CMPT 155: Computer Applications for Life Sciences

Lecture 1: Syllabus and Introduction to Excel

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Presentation Outline

General Info

- Email: iperez04@manhataan.edu
- Office: RLC 204
- Office Hours: Friday 10am-12pm
- Website:
  https://ivaneperez.com/teaching/CMPT155/

About the Course

- Section 01: Tuesday, Wednesday Friday 8:00-8:50 AM
- Section 02: Tuesday, Wednesday, Friday 9:00 - 9:50 AM

Textbook

- Computer Application for Life Sciences, Revised edition, Joan Harnett, Linus Learning, 2014.
- ISBN 13: 978-1-60797-501-4
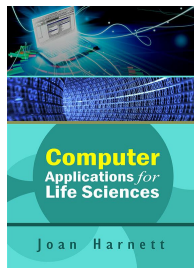
Grading

- 1st Midterm Exam: 15%
- 2nd Midterm Exam: 15%
- Final Exam: 30%
- Attendance & Participation: 5%
- Lab Assignments and Homework: 35%

Important Dates

- *Tentative* Date of 1st Midterm Exam: 10/01/2021
- Midterm Grades Due: 10/19/2021
- *Tentative* Date of 2nd Midterm: 11/05/2021
- Last Day to Withdraw from Courses: 11/19/2021
- Date of Final Exam: 12/17/2021

Attendance Policy

- **Attendance is Mandatory**
- Attendance and **Participation** counts for 5% of your grade.

What is Participation?

1. Engaging with the class
2. Asking questions
3. participating in the moodle forum

Electronic Devices

- Do not Check e-email or visit websites extraneous to the course during class.
- Phones should be silent(including rumble) in 2021.

Homework Policy

- Submit Homework Assignments on Moodle.
- Due 1 week after announced ()Typically on Fridays).
- **No Late Work is Accepted**
- Assignments can be worked out together, but must be typed separately.

Advice for computer/programming based homework:

1. Isolate the ideas/chapters of the course material are explored in the assignment.

Advice to be Sucessful in this Course

- Attend Class
- Take notes
- **Engage with the Material** by doing examples.
- Ask Questions!
- Save/Document programs.
- Do personal programs and projects! (e.g., Tracking Spending, Budgeting, Fitness goals)

About Excel

- It's not free
- Free options
  1. Campus computers
  2. RLC 103 8am-10pm
  3. library 24h
  4. Open-Source! LibreOffice!

About Excel Cont.

- Excel is a Front-End Data Manipulation software, for the Language Visual Basic
- Excel is can store smallish ($< 1GB$) datasets.

Common Spreadsheets

- Business Documents
  - financial statements, invoices,expense reports.
- Personal Documents
  - Budgets, Chore/Bill Split
- Business Documents
  - Numerical Data, Simulated data, Quantitative/Qualitative data.
- Excel is great because: it
  - Portable way to share/collaborate on data analysis.
  - Easy to follow/traceable methods of visualizing data, following data manipulation.
  - Templates are easy to make and distribute.

Ex:Annual Cancer Deaths

State	Cigarettes per person	Lung Cancer	Leukemia
California	2860	22.07	7.06
Idaho	2010	13.58	6.62
Illinois	2791	22.80	7.27
Indiana	2618	20.30	7.00
Iowa	2212	16.59	7.69
Kansas	2184	16.84	7.42
Kentucky	2344	17.71	6.41
Massachusetts	2692	22.04	6.89
Minnesota	2206	14.20	8.28
New York	2914	25.02	7.23
Alaska	3034	25.88	4.90
Nevada	4240	23.03	6.67
Utah	1400	12.01	6.71
Texas	2257	20.74	7.02