Course Plan (Syllabus)

First: Course Information

Faculty: Nursing	
Department: Nursing	**Program: Master**
Academic Year: 2024/2025	**Semester: Second**

Course No.: 0801717	**Course Title: Health Informatics.**	
Credit Hours: 3 hours	**Theoretical: 3 hours**	**Practical: 0 hour**
Prerequisite No.: None	**Prerequisite Title: None**	
Section No.: 1	**Lecture Day(s):** ☑ Sun ☐ Tue ☐ Thu ☐ Fri ☐ Sat ☐ Mon ☐ Wed	**Lecture Time:4:30-7:30**
Level in JNQF	**Level 9**	**Notional Hours JNQF 126**
Type of Course	**Elective Specialization**	
Type of Learning	**Blended Learning (1 Face-to-Face + 1 Asynchronous)**	

Second: Instructor's / Coordinator's Information

Course Instructor	**Name: Dr. Mohammad Alosta** **Academic Rank: Assistant Professor**						
	Office No.:252D **Ext. No.: 1790** **Email: *malosta@zu.edu.jo***						
	Office Hours	**Sun** 2-3 choose	**Mon** 10-11 11-12	**Tues** choose 11-12	**Wed** 10-11 11-12	**Thu** choose choose	**Sat** choose choose
Course Coordinator	**Name: Dr. Mohammad Alosta** **Academic Rank: Assistant Professor**						
	Office No.:252D **Ext. No.: 1790** **Email: *malosta@zu.edu.jo***						

Third: Course Description

This course introduces nursing informatics as an integration of nursing, computer, and information sciences to support nursing practice and enhance healthcare delivery. It aims to equip master nursing students with the knowledge and skills necessary to effectively utilize health information systems, electronic health records, and decision support systems. The course will explore data management, telehealth applications, ethical and legal considerations, and emerging technologies such as artificial intelligence and big data. Students will develop competencies in information literacy, technology adoption, and leadership in informatics, enabling them to contribute to evidence-based practice, quality improvement, and interdisciplinary collaboration. The course will also emphasize the role of nursing informatics in improving patient outcomes and shaping the future of healthcare systems.

Fourth: Course Objectives

Upon successful completion of this course, students will be able to:

1. Define key concepts and components of health informatics and its significance in the healthcare environment.
2. Analyze the role of health informatics in supporting nursing administration functions such as patient care, quality improvement, and resource management.
3. Evaluate the impact of health information technology on patient safety, privacy, and security.
4. Assess the current state of health information systems in healthcare organizations and identify opportunities for improvement.
5. Critically analyze emerging trends and technologies in health informatics and their potential impact on nursing practice.
6. Demonstrate leadership in promoting the use of health informatics to improve patient care and organizational outcomes.

Fifth: Learning Outcomes

Level descriptor according to (JNQF) *	**CILOs Code**	**CILOs**	***Associated PILOs Code*** *Choose one PILO for each CILO***	**Assessment Methods**	**Scores out of 100**
Knowledge	K1	Recognize health informatics' significance, scope, and impact on healthcare delivery and patient outcomes.	P1	Assignments, Group presentation, Mid-term Exam, Final Exam	10
Knowledge	K2	Understand the integration of health informatics with clinical processes, including its role in decision-making, documentation, and evidence-based practice.	P2	Assignments, Group presentation, Mid-term Exam, Final Exam	10
Knowledge	K3	Explain the methods used to evaluate and measure health informatics applications, including ethical considerations and their	P2	Assignments, Group presentation, Mid-term Exam, Final Exam	12

		effect on healthcare functionality.			
Skills	S1	Analyze health information systems to support clinical decision-making, communication, and administrative processes.	P3	Assignments, Group presentation, Mid-term Exam, Final Exam	12
Skills	S2	Evaluate the role of health informatics in improving patient safety, quality of care, and health outcomes.	P4	Assignments, Group presentation, Mid-term Exam, Final Exam	12
Skills	S3	Utilize various electronic resources and technologies to access, retrieve, and apply evidence-based information in nursing practice.	P4	Assignments, Group presentation, Mid-term Exam, Final Exam	12
Competencies	C1	Apply health informatics technologies in clinical and administrative settings to improve patient care and healthcare processes.	P5	Assignments, Group presentation, Mid-term Exam, Final Exam	10
Competencies	C2	Assess the effectiveness of informatics systems in supporting healthcare outcomes and quality improvement.	P5	Assignments, Group presentation, Mid-term Exam, Final Exam	11
Competencies	C3	Demonstrate ethical responsibility in the design, implementation, and evaluation of informatics solutions within healthcare environments.	P6	Assignments, Group presentation, Mid-term Exam, Final Exam	12

* https://jnqf.heac.org.jo/?v=5.20.10.28.2&url=ar/Manuals; ** Program Outcome Competencies (Learning outcomes) Code (PILOS); CILOs: Course Intended Learning Outcomes

Sixth: Learning Resources

Main Reference: Nursing Informatics and the Foundation of Knowledge		
Author: *McGonigle, D., & Mastrian, K*	**Edition:** 6th Edition	**Publication Year:** *2024*
Additional resources: • Hussey, P., & Kennedy, A. (2022). Introduction to Nursing Informatics. 5th ed. Springer: USA • American Psychological Association. (2023). *Publication Manual of the American Psychological Association*. 7th ed. Washington, DC: American Psychological Association. • American Nursing Informatics Association. https://www.ania.org/ • American Medical Informatics Association. https://www.amia.org/		
Teaching Context	**☑Classroom ☐ Laboratory ☐ Workshop ☑ MS Teams ☑ Moodle**	

Seventh: Course Structure

Lecture Date	Topics	CILOs Codes	Teaching Procedures	Teaching Methods	References
Sunday 2-3-2025	Introduction to course requirements and materials Health/ nursing informatics	Introduction to CILOs K1, K2, K3, S1, C1	Face-to-Face	Lecturing Questions and Answers Discussion Presentation Videos	Course Syllabus Evaluation sheets Ch. 1, 16, 17 (McGonigle, D., & Mastrian, K).
Sunday 9-3-2025	**Data Science and Information Management** Videos related to the topic discussed.	K1, K2, K3, S1, C1	Asynchronized	Self-Reading Problem solving	Ch. 6 (McGonigle, D., & Mastrian, K).
Sunday 16-3-2025	Data Science and Information Management	K1, K2, K3, S1, C1	Face-to-Face	Lecturing Questions and Answers Discussion Presentation Videos	Ch. 6 (McGonigle, D., & Mastrian, K).
Sunday 23-3-2025	**Standardization** Videos related to the topic discussed.	K1, K2, K3, S1, C1	Asynchronized		Ch. 7,8,9 (McGonigle, D., & Mastrian, K).

Sunday 30-3-2025	- Standardization	K1, K2, K3, S1, C1	Face-to-Face	Lecturing Questions and Answers Discussion Presentation Videos	Ch. 7,8,9 (McGonigle, D., & Mastrian, K).
Sunday 6-4-2025	**Systems Life Cycle** Videos related to the topic discussed. **Ethics, Security of healthcare systems** Articles: Assessing nurses' informatics competency and identifying its related factors	K1-K3 S1-S3 C1-C3	Asynchronized	Self-Reading Problem solving	Ch. 10, 12, 13, 14 (McGonigle, D., & Mastrian, K).
Sunday 13-4-2025	**Student Presentation:** Systems Life Cycle **Student Presentation:** Ethics, Security of healthcare systems in providing safe and private healthcare.	K1-K3 S1-S3 C1-C3	Face-to-Face	Lecturing Questions and Answers Discussion Presentation Videos	Ch. 10, 12, 13, 14 (McGonigle, D., & Mastrian, K).
Sunday 20-4-2025	Application of Health/Nursing Informatics: **Management, Leadership & Research** Videos related to the topic discussed.	K1-K3 S1-S3 C1-C3	Asynchronized	Self-Reading Problem solving	Ch. 18, 19, 49 and 50 (McGonigle, D., & Mastrian, K).
Sunday 27-4-2025	**Midterm Exam (2 hours)**				
Sunday 4-5-2025	**Student Presentation:** Application of Health/Nursing Informatics: **Management and Leadership.** **Student Presentation:** Application of Health/Nursing Informatics: **Research.**	K1-K3 S1-S3 C1-C3	Face-to-Face	Lecturing Questions and Answers Discussion Presentation Videos	Ch. 18, 19, 49 and 50 (McGonigle, D., & Mastrian, K).

Sunday 11-5-2025	Application of Health/Nursing Informatics: **Education** Articles- A Systematic Review of the Technology Acceptance Model in Health Informatics.	K1-K3 S1-S3 C1-C3	Asynchronized	Self-Reading Problem solving	Ch. 44-48 (McGonigle, D., & Mastrian, K).
Sunday 18-5-2025	**Student Presentation:** Application of Health/Nursing Informatics: **Education**	K1-K3 S1-S3 C1-C3	Face-to-Face	Lecturing Questions and Answers Discussion Presentation Videos	Ch. 44-48 (McGonigle, D., & Mastrian, K).
Sunday 25-5-2025	**Independence Day**				
Sunday 1-6-2025	Application of Health/Nursing Informatics: **Practice** Videos related to the topic discussed.	K1-K3 S1-S3 C1-C3	Asynchronized	Self-Reading Problem solving	Ch. 26-28, 33, 35 (McGonigle, D., & Mastrian, K).
Sunday 8-6-2025	**Student Presentation:** Application of Health/Nursing Informatics: **Practice**	K1-K3 S1-S3 C1-C3	Face-to-Face	Lecturing Questions and Answers Discussion Presentation Videos	Ch. 26-28, 33, 35 (McGonigle, D., & Mastrian, K).
15 to 25-6-2025	**Final Exam (2 hours)**				

Eighth: Assessment Methods

Methods	Blended Learning	Specific Course Output to be assessed								
		Knowledge			Skills			Competency		
		P1/K1	P2/K2	P2/K3	P3/S1	P4/S2	P4/S3	P5/C1	P5/C2	P6/C3
Mid-term Exam	30%	3	3	3	4	3	4	3	3	4
Project	20%	2	1	2	2	3	2	2	3	3
Group presentation	10%	1	1	2	1	1	1	1	1	1
Final Exam	40%	4	5	4	5	5	5	4	4	4

		10	10	11	12	12	12	10	11	12
Total out of 100	100%	31			36			33		

* Refer to document (Guidelines-for-Nursing-Programs-Accreditation-at-Jordanian-Universities)

Ninth: Course Policies

All course policies apply across **all teaching modes**, including **online, blended, and face-to-face learning**.

- Punctuality**:** Attend on time; late work may lose marks.
- Participation**:** Engage in discussions, group work, and assignments.
- Attendance & Exams: Mandatory attendance; valid excuse required for absences.
- Academic Integrity: No cheating, plagiarism, or unauthorized collaboration.
- Ethical Conduct: Respectful behavior is required online and offline.
- Technology Use: Follow platform rules; no misuse of digital tools.

Approval	Name	Date	Signature
Head of Department	**Dr. Islam Al-Oweidat**	2025/03/02	
Faculty Dean	**Dr. Ahmed Rayan**	2025/03/03	