جامعة الملك سعود

كلية الدراسات التطبيقية وخدمة المجتمع

الفصل الدراسي الثاني 1441 / 1442هـ خطة مقرر 1101 عال

**CSC1101 Programming1**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **أستاذة المقرر** | **أوقات المحاضرات** | **الساعات المكتبية** | **المكتب** | **البريد الإلكتروني** | **الموقع الإلكتروني** |
| مرام الدخيل | الخميس 8 – 10 (محاضرة)  الأربعاء 8-10 (عملي) |  | مبنى 26  مكتب3- الدور الأرضي | amaram@ksu.edu.sa | http://fac.ksu.edu.sa/amaram |

Reference:

* Handouts & lecture notes
* Text Book: C How to Program: with an introduction to C++,8st edition, ISBN 978-0-13-397689-2, by Paul Deitel and Harvey Deitel published by Pearson Education © 2016.

Course Description:

You will learn the fundamentals of computer programming using the C programming.

Learning Outcomes:

Students will:

* Understand the following C data types and their methods.
* Be able to implement basic algorithms using selection, iteration and function calling.
* Be able to apply their understanding of the C language in designing, implementing and testing programs to solve simple problems in science and engineering.
* Be able to (re)structure code using modules and functions to reduce complexity.
* Be able to implement simple C program which interact with text files.

Course Topics:

* **Introduction to programming languages:** Evolution of programming languages, structured programming, the compilation process, object code, source code, executable code, operating systems, interpreters, linkers, loaders, fundamentals of algorithms, flow charts
* **C Language Fundamentals:** Character set, Identifiers, Keywords, Data Types, Constant and Variables, Statements, Expressions, Operators, Precedence of operators, Input-output Assignments, Control structures, Decision making and Branching, Decision making & looping
* **C Functions:** User defined and standard functions, Formal and Actual arguments, Functions category, function prototypes, parameter passing, Call-by-value, Call-by-reference, Recursion.
* **Arrays and Strings:** One dimensional Array, declaration and their applications, String Manipulation.
* **Structures:** Declaration of structures, declaration of unions.
* **File Handling:** Console input output functions, Disk input output functions, Data files.

Grading Policy:

First Mid 20% - 7th week

Second Mid 20% - 11th week

Quizzes 20% - 6th week and 10th week, respectively Wednesday

Lab Work 10% - weekly

Final Lab 20% - 15th week

Final Exam 20%

Class Rules:

* Please check the instructor’s website for course material and announcements.
* Attendance is very important if you miss class more than 25% you will be forbidden to enter the final exam
* If you’re late you may attend but you will be considered absent.
* If you miss one of the major exams, you will be not excused unless the instructor accepts your formal medical report.
* Lab work requires your attendance. It is not a group work therefore you need to study before the lab time to be able to finish the required assignments. Please keep a flash memory with you to save your work.
* Your solutions to the weekly sheet should be **printed** and not hand-typed. If it is more than one page it should be **stapled**. Keep your sheets neat and tidy.
* You should also hand your programs in a **CD** attached to the sheet (i.e. you print the code **and** hand it in a CD).
* Both your sheet and CD should be **labeled** with these information:
  + Name
  + ID
  + Sheet number
  + Course name
  + Section
* This course requires constant studying. If you have any questions, please do not hesitate to contact me.
* Copied assignment will be marked by zero.
* Late assignment will not be accepted.