

Kingdom of Saudi Arabia

The National Commission for Academic Accreditation & Assessment

**Course REPORT
(CR)**

Discrete Mathematics for CSI 2

CSI 222

Dr. Naveed Ejaz

A separate Course Report (CR) should be submitted for every course and for each section or campus location where the course is taught, even if the course is taught by the same person. Each CR is to be completed by the course instructor at the end of each course and given to the program coordinator

A combined, comprehensive CR should be prepared by the course coordinator and the separate location reports are to be attached.

Course Report

For guidance on the completion of this template refer to the NCAAA handbooks or the NCAAA Accreditation System help buttons.

Institution : Al Majmaah university	Date of Course Report : 20/3/1436H
College/ Department : College of Science / Department of Computer Science and Information	

A. Course Identification and General Information

1. Course title	Discrete Mathematics for CS2	Code #	CSI 222	Section #	140	
2. Name of course instructor	Location: College of Science in Al- Zulfi					
3. Year and semester to which this report applies.	First Semester 1435-36					
4. Number of students starting the course?	12	Students completing the course?	08			
5. Course components (actual total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	30					30
Credit	30					30

B. - Course Delivery

1. Coverage of Planned Program			
Topics Covered	Planned Contact Hours	Actual Contact Hours	Reason for Variations if there is a difference of more than 25% of the hours planned
1. Number Theory Divisibility and Euclidean algorithms, Modular Arithmetic, Fermat's and Euler's theorems, Chinese Remainder theorem.	10	10	
2. Concepts of Abstract Algebra: Groups, rings, fields, Homomorphisms, Lagrange's theorem, Finite fields.	10	10	
3. Automata Theory: Finite state machine, Regular Expressions, DFA, N DFA, and their equivalence, Grammars and Chomsky hierarchy.	10	10	

2. Consequences of Non Coverage of Topics

For any topics where the topic was not taught or practically delivered, comment on how significant you believe the lack of coverage is for the course learning outcomes or for later courses in the program. Suggest possible compensating action.

Topics (if any) not Fully Covered	Effectuated Learning Outcomes	Possible Compensating Action
None	-	-

3. Course learning outcome assessment.

	List course learning outcomes	List methods of assessment	Summary analysis of assessment results
1	Understand advanced concepts in discrete mathematics	Term Exams, Home works, Presentations & Reports	
2	Understand the basic concepts of Number Theory, Modular Arithmetic, Groups, Rings, Fields and Automata Theory	Term Exams, Home works, Presentations & Reports	
3	Be able to relate mathematical concepts with theory of Computer Science.	Term Exams, Home works, Presentations & Reports	
4	Be able to design FAs, NFAs, Grammars, languages modelling and develop small basics compilers.	Term Exams, Home works, Presentations & Reports	
5	Work in a group and learn time management.	Term Exams, Home works, Presentations & Reports	
6	Learn how to search for information through library and internet.	Term Exams, Home works, Presentations & Reports	
7	Communicate with teacher, ask questions, solve problems, and use computers.	Home works, Group Discussions, Class Activities	
8	Use Information technology and computer skills to gather information about a selected topic.	Home works, Group Discussions, Class Activities	

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

- Individual Presentations
- Brainstorming Exercises
- Group Discussions

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)

List Teaching Methods set out in Course Specification	Were these Effective?		Difficulties Experienced (if any) in Using the Strategy and Suggested Action to Deal with Those Difficulties.
	No	Yes	
<ul style="list-style-type: none"> • Lectures • Homework / Assignments • Group Discussions 		√	
<ul style="list-style-type: none"> • Case studies. 		√	
<ul style="list-style-type: none"> • Evaluation of Presentation skills. 		√	
<ul style="list-style-type: none"> • Use of internet media • Extensive use of online libraries 		√	

Note: In order to analyze the assessment of student achievement for each course learning outcome, student performance results can be measured and assessed using a KPI, a rubric, or some grading system that aligns student work, exam scores, or other demonstration of successful learning.

C. Results

1. Distribution of Grades

Letter Grade	Number of Students	Student Percentage	Explanation of Distribution of Grades
A ⁺	1	8.33	
A	0	0	
B ⁺	1	8.33	
B	0	0	
C ⁺	0	0	
C	1	8.33	
D ⁺	3	25%	
D	2	16.67	
F	0	0	
Denied Entry	2	16.67	
In Progress	0	0	
Incomplete	0	0	
Pass	08	66.67	
Fail	0	0	
Withdrawn	2	16.67	

2. Analyze special factors (if any) affecting the results

None

3. Variations from planned student assessment processes (if any) (see Course Specifications).

a. Variations (if any) from planned assessment schedule (see Course Specification)

Variation	Reason

b. Variations (if any) from planned assessment processes in Domains of Learning (see Course Specification)	
Variation	Reason
None	None

4. Student Grade Achievement Verification (eg. cross-check of grade validity by independent evaluator).	
Method(s) of Verification	Conclusion
Final Exams marks verification by an independent committee of Faculty Members.	No variation in results found

D. Resources and Facilities

1. Difficulties in access to resources or facilities (if any) None	2. Consequences of any difficulties experienced for student learning in the course. Students had some issues related to English language.
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E. Administrative Issues

1 Organizational or administrative difficulties encountered (if any) None	2. Consequences of any difficulties experienced for student learning in the course. None
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F. Course Evaluation

1 Student evaluation of the course (Attach survey results report) The evaluation report is attached.
a. List the most important recommendations for improvement and strengths
b. Response of instructor or course team to this evaluation
2. Other Evaluation (e.g. by head of department, peer observations, accreditation review, other stakeholders)
a. List the most important recommendations for improvement and strengths
b. Response of instructor or course team to this evaluation

G. Planning for Improvement

1. Progress on actions proposed for improving the course in previous course reports (if any).			
Actions recommended from the most recent course report(s)	Actions Taken	Results	Analysis
a. None			
b. None			
c. None			
d. None			

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

None

3. Action Plan for Improvement for Next Semester/Year

Actions Recommended	Intended Action Points and Process	Start Date	Completion Date	Person Responsible
a. Applications of Number theory like Cryptography etc. should be explored in more detail.	Practical home works related to applications must be designed.	Feb 2015	May 2015	Dr. Naveed Ejaz
b. The topic of automata must be taught using simulators	Simulators must be downloaded, learnt and taught to students.	Feb 2015	May 2015	Dr. Naveed Ejaz

Name of Course Instructor: Dr. Naveed Ejaz

Signature: _____

Date Report Completed: 21/3/1436H

Program Coordinator: Dr. Yosry Y Azzam

Signature: _____

Date Received: /3/1436H