EXCEL LESSON PLAN	
Author Names: Mr. Matthew Dupuis	
Lesson Title: Introduction to Excel	**Date:** March 25, 2024
Grade Level: 9	**Subject/Strand:** BTT1O
Topic: Introduction to core features of Excel	**Length of Period:** 75 minutes
Lesson Plan Description This lesson will introduce students to the basic features of Microsoft Excel. Following the teacher along with a step-by-step tutorial, students will learn various functions of the software.	
CURRICULUM CONNECTIONS	
Ontario Curriculum Overall Expectations • *Use spreadsheet software to perform a variety of tasks.*	**Ontario Curriculum Specific Expectations** • *Input, organize, and format data in a spreadsheet.* • *Use formulas and functions (e.g., sum, average, minimum, maximum) to perform specific spreadsheet tasks.* • *Produce spreadsheet documents (e.g., budget, inventory, payroll, invoice) to manage data.* • *Use software to produce charts that visually represent spreadsheet data.*
Learning Goals **Discuss with learners: *What will I be learning today?*** *We are learning …* • How to navigate the menu in Excel and what different features do. • How to enter various types of data. • How to adjust formatting for text in a worksheet. • How to use basic formulas. • How to sort and filter data. • How to create charts and graphs using data.	**Success Criteria** **Discuss with learners: *How will I demonstrate what I have learned?*** *I can …* • **Explain** various features in Excel and where to find them. • **Demonstrate** how to add various types of data to a worksheet such as text, numbers, dates, etc. • **Demonstrate** how to use formulas with data and create graphs after sorting and filtering that data.

ASSESSMENT

Indicate purpose of the assessment: ☐ ***FOR*** ☑ ***AS*** ☐ ***OF***

Indicate Achievement Chart categories being assessed:
☑ ***Knowledge and Understanding*** [ ] ***Thinking*** ☑ ***Application*** [ ] ***Communication***

Indicate Assessment Mode: *Performance – Using Excel to demonstrate understanding.* **AS:** Opportunity to use and practice Excel while demonstrating understanding of taught strategies and topics.	**Indicate Assessment Strategy:** *What will learners do to demonstrate their learning?* **AS:** Details explaining…	**Indicate Assessment Tool:** *Instrument used to record results/ document learning.* **AS:** A rubric will be used to gauge level of understanding and achievement of assignment requirements.

CONSIDERATIONS FOR PLANNING

Review:
What prior experiences, knowledge and skills do the learners bring with them to this learning experience?

- Students have no previous known experience or exposure to Excel and will be learning from scratch.

Resources / Materials:

- Computer for each student
- Access to Microsoft Excel software or spreadsheet program such as Google Sheets for each student

THREE PART LESSON

Introduction (5 minutes)

- Provide a scenario to students:
  - "You are planning out a trip to Europe and you have a budget of $10,000. You start finding flights, hotels, rental cars, train tickets, etc. but quickly get overwhelmed with all the numbers, dates, locations, and confirmation numbers. What can you do to help stay organized?"
- Ask what they can do to keep it all organized.
- When a spreadsheet/Excel is brought up, ask about how it can help.

Key Questions to Engage Learners.

- *Why would using a spreadsheet help with this scenario?*
- *What other situations might you want to use a spreadsheet for?*
- *What are some other software's that can be used for spreadsheets?*

• Ask about other scenarios where Excel and spreadsheets could be useful. Possible examples:
  ○ Budgeting
  ○ Bookkeeping/Accounting
  ○ Planning Trips
  ○ Attendance Lists
  ○ Project Management
	• *Has anyone here used Excel or spreadsheet software before? If so, what for?*

Body of Lesson / Action (~60 minutes)	

1. **Navigating the Interface (7 minutes)**
  • Demonstrate the Excel interface: Ribbon, tabs, cells, columns, and rows.
  • Explain how to navigate between worksheets.
2. **Data Entry (10 minutes)**
  • Show how to enter text, numbers, and formulas into cells.
  • Emphasize the importance of cell references in formulas.
3. **Formatting (10 minutes)**
  • Discuss formatting options: font styles, colors, cell borders, and alignment.
  • Demonstrate how to apply formatting to cells and ranges.
4. **Formulas and Functions (12 minutes)**
  • Introduce basic formulas: SUM, AVERAGE, MAX, MIN, COUNT, COUNTIF, and arithmetic operators.
  • Show how to create formulas and use autofill for quick calculations.
  • Explain the concept of functions and demonstrate how to use them.
5. **Sorting and Filtering (7 minutes)**
  • Explain how to sort data alphabetically or numerically.
  • Demonstrate filtering to display specific data subsets.
6. **Charts and Graphs (10 minutes)**
  • Introduce chart types: bar, pie, and line charts.
  • Show how to create charts based on data in Excel.
7. **Saving and Printing (6 minutes)**
  • Discuss saving workbooks in different formats: .xlsx, .csv, etc.
	Key Questions to Engage Learners.
	Why might you want to change the formatting of a cell?
	
	When would these formulas be useful? When can you use them?
	
	Why would you want to format number cells differently?
	
	When could you use the COUNTIF formula?

• Demonstrate how to print worksheets and adjust print settings. 8. **Practice Exercises (15 minutes)** • Distribute handouts with practice exercises covering topics from the lesson. • Encourage students to work individually or in pairs to complete the exercises.	
Conclusion (10 minutes)	
Summary: • Summarize content covered and features covered in Excel.	**Key Questions to Engage Learners.** *What is one formula that you learned today?* *When can you use this in the future?*
Differentiated Instruction • Main lesson will be taught in chunks letting students follow along. The teacher will go through the software on the projector screen for students to see and hear (auditory/visual) and students will then complete those parts themselves to become familiar with the features (kinesthetic). ***Rationale & Purpose:*** • This lesson covers the spreadsheet elements of the Ontario Secondary Business Studies Curriculum for BTT1O. • This lesson allows students to learn spreadsheet software with hands-on learning approaches.	
Extension Activities *What will learners do when work is completed?* • *Students are encouraged to play around with Excel and different functions. Researching different functions online, etc.* *What will learners do if they finish early?* • *Students will research 2-5 Excel functions different from those covered in the lesson. They will write down the name of it, what it does, and use cases for them.*	
Next Steps *Students will be assigned a budgeting assignment using a scenario similar to the one covered in the introduction of the lesson.*	