



2022
24th ANNUAL SKILLS CANADA MANITOBA
COMPETITION
IN-PERSON & VIRTUAL
CONTEST DESCRIPTION

CONTEST NAME: Web Technologies

CONTEST NO: 17

LEVEL: Secondary and Post-Secondary

CONTEST DEADLINES:

- **Monday, February 7, 2022** - Registration opens online through Skills Canada Manitoba website
- **Friday, March 18, 2022** - Competitor Registration Deadline
- There will be an **Orientation Session** prior to the competition. Details and time to be announced by the Provincial Technical Committee. Competitor and advisor attendance are mandatory.
- Skills Canada Manitoba Competition to be held 9AM-3PM **April 14, 2022**
- Half hour allotted for lunch break
- Deadline for student's work to be submitted is **April 14, 2022**
- Students work to be evaluated by **April 20, 2022**

CONTEST LOCATION: Secondary will happen at the competitor's school and supervised by advisor. Post-Secondary will be held at Assiniboine Community College's new Centre for Creative Media or competitor's institution with supervising advisor.

PURPOSE OF CHALLENGE:

To provide competitors with the opportunity to demonstrate through practical application their skills in client-side and server-side web design and development.

SKILLS AND KNOWLEDGE TO BE TESTED:

- Graphics for the web
- Web design principles
- HTML
- CSS
- Client-side Scripting (JavaScript and/or jQuery)
- Server-side Scripting (Webserver utilizing Apache HTTP Server, MariaDB (MySQL), PHP, phpMyAdmin)

PROJECT DESCRIPTION:

The details of the project are outlined in a project document to be distributed to the competitors prior to the start of the competition.

EQUIPMENT AND MATERIALS:

All software and computer equipment must be provided by the competitor.

- Desktop or laptop Computer
- Web Browser like Google Chrome, Mozilla Firefox, Microsoft Edge
- Images Editors like Adobe Photoshop, Illustrator, GIMP
- Editors like Adobe Dreamweaver, Sublime Text, Notepad++, MS Visual Studio Code, Atom
- FTP Client like FileZilla
- PDF reader
- Zip file extractor like 7-zip or built in to operating system
- Internet connection

Virtual Competition Resource Support Form

A \$40 competition resource subsidy is available to all competitors of the Skills Canada Manitoba Competition – Virtual Edition who are required to purchase items for their respective competition. It is intended for items that were purchased to support competitors. (e.g. food supplies, materials, technical equipment, tools etc.) Please complete the Virtual Competition Resource Support Form found on the Skills Manitoba website. Please note that receipts or a school invoice are required.

SAFETY RULES / REQUIREMENTS:

The health, safety and welfare of all individuals involved with Skills Canada Manitoba are of vital importance.

At the discretion of the judges and technical committees, any competitor submission can be denied should the participant not have the required proper safety equipment and/or act in an unsafe manner that can cause harm to themselves or others.

All competitors must complete and submit a Safety Checklist with your project submission. The Safety Checklist is located in the Skills Manitoba Competition Information package as well as on the Skills Manitoba website.

Submissions will not be judged if the completed Safety Checklist is not included in the submission.

SPECIAL CONDITIONS / ADDITIONAL INFORMATION:

Ethical Conduct: We recognize that participants will be competing individually in their own schools and therefore not all conditions can be monitored. However, we expect all competitors to compete fairly, respecting and abiding by the established rules in the true spirit of Skills Canada Manitoba.

Supervision of Competitor: Competitors will be required to have an adult with them that is qualified /competent in the contest area, to both supervise and ensure safety.

COVID 19 Protocol

Please follow all established COVID 19 protocol as per your school and Manitoba Health guidelines.

NATIONAL COMPETITION ELIGIBILITY:

A mark of **70% or higher** must be scored by the gold medalist in each contest in order for them to attend the National Skills Competition. This year there is **NO** post-secondary competition at the Skills Canada National Competition.

POINT BREAKDOWN/JUDGING CRITERIA:

Secondary

This section includes a general description of the point breakdown for the secondary competition.

User Experience Design: 35

- Includes layout, typography, repetition, contrast, alignment, proximity, visual hierarchy, and other elements of graphic and interface design
- Graphics optimization for web
- Cross-browser compatibility

Technical Elements: 35

- Proper syntax in HTML, CSS, PHP, and JS code statements
- HTML elements required for accessibility
- Commented accordingly
- Interactivity across multiple size screens (responsive)
- Navigation and ease of use

Interactivity: 20 (Choose One)

1. Client-side scripting using JavaScript (JS) and/or jQuery library
 - a. Navigation
 - b. Form validation
 - c. Image gallery
2. Database Connectivity
 - a. Use of proper syntax in PHP scripts
 - b. Read and write functionality to the database
 - c. Proper error handling and reporting

Solution Quality and Integration: 10

- Quality of final website
- Web standards
- Accessibility

Post-Secondary

This section includes a general description of the point breakdown for the post-secondary competition.

User Experience Design: 25

- Includes layout, typography, repetition, contrast, alignment, proximity, visual hierarchy, and other elements of graphic and interface design
- Graphics optimization for web
- Cross-browser compatibility

Technical Elements: 25

- Proper syntax in HTML, CSS, PHP, and JS code statements
- HTML elements required for accessibility
- Commented accordingly
- Interactivity across multiple size screens (responsive)
- Navigation and ease of use

Client-side Scripting: 20

- Use of JavaScript (JS) and/or jQuery library
 - Navigation
 - Form validation
 - Image gallery

Server-side Scripting: 20

- Use of PHP to connect to a database server
 - Use of proper syntax in PHP scripts
 - Read and write functionality to the database

- Proper error handling and reporting

Solution Quality and Integration: 10

- Quality of final website
- Web standards
- Accessibility

THE IMPORTANCE OF ESSENTIAL SKILLS FOR CAREERS IN THE SKILLED TRADES;

Essential skills are used in nearly every job and at different levels of complexity. They provide the foundation for learning all other skills and enable people to evolve with their jobs and adapt to workplace change. Good Essential Skills means you will understand and remember concepts introduced in technical training. The level of Essential Skills required for most trades is as high as or higher than it is for many office jobs.

The following 9 skills have been identified and validated as key essential skills for the workplace:

Numeracy, Oral Communication, Working with Others, Continuous Learning, Reading Text, Writing, Thinking, Document Use, Digital.

Essential Skills Required for Web Technologies: Continuous Learning, Thinking, and Digital.

TECHNICAL COMMITTEE MEMBERS CONTACT INFORMATION:

Sean Taylor, B.S.Ed. (Chair)

taylors@assiniboine.net

Instructor, School of Trades & Technology

Assiniboine Community College

Brandon, MB

R7A 2A9

1.800.862.6307 ext.7416

Vacant (Secondary)