	Worked independently on all tools. Asked a few questions for reassurance. Teacher/peer may have performed 1 task.	Worked completely independently on the tools. Helped classmate's setup tools.
Project Finish (Woods Only)	20% of the project is finished neatly and evenly.	40% of the project is finished neatly and evenly.	60% of the project is finished neatly and evenly.	80% of the project is finished neatly and evenly.	Finishing is applied neatly and all surfaces are covered

Industrial Work Habits Rubric			
	1	2	3
Class Work	Student works for less than 60% of the time during class.	Student works for at least 60% of the time during class.	Student works for more than 90% of the time during class.
Lab Cleanup	Student did not attempt to clean up. Projects were always disorganized.	Student's area was tidy, but forgot to put one or two things away. Projects were often disorganized.	Student's area is clean. Helped clean the other areas of the shop. Projects are always put away neatly
Safety	Student needed to be reminded every day to work safely.	Student had to be reminded up to 50% of the shop days to work safely.	Student worked safely every class. No reminders were needed.