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| | Ministry of Higher Education and Scientific Research - Iraq<br>University of Technology-Iraq<br>Department of Computer Science<br>Networks Management Branch | |

# MODULE DESCRIPTOR FORM
# نموذج وصف المادة الدراسية

## Module Information
معلومات المادة الدراسية

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| **Module Title** | WEB DESIGN | | **Module Delivery** | |
| **Module Type** | CORE | | | **Theory**<br>**Lecture**<br>**Lab**<br>**Tutorial** |
| **Module Code** | WEDE224 | | | |
| **ECTS Credits** | 4 | | | |
| **SWL (hr/sem)** | 100 | | | |
| **Module Level** | 2 | **Semester of Delivery** | 4 | |
| **Administering Department** | Department of Computer Science | **College** | Computer Science | |
| **Module Leader** | Saif Bashar Neamah | **e-mail** | saif.b.neamah@uotechnology.edu.iq | |
| **Module Leader's Acad. Title** | Lecturer | **Module Leader's Qualification** | Ph.D. | |
| **Module Tutor** | Saif Bashar Neamah | **e-mail** | saif.b.neamah@uotechnology.edu.iq | |
| **Peer Reviewer Name** | | **e-mail** | | |
| **Review Committee Approval** | 01/06/2024 | **Version Number** | 1.0 | |

## Relation With Other Modules
العلاقة مع المواد الدراسية الأخرى

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| **Prerequisite module** | | **Semester** | |
| **Co-requisites module** | WEPR321 | **Semester** | 6 |

## Module Aims, Learning Outcomes and Indicative Contents
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

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| **Module Aims**<br>أهداف المادة الدراسية | 1. Introduce fundamental concepts: The module aims to provide students with a solid understanding of the foundational concepts and principles of web design. This includes topics such as client-server architecture, web development technologies, web standards, and protocols.<br><br>2. Foster design and usability knowledge: The module aims to cultivate an understanding of user-centered design principles and usability considerations in web development. This involves teaching students about user experience (UX) design, accessibility, responsive design, and information architecture.<br><br>3. Encourage collaboration and project management skills: The module aims to foster teamwork and collaboration skills necessary for web projects. Students may work in groups to complete web development projects, enhancing their ability to communicate effectively, manage tasks, and meet project deadlines.<br><br>4. Stay updated with industry trends: The module aims to expose students to current trends, emerging technologies, and industry practices in web design. This includes topics such as HTML5, CSS3, responsive design frameworks like Bootstrap, and JavaScript language. |
| **Module Learning Outcomes**<br>مخرجات التعلم للمادة الدراسية | 1. Understanding Web design fundamentals: Students will gain knowledge of the fundamental components of design.<br><br>2. Web Development Technologies: Students will learn various web development technologies and frameworks, such as HTML, CSS, JavaScript, and popular libraries like React or Vue.js or Angular. They will acquire the skills needed to build interactive and dynamic web pages.<br><br>3. Web Design Principles: Students will be introduced to the principles of user-centered design, including user experience (UX) and user interface (UI) design concepts. They will learn how to create visually appealing and user-friendly web interfaces.<br><br>4. Web Performance Optimization: Students will learn techniques for optimizing web application performance, including minimizing load times, reducing file sizes. They will understand the importance of website speed and performance for user experience and search engine rankings.<br><br>5. Web Accessibility: Students will gain an understanding of web accessibility standards and guidelines, ensuring that web applications are inclusive and usable by individuals with disabilities. They will learn techniques to improve accessibility and compliance with accessibility regulations.<br><br>6. Testing and Debugging: Students will learn testing strategies and techniques for web applications, including unit testing, integration testing, and debugging. They will understand the importance of testing for ensuring the quality and reliability of web applications. |

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| **Indicative Contents**<br>المحتويات الإرشادية | Here are the indicative contents of this model:<br>1. Introduction to the Web<br>2. Web development terminologies<br>3. Website structure<br>4. HTML basic tags<br>5. HTML semantic tags<br>6. Styling with CSS<br>7. Fundamentals of JavaScript<br>8. JS libraries<br>9. Front-end frameworks<br>10. Bootstrap for responsive design<br>11. Vue.js fundamentals<br>12. Building a portfolio website |
| **Learning and Teaching Strategies**<br>استراتيجيات التعلم والتعليم | |
| **Strategies** | 1. Lectures: Lectures serve as the foundation for delivering theoretical concepts, principles, and frameworks of web engineering. Instructors can use multimedia presentations, demonstrations, and real-world examples to engage students and facilitate understanding.<br><br>2. Case Studies: Presenting case studies of successful web applications or notable web engineering projects can provide valuable insights into industry practices, challenges, and innovative solutions. Analyzing these case studies can help students understand the practical implications of web engineering concepts.<br><br>3. Group Discussions and Debates: Encouraging group discussions and debates on web engineering topics can foster critical thinking, collaboration, and communication skills. Students can explore different perspectives, exchange ideas, and debate emerging trends, ethical considerations, and best practices in web engineering.<br><br>4. Online Resources and Tutorials: Providing students with access to online resources, tutorials, and learning platforms can supplement their understanding of web engineering concepts. These resources can include interactive websites, video tutorials, coding exercises, and online forums for discussing and solving problems.<br><br>5. Assessments and Feedback: Regular assessments, such as quizzes, assignments, and exams, help gauge students' understanding and progress. Constructive feedback from instructors on their work can guide students in improving their skills and knowledge.<br><br>6. Continuous Learning and Professional Development: Encouraging students to stay updated with the latest advancements in web engineering and providing resources for self-study can foster a culture of continuous learning. Promoting participation in workshops, conferences, and online courses can help students develop their professional skills and broaden their knowledge. |

| Student Workload (SWL)<br>الحمل الدراسي للطالب | | | |
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| **Structured SWL (h/sem)**<br>الحمل الدراسي المنتظم للطالب خلال الفصل | 63 | **Structured SWL (h/w)**<br>الحمل الدراسي المنتظم للطالب أسبوعيا | 4.2 |
| **Unstructured SWL (h/sem)**<br>الحمل الدراسي غير المنتظم للطالب خلال الفصل | 37 | **Unstructured SWL (h/w)**<br>الحمل الدراسي غير المنتظم للطالب أسبوعيا | 2.4 |
| **Total SWL (h/sem)**<br>الحمل الدراسي الكلي للطالب خلال الفصل | 100 | | |

## Module Evaluation
تقييم المادة الدراسية

| | | Time/Number | Weight (Marks) | Week Due | Relevant Learning Outcome |
|---|---|---|---|---|---|
| **Formative assessment** | **Quizzes** | 2 | 10% (10) | Continuous | LO # 6 and 7 |
| | **Assignments** | 2 | 10% (10) | Continuous | LO # 6 and 7 |
| | **Projects / Lab.** | 2 | | | |
| | **Report** | 1 | 15%(15) | 12 | LO # 2, 3 and 5 |
| **Summative assessment** | **Midterm Exam** | 2hr | 15% (15) | 7 | LO # 1-7 |
| | **Final Exam** | 2hr | 50% (50) | 16 | LO # 1-7 |
| **Total assessment** | | | 100% (100 Marks) | | |

## Delivery Plan (Weekly Syllabus)
المنهاج الاسبوعي النظري

| | Material Covered |
|---|---|
| **Week 1** | Web introduction and terminologies |
| **Week 2** | Website structure and conventions |
| **Week 3** | Web development fundamentals |
| **Week 4** | HTML fundamental tags |
| **Week 5** | HTML5 new tags and semantic tags |
| **Week 6** | Styling with CSS |
| **Week 7** | Fonts and Colors and Selectors |
| **Week 8** | Forms in HTML |
| **Week 9** | Fundamentals of JavaScript |
| **Week 10** | JavaScript Libraries |

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| **Week 11** | Responsive Design |
| **Week 12** | Bootstrap into |
| **Week 13** | Bootstrap Components |
| **Week 14** | Vue.js Fundamentals |
| **Week 15** | **Portfolio website Project** |
| **Week 16** | **Exam** |

| **Delivery Plan (Weekly Lab. Syllabus)**<br>المنهاج الاسبوعي للمختبر | |
|---|---|
| | **Material Covered** |
| **Week 1** | IDE intro, website structure, web page structure |
| **Week 2** | HTML text, formatting, semantic, links |
| **Week 3** | HTML attributes |
| **Week 4** | HTML lists, tables |
| **Week 5** | HTML multimedia tags |
| **Week 6** | HTML forms |
| **Week 7** | CSS inline, internal, external |
| **Week 8** | CSS selectors |
| **Week 9** | CSS attributes |
| **Week 10** | JavaScript fundamentals, calculator program |
| **Week 11** | Bootstrap fundamentals, grid system |
| **Week 12** | Bootstrap components |
| **Week 13** | Vue.js fundamentals |
| **Week 14** | Vue.js components |
| **Week 15** | Portfolio Project |

| **Learning and Teaching Resources**<br>مصادر التعلم والتدريس | | |
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| | **Text** | **Available in the Library?** |
| **Required Texts** | Learning Web Design, Jennifer Robbins, O'Reilly, 2012 | No |
| **Recommended Texts** | | |
| **Websites** | https://www.w3schools.com/ | |

## APPENDIX

| GRADING SCHEME<br>مخطط الدرجات | | | | |
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| **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 | مقبول بقرار | (45-49) | More work required but credit awarded |
| | **F** – Fail | راسب | (0-44) | Considerable amount of work required |
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Note:

NB 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.