

Data Collection & Analysis 35S

Credit Value: 0.5

Course Description:

The purpose of the course is to provide students with the skills and knowledge to collect, organize, manipulate, and analyze data to solve problems using spreadsheets.

Specific Learning Outcomes:

Students will:

1. Analyze data for accuracy, currency, credibility, objectivity, and relevance.
2. Analyze whether information from media sources has been manipulated. (*Examples: bogus information, graphs showing only selected data...*)
3. Create worksheets by entering and importing data.
4. Create formulas, including:
 - a. Cell references (relative, absolute, mixed)
 - b. Mathematical expressions
 - c. Functions (*Examples: financial, logical, statistical*)
5. Sort data.
6. Create, modify, and publish charts.
7. Automate repetitive tasks by using software tools. (*Examples: styles, format painter, custom toolbars, macros, templates*)
8. Link multiple worksheets and multiple spreadsheet documents.
9. Improve the readability of a worksheet. (*Examples: layout, format, labels, borders, hiding cells*)
10. Validate and protect data in a spreadsheet.
11. Publish information from a spreadsheet. (*Examples: print, web, link, export to other applications*)

Additional Learning Outcomes:

Students will:

1. Create multiple page websites using good design and layout practices
2. Operate a GPS unit to collect spatial coordinate data
3. Publish GPS data on a relevant, well-designed map