KINGDOM OF SAUDI ARABIA
IMAM MOHAMMAD IBN SAUD ISLAMIC UNIVERSITY
COLLEGE OF COMPUTER AND INFORMATION SCIENCES
INFORMATION SYSTEMS DEPARTMENT
BACHELOR IN INFORMATION SYSTEMS

المملكة العربية السعودية
جامعة الإمام محمد بن سعود الإسلامية
كلية علوم الحاسب والمعلومات
قسم نظم المعلومات
بكالوريوس نظم المعلومات

SYLLABUS

IS1352: Geographic Information Systems

CREDIT HOURS	3 credit hours (Lectures: 3)		PREREQUISITE	IS1220

Instructor:
Contact information and office hours
Office No: To be announced (TBA)
Office Hours: TBA
E-mail: _____@imamu.edu.sa

COURSE DESCRIPTION
To enable students to understand the purposes of GIS and the kinds of problems to which GIS is applied and make them proficient with a commercially available GIS software package so that can perform different GIS operations and make decisions based on analysis.

	COURSE LEARNING OUTCOMES (CLOs)	Aligned SOs
1	**Knowledge and Understanding**	
1.1	Describe the GIS field along with the fundamental types of GIS data, including raster and vector data models.	1(I)
1.2	Recognize the different coordinate systems and related issues	1(I)
1.3		
1.4		
1.5		
2	**Skills :**	
2.1	Design GIS poster with a commercially available GIS software package in both individual and team environment.	2(P)
2.2	Create spatial and attribute data	2(P)
2.3		
2.4		

2.5		
3	**Values:**	
3.1	Function effectively on teams to accomplish a common goal.	5(P)
3.2	Present a topic in a compelling manner.	3(P)
3.3		
3.4		
3.5		

TEACHING Strategies
Lectures
Self-Learning

No	List of Topics	Contact Hours	Self-Learning
1	Introduction to GIS field (Theory)	3	
2	Geo-relational Vector Data Model (Theory)	3	
3	Object-based Vector Data model (Theory)	3	
4	Raster Data Model in detail (Theory)	3	
5	Getting to know ArcMap (Theory + Lab)	3	1
6	Symbolizing features and Raster (Theory + Lab)	3	1
7	Classifying feature and Raster (Theory + Lab)	6	2
8	Coordinate System (Theory) (self-learning)	3	2
9	Analyzing Vector and Raster Data (Theory + Lab)	6	
10	Presenting Data and Project Demos	3	
11			
12			
	Total	**36**	**6**

TEXT BOOK
• Introduction to Geographic Information Systems, 8th Edition, Chang, K., McGraw-Hill Education, 2015, ISBN 978-0078095139.
• Getting to Know ArcGIS Desktop 2nd Edition updated for ArcGIS 10, Tim Ormsby,Eileen J Napoleon, Robert Burke, ESRI Press, 2010, ISBN 978-1589482609.

REFERENCES

	Course Assessment Methods

No	Assessment Method	Due Week	% of Total Assessment
1	Quiz	4	10
2	Assignment	9	10
3	Midterm	7	20
4	Project / Lab Exam	11	20
5	Final Exam	13	40