Kingdom of Saudi Arabia Ministry Of Higher Education

National Commission for Academic Accreditation And Assessment



# Majmaah University

## Deanship of Quality assurance

Department of Computer Science and Information Discrete Mathematics For Computer Science (1) - CSI 212 Course Report 1435 / 1436H - 2014/2015 G 1<sup>st</sup> Term

Dr. Eng. Moustafa Reda AbdALLAH Eltantawi

## Important Notes

- To be completed by course instructors at the end of each course and given to program coordinator.
- If the course is taught in more than one location the course report should be prepared for each location by the course instructors responsible for the course in each location.
- A combined report should be prepared by the course coordinator and the separate location reports attached.

## A. <u>General Information and Course Identification</u>

1. Institution:	Faculty of Science in AZ-Zulfi				
2. College/ Department :	Computer Science and Information				
3. Course title and code:	Discrete Mathematics CSI 212				
4. If course is taught in more than one section indicate the section to which this report applies :Section 130					
5. Year and semester to which this report applies: 3 <sup>rd</sup> Level.					
6. Location (if not on main o	campus): Faculty of Science - Zulfi				

### B. <u>Course Delivery</u>

B.1. Coverage of Planned Program						
Covered Topics	Planned Contact	Actual Contact	Reason for Variations if there is a difference of more than			
	Hours	Hours	25% of the hours planned			
1) Propositional Logic: Statements,						
Connectives, Quantifiers and Truth	16	16	None			
Tables.						
2) Set Theory	4	4	None			
3) Proofs	8	8	None			
4) Functions, Sequences and	8	8	None			
Relations						
5) Graph Theory & Introduction to	24	24	None			
Trees and their Applications						

B.2. Course components (total contact hours and credits per semester):							
Lecture Tutorial Laboratory Practical Other: Total							
Contact Hours	30	30				60	
Credit	30	15				45	

Course Report of Discrete Mathematics For Computer Science (1) Dr. Eng. Moustafa Reda AbdALLAH Eltantawi 1<sup>st</sup> Term - 1435-1436 h 2./9. Class 130

#### B.3 Consequences of Non Coverage of Topics

For any topics where significantly less time was spent than was intended in the course specification, or where the topic was not taught at all, comment on how significant you believe the lack of coverage is for the program objectives or for later courses in the program, and suggest possible compensating action if you believe it is needed.

Topics (if any) not Fully Covered :	Significance of Lack	Possible Compensating Action
None	of Coverage: None	Elsewhere in the Program: None

**B.4 Effectiveness of Planned Teaching Strategies** for Intended Learning Outcomes set out in the Course Specification. (Refer to planned teaching strategies in Course Specification and description of Domains of Learning Outcomes in the National Qualifications Framework).

Domains	List Teaching Strategies set out in Course Specification	Were these Effective ?		Were these Effective ?		Were these Effective ?		Were these Effective ?		Were these Effective ?		Were these Effective ?		Were these Effective ?		Were these Effective ?		Were these Effective ?		Were these Effective ?		Were these Effective ?		Were these Effective ?		Were these Effective ?		Were these Effective ?		Were these Effective ?		Were these Effective ?		Were these Effective ?		Were these Effective ?		Were these Effective ?		Were these Effective ?		Were these Effective ?		Were these Effective ?		Were these Effective ?		Were these Effectiv ?		Difficulties Experienced (if any) in Using the Strategy and Suggested Action to Deal with Those Difficulties
		No	Yes																																															
a. Knowledge	The academic Course and the accompanied Lectures and Exercises.		$\checkmark$	<ul><li>Prob. : Low level understanding of the students for their lectures.</li><li>Sol. : A section is needed for training on Problem Solving.</li></ul>																																														
	<ul> <li>Lecture Discussions.</li> </ul>			Prob. : Low level interactions of the																																														
	• Take Home Exercises and Exams.			students.																																														
b. Cognitive Skills	<ul> <li>Scientific Assignments and Tasks.</li> </ul>		$\checkmark$	Sol. : A section is needed for training on Problem Solving. More encouragement for hard study.																																														
c. Interpersonal Skills and Responsibility	Team Works		$\checkmark$	Prob. : Low level response of the students. Sol.: Continuous Follow up.																																														
d. Numerical and Communication Skills	My: • e-mail. • Web site		$\checkmark$	Prob. : Low level response of the students. Sol.: Computers and Internet must be available in the classrooms. Workshops and team grouping must be held continuously.																																														
e. Psychomotor Skills (if applicable)	Design and developing of interesting presentations		$\checkmark$	Prob. : Low level response of the students. Bad implementation. Very low level in speaking, reading and writing in English. Sol.: High level Training courses in English must be available continuously. Training courses in Psychomotor Skills must be conducted to the students.																																														

Course Report of Discrete Mathematics For Computer Science (1) Dr. Eng. Moustafa Reda AbdALLAH Eltantawi 1<sup>st</sup> Term - 1435-1436 h 3./9. Class 130

## B.5 Summarize any actions you recommend for improving teaching strategies as a result of evaluations in table 3 above.

- 1. Every student must have his own PC, served by cheap/free internet.
- 2. A tutorial section managed by specialized assistant is a must.
- 3. Small/whole group discussion.
- 4. Individual presentations.
- 5. Brainstorming.

#### B.6 <u>Course Learning Outcome Assessment</u>

	List course learning outcomes	List methods of assessment	Summary analysis of assessment results
1	Describe the problem in a formal manner, and Recognize different methods to attack a problem.	<ul> <li>Written Exam</li> <li>Homework</li> <li>assignments</li> <li>Class activities</li> <li>Quizzes</li> </ul>	
2	Explain how to solve a problem, and Reorganize the relationships between a problem and other objects		
3	Differentiate and compare between the alternative solutions of a problem to justify the optimal one.	• Written Exam • Homework	
4	Develop Creativity and imagination skills, Self-assessment ability and Critical thinking and analytic ability.	assignments • Class Activities • Quizzes • Observations	The average of results 96% for 22 students.
5	Master different techniques of proof (direct proof, proof by counterexample, proof by contradiction, mathematical induction) to identify and apply the most appropriate in a particular situation		
6	Use the available commercial software systems/packages in application to the suggested solution/plan.	<ul> <li>Written Exam</li> <li>Homework assignments</li> <li>Class Activities</li> <li>Quizzes</li> </ul>	

C.1 Distribution of Grades for the students who actually entered the Final Exam							
Letter Grade	Number of Students	Percentage	Explanation of Distribution of Grades				
A+	02	9%	The low graded students has some				
A	02	9%	academic problems (absence from his lectures, shortage in achieving and				
B+	02	9%	delivering his tasks). These problems severely affected their final results.				
В	02	9%					
C+	03	14%	The mid and high graded students were				
С	04	18%	They exerted all their efforts to achieve				
D+	04	18%	and deliver their tasks).				
D	02	9%					
F	01	5%					

#### C.2 Distribution of Grades for the students who registered in the Course (22 Students)

Item	Number of Students	Percentage	Explanation of Distribution of Grades
In Progress	0	0%	
Incomplete	0	0%	The Majority of the students were
Pass	21	78%	completely interested
Fail	1	4%	the course
Withdrawn	5	18%	
Denied Entry	0	0%	

C.3 Statistics of										
_	- the Results		s =	جامعة المجمعة						
	كليه العلوم بالزلعي لـــــــــــــــــــــــــــــــــــ									
120	نموذج تحويل العلامات النهائي من مئوي إلي احرف لطلبه الصباحي - المسوي الثالث الناب الله الله الله 142 مــــــــــــــــــــــــــــــــــــ									
130	CSI 130	الشعبه:		/1430 <u>(14</u> 30 رقب رقم المادة	اموات	الاول ככדו	سي	الفصل الدرا	القسم	
فطعة	الرياضيات المتذ		_ادة	اســـــم المــــــ	بونيات ببدالله	د.م. مصطفی رضا ع		لمادة	استاذ ا	
	0		ن عن التهائي 	عدد الطلبة الغائبين عدد الطلبة الراسير		22	ليـــن جين	للبة المسجـ للبة النـــاح	عدد الم عدد الم	
	D			العلامة الدنيا		3.36	حين	ل الدرجات الدرجات	متوسط	
	96.91%		-	نسبة النجاح		A+		ه العليـــــا	الدرجية	
<b></b>							التقدير	العلامة	الرقم	
	Percentage	SUM	Count	то	From	Average	В С+	81 75	1 2	
	9.090909	10	2	100	95	<b>A</b> +	D+	65 61	3	
							F	52	5	
	9.090909	9.5	2	94	90	A	C+	75	6	
	9 090909	9	2	89	85	B+	B+	89	7	
							D+	65	8	
A	9 090909	8	2	84	80	В	D	60	9	
lei						U	D+	67	10	
Ω Ω	13 63636	10 5	3	79	75	C+	C+	77	11	
Je			-				B+	86	12	
	18.18182	12	4	74	70	С	A+	97	13	
								70	14	
	18.18182	10	4	69	65	D+		70	15	
							B	80	17	
	9.090909	4	2	64	60	D	D+	67	18	
	4 5 4 5 4 5 5	1		FO	0	F	A+	96	19	
	4.040400	1	I	09	0	r	С	70	20	
3.4	100	74	22			Total Students	A	92	21	
							С	73	22	
	5									
	4			4 4				_		
	3									
	2 2 2	2	2		2					
	1				1					
	A+ A	B+	B C+	C D+	D F					
_										

Course Report of Discrete Mathematics For Computer Science (1) Dr. Eng. Moustafa Reda AbdALLAH Eltantawi 1<sup>st</sup> Term - 1435-1436 h 6./9. Class 130

C.4 Analyze Special factors (if any) affecting the results: None

C.5 Variations from planned student assessment processes (if any)					
(5 a Variations (if any) from planned assessment schedule					
Variation Reason					
None	None				

C.5.b Actions (if any) from planned assessment processes in Domains of					
Learning.					
Variation	Reason				
None None					

C.6 Student Grade Achievement Verification (e.g. cross-cl validity by independent evaluator).	heck of grade
Method(s) of Verification	Conclusion
Free lectures in the Faculty Library.	
More hours for effective Interviews with the students, including discussions and answers for specific models of problems and their answer sheets.	More interest and interaction of the students.
Use of up-to-date learning resources.	

### D. <u>Resources and Facilities</u>

1. Difficulties in access to resources or facilities (if any)	2. Consequences of any difficulties experienced for student learning in the course.
All the facilities are available.	None.

## E. <u>Administrative Issues</u>

1 Organizational or administrative difficulties encountered (if any)

2. Consequences of any difficulties experienced for student learning in the course.

All the facilities are available.

None.

## F. <u>Course Evaluation</u>

<ul> <li>F.1 Student evaluation of the course:</li> <li>i. 100% of the students are of complete acceptance.</li> </ul>					
<ul> <li>F.1.a List the most important recommendations for improvement and strengths</li> <li>i. Recommendations: <ol> <li>A computer lab with adequate software packages is a must.</li> <li>An exercise class with a specialized lecturer is essential.</li> </ol> </li> </ul>					
ii. Strengths: All the students were completely satisfied with all aspects of the course.					
<ul> <li>F.1.b Response of instructor or course team to this evaluation</li> <li>i. New applications and assignments to be added.</li> <li>ii. More and new Illustrative Examples to be added.</li> <li>iii. New interesting presentations with related topics will be achieved.</li> <li>iv. New interesting related subjects with real life applications will be added.</li> </ul>					
F.2 Other Evaluation (e.g. By head of department, peer observations, accreditation review, other stakeholders etc.):					
None					
F.2.a List the most important recommendations for improvement and strengths					
None					

F.2.b Response of instructor or course team to this evaluation

None

## G. <u>Planning for Improvement</u>

G.1 Progress on actions proposed for improving the reports:	course in pre	vious course
Actions recommended in the most recent previous course report(s)	Actions Taken	Results
a. A permanent tutorial class and a computer lab is essentially needed.		New up-to-date
b. Availability of a specialized teaching-assistant.	Only, new	
c. Providing the students with a powerful continuous working internet.		
d. Increasing the number of up-to-date scientific books in the	be provided	including real-
library. Also, facilitating the procedures of the borrowing	to the	life-examples
process.	library.	were added
e. Doubling the number of available borrowing books (for either a staff member or a student) along the whole academic year, and not term by term.		

G.2 List what actions have been taken to improve the course (based on previous CR, surveys, independent opinion, or course evaluation).

- 1. The studying halls are provided with new smart computer-based educational equipments.
- 2. Many training courses in electronic-learning where available and conducted to many staff members, including the one responsible/writer of this course.
- 3. New Software are to be developed as electronic courses and On-line exams

G.3 Action Plan for Next Semester (1 <sup>st</sup> Semester of Academic Year 1435-1436 h)					
Actions Required	Intended Action Points and Process.	Start Date.	Completion Date.	Person Responsible	
Practical exercises during the lectures.	Extra assignments and H.Ws.	By the start of the next academic year	By the end of the 1 <sup>st</sup> semester of the academic year	Instructor of the course.	

Name of Course Instructor: Dr. Eng. Moustafa Reda AbdALLAH Eltantawi Signature: \_\_\_\_\_

Program Coordinator: Prof: Yousry Azzam

Signature: \_\_\_\_\_

Date Report Completed: 24/03/1436 h

Date Received: 24/03/1436 h