اعتماد
NCAAA

T4

2020

Course Specifications

Course Title:	Decision Support Systems
Course Code:	MIS10706
Program:	Management Information Systems
Department:	Management Information Systems
College:	College of Business Administration
Institution:	Albaha university

Table of Contents

A. Course Identification

1. **Credit hours:** 3

2. Course type

a.	University ☐	College ☐	Department *****	Others ☐
b.		Required *****	Elective ☐	

3. **Level/year at which this course is offered:** 6th level / 3th year

4. **Pre-requisites for this course** (if any)**:**

5. **Co-requisites for this course** (if any)**:**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	30	%67
2	**Blended**		
3	**E-learning**	15	%33
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	30
2	**Laboratory/Studio**	-
3	**Tutorial**	15
4	**Others** (specify)	-
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description

The course introduces students to the concepts of artificial intelligence and how to build an integrated decision support system. Topics covered include: methods for evaluating decision support systems, modeling and analysis of the development of decision support systems data management, modeling and administration user interface, the concepts of artificial intelligence and intelligent systems, including the evidentiary rules of the cases, and expert systems, rules systems semesters.

2. Course Main Objective

This course will examine the design, development and implementation of information technology-based systems that support managerial and professional work, including Communications-Driven and Group Decision Support Systems (GDSS), Data-Driven DSS, Model-Driven DSS, Document-Driven DSS, and Knowledge-Driven DSS.

A variety of instructional methods may be used depending on content area. These include, but are not limited to: lecture, multimedia, cooperative/collaborative learning, projects and presentations. Course is going to be improved based on the new theories and innovations on decision support systems, new research findings and latest information that is found in well trusted source books.

3. Course Learning Outcomes

	CLOs	Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Recognize traditional and new technologies for knowledge acquisition and representation.	K1
1.2	Describe the decision support system.	K2
1.3	Describe the process of decision support system.	K3
2	**Skills :**	
2.1	Define appropriate criteria to be developed for decision making	S1
2.2	analyze problems and design the right solution models	S2
2.3	Work in a group and learn time management.	S5
3	**Values:**	
3.1	Develop time management skills	V1

C. Course Content

No	List of Topics	Contact Hours
1	Course Introduction: Decision Support and Business Intelligence (BI).	9
2	Computerized decision Support: decision making, systems, DSS concepts and modeling.	6
3	Business Intelligence: data mining, Data warehousing, Business Performance Management.	6
4	Collaboration, Communication, Group Support Systems, Knowledge Management: Context of Group Work, Groupware Applications (GDSS).	6
5	Base Technologies for Groupware Software: Conferencing Systems; Video Conferences (GSS).	6
6	Intelligence Systems: Artificial intelligence (AI) and Expert systems, Advanced AI .	6
7	Implementation DSS, GSS and BI systems. Review: Case study.	6
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Recognize traditional and new technologies for knowledge acquisition and representation.	• Presentations • Lecturing • Teamwork Lab exercises	• Homework. • Group Discussion • Presentation Mid & Final Exams
1.2	Describe the decision support system.	• Presentations • Lecturing • Teamwork Lab exercises	• Homework. • Group Discussion • Presentation Mid & Final Exams

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.3	Describe the process of decision support system.	• Presentations • Lecturing • Teamwork Lab exercises	• Homework. • Group Discussion • Presentation Mid & Final Exams
2.0	**Skills**		
2.1	Define appropriate criteria to be developed for decision making	• Problem solving • Class discussion • presentation Individual meeting with the instructor	• Class Participation • Presentation • Essay Question Research
2.2	analyze problems and design the right solution models	• Problem solving • Class discussion • Presentation Individual meeting with the instructor	• Class Participation • Presentation • Essay Question Research
2.3	Work in a group and learn time management.	• Discussion with students • Making students aware about time management in completing their assignments. • Counsel students how to make a good presentation in data mining. Encourage students to help each other.	• Respecting deadlines. • Showing active class participation. • Helping other students to understand tasks in the class. • Giving clear and logical arguments. Performing seriously on midterms and final exams.
3.0	**Values**		
3.1	Develop time management skills	• Discussion with students • Making students aware about time management in completing their assignments. • Counsel students how to make a good presentation in data mining. Encourage students to help each other.	• Respecting deadlines. • Showing active class participation. • Helping other students to understand tasks in the class. • Giving clear and logical arguments. Performing seriously on midterms and final exams

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quizzes	3-7	10 %
2	Homework	1-14	5 %
3	Project	1-14	5 %
4	Mid Term Examination	7-9	30 %
5	Final Examination	15-16	50 %
6			
7			
8			

Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :
Instructor will be available for student consultation and academic advice on weekdays during their office hours. Additional assistance by appointment only. (9 hours per week)

F. Learning Resources and Facilities
1.Learning Resources

Required Textbooks	Business Intelligence and Analytics: Systems for Decision Support, 10/E. by Ramesh Sharda, Dursun Delenand Efraim Turban, , Prentice Hall, 2014
Essential References Materials	(Journals, Reports, etc.) 1. Business Intelligence: A Managerial Perspective on Analytics (3rd Edition) – December 16, 2013 by by Ramesh Sharda, Dursun Delen, Efraim Turban 2. V.L. Sauter, Decision Support Systems For Business Intelligence, New York: John Wiley & Sons, 2011. 3. Decision Management Systems: A Practical Guide to Using Business Rules and Predictive Analytics, 1 edition (October 10, 2011), by James Taylor. IBM Press; ISBN-10: 0132884380. 4. Handbook on Decision Support Systems, V1, F. Burstein and C. Holsapple, Eds., Springer, 2008 5. Decision Support Systems, 2nd Edition, by George Marakas, Prentice-Hall, 2003. ISBN10: 0130922064. 6. Making Hard Decisions, 2nd Edition, Robert Clemen, Duxbury, 2001. ISBN13: 9780495015086. 7. Value-Focused Thinking: A Path to Creative Decision making (Paperback), Ralph L. Keeney, Harvard University Press, 1996. ISBN-10: 067493198X. 8. Decision Support Systems and Intelligent Systems, 8th edition, by Ephraim Turban, Jay Aronson, Ting-Peng Liang, and Ramesh Sharda, Prentice-Hall, 2007. ISBN-10: 0131986600. 9. Spreadsheet Modeling & Decision Analysis, 5th Edition, Cliff T. Ragsdale, Thomson; South-Western, 2007. ISBN-10: 0324312504. 10. Decision Support Systems: Concepts and Resources for Managers. By Power, D. J. Publisher: Pearson Education (2004). 11. Decision Support Systems: Myth or Reality, C. Carlson; Elsevier Sciences; March 2004 12. https://www.journals.elsevier.com/decision-support-systems/most-downloaded-articles 13. https://www.sciencedirect.com/journal/decision-support-systems
Electronic Materials	Web Sites, Facebook, Twitter, etc. 1. Decision Support Systems Hyperbook, Power, D.J., at http://dssresources.com. 2. http://www.DSSResources.com
Other Learning Materials	such as computer-based programs/CD, professional standards or regulations and software.

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture rooms are well equipped with: • Air conditioned with at least 25 adequate seats. • Interactive/smart Board. • Up-to-date projector. An Auditorium is well equipped with: • Air conditioned with at least 100 adequate seats. • Interactive/smart Board. Up-to-date projector.
Technology Resources (AV, data show, Smart Board, software, etc.)	• Personal computer with necessary up-to-date software. • DBS Smart Systems. • Interactive Board. Laptop
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	• Colored Printer (needed). • Central laser-Printer, and Scanner. • Wall Boards (are essentially needed.). • Internet inside the classroom (missed.). Library: Up to date scientific books, in the library. Wi-Fi and internet connections are available inside the teaching staff rooms, and the seminar room. (missed.).

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Strategies for Obtaining Student Feedback on Effectiveness of Teaching Questionnaires (course evaluation) achieved by the students and it is electronically organized by the University.	Students	Direct
Other Strategies for Evaluation of Teaching by the Instructor or by the Department • Discussions within the staff member teaching the course. • Departmental internal review of the course. Outside reviewer of the course.	Faculty	Direct
Processes for Improvement of Teaching • Course Evaluation by other staff members to be sure it will be up to standards Exam Evaluation by other staff members to find the weaknesses and how exams will evaluate student's level in a fear way	Faculty	Direct
Processes for Verifying Standards of Student • Providing the computer labs with up-to-date computers and software. • Conducting and attending workshops given by experts on the teaching and learning methodologies. • Periodical departmental and outside revisions of its methods of teaching.	Students	Indirect

Evaluation Areas/Issues	Evaluators	Evaluation Methods
• Monitoring of teaching activates by senior faculty members (course and program reports). Training Courses.		
Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement. Efficiency of course will be reflected on the results of the class, so reviewing the final exam questions and a sample of corrected papers is essential. This could be achieved by members of the teaching staff (or/and external reviewers) in addition to other duties such as discussing ideas and ways of teaching and learning. The	Program Leaders	Direct

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	Minutes of the Council of Management Information Systems Department
Reference No.	3
Date	8.12.2021