A. COURSE DESCRIPTION

Credits: 6
Lecture Hours/Week: 2
Lab Hours/Week: 8
OJT Hours/Week: *.*
Prerequisites: None
Corequisites: None
MnTC Goals: None

This is the Spring Semester continuation of VLN1370. (Prerequisites: VLN1372 and VLN1373, or VLN1370) (6 credits: 2 lecture/4 lab)

B. COURSE EFFECTIVE DATES: 02/02/2012 - Present

C. OUTLINE OF MAJOR CONTENT AREAS
D. LEARNING OUTCOMES (General)
1. Select body shape  
2. Select top wood  
3. Select bracing style  
4. Select scale length  
5. Select back wood  
6. Select neck wood  
7. Select neck reinforcement  
8. Select purfling/binding  
9. Select fittings  
10. Select linings  
11. Select soundhole design  
12. Identify necessary tools  
13. Identify necessary templates  
14. Describe mold construction steps  
15. Identify block materials  
16. Describe block construction steps  
17. Describe rib thicknessing technique  
18. Describe rib bending technique  
19. Describe necessary clamping cauls  
20. Describe rib/block gluing methods  
21. Describe rib structure flattening  
22. Identify top joining techniques  
23. Describe back joining techniques  
24. Identify plate flattening techniques  
25. Identify plate edge thicknessing techniques  
26. Describe arching variations  
27. Identify rough carving technique  
28. Identify rough smoothing technique  
29. Identify arch finalizing technique  
30. Describe soundhole cutting  
31. Describe margins  
32. Describe plate pinning technique  
33. Describe brace fitting steps  
34. Describe brace shape/dimensions  
35. Record top thickness measurements  
36. Record back thickness measurements  
37. Record instrument wood descriptions  
38. Describe plate to rib structure gluing technique  
39. Identify construction steps  
40. Complete instrument construction journal  
41. Make body template  
42. Make neck template  
43. Make headstock template  
44. Make soundhole template
45. Cut mold material
46. Shape mold
47. Prepare block wood
48. Shape blocks
49. Spot glue blocks
50. Make clamping cauls
51. Thickness ribs
52. Scrape ribs
53. Cut rib height
54. Bend ribs
55. Glue ribs to blocks
56. Flatten rib structure
57. Flatten individual top plates
58. Join top plates
59. Flatten joined top plates
60. Flatten individual back plates
61. Join back plates
62. Flatten joined back plates
63. Trace rib and button outline on back
64. Trace rib outline on top
65. Cut back outline
66. Cut top outline
67. Rough cut top arch
68. Rough cut back arch
69. Mark desired top edge thickness
70. Mark desired back edge thickness
71. Route top edge thickness
72. Route back edge thickness
73. Spot glue plates
74. Drill locating pin holes
75. Prepare purfling
76. Cut top purfling channel
77. Cut back purfling channel
78. Install top purfling
79. Install back purfling
80. Make workboard
81. Plane top arch
82. Plane back arch
83. Prepare scraper
84. Cut top recurve
85. Cut back recurve
86. Scrape back arch
87. Scrape back arch
88. Make graduation templates
89. Drill top graduation holes
90. Drill back graduation holes
91. Rough cut top graduation
92. Rough cut back graduation
93. Plane top graduation
94. Plane back graduation
95. Scrape top graduation
96. Scrape back graduation
97. Locate soundholes
98. Rough cut soundholes
99. Shape soundholes
100. Mark brace location
1. Cut brace wood
2. Rough cut treble brace fit
3. Rough cut bass brace fit
4. Plane treble brace fit
5. Scrape treble brace fit
6. Plane brass fit
7. Scrape bass brace fit
8. Glue braces
9. Shape braces
10. Make linings
11. Install linings
12. Make locating pins
13. Install locating pins
14. Check plates/rib structure fit
15. Glue top plate to rib structure
16. Glue back plate to rib structure
17. Complete assigned clean up
E. Minnesota Transfer Curriculum Goal Area(s) and Competencies
   None

F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   None noted