Contest Description

COMPETITION DATE: **Wednesday, March 31, 2021**	**CONTEST AREA NAME:** **IT Office Software**
CONTEST AREA NUMBER: **08**	**LEVEL:** **Post-Secondary**
DURATION OF CONTEST: **6 hours**	**LOCATION:** **Virtual**

CONTEST INTRODUCTION

Purpose of the Challenge.

The rapid pace of globalization over the past decade has been largely driven by developments in Information Communication Technology (ICT). Information Technology (IT) Specialists are increasingly in great demand in several areas, one of which is in providing office software applications for business.

These professionals are not merely users of Microsoft Office; they are power users who have an intricate knowledge of each of the applications in the suite. Their skills may be used in a plethora of ways across a multitude of industries, cultures and languages.

Microsoft Office is by far the most widely-used suite of office applications throughout the world, therefore making office application professionals highly-employable members of the IT community. There are thousands of businesses that are undoubtedly in need of better training in the use of these office applications and will often benefit greatly from having customized solutions developed for them that suit their individual needs.

What do IT Office Application professionals do?
● Develop solutions to business' problems
● Use Microsoft Office as a framework to build software solutions
● Analyze business requirements in order to create well-fitting solutions
● Use problem-solving skills and in-depth technical knowledge to build those solutions
● Use communication skills to document their creation in an easy-to-understand way
● Use communication and sales skills to present their solutions to clients

Where do IT Office Application professionals work?
- Large enterprises
- Medium-sized businesses
- Small businesses
- As freelancers

They can operate in a wide variety of roles including:
- In a support role
- In a training role
- In a development role
  - Providing customization and automation
  - Developing totally customized software solutions to business' requirements
- In a business analyst role providing the data required to enable decision making
- In the daily activities of a company
  - Simplifying and improving routine office and business activities

CONTEST DESCRIPTION

List of documents produced and timeline for when competitors have access to the documents. The Provincial competition is divided into four sections. The competition involves the ability to use Microsoft Office 2016 or Office 365 to complete four sections. In each section, competitors may be using any combination of the applications (Word, PowerPoint, Excel, and Access). Each section will be 1.5 hours in length and will be tested as follows (subject to change).

DOCUMENT	DATE OF DISTRIBUTION VIA WEBSITE
Word Processing	
Spreadsheets	
Presentations	
Database	

The competitors will use Word, Excel, Access, and PowerPoint to create business documents. The criteria listed in each section below are intended as a guideline only. All criteria may not be included.

Competitors will submit their work at the end of each session. Work files will be provided when needed.

Word Processing

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

Create a document

Competitors must know and understand:

● How to design, create and modify a range of business documents

Competitors must be able to:

● 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

Mail Merge

Competitors must know and understand:

● 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
● Apply conditions and rules

Referencing

Competitors must know and understand:

● How to set up and apply the referencing features of Microsoft Word

Competitors must be able to:

● Set up and use indexes, cross-references, captions, tables of contents, 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

Share data across applications

Competitors must know and understand:

- 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

Competitors must be able to:

- Import and export data according to specifications
- Integrate data with external sources

Customize and automate processes

Competitors must know and understand:

- How to create a custom layout using a template
- How to create a template
- How to create and use forms

Competitors must be able to:

- 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

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; no drawing packages will be used in the Test Project.

Create a presentation

Competitors must know and understand:

● How to design, create and modify a presentation according to given specifications

Competitors must be able to:

● 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, and database)
● Hide/unhide slides

Add special effects to presentations

Competitors must know and understand:

● How to add special effects to presentations according to given specifications

Competitors must be able to:

● Add multimedia elements
  ■ Insert hyperlinks
● Customize slide component animation
● Insert and edit media files and playback specifications (movie, sound)

Competitors must know and understand:

● How to create, format and apply graphical objects to a presentation according to given specifications

Competitors must be able to:

● 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

Competitors must know and understand:

- 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

Competitors must be able to:

- Display objects using timings, animations and transitions
- 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

Prepare a presentation for delivery

Competitors must know and understand:

- The importance of professionalism in preparing a slide show for delivery according to given specifications

Competitors must be able to:

- 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 (eg. financial, engineering, statistical, mathematical, etc.)

Construct a spreadsheet

Competitors must know and understand:

- The power of a well-designed and well-constructed spreadsheet to improve business productivity and aid decision making with its powerful data analysis and reporting functions

Competitors should be able to:

- 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).

Use design and analysis tools

Competitors must know and understand:

- How to design and use analysis tools in Excel

Competitors should be able to:

- Perform What If Analysis using Goal Seek / Solver / Scenario Manager
- Analyze Data Using PivotTables and PivotCharts

Use data and table functions

Competitors must know and understand:

● How to manage and analyze data

Competitors should be able to:

● 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

Share data across applications

Competitors must know and understand:

● 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

Competitors must be able to:

● Import and export data according to specifications
● Integrate data with external sources

Printing spreadsheets

Competitors must know and understand:

● How to set up worksheets and workbooks for printing

Competitors must be able to:

● Set printing options to output a chart, worksheet, workbook, PivotTable report according to specifications

Charts and graphs

Competitors must know and understand:

● How to present spreadsheet data in various graphical formats

Competitors must be able to:

● Create, modify and format the full range of charts according to specifications
● Create dynamic charts
● Create and use PivotTables and PivotCharts

Customize and automate processes

Competitors must know and understand:

● 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

Competitors must be able to:

● 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

Use graphical objects

Competitors must know and understand:

● How to enhance visual appeal using graphic objects

Competitors must be able to:

- Insert, modify and format graphic objects
- Change the order of layered graphic objects
- Group graphic objects

Use multiple workbooks

Competitors must know and understand:

- How to work with multiple workbooks

Competitors must be able to:

- Create a workspace
- Consolidate data
- Link cells in different workbooks
- Edit links

Use auditing features

Competitors must know and understand:

- The importance of controlling data accuracy through auditing

Competitors must be able to:

- Trace cells
- Troubleshoot errors in formulas
- Troubleshoot invalid data and formulas
- Watch and evaluate formulas
- Create a data list outline

<u>Database</u>

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

Create and/or modify a database

Competitors must know and understand:

- 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

Competitors must be able to:

- 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

Design and use forms

Competitors must know and understand:

- How to create a form to a specified design and layout

Competitors must be able to:

- 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

Query a database

Competitors must know and understand:

- How to design and execute queries to generate results as specified

Competitors must be able to:

- 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

Design and use reports

Competitors must know and understand:

- How to design and produce reports to generate results as specified

Competitors must be able to:

- 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

Share data across applications

Competitors must know and understand:

- 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

Competitors must be able to:

- Import and export data according to specifications
- Integrate data with external sources

Customize and automate processes

Competitors must know and understand:

● 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

Competitors must be able to:

● Automate loading and display of objects
● Create and use macros to automate processes
● Customize the Access environment

EQUIPMENT, MATERIAL, CLOTHING

Equipment and Material <u>Competitor</u> must supply:

Competitors must use their own device (BYOD) for the competition. Each PC (**no Apple products permitted due to incompatibility with Microsoft Access)** device will require the following specifications:

● English keyboard
● Ear plugs for noise reduction
● Internet
● Software:
  ○ Windows 7 or greater operating system
  ○ Microsoft Office 2016 or Office 365
    ■ Word
    ■ PowerPoint
    ■ Excel
    ■ Access

If competitors use a computer or laptop from their school (instead of their personal computer), please ensure that the computer is unlocked so documents and possibly software can be saved/installed to the hard drive and technology support can be provided onsite. Competitors should make sure that no data files are on their device prior to the test. Computers will be checked by Skills Competition members prior to starting the competition. Be prepared to create a new user profile on your laptop for use during the competition.

The use of a headset (connect to electronic music device, e.g. iPod) is permitted. No communication devices permitted. Earplugs are permitted.

Required clothing (Provided by competitor)

- Competitors should be dressed appropriately and comfortably
- Competitors may wear their Skills Canada shirts provided attire if they desire.

PROJECT DISTRIBUTION

The actual projects will be distributed at the start of each section during the competition. Past projects are not available.

COMPETITOR RESPONSIBILITIES

Competitors should attend the formal orientation session prior to the competition. Competitors will test and become familiar with their workstation and competition procedures during this time.

ASSESSMENT

Point Breakdown

The final score will be determined by combining the scores from each of the sections as follows:

Post Secondary

Document Processing	25%
Spreadsheets	25%
Presentations & Graphics	25%
Database	25%

ADDITIONAL INFORMATION

Tie (No ties are allowed)

In the event of a tie, the position will be awarded to the highest average of each competitors highest and lowest mark.

SAFETY REQUIREMENTS

The health, safety and welfare of all individuals involved with Skills Canada NL are of vital importance. Safety is a condition of participation 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.

PROVINCIAL TECHNICAL COMMITTEE MEMBERS

LIST THE NAMES AND EMAIL ADDRESS OF ALL PTC MEMBERS

NAME	EMAIL ADDRESS
Colleen Duffett	colleen.duffett@cna.nl.ca
Cathy Goodwin	cfgoodwin709@gmail.com
Christine Bugler	buglerchristine@gmail.com
Denise Martin	denise.martin@cna.nl.ca