MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

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| **Module Information**  **معلومات المادة الدراسية** | | | | | | | |
| **Module Title** | Fundamental computer science | | | | **Module Delivery** | | |
| **Module Type** | Core | | | | * **☒ Theory** * **☒ Lecture** * **☒ Lab** * **☐ Tutorial** * **☐ Practical** * **☐ Seminar** | | |
| **Module Code** |  | | | |
| **ECTS Credits** | 3 | | | |
| **SWL (hr/sem)** | 75 | | | |
| **Module Level** | |  | **Semester of Delivery** | | | | 1 |
| **Administering Department** | | **Remote Sensing** | **College** | **Remote Sensing & Geophysics** | | | |
| **Module Leader** | Dr. Ali Abdulawahhab Mohammed | | **e-mail** | ali\_abdulwahhab@kus.edu.iq | | | |
| **Module Leader’s Acad. Title** | | Assistant Professor | **Module Leader’s Qualification** | | | |  |
| **Module Tutor** |  | | **e-mail** | ali\_abdulwahhab@kus.edu.iq | | | |
| **Peer Reviewer Name** | |  | **e-mail** |  | | | |
| **Scientific Committee Approval Date** | | 1/9/2022 | **Version Number** | | | 1 | |

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

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| **Module Aims, Learning Outcomes and Indicative Contents**  **أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية** | |
| **Module Aims**  **أهداف المادة الدراسية** | 1. Identify the properties of computer science. 2. Recognize the concept basic computer and application of it in human life and Remote Sensing field. 3. Study types of Computer generations. 4. Study types of computers. 5. Knowing the Computer Components. 6. Identify types of Memory 7. Study Microsoft Excel 2016. 8. Study Microsoft PowerPoint 2016. 9. Study Convert Decimal to Binary & Binary to Decimal Numbers Systems. 10. Identify the Internet and the World Wide Web. |
| **Module Learning Outcomes**  **مخرجات التعلم للمادة الدراسية** | 1. Recognize the theoretical and Practical aspects of learning computer Components.  2. Learning types of Components.  3. Understand and apply the Microsoft words 2016.  4. Understand and apply the Microsoft Excel 2016.  5. Learning types of Memory.  6. Understand and apply the types of Convert Decimal to Binary & Binary to Decimal Numbers Systems.  7. Recognize the Internet and the World Wide Web. |
| **Indicative Contents**  **المحتويات الإرشادية** | 1. To distinguish between types of Computers. 2. To distinguish between types of Memory. 3. Students will receive hands-on experience with the Internet and the World Wide Web. 4. To understand the Microsoft words 2016.   Introduction to the personal computer, hardware and software will be covered as well |

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| **Learning and Teaching Strategies**  **استراتيجيات التعلم والتعليم** | |
| **Strategies** | 1. Following up the scientific development of computer Components by reviewing modern curricula. 2. Follow-up and development of academic courses and compare them with other universities. 3. Using the latest teaching aids to motivate the student to learn and understand. |

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| **Student Workload (SWL)**  **الحمل الدراسي للطالب** | | | |
| **Structured SWL (h/sem)**  **الحمل الدراسي المنتظم للطالب خلال الفصل** | 64 |  |  |
| **Unstructured SWL (h/sem)**  **الحمل الدراسي غير المنتظم للطالب خلال الفصل** | 11 |  |  |
| **Total SWL (h/sem)**  **الحمل الدراسي الكلي للطالب خلال الفصل** | 75 | | |

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| **Module Evaluation**  **تقييم المادة الدراسية** | | | | | |
| **As** | | **Time/Number** | **Weight (Marks)** | **Week Due** | **Relevant Learning Outcome** |
| **Formative assessment** | **Quizzes** | 2 | 10% (10) | Within the course | All of the previous Lectures |
| **Assignments** | 7 | 10% (10) | Within the course | All of the previous Lectures |
| **Projects / Lab.** | 7 | 10% (10) | Within the course | All of the previous Lectures |
| **Report** | 5 | 10% (10) | Within the course | All of the previous Lectures |
| **Summative assessment** | **Midterm Exam** | 2 hr | 10% (10) | Within the course | All of the previous Lectures |
| **Final Exam** | 2hr | 50% (50) | After the course | All |
| **Total assessment** | | | 100% (100 Marks) |  |  |

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| **Delivery Plan (Weekly Syllabus)**  **المنهاج الاسبوعي النظري** | |
| **Week** | **Material Covered** |
| **Week 1** | Introduction to the Computer generation and its uses |
| **Week 2** | Computer generation, First Generation Computers, Second Generation Computers, Third Generation Computers. |
| **Week 3** | Computer generation, Fourth Generation Computers, Fifth Generation Computers. |
| **Week 4** | Types of Computers, PC (Personal Computer) , Workstation, Minicomputer . |
| **Week 5** | Types of Computers , Mainframe , Supercomputers |
| **Week 6** | Computer Components , Parts Computers and Units of input and output types, |
| **Week 7** | Memory.Cache Memory, Primary Memory/Main Memory |
| **Week 8** | Memory. Secondary Memory, Memory unit |
| **Week 9** | Statistical functions and logical , Convert Decimal to Binary |
| **Week 10** | Statistical functions and logical, Binary to Decimal Numbers Systems |
| **Week 11** | Windows 10 (1) and uses, Desktop and divisions, , Taskbar barriers a cent, |
| **Week 12** | Windows 10 (2) The contents start list |
| **Week 13** | * 1. Microsoft Word 2016 (1), Microsoft Excel 2016. |
| **Week 14** | Internet and Intranet and its applications |
| **Week 15** | Examples |
| **Week 16** | **Preparatory week before the final Exam** |

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| **Delivery Plan (Weekly Lab. Syllabus)**  **المنهاج الاسبوعي للمختبر** | |
| **Week** | **Material Covered** |
| **Week 1** | Windows 10 (1) and uses. |
| **Week 2** | Windows 10 (2) and Desktop and divisions |
| **Week 3** | Windows 10 (3) and Taskbar barriers a cent. |
| **Week 4** | Windows 10 (4) The contents start list. |
| **Week 5** | Windows 10 (5) Mouse and its uses. |
| **Week 6** | Microsoft Word 2016 (1) |
| **Week 7** | Microsoft Word 2016 (2) |
| **Week 8** | Microsoft Word 2016 (3) |
| **Week 9** | Microsoft Word 2016 (4) |
| **Week 10** | Microsoft Word 2016 (5) |
| **Week 11** | Microsoft Excel 2016 |
| **Week 12** | Microsoft Excel 2016 |
| **Week 13** | Microsoft Excel 2016 |
| **Week 14** | Microsoft PowerPoint 2016 |
| **Week 15** | Microsoft PowerPoint 2016 |
| **Week 16** | **Preparatory week before the final Exam** |

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| **Learning and Teaching Resources**  **مصادر التعلم والتدريس** | | |
|  | **Text** | **Available in the Library?** |
| **Required Texts** | 1. Parsons, June and Dan Oja. Computer Concepts 2016 Comprehensive, Course Technology, 2016. Computers today by S.K. Basandra, Galgotia Publications 2. Zimmerman, S. Scott, et.al. Microsoft Office Word 2016. Course Technology, 2016.   Parsons, June, et.al. Microsoft Office Excel 2016. Course Technology, 2016. | yes |
| **Recommended Texts** | 1. , Parsons, June and Dan Oja. Computer Concepts 2016 Comprehensive, Course Technology, 2016. Computers today by S.K. Basandra, Galgotia Publications | yes |
| **Websites** | <https://code.org/educate/curriculum/csf> | |

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| **Grading Scheme**  **مخطط الدرجات** | | | | |
| **Group** | **Grade** | التقدير | **Marks (%)** | **Definition** |
| **Success Group**  **(50 - 100)** | **A -** Excellent | **امتياز** | 90 - 100 | Outstanding Performance |
| **B -** Very Good | **جيد جدا** | 80 - 89 | Above average with some errors |
| **C -** Good | **جيد** | 70 - 79 | Sound work with notable errors |
| **D -** Satisfactory | **متوسط** | 60 - 69 | Fair but with major shortcomings |
| **E -** Sufficient | **مقبول** | 50 - 59 | Work meets minimum criteria |
| **Fail Group**  **(0 – 49)** | **FX –** Fail | **راسب (قيد المعالجة)** | (45-49) | More work required but credit awarded |
| **F –** Fail | **راسب** | (0-44) | Considerable amount of work required |
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| **Note:**Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above. | | | | |

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| **Unstructured SWL (h/sem)**  **الحمل الدراسي غير المنتظم للطالب خلال الفصل** | |
| **(12) ساعة** | 1. تهيئة العرض التقديمي ( عرض تقديمي للطلاب) |
| **(12) ساعة** | 1. واجبات (حل وانجاز واجبات الطلبة) |
| **(12) ساعة** | 1. التهيئةللامتحانات اليومية (الامتحانات اليومية) |
| **(36) ساعة** | المجموع |