**2019**

**22nd ANNUAL SKILLS CANADA MANITOBA COMPETITION**

**April 11, 2019**

**CONTEST DESCRIPTION**

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| **EVENT:** IT Office Software Applications | **LEVEL:** Secondary<br>Post-Secondary |
| **WORLDSKILLS TRADE #: 08** | **LOCATION:** Notre Dame Campus<br>F204 |
| **COMPETITION START/END TIMES**<br>April 12, 8:00 a.m. – 2:30 p.m. | **REGISTRATION AND ORIENTATION**<br>Registration: 7:30 – 7:50 a.m.<br>Orientation: 7:50 a.m. - 8:00 a.m. |
| **DURATION: 6 hours** | |

**Please note:** **Both projects (post-secondary and secondary) will be similar with different levels of expertise expected.**

**GENERAL DESCRIPTION**

Information technology specialists are increasingly in great demand in several areas, one of which is in providing solutions for business. This competition will evaluate each contestant's advanced-level understanding and ability to solve business problems using Microsoft Office 2016 to complete Word, Excel, Access and PowerPoint challenges. It is at the competitor's discretion as to which software will most adequately aid in completing the challenge. Students from any high school/post-secondary level may compete.

The Test Project will be in the form of a case study that will represent typical functions that might be asked of an IT professional who is highly competent in the area of Microsoft Office. The scenario will be presented as a project with clearly defined deliverables. These deliverables will be grouped to enable a modular approach whereby discrete tasks are completed within a session. The projects will be divided into 2 sessions during the competition.

The scenario for this competition will include an extensive simulation of workplace activities related to the Company that is operating in the province. This could include any type of administrative activity. Competitors will be required to customize and automate elements within the applications. Competitors will submit their work at the end of each session. Work files will be provided when needed.

The gold medallist in this competition will represent Manitoba at the Skills Canada National Competition.

**Please note:** A mark of **70% or higher** must be scored by the gold medallist in each contest in order for them to attend the National Skills Competition.

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**TASKS THAT MAY BE PERFORMED DURING A COMPETION**

**Skills and Knowledge to be tested:**

Students should be prepared for the competition by learning and applying ALL the features and functions of Microsoft Access, Excel, PowerPoint, and Word to solve a variety of business problems. The criteria listed in each section below are intended as guidelines only. All criteria may or may not be included.

**Database**
Competitors will be expected to use the full functionality of Microsoft Access. Database design skills will be required.

- The importance of using industry-accepted conventions for the naming of database objects
- The need for standardization in the naming of fields
- How to ensure data integrity
- How to ensure security
- How to avoid data redundancy
- How to problem solve

- Set up tables with correct fields, keys and data types
- Apply table and field properties (validation rules, input masks, lookups etc)
- Import data from a variety of sources and in a variety of formats
- Designate primary and foreign keys
- Set up correct relationships between tables
- Provide for database security, protection, and permissions
- How to create a form to a specified design and layout

- Create forms and subforms for a range of uses
- Control data entry through forms
- Create calculated fields
- Add and set up appropriate controls in forms
- Control record navigation in a form
- Set properties
- How to design and execute queries to generate results as specified

- Filter & search records
- Construct and use select, parameter and action queries
- Add a calculated field to a query
- Perform calculations on a record grouping
- Create new fields based on existing fields
- How to design and produce reports to generate results as specified

- Produce and modify reports (simple, grouped, summary and sub reports)

- following a stated layout and format

- Create and use pivot tables and charts
- Set report properties
- Use calculated fields in reports
- Format a report for printing
- How to extract and use data from other applications that may be in differing file formats
- How to output data from Access to other applications
- Import and export data according to specifications
- Integrate data with external sources
- How to create and design the interface to suit client requirements as specified
- How to provide the user with options for simple execution of complex processes
- Automate loading and display of objects
- Create and use macros to automate processes
- Customize the Access environment

**Presentations**

Competitors will be expected to use the full functionality of Microsoft PowerPoint. Drawing and modifying of graphical objects will be limited to the capabilities of PowerPoint

- How to design, create and modify a presentation according to given specifications
- Create and modify slides using a variety of layouts and formats
- Use text effects
- Include tables and charts in a presentation
- Import data (text, spreadsheet, charts, etc.)
- Hide/unhide slides
- How to add special effects to presentations according to given specifications
- Add multimedia elements
- Customize slide component animation
- Insert media files (movie or sound)
- How to create, format and apply graphical objects to a presentation according to given specifications
- Insert and manipulate Illustrations, for example:
    - Shapes
    - WordArt
    - SmartArt
    - Diagrams
    - Graphical Objects
- Modify and work with objects:
    - Change object orientation
    - Format objects
    - Group and ungroup objects
    - Arrange objects
    - Save graphics in various formats
- How to customize a design template
- How to use timings, animations and transitions
- How to create and design the interface to suit client requirements as specified
- How to provide the user with options for simple execution of complex processes
- Display objects using timings, animations and transitions
- Create and use macros to automate processes
- Create, modify and use templates
- Set up a slide master
- Customize slide layouts
- Create custom themes
- Customize bullets
- Add common slide information
- Modify the notes master
- Modify the handout master
- The importance of professionalism in preparing a slide show for delivery according to given specifications
- Arrange slides
- Add transitions
- Apply animation effects
- Execute other programs during a slideshow
- Create speaker notes
- Print a presentation
- Package a presentation
- Set up a custom show
- Annotate a presentation
- Create a presenter-independent slide show
- Set up and apply automatic timings to a slideshow

**Spreadsheets**

Competitors will be expected to use the full functionality of Microsoft Excel; however, competitors will not be expected to have in-depth knowledge or expertise in any particular field (e.g. financial, engineering, statistical, mathematical, etc.)

- The power of a well-designed and well-constructed spreadsheet is to improve business productivity and aid decision making with its powerful data analysis and reporting functions
- Use formulas as required
- Create, modify and format spreadsheets using the full range of Excel's formatting features including conditional formatting
- Use a variety of built-in functions (statistical, mathematical, text, logical, financial, date and time).
- How to design and use analysis tools in Excel
- Perform What If Analysis using Goal Seek / Solver / Scenario Manager
- Analyse Data Using PivotTables and PivotCharts
- How to manage and analyse data
- Define and apply data filters
- Use the sub-totaling feature
- Query spreadsheet data
- Set up and apply validation rules to spreadsheet data
- Create and analyze amortization table
- How to extract and use data from other applications that may be in differing file formats
- How to output data from Excel to other applications
- Import and export data according to specifications
- Integrate data with external sources
- How to set up worksheets and workbooks for printing
- Set printing options to output a chart, worksheet, workbook, PivotTable report according to specifications
- How to present spreadsheet data in various graphical formats
- Create, modify and format the full range of charts according to specifications
- Create dynamic charts
- Create and use PivotTables and PivotCharts
- How to create and design the interface to suit client requirements as specified
- How to provide the user with options for simple execution of complex processes
- Automate loading and display of objects
- Create and use macros to automate processes
- Hide/unhide/freeze rows and columns
- Set up templates with appropriate protection
- Customize the Excel environment
- Customize an Excel worksheet
- Enhance worksheets using themes
- Work with comments
- How to enhance visual appeal using graphic objects
- Insert, modify and format graphic objects
- Change the order of layered graphic objects
- Group graphic objects
- How to work with multiple workbooks
- Create a workspace
- Consolidate data
- Link cells in different workbooks
- Edit links
- The importance of controlling data accuracy through auditing
- Trace cells
- Troubleshoot errors in formulas
- Troubleshoot invalid data and formulas
- Watch and evaluate formulas
- Create a data list outline

**Word Processing**

Competitors will be expected to use the full functionality of Microsoft Word efficiently.

- How to design, create and modify a range of business documents
- Apply the full range of text, paragraph, page and document formatting
- Create, edit and format tables
- Create and modify charts
- Insert, draw, modify and manipulate graphical objects
- How to generate mass-mailing documents Competitors must be able to:
- Set up a main document
- Connect the document to a data source
- Refine the list of recipients by sorting and filtering data
- Apply conditions and rules
- How to set up and apply the referencing features of Microsoft Word
- Set up and use indexes, cross-references, captions, tables of contents and bibliography
- Set up and use footnotes and endnotes
- Use fields and calculations in documents
- Create, manage, revise, and distribute long documents and forms
- Prepare documents for printing or for publishing electronically
- How to extract and use data from other applications that may be in differing file formats
- How to output data from Word to other applications
- Import and export data according to specifications
- Integrate data with external sources
- How to create a custom layout using a template
- How to create a template
- How to create and use forms
- Create and use macros to automate processes
- Provide user interactivity by means of forms and fields
- Protect forms
- Create, edit and apply themes to documents
- Create, modify and use templates

**Integration**
- Competitors can expect to copy, paste, embed, link, export and import/export data between the four software applications within the MS Office suite.

**PROJECT DESCRIPTION**

The project will include a simulation of workplace activities that may be asked of an IT professional who is competent in Microsoft Office. The project will be divided into two sessions where the competitors can expect to customize, integrate, and automate elements within the applications. Competitors will submit their work at the end of each session. Work files will be provided when needed.

| SCHEDULE | |
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| Orientation | 7:50 - 8:00 a.m. |
| Session 1 Word Processing/Presentations | 8:00 – 11:00 a.m. |
| Lunch | 11:00 - 11:30 a.m. |
| Session 2 Spreadsheets/Database | 11:30 - 2:30 p.m. |

**EQUIPMENT, MATERIAL, CLOTHING**

Equipment and material provided by Skills/Compétences Manitoba
- Computer
- Software (Windows 7.0 or greater/MS Office 2016)
- Table and chair
- Monitor

Equipment and material provided by the competitor
- Writing instrument

Required clothing provided by the competitor.
- Competitors should be dressed appropriately

**SAFETY REQUIREMENTS**

The health, safety and welfare of all individuals involved with Skills Canada Manitoba are of vital importance. Safety is a condition of participation with Skills Canada Manitoba and shall not be sacrificed for the sake of expediency. At the discretion of the judges and technical committees, any competitor can be denied the right to participate should they not have the required proper safety equipment and/or act in an unsafe manner that can cause harm to themselves or others.

Personal protective equipment (PPE) provided by Skills/Compétences Manitoba
- No PPE required

Personal protective equipment (PPE) provided by competitors
- No PPE required

**JUDGING CRITERIA**

- Each of the four competition projects will be given equal weighting
- Final documents produced at the end of the allotted time
- Completion
- Accuracy
- Format
- Attention to detail (instructions followed exactly as given)

**TIE BREAKING PROCESS**

In the event of a tie, the position will be awarded to the competitor displaying the most consistent skills in all four competition areas.

**SPECIAL CONDITIONS/ADDITIONAL INFORMATION:**

Competitors will be identified by a competitor number. Most tasks will require a header or footer with the assigned competitor number.   Competitors **are not to** include their names on any documents.

**THE ESSENTIAL SKILLS FOR CAREERS IN THE SKILLED TRADES AND TECHNOLOGY**

SCC is currently working with Employment and Social Development Canada (ESDC) in order to bring awareness to the importance of Essential Skills that are absolutely crucial for success in the workforce. Part of this ongoing initiative requires the integration and identification of Essential Skills in contest descriptions, projects, and project documents. The next phase and very important aspect of our Essential Skills (ES) initiative is to provide an ES report card to each competitor at the Skills Canada National Competition. The purpose of the ES report card is to inform the competitor about their current level of essential skills based on their competition scores. With this knowledge, the competitor will be made aware which essential skill may require improvement. Full implementation is expected in the next Skills Canada National Competition.

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

1Numeracy, 2Oral Communication, 3Working with Others, 4Continuous Learning, 5Reading Text, 6Writing, 7Thinking, 8Document Use, 9Digital

**TECHNICAL COMMITTEE MEMBERS CONTACT INFORMATION:**

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|---|---|
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