

Cabinetmaker Level 4

Cabinetmaker

Unit: C7 Senior Project Design

Level: Four

Duration: 35 hours

Theory: 35 hours

Practical: 0 hours

Overview:

Upon completion of this unit the apprentice will demonstrate knowledge to undertake the design, drawing, research, and to determine the tasks and their sequence to plan a project.

Objectives and Content:	<u>Percent of Unit Mark (%)</u>
1. Develop design concept.	50%
a. Elements of style, function and form	
b. Available materials	
c. Production sequence	
d. Standards	
2. Prepare and submit sketches and written description of project.	50%
a. Scope of sketches	
b. Plans for troubleshooting	
c. Compare sketches to original design concept	
d. Determine project viability before final CAD drawing	

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Unit: C8 Senior Project Computer Aided Design (CAD) Production Drawings

Level: Four

Duration: 35 hours

Theory: 35 hours

Practical: 0 hours

Overview:

Upon completion of this unit the apprentice will demonstrate knowledge to generate a working shop drawing using Computer Aided Design (CAD).

Objectives and Content:	<u>Percent of Unit Mark (%)</u>
1. Review materials to complete a working shop drawing that incorporates information from C7: Senior Project Design.	15%
a. CAD Design, Drafting, Dimensioning fundamentals	
2. Demonstrate incorporation of information from C7: Senior Project Design into a finished working shop drawing.	15%
3. Use CAD to generate a working shop drawing of the project.	70%
a. Completed drawings	
b. Cut-bills generated	
c. Materials take-off	
d. Materials optimization	
e. Calculation of waste factor	
f. Computer Numerical Control (CNC) programming (if applicable)	

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Unit: D5 Wood Finishing II

Level: Four

Duration: 35 hours

Theory: 7 hours

Practical: 28 hours

Overview:

Upon completion of this unit the apprentice will demonstrate knowledge to apply wood-finish to a project.

Objectives and Content:	<u>Percent of Unit Mark (%)</u>
1. Identify wood-finishing materials and techniques required for project.	20%
a. Assessment of final finish requirements	
b. Selection and take-off of required materials	
c. Identification of techniques, tools, equipment and time requirements	
2. Perform wood-finishing of project.	80%

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Unit: E4 Senior Project

Level: Four

Duration: 100 hours

Theory: 0 hours

Practical: 100 hours

Overview:

Upon completion of this unit the apprentice will demonstrate knowledge and skills to produce a senior project approved by the instructor, incorporating furniture components and traditional and/or modern equipment and techniques.

Objectives and Content:	<u>Percent of Unit Mark (%)</u>
1. Complete project as per finalized drawings developed in C8 Senior Project CAD Production Drawings.	100

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Unit: G1 Orientation II: The Job of Journeywork

Level: Four

Duration: 7 hours

Theory: 7 hours

Practical: 0 Hours

Overview:

This unit introduces senior apprentices to the responsibilities of workplace teaching that they will take on as supervising journeypersons. Experienced trade-workers can share valuable skills with new apprentices. This unit orients senior apprentices to strategies that help them to share their trade knowledge when they themselves become certified journeypersons. The ability to offer support to apprentices is an important area of trade learning. This unit presents material intended to help refine this ability through reflection and discussion by senior apprentices and dialogue with their instructor. Delivery of this content will vary with the discretion of individual instructors and with the experiences senior apprentices bring to the process.

Objectives and Content:

**Percent of
Unit Mark (%)**

- | | |
|--|------------|
| 1. Describe the scope, substance, and significance of journeyperson-level status. | 20% |
| a. Historical background, including trainee experiences | |
| • Definition and examples of journeyperson-level status | |
| • Obligations to employers, trade clients, and apprentices | |
| • Responsibilities of journeyperson as workplace trainer/supervisor | |
| • Trends | |
| b. Regulations of journeyperson in designated trades | |
| • Manitoba provincial requirements [e.g. <i>Apprenticeship and Trades Qualifications Act; General Regulation; the Trade of Cabinetmaker Regulation</i> ; relevant policies of the Apprenticeship and Trades Certification Board of Manitoba] | |
| • Trade-specific requirements re: practical training supervision and documentation; quality assurance and coverage of content, ratios | |
| | |
| 2. Describe the responsibilities of the supervising journeyperson. | 20% |
| a. Recognizing the variety of supervision assignments, situations, and roles | |
| b. Standards and content: training goals and assessment | |
| c. Scope of expectations regarding supervisory tasks | |
| d. Formal vs. informal structure – e.g. supervision is part of assignment; apprentice is trained according to a training plan negotiated with employer | |
| e. Common supervisory roles: | |
| • Coach role: is often initiated by someone other than apprentice and limited to a particular skill set or task | |
| • Mentor role: often initiated by apprentice, and relatively open-ended regarding content, duration, etc. | |
| • Peer role: involves individual upgrading of one journeyperson by another; can include senior apprentice assisting less experienced trade learner | |
| • Managerial role: hire/fire issues as lead-hand or site-boss | |

- Coordinator role: often a senior-level journey person appointed by an organization to assume responsibilities for monitoring progression of groups of apprentices
- f. Clarifying roles and expectations
- g. Role of Apprenticeship Training Coordinator (ATC), Apprenticeship Manitoba
- h. Resources for developing skills and knowledge on providing journey person level supervision
 - Books and journals (not always trade-specific)
 - Websites
 - Conversation with trade instructors, journey persons, and peers
 - Workshops

3. Describe common requirements in providing journey person level supervision. 20%

- a. Review Unit A1 content on the challenges and opportunities of Apprenticeship learning adapted to journey person level supervision assignments
 - Application of adult education concepts to trade teaching/learning
 - Practical significance of ‘styles’ of adult learning and teaching
 - Helping apprentices to integrate in-school technical training and on-the-job practical training learning experiences
 - Providing help and guidance on new tasks and skills and fixing mistakes
 - Teaching/learning “the ropes” – socialization of learner within a trade community
 - Coverage of prescribed tasks and subtasks (National Occupational Analysis (NOA) or Provincial Occupational Analysis(POA))
 - Consultation with Apprenticeship Training Coordinator (ATC)
 - Communicating with apprentices and employers about supervision assignments
 - Maintaining personal record of achievements, ideas, needs as a workplace trainer
- b. Individual reflection and guided group discussion re: personal experiences of workplace learning as an apprentice
 - Identification of best and worst practices of supervising journey persons
 - Assessment of personal experiences in supervising, coaching, or guiding other people to learn or improve their skills compared with the journey person level support of apprenticeship learning
 - Development of personal standards in sharing knowledge with others in workplace
- c. Compare discussions with current knowledge on workplace skills coaching methods as they relate to journey person level supervision assignments
 - Qualities of a good workplace coach
 - Recommended practices in workplace coaching
 - Troubleshooting problems in supervision assignments

4. Complete Modules 1 to 3, *Workplace Coaching Skills* (or equivalent). See: *TEACHING AND LEARNING Workplace Skills* at the following link: 20%

<http://apprenticeship.nsc.ca/mentoring/Mentoring.Course.Steps.pdf>

- a. Identifying purpose of the lesson: role of coach
- b. Linking the lesson: learner needs
- c. Demonstration of skill/task to be learned: demonstration, hands-on, re-cap

5. Complete Modules 4 to 6, *Workplace Coaching Skills* (or equivalent). See: *TEACHING AND LEARNING Workplace Skills* at the following link: 20%

<http://apprenticeship.nsc.ca/mentoring/Mentoring.Course.Steps.pdf>

- a. Practice of skill/task to be learned
 - Types of practice
 - Reinforcing skill/task learning
- b. Providing feedback to the learner
 - Types of feedback
- c. Assessment
 - Assessing level of skill
 - Planning further steps toward skill/task mastery

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Unit: G2 Pre-Certification Review

Level: Four

Duration: 68 hours

Theory: 68 hours

Practical: 0 hours

Overview:

This unit offers senior apprentices a systematic review of skills and knowledge required to pass the Interprovincial 'Red Seal' Examination. It promotes a purposeful personal synthesis between on-the-job practical training and the content of in-school technical training. The unit includes information about the significance of Red Seal Interprovincial certification and the features of the Interprovincial exam. No testing is prescribed for this unit. Instead, a "Pass/Fail" grade will be awarded upon completion of the unit.

Objectives and Content:

**Percent of
Unit Mark (%)**

1. **Describe the significance, format and general content of Interprovincial (Red Seal) Examinations for the trade of Cabinetmaker.**
 - a. Scope and aims of Red Seal system; value of certifications
 - b. Obligations of candidates for Interprovincial (IP) certification
 - Relevance of IP examinations to current, accepted trade practices; industry-based national validation of test items
 - Supplemental policy (re-testing)
 - Confidentiality of examination content
 - c. Multiple choice format (four-option) item format, Red Seal/Apprenticeship Manitoba standards for acceptable test items
 - d. Government materials relevant to the IP examinations for apprentice Cabinetmakers
 - National Occupational Analysis (NOA); prescribed scope of the skills and knowledge which comprise the trade
 - NOA "Pie-chart" and its relationship to content distribution of IP examination items
 - Apprenticeship Manitoba Technical Training Standards, especially the NOA, as these relate to apprentice's coverage of the skills and knowledge of his/her trade

2. **Identify resources, strategies and other considerations for maximizing successful completion of written exams.**
 - a. Personal preparedness
 - Rest
 - Nutrition
 - Personal study regimen
 - Prior experience in test situations (e.g. unit tests)
 - b. Self-assessment, consultation and personal study plan
 - Self-assessment of individual strengths/weaknesses in trade-related skills and knowledge
 - Approved textbooks
 - Study groups

3. **Review program content regarding occupational skills.**
4. **Review program content regarding trade math.**
5. **Review program content regarding documents and design.**
6. **Review program content regarding materials and techniques.**
7. **Review program content regarding machining and assembly.**
8. **Review program content regarding jobsite applications.**