OATTACHMENT 2 (e)

Course Specifications

Kingdom of Saudi Arabia

The National Commission for Academic Accreditation & Assessment

Course Specifications (CS) Course Specifications

Institution: Dammam University

Date :

College/Department : Faculty of Science / Mathematics

A. Course Identification and General Information

1. Course title and code: Introduction in computer / MATH 180N

2. Credit hours: 3

3. Program(s) in which the course is offered.

(If general elective available in many programs indicate this rather than list

programs) Bachelor of Mathematics

4. Name of faculty member responsible for the course					
A specific team from the Computer Department					
cccomathematics					
department					
5. Level/year at which this course is offered: 3 rd Level / Year 2					
o. Pre-requisites for this course (if any)					
ne					
7. Co-requisites for this course (if any)	—				
8. Location if not on main campus	_				
9. Mode of Instruction (mark all that apply)					
a. traditional classroom $$ What percentage?					
100					
b. blended (traditional and online) What					
percentage? c. e-learning					
What percentage? d. correspondence					
What percentage? f. other					
r r r r r r r r r r r r r r r r r r r					
What percentage?					
Comments:					

B Objectives

1. What is the main purpose for this

course? The students must be able:

- 1- To classify student computer components and function of each different part.
- 2- To learn the operating systems and various software applications.
- 3- To learn how to work the computer.
- 4- To remember the main uses of the computer.
- 5- To learn the Internet and some scientific sources on it.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

C. Course Description (Note: General description in the form used in Bulletin or

handbook) Course Description:

The course focus on the detail of hardware, software, operating systems, application software, networks, internet services, identity/authentication, password policies, data security, copyright, licensing, end user license agreement, numbers systems, decimal numbers, binary numbers, octal numbers, hexadecimal numbers, and the conversion among them.

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
Hardware, Personal computers, The main parts of a computer, computer's performance factors, computer's memory, Representing data in the computer, Memory capacity measurement, Storage media.	2	4
Software, Operating systems, Application Software, Interfaces, Accessibility options.	2	4
Networks, Types of Networks, Client/server networks, Internet, World Wide Web (WWW), Intranet, Extranet, Downloading and uploading, Transfer rate, Digital and Analogue signals, Modem, Data transmission media, Network interface card, Internet connection, Options for internet connection, and Characteristics of Broadband.	3	6
Internet services, E-Learning, Teleworking, Electronic mail (e- mail), Instant messaging, VoIP, Web Log, Really simple syndication, Podcast, Virtual communication, Publishing content online, Ergonomics, Health Issues, Screen and keyboard positioning, Seating issues, safety precautions, Recycling options, and Computer energy saving options.	2	4
Identity / Authentication, Password policies, Data security, Backups, Firewall, Smart cards, Data theft Issues, Viruses, How can viruses enter a computer system, Protection against viruses, working with folders, Illegal access, Hacking, Password cracker, Cryptography, Encryption and Decryption, and digital signature.	2	4
Copyright, Licensing, End user license agreement, Product Id number, Types of license agreements, Copyright associated with downloading files, data protection. E-mail ethics, internet ethics, Software piracy, Plagiarism, Site license, and Copyright infringement.	2	4

Numbers systems, Decimal numbers, Binary numbers, Octal numbers, Hexadecimal numbers, Conversion of the binary numbers to decimal numbers, Conversion of the Octal numbers to decimal numbers, Conversion of the Hexadecimal numbers to decimal numbers, Conversion of the decimal numbers to binary numbers, Conversion of the decimal numbers to Octal numbers, Conversion of the decimal numbers to Hexadecimal numbers, and Conversion of the	2	4
Octal numbers to binary numbers.		

2. Course components (total contact hours and credits per semester):									
	Lectur e	Tutoria l	Laborator y or Studio	tor Practical Other Tota dio :					
Contact Hours	30			30		60			
Credit	30			15		45			

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3. Additional private study/learning hours expected for students per week. 4

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and

- T e a c h i n g S t r
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у

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the

appropriate learning domains (see suggestions below the table). Second, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. <u>Third</u>, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Cod	NQF Learning Domains	Course Teaching	Course
e #	And Course Learning Outcomes	Strategies	Assessment Methods
1.0	Knowledge		
1.1	Recognize and memorize the computer systems & software.	- Using PowerPoint and handouts.	 Class & lab works including short quizzes.
1.2	Define computer parts and applied software.	- Reports and oral presentations.	- Student's participation, homework assigned questions and evaluation.
2.0	Cognitive Skills		
2.1	Explain the interaction between hardware and software.	 Scientific debate among the students. 	-Midterm and final exams. -Evaluation of lab
2.2	Summarize the diagnosing and correcting problems.	 Activities and homework. Discussion. 	reports and examinations. -Evaluation of oral
			presentations.
3.0	Interpersonal Skills & Responsibility	-	
<u>3.1</u> <u>3.2</u>	Choose students to work in a team. Use plan and being responsible for self- learning.	 Using smart class rooms. Enable students to analyze data and write reports. 	Estimating of student's reports and its conclusion in discussion.
4.0	Communication, Information Technology, N	lumerical	
4.1	Research on computer systems & software and discuss them.	 Promoting student to submit activities 	 Evaluating the discussing ability.
4.2	Illustrate research collections via computers and internet.	and assignments. - Discussion.	- Evaluating the activating.
5.0	Psychomotor		
5.1 5.2	Not applicable	Not applicable	Not applicable

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s

across the top.)

Course	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)								
LOs #	1.1	1.2		2.1		3.2		4.1	
1.1									

2.1					

6. S	6. Schedule of Assessment Tasks for Students During the Semester							
	Assessment task (e.g. essay, test, group project,	Week	Proportion of					
	examination,	Due	Total					
	speech, oral presentation, etc.)		Assessment					
1	Questions / Participation	All weeks	%2					
2	First Mid-term	8	%10					
3	Second Mid-term	8	%18					
4	Final lab	13	%20					
5	Final	17	%50					

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

- Divide the students into groups.
- Each group of students is assigned to a member of staff who will be available for help and academic guidance office hours at specific 2 hours on daily basis.

E Learning Resources

1. List Required Textbooks

Hardware and Software, third edition, 2013, Dr. Mohamed Blal Elzoby, Dr. Ahmed Elshraia, Sohair Abd Allah, and Kaladah Mohamed Elzoby.

2. List Essential References Materials (Journals, Reports, etc.)

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

4. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

• Blackboard and Social Media.

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

regulations and software.

• CDs accompanied with the text book, power point lectures and essential references.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number

of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

Classrooms:

- Furnished with a large central table or multiple small tables that can be grouped into one central table.
- Designed for up to 25 students.
- Size the room allowing 1sq meter per

seat. Laboratories:

• 25 PC's, one for each student.

2. Computing resources (AV, data show, Smart Board, software, etc.)

• Smart Board, projector, internet, and whiteboard.

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or

attach list)

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Student questionnaires to be assessed by independent body.
- Assessment of course teaching strategies by independent body.
- 2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department
 - Student questionnaires to be assessed by department.
- 3 Processes for Improvement of Teaching
 - Revision of course contents, course specifications, and strategies every 5 years.

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent member of staff of a sample of student work.
- Periodic exchange and remarking of a sample of assignments with a member of staff in another institution.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- Reviewing student's feedback. Update text books. •
- •
- Consulting other top universities course specifications and contents.

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