

Al al-Bayt University
Institute of Earth and Environmental Sciences
Applied Geology and Environmental Sciences Department
Course Syllabus

Course Title: Computer applications in Geology	Instructor: Dr. Ibraheem Hamdan
Course Number: 0801161	Credit hours: 2 h (2 lectures)
Term: Second semester 2019/2020	Class Meeting Hours: 1.00-2.00/ Remote sensing lab
Class Meeting Days: Tuesday and Thursday	Email: ibraheem.hamdan@aabu.edu.jo

Course Aims and Objectives:

Course aim to provide students with the knowledge about different computer applications and software's that serving geology science. Within the course students will learn how enter the data, analyzing and processing data, and visualizing these data as a maps and graphs on these software's.

Course Outlines:

- **Excel software:** introduction to Excel software, worksheets, columns, rows, cells, Data filter, Data sort, Formulas, charts, data formatting, etc.
- **Surfer software:** introduction to Surfer software, advantages of using surfer software, exploring Surfer software contents and its capabilities, creating X,Y,Z sheet, creating different maps in Surfer (e.g.: contour map, post map, shaded relief map, vector map, etc.), map preview and visualization, map layout.
- **Google earth:** introduction to Google earth, how to navigate in Google earth, searching in Google earth, layers in Google earth, Google earth tools options, creating point, line, polygon in Google earth, saving files, calculating geometries in Google earth, saving images, reviewing historical images in Google earth.

Text Book:

No specific text book. Students will depend mainly on the lecturer presentation and the practical part during the lecture.

Grading Policy:

Determination of the final grade for this course will be based upon the following:

Mid-term exam 35%

Final exam 50%

Project, quizzes and other activities during the course 15%