

Faculty of Engineering & Technology

Mathematics & Statistics & Computers

Information :

Course Code : MTH 213

Level : Undergraduate

Course Hours : 3.00- Hours

Department : Department of Architectural Engineering

Instructor Information :

Title	Name	Office hours
Lecturer	Mahmoud Mohamed Mokhtar Abdulwadud Mohamed	
Teaching Assistant	Mariam Maged Kamal Eldeen Mohamed Gomaa	

Area Of Study :

- 1- Give basic definitions.
- 2- Use standard method to deal with various techniques of integration.
- 3- Random variables, distribution functions, estimation, significance statistic. and softwares programs, Computer languages and Applications.
- 4- Some special families of univariate distributions. Joint, conditional and marginal distributions stochastic independence.

Course outcomes :

a. Knowledge and Understanding: :

- 1 - Define and distinguish between various statistical theories
- 2 - Apply those theories and discuss some concepts dealing with these theories

b. Intellectual Skills: :

- 1 - All subjects concerned with statistical theories illustrate a
- 2 - The student should be able to deal with statistical techniques

c. Professional and Practical Skills: :

- 1 - Application of statistical theories
- 2 - Clarify some properties and concepts touching those fields

d. General and Transferable Skills: :

- 1 - Ability of dealing with theories and distinguishing various methods
- 2 - Ability of presenting a method to give an application to some theory

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Descriptive Statistic: Data Description, Frequency distributions for Categorical Data , Measure of central Tendency , and Numerical Measure of Variability , Measure of position, Exploratory Data Analysis	12	6	6
Probability and counting: Random variables, Distribution functions, and Joint, conditional and marginal distributions, and Cumulative distribution function	8	4	4
Discrete Probability Distribution: Mean, variance and standard Deviation	8	4	4
Important Distributions: Bin(n,p), Poisson(), and	8	4	4
Confidence Intervals and Sample Size : Confidence Intervals for the Mean when Standard deviation is know , Good Estimator	4	2	2
Solve problems : Using Statistical Program e.g.: Minitab and Excel programs	8	4	4

Teaching And Learning Methodologies :

Presentation to students in classrooms.

Direct study of notes or books.

Solving problems in practical hours.

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Assignments and quizzes	20.00	1	i- Discussions in the lectures to assess the student ability to gain new information.
Attendance and Participation	10.00	1	i- Discussions in the lectures to assess the student ability to gain new information.
Final- Exam	40.00	15	i- Discussions in the lectures to assess the student ability to gain new information.
First mid-term Exam	15.00	6	i- Discussions in the lectures to assess the student ability to gain new information.
Second mid-term Exam	15.00	12	i- Discussions in the lectures to assess the student ability to gain new information.

Course Notes :

Course notes prepared by staff

Periodicals :

web sites

Web Sites :

web sites