

# Minnesota State College Southeast

## VLNR 1300: 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. Plane wooden block
10. Flatten chisel backs
11. Grind chisel bevels
12. Hone chisel bevels
13. Sand burnisher steel
14. Polish burnisher steel
15. Make burnisher handle
16. Flatten long cabinet scraper sides
17. Polish cabinet scraper sides
18. Burnish long cabinet scraper edges
19. Make one curved scraper
20. Sharpen one curved scraper
21. Work on violin fingerboard blank OR plane guitar scarf joint
22. Identify bandsaw parts
23. Identify safe bandsaw use techniques
24. Adjust bandsaw blade guides
25. Change bandsaw blades
26. Demonstrate safe bandsaw use
27. Perform bandsaw freehand cuts
28. Perform band saw resaw cut
29. Identify belt/disc sander parts
30. Identify safe belt/disc sander use techniques
31. Adjust sanding belt tracking
32. Demonstrate safe belt/disc sander use
33. Identify drill press parts
34. Identify safe drill press use techniques
35. Demonstrate safe drill press use
36. Identify jointer parts
37. Identify safe jointer use techniques
38. Demonstrate safe jointer use
39. Identify thickness planer parts
40. Identify safe thickness planer use techniques
41. Demonstrate safe thickness planer use
42. Identify table saw parts
43. Identify safe table saw use techniques
44. Demonstrate safe table saw use

45. Perform table saw rip cut
46. Perform table saw cross cut
47. Identify router parts
48. Identify safe router use techniques
49. Demonstrate safe router use
50. Perform flush trim rout with template
51. Identify spindle sander parts
52. Identify safe spindle sander use techniques
53. Demonstrate safe spindle sander use
54. Make push sticks
55. Make bench hook
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