

LINC 63: CLOUD-BASED DATA ANALYSIS TOOLS

Foothill College Course Outline of Record

| Heading | Value |
|------------------------------------|---|
| Units: | 1 |
| Hours: | 1 lecture per week (12 total per quarter) |
| Advisory: | Basic computer skills and knowledge of Macintosh or Windows operating systems and basic skills and knowledge of internet technologies, such as using web browsers, email, bookmarking, searching and downloading; not open to students with credit in LINC 269. |
| Degree & Credit Status: | Degree-Applicable Credit Course |
| Foothill GE: | Non-GE |
| Transferable: | CSU |
| Grade Type: | Letter Grade (Request for Pass/No Pass) |
| Repeatability: | Not Repeatable |

Student Learning Outcomes

- A successful student will be able to build, edit, format worksheets.
- A successful student will be able to create and format charts.
- A successful student will be able to write formulas and use functions.

Description

This course covers a variety of powerful cloud-based data analysis tools (e.g., Microsoft Excel, Google Sheets, and Apple Numbers) that can support educators, students, and business professionals in myriad tasks, including analyzing performance data, tracking expenditures, budget development, meeting planning, workflow processes, and database management.

Course Objectives

The student will be able to:

- perform typical administrative tasks appropriate to a spreadsheet application.
- apply new knowledge to real or simulated tasks involved in management and leadership.
- use tools to produce graphical representations of the data contained in a spreadsheet.

Course Content

- Introduction to cloud-based data analysis tools and the common functionality of these tools, for example:
 - Microsoft Excel (Office 365)
 - Google Sheets
 - Apple Numbers
- Using a spreadsheet tool for financial management and planning
 - Developing a spreadsheet structure
 - Entering financial data

- Formatting cells
 - Using the subtotals
 - Entering simple functions
- Using a spreadsheet as a simple database
 - Basic database concepts (e.g., field, record)
 - Constructing a simple database
 - Sorting and filtering data
 - Summarizing data
 - Creating a simple chart or graph
 - Importing data from another source

Lab Content

Not applicable.

Special Facilities and/or Equipment

- When offered on/off campus: Lecture room equipped with overhead projector, white/black board, and a demonstration computer connected online. Computer laboratories equipped with online PCs and Macintosh computers, network server access, and printers.
- When taught via Foothill Global Access on the Internet: Students must have currently existing email accounts/email address and ongoing access to computers with email software, GUI web browsing capability, FTP program, and access to the World Wide Web.

Method(s) of Evaluation

The student will demonstrate proficiency by:

- Creating a spreadsheet project using characteristics of quality defined by the class.
- Writing an evaluation critique and reflection for their own and classmates' final projects, with emphasis on use of constructive comments and suggested improvements with respect to established characteristics of good multimedia design.
- Instructor's evaluation of final project, including at minimum, a worksheet with formulas, tables, conditional cell formatting.

Method(s) of Instruction

During periods of instruction the student will be:

- Listening actively to lecture presentations delivered in student-centered learning style by taking notes, following demonstrations, or completing an activity
- Participating in facilitated discussions of live presentations, readings or video presentations
- Presenting in small group and whole class situations

Representative Text(s) and Other Materials

Instructor-assigned notes and materials.

When course is taught online: Additional information, notes, handouts, syllabus, assignments, tests, and other relevant course material will be delivered by email and on the World Wide Web, and discussion may be handled with internet communication tools.

Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

A. Writing assignments include a project plan, peer evaluations, and critical analysis of technology tools, systems, or processes used.

B. Outside assignments include conducting project development, writing the project development plan, reading, and participating in online peer collaboration activities.

C. When taught online these methods may take the form of video, audio, animation and web page presentations. Assignments will be submitted online as well.

Discipline(s)

Instructional Design/Technology