Kingdom of Saudi Arabia
Ministry Of Higher Education
Majmaah University
Deanship of Quality assurance
and Human Development

Course Specification

(Summary)

1431/1432

Course Specification

Institution : Majmaa University
Computer Science:College/Department

A- Course Identification and General Information

1. Course title and code: Compiler Design   CIS 338
2. Credit hours: 3
4. Name of faculty member responsible for the cours: Science- Zulfi
5. Level/year at which this course is offered: level 5
6. Co-requisites for this course (if any): CIS 225
7. Location if not on main campus: classes

B- Objectives

1. Summary of the main learning outcomes for students enrolled in the course.

C- Course Description (Note: General description in the form to be used for the Bulletin or Handbook should be attached)

1. Topics to be Covered		
List of Topics	No of Weeks	Contact hours
• *What is a Compiler and what its Phases of it.*	2	6
• *Lexical Analysis*	2	6
• *Syntax Analysis*	3	9
• *Top Down Parsing.*	2	6
• **Bottom Up Parsing**	2	6
• **Code Generation**	3	9
• **Optimization**	2	6

2. Course components (total contact hours per semester):				
Lecture: 42	Tutorial:	Laboratory:	Practical/Field work/Internship	Other:

3. Additional private study/learning hours expected for students per week. (This should be an average: for the semester not a specific requirement in each week)

4. Schedule of Assessment Tasks for Students During the Semester

D- E-Learning Resources.

1. Required Text(s): **"compiler design theory tools and examples" Seth D. Bergmann.**

2. Essential References: **-**" Compilers: Principles, Techniques, and Tools" A.V. Aho, R. Sethi, J. D. Ullman, 1986; Addison wissley

3- Recommended Books and Reference Material (Journals, Reports, etc) (Attach List):

" Basics of compiler Design" T. Mogensen,

"Modern Compiler Implementation in Java", **Andrew W. Appel and Jens Palsberg**

4-.Electronic Materials, Web Sites etc.: any tutorial web site

5- Other learning material such as computer-based programs/CD, professional standards/regulations

E- Assessment

Quizzes   5%

First Test: 15%

Second Test: 15%

Reports: 5%

Final Test   60%