	Ministry of Higher Education and Scientific Research - Iraq University of Warith Al-Anbiyaa College of Advanced Technologies Department of Smart Digital Health Technologies	

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information					
Module Title	Digital Health Fundamentals and the Health Care System			**Module Delivery**	
Module Type	Core			☒Theory ☒ Lecture ☒ Lab ☒ Tutorial ☐ Practical ☒ Seminar	
Module Code	DHTC103				
ECTS Credits	6:00				
SWL (hr/sem)	150				
Module Level		1	**Semester of Delivery**		1
Administering Department		Smart Digital Health Technologies	**College**		College of Advanced Technologies
Module Leader	Ruaa Majeed Dawood		**e-mail**		roaa.majed@uowa.edu.iq
Module Leader's Acad. Title		Lecturer	**Module Leader's Qualification**		Ph.D.
Module Tutor	Ruaa Majeed Dawood		**e-mail**		
Peer Reviewer Name			**e-mail**		
Scientific Committee Approval Date			**Version Number**		

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	NA	**Semester**	
Co-requisites module	NA	**Semester**	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Aims أهداف المادة الدراسية	This module aims to provide students with a comprehensive understanding of the fundamentals of digital health and the structure of healthcare systems. By the end of this module, students will be able to: 1. Explain key concepts, tools, and technologies in digital health. 2. Understand the organization, functions, and challenges of modern healthcare systems. 3. Analyze the role of digital solutions in improving healthcare delivery, patient outcomes, and health management. 4. Evaluate ethical, legal, and security considerations in implementing digital health technologies. 5. Apply knowledge of digital health principles to practical scenarios within healthcare settings.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	By the end of this module, students will be able to: 1. Define and explain the core concepts of digital health and e-health. 2. Describe the structure and functions of healthcare systems at local and global levels. 3. Identify key digital health technologies and their applications in patient care. 4. Analyze the impact of digital health on healthcare delivery, quality, and efficiency. 5. Evaluate ethical, legal, and data privacy issues in digital health implementation. 6. Apply digital health tools and concepts to case studies or practical healthcare scenarios.
Indicative Contents المحتويات الإرشادية	Indicative Contents: • Introduction to Digital Health Definition, scope, and evolution of digital health

	Key concepts: e-health, m-health, telemedicine, health informatics • Healthcare Systems Overview Structure and organization of healthcare systems Roles of primary, secondary, and tertiary care Public vs. private healthcare systems • Digital Health Technologies Electronic Health Records (EHRs) and Personal Health Records (PHRs) Telemedicine and teleconsultations Mobile health applications and wearable devices • Health Data Management Health data standards and interoperability Data collection, storage, and analysis Big data and artificial intelligence in healthcare • Ethical, Legal, and Security Considerations Patient privacy and data protection Legal regulations in digital health Ethical issues and professional responsibilities • Digital Health Applications in Practice Case studies on digital health interventions Improving healthcare delivery and patient outcomes Challenges and future trends in digital health

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1. Lectures: Presenting core concepts interactively with practical examples. 2. Tutorials and Workshops: Group sessions to apply concepts and solve practical problems. 3. Problem-Based Learning (PBL): Analyzing real-world scenarios and proposing digital health solutions. 4. Independent Study: Reading educational materials, conducting research, and completing exercises to reinforce understanding. 5. Assessment-Linked Activities: Quizzes, assignments, and presentations to monitor students' progress and comprehension.

Student Workload (SWL) الحمل الدراسي للطالب			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	46	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	3
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	104	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	35
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	150		

Module Evaluation تقييم المادة الدراسية					
		Time/ Number	**Weight (Marks)**	**Week Due**	**Relevant Learning Outcome**
Formative assessment	**Quizzes**	10	10 % (10)	2,5,8	LO # 1, 4, 5, 7,8
	Assignments	10	10 % (10)	4,7,11	LO # 1-15
	Lab.	10	10 % (10)	1-9	LO # 1-15
	Report	10	10 % (10)	1-8	LO # 1-15
Summative assessment	**Midterm Exam**	10	10 % (10)	9	LO # 1-15
	Final Exam	50	50% (50)	14	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction to Digital Health: Concepts and Evolution
Week 2	Overview of Healthcare Systems: Structure and Functions
Week 3	Primary, Secondary, and Tertiary Care Levels
Week 4	Public vs. Private Healthcare Systems
Week 5	Electronic Health Records (EHRs) and Personal Health Records (PHRs)
Week 6	Telemedicine: Principles and Applications

Week 7	Mobile Health (mHealth) and Wearable Devices
Week 8	Health Data Management and Interoperability
Week 9	Big Data and Artificial Intelligence in Healthcare
Week 10	Patient Privacy, Data Security, and Legal Considerations
Week 11	Ethical Issues in Digital Health
Week 12	Improving Healthcare Delivery through Digital Solutions
Week 13	Challenges and Barriers in Implementing Digital Health
Week 14	Future Trends in Digital Health and Healthcare Systems
Week 15	**Preparatory week before the final Exam**

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	
Week 8	
Week 9	
Week 10	
Week 11	
Week 12	
Week 13	
Week 14	
Week 15	

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	WHO – Digital Health World Health Organization. Digital Health. Geneva: WHO; 2023 [cited 2026 Jan 23]. Available from: https://www.emro.who.int/ar/noncommunicable-diseases/digital-health/digital-health.html Textbook of Digital Health Hersh WR, Totten AM, Eden KB, et al. Textbook of Digital Health. 1st ed. New York: McGraw-Hill; 2021. Available from: https://textbookofdigitalhealth.com/?utm_source=chatgpt.com Digital Future of Healthcare Dey N, Das N, Chaki J, editors. Digital Future of Healthcare. Boca Raton, FL: CRC Press; 2022. Available from: https://www.routledge.com/Digital-Future-of-Healthcare/Dey-Das-Chaki/p/book/9781032057040?utm_source=chatgpt.com The Lancet Digital Health The Lancet. The Lancet Digital Health. [Internet]. 2019–2026 [cited 2026 Jan 23]. Available from: https://www.thelancet.com/journals/landig/home	

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

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.

رئيس القسم

Ruaa Majeed Dawood

التاريخ

استاذ المادة

Ruaa Majeed Dawood

التاريخ: