9179 Cabinet and Furniture Design (11B)

30S/30E/30M

A Cabinet and Furniture Making Course

# 9179: Cabinet and Furniture Design (11B) 30S/30E/30M

## Course Description

In this course, students will learn the principles of cabinet and furniture design, and learn to produce shop drawings. The course includes all the objectives found in Unit C1: Design Principles and Technical Drawings and Unit C2: Blueprint Reading from Apprenticeship Manitoba's *Cabinetmaker Level 1*.

- **Goal 1:** Describe and apply **health and safety** practices.
  - **GLO 1.1:** Describe and apply **health and safety** practices.
    - SLO 11B.1.1.1: Describe and apply health and safety practices.
    - SLO 11B.1.1.2: Create and maintain a safe and organized working

environment.

- **Goal 2:** Demonstrate an understanding of the characteristics of **materials**.
  - **GLO 2.1:** Demonstrate an understanding of the characteristics of **materials**.

No applicable SLOs.

- **Goal 3:** Demonstrate the storage, selection, use, and management of materials, fasteners, adhesives, and hardware.
  - **GLO 3.1:** Demonstrate the storage, selection, use, and management of **materials**.
    - SLO 11B.3.1.1: Demonstrate the storage, selection, use, and management of materials.
  - **GLO 3.2:** Demonstrate the storage, selection, use, and management of **fasteners**.

No applicable SLOs.

**GLO 3.3:** Demonstrate the storage, selection, use, and management of **adhesives**.

**GLO 3.4:** Demonstrate the storage, selection, use, and management of **hardware**.

No applicable SLOs.

- **Goal 4:** Demonstrate the identification, selection, operation, and maintenance of **tools and equipment**.
  - **GLO 4.1:** Demonstrate the identification, selection, operation, and maintenance of **tools and equipment**.

No applicable SLOs.

- **Goal 5:** Demonstrate the ability to interpret **blueprints** and to produce **drawings and layouts**.
  - **GLO 5.1:** Demonstrate the ability to interpret **blueprints** and to produce **drawings and layouts**.
    - SLO 11B.5.1.1: Describe the uses and categories of technical drawings in the current practice of cabinetmaking. (C1.1)
    - SLO 11B.5.1.2: Describe the basic design principles and trade-accepted conventions in design. (C1.2)
    - SLO 11B.5.1.3: Describe the use and selection of conventional drafting equipment and materials. (C1.3)
    - SLO 11B.5.1.4: Describe specified principles, conventions, and techniques in joinery and casework construction and installation. (C1.4)
    - SLO 11B.5.1.5: Design and draw a cabinetmaking specialty according to identified specifications. (C1.5)
    - SLO 11B.5.1.6: Describe the taxonomy of blueprint use in casegoods and residential construction. (C2.1)
    - SLO 11B.5.1.7: Describe the uses and preparation of blueprints in casegoods and residential construction. (C2.2)
    - SLO 11B.5.1.8: Describe the use of casegoods and residential blueprints to derive specified information. (C2.3)
    - SLO 11B.5.1.9: Produce millwork shop drawings using casegoods and residential blueprints, as assigned. (C2.4)
- **Goal 6:** Demonstrate knowledge and skills related to **joinery and** casework.
  - **GLO 6.1:** Demonstrate knowledge and skills related to **joinery and casework**.

- **Goal 7:** Demonstrate knowledge and skills related to **finishing**.
  - **GLO 7.1:** Demonstrate knowledge and skills related to **finishing**. No applicable SLOs.
- **Goal 8:** Demonstrate knowledge and skills related to **installation**.
  - **GLO 8.1:** Demonstrate knowledge and skills related to **installation**. No applicable SLOs.
- **Goal 9:** Describe and apply transferable **cross-curricular knowledge and skills** as they relate to cabinet and furniture making.
  - **GLO 9.1:** Demonstrate knowledge and skills from **mathematics** as they relate to cabinet and furniture making.
    - SLO 11B.9.1.1: Review general mathematics concepts and the use of an electronic calculator. (B1.1)
    - SLO 11B.9.1.2: Perform specified trade-related calculations. (B1.2)
    - SLO 11B.9.1.3: Demonstrate the ability to work in imperial (or standard) and metric measurements.
  - **GLO 9.2:** Demonstrate knowledge and skills from **information and communication technology** as they relate to cabinet and furniture making.
    - SLO 11B.9.2.1: Describe basic computer components and programs and

their functions. (C4.1)

SLO 11B.9.2.2: Describe areas of trade practice to which computer

technology is being applied. (C4.2)

- **Goal 10:** Follow the **ethical and legal standards** that pertain to cabinet and furniture making.
  - **GLO 10.1:** Demonstrate an awareness of the **ethical and legal expectations** of cabinet and furniture makers.

### **Goal 11:** Demonstrate **employability skills**.

#### **GLO 11.1:** Demonstrate fundamental **employability skills**.

- SLO 11B.11.1.1: Demonstrate regular attendance and punctuality.
- SLO 11B.11.1.2: Demonstrate accountability by taking responsibility for own actions.
- SLO 11B.11.1.3: Demonstrate adaptability and effort.
- SLO 11B.11.1.4: Demonstrate the ability to accept and follow direction and feedback.
- SLO 11B.11.1.5: Demonstrate teamwork skills.
- SLO 11B.11.1.6: Demonstrate the ability to stay on task and to use time effectively.
- SLO 11B.11.1.7: Demonstrate the responsible use of electronic devices.

#### **GLO 11.2:** Demonstrate **critical thinking skills**.

- SLO 11B.11.2.1: Demonstrate problem-solving skills.
- **GLO 11.3:** Demonstrate respectful interactions with individuals of different **cultures**.
  - SLO 11B.11.3.1: Define and discuss culture.
- **Goal 12:** Demonstrate an awareness of **sustainability** as it pertains to cabinet and furniture making.
  - **GLO 12.1:** Describe the cabinet and furniture making industry's sustainability practices and their impact on the environment.
    - SLO 11B.12.1.1: Demonstrate the efficient use of materials.

- Goal 13: Demonstrate an understanding of the structure and scope of cabinet and furniture making, including education and career opportunities and working environments.
  - **GLO 13.1:** Describe the **scope** of cabinet and furniture making.

No applicable SLOs.

**GLO 13.2:** Describe apprenticeship, education, and employment opportunities and working environments in cabinet and furniture making.

- **Goal 14:** Demonstrate an understanding of the **evolution** of cabinet and furniture making, including its **technological progression and emerging trends**.
  - **GLO 14.1:** Demonstrate an understanding of the **evolution** of cabinet and furniture making, including its **technological progression and emerging trends**.
    - SLO 11B.14.1.1: Demonstrate an understanding of the evolution of drafting and design, including their technological progression and emerging trends.