Kingdom of Saudi Arabia

Ministry of Higher Education

Najran University

College of Computer Science and

Information Systems

المملكة العربية السعودية

وزارة التعليم العالي

جامعة نجران

كلية علوم الحاسب ونظم المعلومات

College of Computer Science and Information Systems	**Department of Computer Science**
Course Code : 111CSS-4	**Programming Language 1**
Contact Hour : 4(0)	**Prerequisite : N/A**

Coordinator -

2. Course Description
Study of basic and intermediate concepts of Structured Programming using C. The topics included are Flowcharts, Algorithm, Data types, Identifiers, Storage classes, Constants, Operators, Expressions, Statements, Selection statements, Switch, Iteration statements, Jump statements, Function calls, Arrays, Pointers, Structures, Unions, Enumerations

3. Course Learning Outcomes	
SL	By the end of this course, students should be able to:	Linkages to POs
1.	Describe the basic concepts of C programming.	a(S)
2.	Construct C programs with basic programming elements	a(S),c(S),i(W)
3.	Apply the concept of flowchart and algorithm in solving problems.	a(S),j(S)
4.	Apply function concepts of C programs	a(S),c(S),i(S)
5.	Create C programs with advanced programming elements	c(S),i(S),j(W),k(W)
6.	Assess program execution	k(S)

4. Learning Resources	
Text	Brian W. Kernighan, Dennis M. Ritchie. The C Programming Language, Prentice hall, Second Edition, 2014.
Reference	H. Deitel & P. Deitel, C How to Program, Prentice Hall; 8th Edition , 2015
Reference	Rob Miles, Introduction to C programming, The University of Hull, Latest Edition
Reference	E. Balagurusamy, Introduction to C, 4th Edition

5. Course Content : The list below provides a summary of the material that will be covered during the course					
Week	Topics	References Book / Others Source	Special Event	Tutorial Activities	Lab Activities
1.	Introduction to Programming language an its types, Introduction to assembler, interpreter and compiler	Rob Miles: Introduction to C Programming Pg. 4 to 8			
2.	Algorithms,Flowcharts	E. Balagurusamy: C Programming& Data Structures Chapter 1		Some exercises on writing simple algorithms	Lab Activity-1 Getting familiar with the â€˜Câ€™ software envi
3.	Constants, Identifiers, Variables and Data types	Brian W. Kernighan : The C Programming Language Kernighan, Pg		Some exercises on - Variables declaring - Correct some errors	Lab Activity-2 Practice on Programs demonstrating the use of co

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4.	Operators, Expressions and Console I/O Statements	Brian W. Kernighan : The C Programming Language Pg. 41 to 51	Assignment	Some exercises on Console I/O Statements.	Lab Activity-3 Practice on Programs involving different types o
5.	Selection statements and Iteration statements,Continue and Break statements	Brian W. Kernighan: The C Programming Language Chapter 2 and	Quiz	Some exercises on -programs with control statements	Lab Activity â€" 4 Practice on Programs using if, if-else, nest
6.	Selection statements and Iteration statements,Continue and Break statements	Brian W. Kernighan: The C Programming Language Chapter 2 and	Assignment	Some exercises on -programs with control statements	Lab Activity â€" 5 Practice programs using for, while, do-while
7.	Arrays	Brian W. Kernighan: The C Programming Language Pg. 22 to 24	Mid Term - 1	Some exercises on -programs with arrays	Lab Activity â€" 6 Practice on Programs to demonstrate the work
8.	Functions	Brian W. Kernighan: The C Programming Language Pg. 24 to 28 an	Quiz	Some exercises on -programs with functions	Lab Activity â€" 7 Practice on Programs that uses user-defined
9.	Functions	Brian W. Kernighan: The C Programming Language Pg. 24 to 28 an	Lab Test	Some exercises on -programs with functions	
10.	Strings	Brian W. Kernighan: The C Programming Language Pg. 27 to 31	Mid Term â€" 2	Some exercises on programs with strings	Lab Activity-8 Practice on Programs that use built-in and recur
11.	Pointers	Brian W. Kernighan: The C Programming Language Chapter 5		Some exercise programs with pointers	Lab Activity â€" 9 Practice on Programs that uses string handli
12.	Pointers	Brian W. Kernighan: The C Programming Language Chapter 5	Lab Test	Some exercise programs with pointers	Lab Activity â€" 10 Practice on Progams that use pointers, pass

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13.	Structures, Unions, Enumerations	Brian W. Kernighan Chapter 6		Some exercises on -programs with structures & unions	Lab Activity â€" 11 Practice on Programs that use structures, u
14.	Revision		Final Lab Exam		

6. Evaluation Scheme: The following list is the contribution of course components to the final grade for the course.	
Component	Weight (%)
Assignments	5
Quizzes	5
Lab Performance and Exam	10
Mid Term-1 Exam	15
Mid Term-2 Exam	15
Final Lab Examination	10
Final Examination	40
Total	100