

Kingdom of Saudi Arabia
The National Commission for Academic Accreditation & Assessment

470CIS-3
Geography Information System

Course Specification
First Semester 2016-2017

Course Specification

Institution : Najran University	Date of Report : 05-May-2017
College/Department : College of Computer Science and Information Systems, Department of Information Systems	

A. Course Identification and General Information

1. Course title and code : Geography Information System, 470CIS-3		
2. Credit Hours : 3		
3. Programs : Bachelor of Information Systems		
4. Name of the faculty member responsible for the course: Dr. Ghassan Ahmed Ali		
5. Level of the Course offered : Level - 9		
6. Pre-requisites for this course : N/A		
7. Co-requisites for this course : N/A		
8. Location : Male Campus		
9. Mode of Instruction :		
a. Traditional classroom	<input type="checkbox"/> What percentage?	<input type="text"/>
b. Blended (traditional and online)	<input checked="" type="checkbox"/> What percentage?	<input type="text" value="100"/>
c. e-Learning	<input type="checkbox"/> What percentage?	<input type="text"/>
d. Correspondence	<input type="checkbox"/> What percentage?	<input type="text"/>
e. Other	<input type="checkbox"/> What percentage?	<input type="text"/>
Comments:		

B. Objectives

By the end of this course, students should be able to:

1. Explain the general concepts of GIS, ArcGIS, "ArcMap" and "Openstreetmap".
2. Use Projections & Coordinate Systems.
3. Analyze Vector and Mapping.
3. Design Map Layouts and 3D Models.
4. Create Feature Datasets.

C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should

1. Topics to be Covered

List of Topics	No. of Weeks	Contact Hours
1. Introduction to GIS	1	
2. Introduction to ArcGIS 10	1	
3. ArcMap Basics	1	
4. Projections & Coordinate Systems	1	
5. Creating Feature Datasets	1	
6. Working with tables	1	
7. Vector Analysis 1	1	
8. Vector Analysis 2	1	
9. Raster Analysis	1	
10. 3-d Modeling & Display	1	
11. Map Layouts	1	

2. Course components (total contact hours and credits per semester):

	Lecture	Tutorial	Laboratory	Practical	Other	Total
Contact Hours	28	14	14			56
Credits	2					3

3. Additional private study/learning hours expected for students per week.

4-5

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Method
1.0	Knowledge		
1.1	Not applicable to this course		
2.0	Cognitive		
2.1	Not applicable to this course		
3.0	Interpersonal		
3.1	Not applicable to this course		
4.0	Communication		
4.1	Not applicable to this course		
5.0	Psychomotor		
5.1	Not applicable to this course		

5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task	Week Due	Proportion of Total Assessment
1.	Homework & Quizes		10 %
2.	Midterm Examination 1		15 %
3.	Midterm Examination 2		15 %
4.	Lab Performance and Exam		10 %
5.	Fist lab exam		10 %
6.	Final Examination		40 %

D. Student Academic Counseling and Support

1. 10 weekly office hours + appointments
2. 3 weekly academic advising hours
3. Extra weekly 2 office hours prior to exams

E. Learning Resources

1. List Required Textbooks
 - GIS Fundamentals: A First Text on Geographic Information Systems, Fifth Edition, Mar 23, 2016
2. List Essential References Materials (Journals, Reports, etc.)
 - Pete Bettinger, Michael G Wing, latest edition, Geographic Information Systems: Applications in Forestry and Natural Resources Management, McGraw-Hill Science/Engineering/Math
 - Getting to know ArcGIS desktop by Ormsby, Napoleon, Burke, Groessl, and Bowden; 2010 ESRI PRESS

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc) - GIS Fundamentals, Fifth Edition, by Paul Bolstad 2016 John R Jensen and Ryan R. Jensen (2013): Introductory Geographic Information Systems. Prentice Hall
4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.) - Paul A. Longley, Mike Goodchild, David J. Maguire, and David W. Rhind (2010): Geographic Information Systems and Science, 2nd Edition. Wiley. GIS: A Visual Approach, Bruce Ellsworth Davis. Cengage Learning, 2001
5. Other learning material such as computer-based programs/CD, professional standards or regulations and software. -

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) - - Lecture Rooms with 30 seats with smart table, PC, Auto Projector with Screen and a white board or a smart board.
2. Computing resources (AV, data show, Smart Board, software, etc.) - All the computers in all the laboratories should be installed with the latest version of the software. - One PC and one projector and data show in the lecture room - Number of PCs according to the number of students in the lab room
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) -

G. Course Evaluation and Improvement Processes

1. Strategies for Obtaining Student Feedback on Effectiveness of Teaching		
Methods	Ways	Plan of Action
2. Other Strategies for Evaluation of Teaching by the Program/Department Instructor - Consulting peers on teaching. - Discussion about the course in department. - Discussion with experienced teaching staff in the subject. - Using e-mails to receive students' expectation in the course		

3. Processes for Improvement of Teaching

- Relate CLOs to assessment methods and teaching strategies
- Describe the relationships between the courses topics and CLOs.
- Course syllabus must be distributed in the first week. It should contain the necessary information about the course (CLOs, assessment methods, descriptions, etc.)
- Implement the improvement plan of previous semester.
- Ensure that all students participate in the class.
- Encourage students to attend tutorials and to benefit from office hours.

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Mid and Final exams are reviewed by Course Coordinators to check the compatibility between questions and CLOs.
- All the exams (mid and final) and final grade sheet will be rechecked by a faculty member assigned by Departments before the final result.
- Head of the Department and Dean will review and approve the final grades before publishing on the internet.
- Curriculum committee reviews the overall course reports for all the courses every academic year

5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

This course will be taught according to the previous course materials and improvement plans.

- By the end of each semester, a course file containing all activities and samples must be prepared and submitted to the college.
- Evaluation of CLOs can be used to compare the improvement from previous evaluation.
- Improvement plan based on the online course survey must be prepared.
- Action plan based on the CLOs achievements must be prepared.

Teaching Staff : Dr. Ghassan Ahmed Ali

Signature : _____

Date of Report Completed : 26-Jan-2017

Received by : _____

Dean/Department Head

Signature : _____

Date : _____

