

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

| Module Information | | | | |
|------------------------------------|---------------------|----------------------|---|------------------------|
| معلومات المادة الدراسية | | | | |
| Module Title | Programming I | | Module Delivery | |
| Module Type | Core | | <input checked="" type="checkbox"/> Theory <input checked="" type="checkbox"/> Lecture <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar | |
| Module Code | CS101 | | | |
| ECTS Credits | 8 | | | |
| SWL (hr/sem) | 200 | | | |
| Module Level | | Semester of Delivery | | 1 |
| Administering Department | Type Dept. Code | College | Type College Code | |
| Module Leader | Dr. Shatha Falih | | e-mail | Shatha.falih@gmail.com |
| Module Leader's Acad. Title | Professor | | Module Leader's Qualification | Ph.D. |
| Module Tutor | Name (if available) | | e-mail | E-mail |
| Peer Reviewer Name | Name | | e-mail | E-mail |
| Scientific Committee Approval Date | 01/06/2023 | | Version Number | 1.0 |

| Relation with other Modules | | | | |
|-----------------------------------|------|--|----------|--|
| العلاقة مع المواد الدراسية الأخرى | | | | |
| Prerequisite module | None | | Semester | |
| Co-requisites module | None | | Semester | |

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

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| <p>Module Aims أهداف المادة الدراسية</p> | <p>Here are some module aims typically associated with a Programming I course. These aims describe the overarching goals and objectives of the course:</p> <ol style="list-style-type: none">1. This course covers fundamentals of algorithms and give the students an opportunity to write the algorithms.2. In this course the students can easily know how to draw flowcharts to describe the algorithms.3. The programming aims to learn how to solve problem.4. This course covers programming concepts and write codes.5. Also after this course the students will know how to control structures and function |
| <p>Module Learning Outcomes مخرجات التعلم للمادة الدراسية</p> | <p>Here are some module learning outcomes that are typically associated with a Programming I course. These outcomes represent the knowledge, skills, and competencies that students are expected to achieve upon completing the course:</p> <ol style="list-style-type: none">1. Develop algorithms to solve "computer-solvable" problems.2. Test algorithms.3. Translate algorithms to C++ programs.4. Debug, run and test C++ "procedural" programs |
| <p>Indicative Contents المحتويات الإرشادية</p> | <p>Here are some indicative contents for a programming I course targeted at beginners. These contents cover the fundamental concepts and topics typically included in such a course:</p> <ul style="list-style-type: none">• Problem solving• Algorithms• What is programming?• Basic elements of C++• General Form of a C++ Program<ul style="list-style-type: none">• Comments• Reserved Words• Identifiers• Variables and constant• Data Types• Arithmetic Operators and Operator Precedence• Expressions• Assignment Statement• Declaring and Initializing Variables• Input and output• Control Structures<ul style="list-style-type: none">• Relational Operators and precedence• Selection<ul style="list-style-type: none">• Selection: if and if...else• Compound (Block of) Statements• Multiple Selections: Nested if• Selection: Switch case |

| | |
|--|--|
| | <ul style="list-style-type: none"> • Repetition <ul style="list-style-type: none"> • for Looping Structure • User-defined functions • Function declarations and call • Scope rule of an Identifier |
|--|--|

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

| | |
|-------------------|--|
| Strategies | When teaching a programming I course to beginners, it's important to adopt strategies that cater to their foundational understanding and gradually build their knowledge and skills. Here are some effective learning and teaching strategies for beginners in a Programming I course: |
|-------------------|--|

Student Workload (SWL)

الحمل الدراسي للطالب

| | | | |
|--|-----|--|--|
| Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل | 45 | Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعياً | |
| Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل | 80 | Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعياً | |
| Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل | 125 | | |

Module Evaluation

تقييم المادة الدراسية

| | | Time/Number | Weight (Marks) | Week Due | Relevant Learning Outcome |
|-----------------------------|------------------------|-------------|------------------|------------|---------------------------|
| Formative assessment | Quizzes | 2 | 10% (10) | 5, 10 | LO #1, 2, 10 and 11 |
| | Assignments | 2 | 10% (10) | 2, 12 | LO # 3, 4, 6 and 7 |
| | Projects / Lab. | 1 | 10% (10) | Continuous | |
| | Report | 1 | 10% (10) | 13 | LO # 5, 8 and 10 |
| Summative assessment | Midterm Exam | 2 hr | 10% (10) | 7 | LO # 1-7 |
| | Final Exam | 2 hr | 50% (50) | 16 | All |
| Total assessment | | | 100% (100 Marks) | | |