### **OATTACHMENT 2 (e)**

### **Course Specifications**

## Kingdom of Saudi Arabia

# The National Commission for Academic Accreditation & Assessment

# **Course Specifications** (CS)

# **Course Specifications**

Institution Dammam University Date1-6-2014

College/Department Science College – Mathematic Department

A. Course Identification and General Information

- 1. Course title and code: Introduction to Programming
- 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)

4. Name of faculty member responsible for the course

## A specific team from the Computer department

- 5. Level/year at which this course is offeredfourth level / second year
- 6. Pre-requisites for this course (if any)
- No Pre-requisites
- 7. Co-requisites for this course (if any) No Co-requisites

Location if not on main campus College Of Science for girls in Dammam 9. Mode of Instruction (mark all that apply) What percentage? a. traditional classroom b. blended (traditional and online) What percentage? e-learning What percentage? d. correspondence What percentage? f. other What percentage? Studio 50% Comments:

#### **B** Objectives

1. What is the main purpose for this course?

Use the Programming languages and get benefit from them in solving mathematical problems

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)

Applied software solutions to some of the aspects of life, take advantage of the Internet to support and clarify this matter

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

handbook) Course Description:

Programming language in C++, Used C++ to solve some problems in mathematic

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
An Overview of Computers and Programming Languages	1	3
Basic Elements of C++	2	6
Control Structures I (Selection)	2	6
Control Structures II (Repetition)	3	9
User-Defined Functions I	2	6

User-Defined Functions II	2	6
	1	3
Strings		
Arrays	2	6

2. Course components (total contact hours and credits per semester):						
	Lectur	Tutorial	Laborator	Practical	Other:	Total
	e		y			
			or Studio			
Contact			15*3	15*2		75
Hours	Hours					
Credit			3	2		3

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

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 a t e g

y

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. **Third**, 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	Characterization of the knowledge to	Lectures and	Examinations and
	be gained	laboratory	quizzes
1.2			
2.0	Cognitive Skills		

2.1	Characterization of the cognitive skills to be development	By Research
2.2		
3.0	Interpersonal Skills & Responsibility	
3.1	Description of the interpersonal skills and the ability to take responsibility to be developed	That is the shift from law enforcement to use the style of computer simulations for use in the district needs is easier to shift from the traditional form in the completion of transactions to deal with them in electronic way
3.2		

4.0	Communication, Information Technology, Numerical					
4.1	Characterization of the skills you want to develop in this area	Training in C + +				
4.2						
5.0	Psychomotor					
5.1	Characterization of the psychomotor skills to be developed and the level of performance required	There is no comment to the difficulty of assessment	There is no comment to the difficulty of assessment			
5.2						

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

Course			(Use ]	Program 1	Progran LO Code #s	n Learn s provide	ing Outcom d in the Prog	es gram Spe	cifications)
LOs #	1.1	1.3		2.		3.2		4.	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	Theoretical Mid Term Exam	Eighth week	20%			
2	Practical Exam	Eighth week	10%			
3	Final Practical Exam	Week 15	20%			
4	Final Theoretical Exam	Week 16	50%			
5						
6						

7			
8			
D Stu	dent Academic Counseling and		
Suppor			
consul	angements for availability of faculty and teaching attions and academic advice. (include amount of tinvailable each week)		
6			
h			
0			
u r			
S			
E Lear	ning Resources		
	Required Textbooks rogramming: From Problem Analysis to Program Dec	zion	
CIII	D. S. Malik2010Fifth	oigii	
	Edition		
2. List	Essential References Materials (Journals, Reports, et C++ common knowledge: essential intermediate programming C++ (Computer program language), Dewhurst, Stephen C. Ad J.:	:/	Jpper Saddle River, N.
2.	2005. C++ programming cookbook Herb Schildt's C++ programming C++ (Computer program language), Schildt, Herbert. McGraw		k: c2008.
3.	Problem solving with C++: The object of programming/ C++ (Savitch, Walter. Pearson Addison Wesley, Boston: 2005. Fifth	Computer progr Edition (Internate	ram language) . tional ed.)
<ul><li>4.</li><li>5.</li></ul>	C++ programming: From Problem Analysis to Program Desig C plus plus programming.: Malik, D S. Course Technology, E Problem solving with C++ / Savitch, Walter J, 1943- Pearson/A Edition.	oston, MA: c2	
3. List	Recommended Textbooks and Reference Material (J	ournals, Repo	orts, etc)
Ac			
m			
eb			
SC			
0			
4. List	Electronic Materials, Web Sites, Facebook, Twitter, o	etc.	
www	<u>ieee.c</u>		
<u>om</u>			
www	acm.c		
om			
<u> </u>			

www.ebsco.com

5. Other learning material such as computer-based programs/CD, professional standards or regulations and software. Take advantage of the educational sites and forums on the Internet 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.) Classro oms laborato ries 2. Computing resources (AV, data show, Smart Board, software, etc.) data show, Smart Board, software 3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) **Xclass** Software G Course Evaluation and Improvement Processes 1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching Questioner, survey 2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department Workshops and seminars 3 Processes for Improvement of Teaching

Through the use of modern methods of education networking such as creating blogs and private collections of communication between the students , such as Facebook and Twitter

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)

The existence of committees to review the exam

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

This is done through the exchange of experiences with other universities

Name of Course Instructor: Nashat Ali Al-Refai Signature:

Date Report Completed: 1-6-2014

Program Coordinator:

Signature: Date Received: