



CSET 101-Computer Programming

Second Semester 2008-09 (082)

2008/2009 Catalog Description: (2 3 3) CSET 101: This course is a basic programming course for Associate Degree Program in Computer Science & Technology. It will introduce a typical programming language and students will learn the following basic topics: Basic Data Types, Selection Structures, Repetition Structures, Arrays and Strings, Procedures and Functions, and Simple Algorithm Development.

Textbook	: Problem Solving and Program Design in C, Wiley & Sons	(TB)
Author	: Jeri R. Hanly and Elliot B. Koffman,	
Laboratory Manuals	: HBCC, CSET 101 Manuals	(LM)
Notes	: HBCC, CSET 101 Handouts	(HO)
Coordinator	: Dr Lawan Ahmed Mohammed, <i>Assistant Professor</i>	
Instructor	: Athar al-Quraishi, <i>Lecturer</i>	

Goals : The purpose of this course is to apply software development methods to solve simple problems. C language techniques will be applied to overcome problems in real-life situations. Students will be provided with the experimental experience in using control structures and data structures. Algorithms will be developed, and C language will be used to implement these algorithms.

Topics:

1. Introduction to C Programming Environment (1 class)
2. Fundamental Data Types and I/O (2 classes)
3. Expressions (2 Classes)
4. Selection and Repetition (6 classes)
5. Functions (5 classes)
6. 1 D-Array (6 classes)
7. Strings (2 classes)
8. 2-D Array (2 classes)
9. Files (2 classes)
10. Major Exams (2 classes)

Weekly schedule: *Attached*

Assessment Policy:

	<i>Weighting</i>	<i>Letter Grading Scale</i>		
Lab Work	15%	0%	< 60%	F
Homework	5%	60 %	< 65%	D
Class Quizzes	10 %	65%	< 70%	D+
Mid-term lab exam.	5%	70%	< 75%	C
Final Lab exam.	5%	75%	< 80%	C+
First Major exam.	15%	80%	< 85%	B
Second Major exam.	20%	85%	< 90%	B+
Final examination	25%	90%	< 95%	A
	-----	95%	to 100%	A+
	100%			

Some clustering and adjustment of threshold values may be applied depending on final results' statistics of discreet groups.

HBCC Rules and Regulations:

1. **Attendance:** students are expected to attend all meeting of their courses. In the case of any absence, students are responsible for course content during their absence.
2. **Absenteeism:** a record is consistently compiled and updated. If the student has been absent too many times without a valid excuse, he will be excluded from the college.
3. **Smoke free college:** smoking is prohibited in all college facilities.
4. **Behavior:** students who engage in behavior that disrupts the learning environment for others may be subjected to disciplinary action under the KFUPM code.
5. **Exam cheating:** it is not permitted to speak during the exam. Failure to abide by this rule will result in their exam marks being cancelled.

Prepared by: ATHAR AL-QURAIISHI

Signature : _____

Date: MARCH 05, 2009

Approved by: DR HAMZA MAGHRABY (Dean HBCC)

Signature : _____

Date: _____

Week No.	Contents	Text Ref.	Practical / support activities	Assessment
1	<u>Introduction</u> Introduction to C Language <u>Data Types</u> Fundamental Data Types, Variable Declaration	TB: 34-41	Introduction Introduction to C Environment	
2	Input and Output Operations <u>Expressions</u> Arithmetic Expressions	TB: 45-72	Experiment 1 Fundamental Data Types in C	HW #1
3	Expression Evaluation, Library Functions, Functions with Arguments etc. <u>Selection</u> Conditions, IF Statements	TB: 104-125 TB: 146-162	Experiment 2 Expressions	HW # 2 <i>HW # 1 Due</i>
4	Nested IF Statements, the Switch Statement <u>Repetition</u> The FOR Statement	TB: 179-195 TB: 220-228	Experiment 3 Selection Statements (1)	Class-Quiz # 1 <i>HW # 2 Due</i>
5	The WHILE Loop The DO-WHILE Loop	TB: 229-243 TB: 248-251	Experiment 4 Selection Statements (2)	HW # 3
6	<u>Functions</u> Functions with Simple Output Parameters	TB: 278-286	Experiment 5 FOR Loop	Class-Quiz # 2
7	Major Exam 1			
	Multiple Calls to a Function with I/O Parameters Scope of Names	TB: 287-293	Experiment 6 WHILE Loop	<i>HW # 3 Due</i>
8	Multiple Functions Review	TB: 299-300	Experiment 7 DO-WHILE Loop	Class-Quiz # 3
9	<u>1-D Array</u> Declaring and Referencing Arrays Using Loop for Sequential Access	TB: 364-369	Mid Term Lab Exam	HW # 4
10	Using Array Elements as Function A Arguments. Array Arguments	TB: 376-392	Experiment 8 Functions (1)	Class-Quiz # 4
11	Arrays & Functions Review	TB: 393-397	Experiment 9 Functions (2)	<i>HW # 4 Due</i>

Major Exam 2				
12	<u>Strings</u> Strings Basics, Library Functions, Comparison	TB: 426-461	Experiment 10 1-D Arrays	HW # 5 Class-Quiz #5
13	Character Operations, String Conversions <u>2-D Arrays</u> Using 2-D Arrays	TB: 398-404	Experiment 11 1-D Arrays	Class-Quiz# 6
14	Example Programs <u>Files</u> Input/Output Files	TB: 596-614	Experiment 12 2-D Arrays	HW # 6 Class-Quiz # 7 <i>HW # 5 Due</i>
15	Files		Experiment 13 Filing	Class-Quiz # 8 <i>HW # 6 Due</i>
Revision		Final Lab Exam		
16	FINAL EXAM (3 hours comprehensive)			

EXAMINATION SUMMARY

Examination	Major I	Major II	Midterm Lab Exam	Final Lab Exam	Final Exam.
Week No.	7	12	9	15	16