## **Course Title:**

**Computer Science** 

**Course Code:** 

WNR-11-06

Semester / Academic Year:

First Stage / First Semester

**Description Preparation Date:** 

01/10/2024

**Available Attendance Models:** 

**Live Lectures** 

**Total Credit Hours / Units:** 

1 theoretical hour per week, total credit hours: 1

**Course Coordinator:** 

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**Course Objectives** 

This course equips students with:

- 1. A fundamental understanding of computer science concepts, including hardware, software, operating systems, and the basics of networking and cybersecurity.
- 2. Knowledge of e-commerce services, especially electronic banking, and an introduction to artificial intelligence (AI), its history, types, and everyday applications.
- 3. Practical skills in using desktop operating systems (e.g., Windows), Microsoft Office applications, internet browsing, academic research, and basic computer troubleshooting.
- 4. The ability to operate and analyze AI-based applications on smart devices and apply AI concepts in real-world scenarios.
- 5. Awareness of ethical, legal, and security issues related to digital technology and AI, including digital privacy, discrimination, control, and monitoring.
- 6. Development of critical thinking, digital collaboration, responsible technology use, and proactive problem-solving skills to enhance quality of life and professional practices.

## **Strategy**

• Theoretical Lectures.

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- Discussions.
- Reports

Week	Hours	Intended Learning	Topic / Unit Title	Learning	Assessment
		Outcomes	•	Method	Method
1	1 theoretical	Introduce the concept	Computer Basics –	Lecture +	Written Test
	hour	of computers, their	Role of Computers	Visual	+ In-Class
		evolution, and	<ul> <li>Device Evolution</li> </ul>	Presentation	Activity
		importance in daily life			

2	1 theoretical	Distinguish between	Electronic	Lecture +	Written Test
	hour	data and information; understand components	Computers – Data & Information –	Visual Presentation	+ In-Class Activity
		of the computer	Components		
3	1 theoretical	Distinguish different	Types of	Lecture +	Written Test
	hour	types of computers and	Computers	Visual	+ In-Class
		their uses		Presentation	Activity
4	1 theoretical	Recognize hardware	Computer	Lecture +	Written Test
	hour	and software	Components –	Visual	+ In-Class
		components	Hard <mark>ware –</mark>	Presentation	Activity
			Software		
5	1 theoretical	Understand number	Number Systems –	Lecture +	Written Test
	hour	systems and the	Personal	Visual	+ In-Class
		limitations/advantages	Computers –	Presentation	Activity
		of computers	Advantages		
6	1 theoretical	Understand computer	Computer Security	Lecture +	Written Test
	hour	security and user	<ul><li>Digital Ethics –</li></ul>	Visual	+ In-Class
		privacy	User Privacy	Presentation	Activity
7	1 theoretical	Recognize protection	Protection	Lecture +	Written Test
	ho <mark>ur</mark>	tools and intellectual	Software – Types –	Visual	+ In-Class
		property concepts	Intellectual	Presentation	<b>Activity</b>
		4 6 6 1	Property		
8	1 theoretical	Identify cyberattacks	Hacking – Sources	Lecture +	Written Test
	<mark>ho</mark> ur	and methods of	- Types - Risks	Visual	+ In-Class
		protection		Presentation	Activity
9	1 theoretical	Identify malware and	Spyware and	Lecture +	<mark>W</mark> ritten Test
	<mark>ho</mark> ur	protection methods	Viruses – Damages	Visual	+ In-Class
			<ul><li>Prevention</li></ul>	Presentation	Activity
10	1 theoretical	Apply protection steps	Protection Steps –	Lecture +	<mark>W</mark> ritten Test
	<mark>ho</mark> ur	and understand health	Health Effects	Visual	+ In-Class
		effects of computer use		Presentation	Activity
11	1 theoretical	Understand functions	Operating Systems	Lecture +	<mark>W</mark> ritten Test
	<mark>hou</mark> r	and types of operating	– Functions –	Visual	+ In-Class
		systems	Types	Presentation	Activity
12	1 theoretical	Identify applications of	AI Applications	Lecture +	Written Test
	hour	AI in various fields		Case Study	+
					Presentation
13	1 theoretical	Explain the impact of	AI and Society	Class	Class
	hour	AI on society and		Discussion +	Participation
1.4	113	global relations	ATELL	Video	+ Report
14	1 theoretical	Analyze ethical issues	AI Ethical	Lecture +	Short Essay +
	hour	in AI (privacy, labor	Challenges	Open	Written Test
		market)		Discussion	
15	1 theoretical	Explore future trends	Future of AI	Lecture +	Final Exam +
	hour	and new AI		Modern	Mini Project
		technologies		Examples	

Туре	Grades	Assessment Methods	Grading Scale
Formative	5%	Quizzes	90–100: Excellent 80–<90: Very Good
	5%	Participation	70–<80: Good
	10%	Midterm Theoretical Exam 1	60–<70: Pass 50–<60: Conditional Pass
	10%	Midterm Theoretical Exam 2	<50: Fail
Summative	70%	Final Theoretical Exam	
Total	100%		

Learning and Teaching Resources				
Required Textbooks	<ul> <li>□ Graham Brown, David Watson, Cambridge Information Technology, 3rd Edition (2020)</li> <li>□ Alan Evans, Kendall Martin, Mary Anne Poatsy, Technology In Action Complete, 16th Edition (2020)</li> <li>□ Ahmed Banafa, Introduction to Artificial Intelligence (AI), 1st Edition (2024)</li> <li>□ Curtis Frye &amp; Lamb, Microsoft Office 2019 Step by Step</li> <li>□ Dr. Adel Abdulnoor, Introduction to the World of AI, 5th Edition</li> </ul>			
Main References	☐ Windows 7 ☐ Office 2010			
Recommended Books and Resources	<ul> <li>Computer science reference books</li> <li>Academic reports and journals</li> <li>Electronic references, websites</li> <li>Introduction to Computers and the Internet, 5th Edition</li> <li>Trusted websites and scientific electronic journals</li> </ul>			
Recommended online reference link:	https://www.kutub.info/library			

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