STRUCTURED PROGRAMMING1 COURSE SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAM REVIEW

COURSE SPECIFICATION

Course Description: This provides a concise summary of the most important characteristics of planned and expected outcomes of student learning achievement proving whether he has made the most of learning opportunities available. It must be linked to the program description.

1. Teaching Institution	Baghdad University/College of Science for Women
2. University Department/Centre	Computer Science Department
3. Course title/code	Structured Programming I 109 CSP1
4. Program (s) to which it contributes	Object Oriented Programming and Advanced programming.
5. Modes of Attendance offered	Actual attendance (including the loader student) and distance learning is possible in accordance with applicable

	laws.
6. Semester/Year	First Year/First Semester
7. Number of hours tuition (total)	90 Hours (30 hours Theoretical + 60 hours Practical)
8. Date of production/revision of this specification	4/4/2016

9. Aims of the Course

This subject aims to learn the students the basic of programming using the C++ programming language in problem solving and system designing. The course should prepare the students to be professional programmers in designing and executing the programs for different purposes.

10· Learning Outcomes, Teaching ,Learning and Assessment Method

C- Knowledge and Understanding

A1. Learn the principles of the structured programming.

A2. Use the C++ programming language in understanding the principles of the structured programming.

A3. Learn the C++ work environment and tools and how use them in solving programming problems.

A4. Develop the students' abilities in imagine the shortest path to solve and treat the programming problems.

A5. Develop the students' flexibility in using the suitable programming tools according to the programming logic.

A6. Add some of competitive spirits among students by motivate them in solving the sudden problems during the lesson.

A7. Evaluate the students' abilities in understanding the subject by monthly and quarterly exams in addition to quizzes during lectures.

B. Subject-specific skills

B1- the course provides special skills to deal with advanced programming structures and the processes that occur on them.

B2- the course allows for skills that clarify relations between the programming structures.

B3- skill of choosing the most efficient way to solve the programming problem and not to go to the lengthy solutions.

B4- develops skill diversification using programming tools for the language used in the course.

Teaching and Learning Methods

• Education: provide printed lectures and modern, and diverse sources that rich with examples.

• Education: Harnessing smart blackboard to the goal of teaching students and explain the steps the solution and extraction results.

• Education: resolving some questions, with intent to contain errors and make students extracting errors.

• Learning: asking questions and inquiries and make the student to work as a teacher by explaining the solution on the blackboard.

• Learning: direct questions for all students and gradually to know the extent of their interaction and to draw the attention of the rest.

• Learning: Each specific group explains its report and the interaction among

students by questions and answers and provides an environment that enables the student for lecture or debate management.

Assessment methods

• Quizzes (quiz) semi-weekly.

• Reporting, in the form of groups by a report for each group and dumping on students.

• put up sudden and overlapped questions with material explanation and an assessment on this activity

• tests in the laboratory on the computer and written to enable the student to the solution without a computer

• Monthly and quarterly tests.

C. Thinking Skills

C 1- puts set of solutions for the same problem and discussed them individually and determine the appropriate solution to the problem at hand with a stand on the disadvantages of the rest of the solutions.

C 2-launch solutions contain inaccuracies and identifying these mistakes after discussion and processed them.

C 3- asked exceptional verbal questions that need for exceptional

answers that have specific weight from evaluation and grading hand

than be a strong incentive for student participation, competition and the

race to be resolved.

Teaching and Learning Methods

Discussions that arise during the lecture and try to involve the largest possible number of students by touched on the details of things and discussed them

objectively and targeted discussion.

Assessment methods
• Verbal assessment by involving students in discussions. • Quizzes (quiz). • Laboratory tests on the computer as well as written tests. • Monthly and quarterly exams.

D. General and Transferable Skills (other skills relevant to employability and personal development)

D1- distribution of specific topics for each group of students to prepare reports by search on sources in the web-network or library and formulated it in accordance with the basis of the approved formulation research.

D2-giving the leadership debate administration to the discussion group and enable them to lead and manage the dialogue.

D3-alert on errors in the students' oral answers and discussed them to see her fault.

D4- alert on errors in the written answers of students and marking them to clarify the errors to the student.

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
١	4	**The parts of C++**	**Study the environment of C++**	According to point 10 in above	According to point 10 in above
٢	4	**Variables and constant**	**Simple program**	According to point 10 in above	According to point 10 in above
٣	4	**Characters**	**Program on character**	According to point 10 in above	According to point 10 in above
٤	4	**String**	**Program on string**	According to point 10 in above	According to point 10 in above
٥	4	**Expression and statement**	**Program on expression**	According to point 10 in above	According to point 10 in above
٦	4	**If statements**	**Program on if statement**	According to point 10 in above	According to point 10 in above
٧	4	**If statements**	**Program on if statement**	According to point 10 in above	According to point 10 in above
٨	4	**Advanced if statement**	**Program on advanced if**	According to point 10 in above	According to point 10 in above

11. Course Structure

٩	4	**Looping**	**Program on loop**	According to point 10 in above	According to point 10 in above
١٠	4	**Looping**	**Program on loop**	According to point 10 in above	According to point 10 in above
١١	4	**Looping**	**Program on loop**	According to point 10 in above	According to point 10 in above
١٢	4	**Continue and break**	**Program on continue and break**	According to point 10 in above	According to point 10 in above
١٣	4	**For loop**	**Program on for loop**	According to point 10 in above	According to point 10 in above
١٤	4	**Advanced for loop**	**Program on advanced for loop**	According to point 10 in above	According to point 10 in above
١٥	4	**Switch and If statement**	**Program on switch & if statements**	According to point 10 in above	According to point 10 in above

12. Infrastructure

Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER	➢ C++ for programmers/ John wily and Sonsltd ➢ Learning C++ language/ Internet

Special requirements (include for example workshops, periodicals, IT software, websites)	➢ Introduction to computer scince C++/ Keneth. ➢ Problem solving in C++/ Angela .B.S ➢ Problem solving with C++/ Walter Savith ➢ The design and evolution of C++/ Bjarne stroustrup
Community-based facilities (include for example, guest Lectures , internship , field studies)	The design and evolution of C++/ Bjarne stroustrup

13. Admissions	
Pre-requisites	none
Minimum number of students	According to hall size and class size.
Maximum number of students	According to hall size and class size.