FUTURE UNIVERSITY IN EGYPT جامعة المستقبل

Faculty of Engineering & Technology

Geo-informatics 2

Information :

Course Code :	SCM 322	**Level :**	Undergraduate	**Course Hours :**	2.00- Hours

Department : Department of Structural Engineering & Construction Management

Instructor Information :

Title	Name	Office hours
Professor	Ayman Fouad Mohammed Ragab	13
Professor	Ayman Fouad Mohammed Ragab	13
Teaching Assistant	Ahmed Taher Abdelhamed Mohamed Yousef	
Teaching Assistant	Ahmed Salah Rashad Ahmed Abdelhakk	4
Teaching Assistant	Sarah Salah Sayed Hussein Aly Elsheshtawy	

Area Of Study :

Upon successful completion of this course, the student should be able to:
- Understand the basic concepts and main principles
- Calculate the values of the essential terms
- Carry out the related tests

Regarding geographic information system Data formats & topology electromagnetic distance measurements figure of earth geodetic coordinate global positioning system map projection

Description :

Earth surface, Geodetic coordinate Systems, Geodetic networks, Fundamentals of satellite geodesy, Global positioning system GPS, Map projections, Fundamentals and structure of Geographic information systems GIS.

Course outcomes :

a.Knowledge and Understanding: :	
1 -	Define the main terms of geographic information system
2 -	List the main items of Data formats & topology
3 -	Explain the principals of electromagnetic distance measurements
4 -	Describe the main concept of global positioning system
5 -	Define the main terms of map projection
b.Intellectual Skills: :	
1 -	Calculate the values of electromagnetic distance measurements
2 -	Calculate the values of geodetic coordinate
3 -	Assess issues of global positioning system
4 -	Solve problems regarding map projection

5 -	Solve problems regarding figure of earth
c.Professional and Practical Skills: :	
1 -	Prepare technical reports for Data formats & topology
2 -	Prepare technical reports for map projection
d.General and Transferable Skills: :	
1 -	Cooperate and communicate effectively

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
geographic information system	4	2	2
Data formats & topology	8	4	4
electromagnetic distance measurements	8	4	4
figure of earth	8	4	4
geodetic coordinate	12	6	6
global positioning system	8	4	4
map projection	8	4	4
Revision	4	2	2

Teaching And Learning Methodologies :

Interactive Lec.
Discussion
Problem Solving
Report / Present.

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
final exam	40.00		
Mid- Exam I, II	30.00		
Quizzes / Assig.	15.00		
Report / Present.	15.00		

Course Notes :

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Recommended books :

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Periodicals :

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Web Sites :
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