

Minnesota State College Southeast

GTRB 1400: Introduction to Tools

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: *.*

Lab Hours/Week: 6

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course covers hand tool preparation and use, and power tool safety, set up, adjustment and use. Time is spent on tool preparation and sharpening and some tools are made. Accurate measuring, marking and shaping using hand and power tools is practiced. (Prerequisite: None) (3 credits: 0 lecture/3 lab)

B. COURSE EFFECTIVE DATES: 02/06/2009 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

D. LEARNING OUTCOMES (General)

1. Engrave hand tools
2. Use metric system
3. Identify hand tools
4. Identify block plane parts
5. Flatten plane bottom
6. Flatten plane blade back
7. Grind plane blade bevel
8. Hone plane blade bevel
9. Flatten plane mouth
10. Polish plane blade bevel
11. Plane wooden block
12. Flatten chisel backs
13. Grind chisel bevels
14. Hone chisel bevels
15. Polish chisel bevels
16. Polish burnisher steel
17. Make burnisher handle
18. Flatten cabinet scraper sides
19. Polish cabinet scraper sides
20. Flatten long cabinet scraper edges
21. Burnish long cabinet scraper edges
22. Hone knife bevel
23. Polish knife edge(s)
24. Make knife handle(s)
25. Make one curved scraper
26. Flatten violin fingerboard blank OR plane guitar scarf joint
27. Identify bandsaw parts
28. Identify safe bandsaw use techniques
29. Adjust bandsaw blade guides
30. Change bandsaw blades
31. Demonstrate safe bandsaw use
32. Perform bandsaw freehand cuts
33. Perform band saw resaw cut
34. Identify belt/disc sander parts
35. Identify safe belt/disc sander use techniques
36. Adjust sanding belt tracking
37. Demonstrate safe belt/disc sander use
38. Identify drill press parts
39. Identify safe drill press use techniques
40. Demonstrate safe drill press use
41. Identify jointer parts
42. Identify safe jointer use techniques
43. Demonstrate safe jointer use
44. Identify thickness planer parts

45. Identify safe thickness planer use techniques
46. Demonstrate safe thickness planer use
47. Identify table saw parts
48. Identify safe table saw use techniques
49. Demonstrate safe table saw use
50. Perform table saw rip cut
51. Perform table saw cross cut
52. Identify spindle sander parts
53. Identify safe spindle sander use techniques
54. Demonstrate safe spindle sander use
55. Make push sticks
56. Complete assigned shop projects
57. Complete assigned shop clean up
58. Complete all text study guides

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted