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

1st 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. General Information and Course Identification

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| 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: 3rd Level. |
| 6. Location (if not on main campus): Faculty of Science - Zulfi |

B. Course Delivery

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

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| 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 |

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| 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 : None | Significance of Lack of Coverage: None | Possible Compensating Action Elsewhere in the Program: None |

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| 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? | | 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. |  | √ | Prob. : Low level understanding of the students for their lectures.  Sol. : A section is needed for training on Problem Solving. |
| b. Cognitive Skills | * Lecture Discussions. * Take Home Exercises and Exams. * Scientific Assignments and Tasks. |  | √ | Prob. : Low level interactions of the students.  Sol. : A section is needed for training on Problem Solving. More encouragement for hard study. |
| c. Interpersonal Skills and Responsibility | Team Works |  | √ | Prob. : Low level response of the students.  Sol.: Continuous Follow up. |
| d. Numerical and  Communication Skills | My:   * e-mail. * Web site |  | √ | 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 |  | √ | 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. |

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 Course Learning Outcome Assessment

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|  | 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. | * Written Exam * Homework assignments ‎ * Class activities * Quizzes | The average of results 96% for 22 students. |
| 2 | Explain how to solve a problem, and Reorganize the relationships between a problem and other objects ‎ | * Written Exam * Homework assignments * Class Activities * Quizzes * Observations |
| 3 | Differentiate and compare between the alternative solutions of a problem to justify the optimal one. |
| 4 | Develop Creativity and imagination skills, Self-assessment ability and Critical thinking and analytic ability. |
| 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. | * Written Exam * Homework assignments ‎ * Class Activities * Quizzes |

C. Results Of Class 130

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| 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 academic problems (absence from his lectures, shortage in achieving and delivering his tasks). These problems severely affected their final results.  The mid and high graded students were interested presence of their lectures. They exerted all their efforts to achieve and deliver their tasks). | | A+ | 02 | 9% | | B+ | 02 | 9% | | B+ | 02 | 9% | | C+ | 03 | 14% | | C | 04 | 18% | | D+ | 04 | 18% | | D | 02 | 9% | | F | 01 | 5% | |

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

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

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| **جامعة المجمعة**  C.3 Statistics of the Results | | | | | | | | | | | |
| **كلية العلوم بالزلفي** | | | | | | | | | | | |
| نموذج تحويل العلامات النهائي من مئوي إلي أحرف لطلبة الصباحي - المسوي الثالث | | | | | | | | | | | |
| الفصل الدراسي | | | | | الأول 1435 | /1436 هـ | |  | الشعبة: |  | 130 |
| **القسم** | | | | علوم الحاسب والمعلومات | | | **رقم المادة** |  |  | CSI 130 | |
| **استاذ المادة** | | | | د.م. مصطفى رضا عبدالله | | | **اســــــــم المـــــــــــــادة** | | | الرياضيات المتقطعة | |
| **عدد الطلبة المسجــليـــن** | | | | 22 | | | **عدد الطلبة الغائبين عن التهائي** | | | 0 | |
| **عدد الطلبة النــــاجحين** | | | | 20 | | | **عدد الطلبة الراسبين** | |  | 1 | |
| **متوسط الدرجات** | | | | 3.36 | | | **العلامة الدنيا** | |  | D | |
| **الدرجــة العليـــــــــا** | | | | A+ | | | **نسبة النجاح** | | | 96.91% | |
| الرقم | العلامة | التقدير | | |  |  |  |  |  |  |  |
| 1 | 81 | **B** |  | | Average | From | TO | Count | SUM | Percentage | Average |
| 2 | 75 | **C+** |  | |
| 3 | 65 | **D+** |  | | **A+** | 95 | 100 | 2 | 10 | 9.090909 |
| 4 | 61 | **D** |  | |
| 5 | 52 | **F** |  | | **A** | 90 | 94 | 2 | 9.5 | 9.090909 |
| 6 | 75 | **C+** |  | |
| 7 | 89 | **B+** |  | | **B+** | 85 | 89 | 2 | 9 | 9.090909 |
| 8 | 65 | **D+** |  | |
| 9 | 60 | **D** |  | | **B** | 80 | 84 | 2 | 8 | 9.090909 |
| 10 | 67 | **D+** |  | |
| 11 | 77 | **C+** |  | | **C+** | 75 | 79 | 3 | 10.5 | 13.63636 |
| 12 | 86 | **B+** |  | |
| 13 | 97 | **A+** |  | | **C** | 70 | 74 | 4 | 12 | 18.18182 |
| 14 | 94 | **A** |  | |
| 15 | 70 | **C** |  | | **D+** | 65 | 69 | 4 | 10 | 18.18182 |
| 16 | 70 | **C** |  | |
| 17 | 80 | **B** |  | | **D** | 60 | 64 | 2 | 4 | 9.090909 |
| 18 | 67 | **D+** |  | |
| 19 | 96 | **A+** |  | | **F** | 0 | 59 | 1 | 1 | 4.545455 |
| 20 | 70 | **C** |  | |
| 21 | 92 | **A** |  | | Total Students |  |  | **22** | **74** | **100** | **3.4** |
| 22 | 73 | **C** |  | |  |  |  |
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| C.4 Analyze Special factors (if any) affecting the results: None |

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

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

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| C.6 Student Grade Achievement Verification (e.g. cross-check of grade validity by independent evaluator). | |
| 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.  Use of up-to-date learning ‎resources. | More interest and interaction of the students. |

D. Resources and Facilities

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

E. Administrative Issues

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| 1 Organizational or administrative difficulties encountered (if any)  All the facilities are available. | 2. Consequences of any difficulties experienced for student learning in the course.  None. |

F. Course Evaluation

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| F.1 Student evaluation of the course:  i. 100% of the students are of complete acceptance. |
| F.1.a List the most important recommendations for improvement and strengths  i. Recommendations:  1. A computer lab with adequate software packages is a must.  2. An exercise class with a specialized lecturer is essential.    ii. Strengths:  All the students were completely satisfied with all aspects of the course. |
| F.1.b Response of instructor or course team to this evaluation  i. New applications and assignments to be added.  ii. More and new Illustrative Examples to be added.  iii. New interesting presentations with related topics will be achieved.  iv. New interesting related subjects with real life applications will be added. |

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| 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. Planning for Improvement

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| G.1 Progress on actions proposed for improving the course in previous course reports: | | |
| 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. | Only, new books may be provided to the library. | New up-to-date materials, including real-life-examples were added |
| b. Availability of a specialized teaching-assistant. |
| c. Providing the students with a powerful continuous working internet. |
| d. Increasing the number of up-to-date scientific books in the library. Also, facilitating the procedures of the borrowing process. |
| 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. |

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| 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 |

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| G.3 Action Plan for Next Semester (1st 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 1st 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