

"التعداد السكاني ... ركيزة التنمية"
(عاجل بالبريد الالكتروني)

الجامعات كافة/السيد رئيس الجامعة المحترم
الجامعات (الكليات) الأهلية كافة/السيد رئيس الجامعة (عميد الكلية) المحترم
م/ مناهج مادة الحاسوب والذكاء الاصطناعي

السلام عليكم ورحمة الله وبركاته..

إلحاقاً بكتابنا ذي العدد (ت م ٣ / ١١٠٠٩ / ٢٠٢٤/١٠/٩)، المتضمن مناهج مادة الحاسوب مشتملاً مفردات مادة الذكاء الاصطناعي للأقسام غير التخصصية ، حصلت الموافقة على اعتماد المناهج الدراسية للأقسام المشار إليها في أعلاه حسب الأنظمة التعليمية (الفصلية والسنوية و عملية بولونيا) بموجب التقويم الجامعي (١٥ أسبوع للنظام الفصلي ونظام بولونيا) و (٣٠ أسبوع للنظام السنوي) والمرفقة طياً والمقررة من قبل لجنة عمداء كليات تكنولوجيا المعلومات بموجب كتابهم ذي العدد (٩٧ في ٢٠٢٤/١٠/١٣) بعد أن تم تضمين ذلك بجداول مفصلة للمواد الدراسية المذكورة آنفاً.

للتفضل باتخاذ اللازم...مع التقدير.

المرفقات

- نسخة من الكتاب المشار إليه في أعلاه مع كافة الأوليات.



أ.م.د. إيهاب ناهي عباس

مدير عام دائرة الدراسات والتخطيط والمتابعة

٢٠٢٤ / ١٢ / ٥

نسخة منه إلى:

- مكتب معالي الوزير/ للتفضل بالاطلاع.. مع التقدير.
- مكتب وكيل الوزارة للشؤون الإدارية/ للتفضل بالاطلاع.. مع التقدير
- مكتب وكيل الوزارة لشؤون البحث العلمي/ إشارة إلى مصادقة سيادته في ٢٠٢٤/١١/٧ للتفضل بالعلم ... مع التقدير.
- مكتب السيد مستشار الوزارة / للتفضل بالاطلاع مع التقدير
- جهاز الإشراف والتقويم العلمي/ للتفضل بالعلم ... مع التقدير.
- هيئة البحث العلمي / للتفضل بالاطلاع مع التقدير
- جامعة الموصل/ عميد كلية الحاسوب والرياضيات / رئيس لجنة عمداء كليات تكنولوجيا المعلومات المحترمة/ إشارة إلى كتابكم أعلاه للتفضل بالاطلاع .. مع التقدير.
- دائرة التعليم الجامعي الأهلي / للتفضل بالاطلاع واتخاذ ما يلزم فيما يخص الجامعات والكليات الأهلية ذات التوأمة ... مع التقدير.
- دائرة الإعلام والاتصال الحكومي / للتفضل بالاطلاع مع التقدير
- مديرية الرقابة والتدقيق الداخلي/ للتفضل بالاطلاع .. مع التقدير
- ديوان الوقف الشيعي / للتفضل بالاطلاع واتخاذ ما يلزم بخصوص الكليات التابعة لديوانكم ووفقاً لمضمون كتابنا ... مع التقدير.
- ديوان الوقف السني / للتفضل بالاطلاع واتخاذ ما يلزم بخصوص الكليات التابعة لديوانكم ووفقاً لمضمون كتابنا ... مع التقدير.
- مكتب السيد المدير العام / للتفضل بالاطلاع ... مع التقدير
- قسم الدراسات والتخطيط/ شعبة المناهج .. مع الأوليات.
- الصادرة

د.غسان / مناهج / ١١/٢٧

الى/ وزارة التعليم العالي والبحث العلمي/ الدراسات والتخطيط والمتابعة/ قسم الدراسات والتخطيط
م/ مادة الذكاء الاصطناعي للأقسام الغير تخصصية

تحية طيبة..

الحاقا بكتابنا المرقم 89 في 2024-9-12 والمعمم بالكتاب الوزاري المرقم ت م 11009/3 في 2024-10-9،
والمتضمن منهاج مادة الحاسوب مشتملا مفردات مادة الذكاء الاصطناعي للأقسام غير التخصصية، ولورود بعض
الاستفسارات الخاصة بألية اعتماد المنهاج المقترح وذلك لاختلاف نظام الدراسة من كلية الى أخرى، نرفق لكم ربطا
المنهاج تفصيلا حسب انظمة الدراسة المتبعة.

للتفضل بالاطلاع.. مع التقدير



أ.د. ضحى بشير عبد الله البزاز
رئيس لجنة عمداء كليات تكنولوجيا المعلومات
جامعة الموصل

عميد كلية علوم الحاسوب والرياضيات

2024/10/13

نسخة منه الى/

- مكتب معالي السيد الوزير المحترم / للتفضل بالاطلاع مع التقدير
- مكتب وكيل الوزير للشؤون العلمية المحترم / للتفضل بالاطلاع مع التقدير
- السيد مقرر لجنة العمداء / مع الاوليات مع التقدير
- الصادرة



deen.ca@uomosul.edu.iq



www.uomosul.edu.iq



Computer Course

Curriculum:

Today, it's impossible to imagine life without computers or other digital devices. Nowadays, knowing how to use a computer is a need. Many of our students take advantage of our college's fundamental computer courses, which educate them on the principles of computers and the Internet's underlying technologies and skills. The course introduces students to the fundamentals of computing, including the use of a variety of different hardware and software components. There is no prerequisite knowledge in either programming or computer science.

Course Objectives:

Students successfully completing this course will be able to:

1. Utilize the computer for fundamental tasks.
2. Identify and discuss the hardware components of the computer system.
3. Creating documents using a word processor and creating presentations.
4. Conducting research on the Internet.
5. An introduction to Artificial Intelligence

Grades:

Passing the class requires a 50% average.

Teaching methods

The course will use the following teaching and learning methods

- Board (Normal or Smart)
- Computers
- Presentation software such as PowerPoint



أولاً: الأقسام التي تتبع مسار بولونيا (3 ECTS) والنظام الفصلي (2 وحدة دراسية)

Computer Course Syllabus: Level I

Week No.	Content	No. of Hours Theoretical	No. of Hours Practical
1.	Introduction to Computer: Concepts of Hardware and Software with their components; Concept of Computing, Data and Information; Connecting input/output devices, and peripherals to CPU.	1	2
2.	Computer Components: Computer Portions, Hardware Parts, I/O Units, Memory Types.	1	2
3.	Computer Components (Cont.): Basic CPU Components, Computer Ports, Personal Computer, Personal Computer (Features and Types)	1	2
4.	Operating System and Graphical User Interface GUI: Operating System; Basics of Common Operating Systems; The User Interface, Using Mouse Techniques.	1	2
5.	Operating System and Graphical User Interface GUI(Cont.): Use of Common Icons, Status Bar, Using Menu and Menu-selection, Concept of Folders and Directories, Opening and closing of different Windows; Creating Short cuts.	1	2
6.	Word Processing: Word Processing Basics; Basic Features of Word Processors, Opening and Closing of documents, Text creation and Manipulation; Formatting Text and Paragraphs, Using Templates for Document Creation.	1	2
7.	Word Processing (Cont.): Creating and Managing Tables, Utilizing Styles and Themes, Spell Check and Grammar Tools, Using Headers and Footers.	1	2
8.	Spread Sheet: Introduction to Spreadsheet Software, Creating and Formatting Worksheets. Sorting and Filtering Data, Using Formulas and Functions.	1	2



9.	Spread Sheet (Cont.): Using Formulas and Functions, Using Pivot Tables for Data Analysis, Data Validation and Error Checking, Data Visualization: Creating Charts and Graphs.	1	2
10.	Presentation Software: Introduction to Presentation Software, Overview of Popular Presentation Tools, creating a New Presentation, Using Templates and Themes, Inserting and Formatting Text and Images, Transition and Animation Effects.	1	2
11.	Presentation Software (Cont.): Using Speaker Notes and Timers, , Advanced Features: Hyperlinks and Action Buttons, Troubleshooting Common Presentation Issues, Future Trends in Presentation Technology.	1	2
12.	Introduction to Internet and Web Browsers: Computer networks Basic; LAN, WAN; Concept of Internet and its Applications; connecting to internet.	1	2
13.	Introduction to Internet and Web Browsers (Cont.): World Wide Web; Web Browsing software's, Search Engines; Understanding URL; Domain name; IP Address.	1	2
14.	Communications and Emails: Basics of electronic mail; Getting an email account; Sending and receiving emails; Accessing sent emails; Using Emails; Document collaboration.	1	2
15.	Introduction to Cloud Computing and Services: Definition of Cloud Computing and its concept, Cloud-Based Office Suites (Office 365 and Google Workspace), Google Docs, Google Sheets, Google Drive, Google Meet.	1	2



Computer Course Syllabus: Level II

Week No.	Content	No. of Hours Theoretical	No. of Hours Practical
1.	Security and Networking: What is a network? Types of networks. Basic network components.	1	2
2.	Security and Networking (Cont.): Network Security Basics. Understanding network threats.	1	2
3.	E-Commerce: Concepts of Electronic banking services this include online banking: ATM and debit card services, Phone banking, SMS banking, electronic alert, Mobile banking	1	2
4.	Computer Troubleshooting: Identifying and solving common hardware and software problems that computer users encounter.	1	2
5.	Computer Troubleshooting (Cont.): Basic troubleshooting techniques and tools for diagnosing and resolving issues.	1	2
6.	Introduction to AI: Definition of AI, History of AI, AI Techniques and Approaches.	1	2
7.	Introduction to AI(Cont.): Key Characteristics of AI, Benefits of AI, Challenges and Ethical considerations.	1	2
8.	The Role of AI in Modern Smartphones: AI-Driven Mobile Technologies, Virtual Assistants (Siri, Google Assistant, Alexa).	1	2
9.	The Role of AI in Modern Smartphones (Cont.): Adaptive Learning, Real-Time Translation Services.	1	2
10.	Applications and Tools of AI: Overview of AI Applications in Various Industries, Education and Healthcare.	1	2
11.	Applications and Tools of AI (Cont.): Transportation, Marketing and Advertising.	1	2
12.	Applications and Tools of AI(Cont.): Finance, Robotics and Automation Technologies.	1	2



13.	AI and Society: How AI affects social, AI and international relations, AI and the future of humanity.	1	2
14.	Ethical Challenges in AI : AI ethics, privacy and surveillance, the impact of AI on the job market.	1	2
15.	The Future of AI: Future trends in AI, recent research and emerging technologies.	1	2

Suggested Books

1. Graham Brown, David Watson, "Cambridge IGCSE Information and Communication Technology", 3rd Edition (2020)
2. Alan Evans, Kendall Martin, Mary Anne Poatsy, "Technology In Action Complete", 16th Edition (2020).
3. Ahmed Banafa, "Introduction to Artificial Intelligence (AI)", 1st Edition (2024).
4. Microsoft Office 2019 Step by Step 1st Edition by Curtis Frye & Joan Lambert
5. الخضر علي الخضر بحاث , " أساسيات الحاسوب " 2016
6. الدكتور عادل عبدالنور , "مدخل إلى عالم الذكاء الاصطناعي " 2005

ثانياً: الأقسام التي تتبع النظام السنوي (2 وحدة دراسية)

ملاحظة: يترك لمدرس المادة إعطاء بعض المحاضرات في المختبرات لإنجاز المتطلبات العملية وحسب الحاجة.

Computer Course Syllabus: First-Year

Week No.	Content	No. of Hours
1.	Introduction to Computer: Concepts of Hardware and Software with their components.	1
2.	Introduction to Computer (Cont.): Concept of Computing, Data and Information; Applications of Information Connecting input/output devices, and peripherals to CPU.	1
3.	Computer Components: Computer Portions, Hardware Parts, I/O Units.	1
4.	Computer Components (Cont.): Memory Types: Volatile and Non-Volatile Memory, Secondary Storage.	1
5.	Computer Components (Cont.): CPU Components: Control Unit (CU), Arithmetic Logic Unit (ALU) and Registers	1
6.	Computer Components (Cont.): Computer Ports, Personal Computer (Features and Types)	1
7.	Operating System and Graphical User Interface GUI: Operating System; Basics of Common Operating Systems; The User Interface, Using Mouse Techniques;	1
8.	Operating System and Graphical User Interface GUI (Cont.): Use of Common Icons, Status Bar, Using Menu and Menu-selection,	1



9.	Operating System and Graphical User Interface GUI (Cont.): Concept of Folders and Directories, Opening and closing of different Windows; Creating Short cuts.	1
10.	Operating System and Graphical User Interface GUI (Cont.): Customization and Personalization of GUIs, Accessibility Features in GUIs, User Experience (UX)	1
11.	Word Processing: Word Processing Basics; Basic Features of Word Processors, Opening and Closing of documents;	1
12.	Word Processing (Cont.): Text creation and Manipulation; Formatting Text and Paragraphs, Using Templates for Document Creation.	1
13.	Word Processing (Cont.): Creating and Managing Tables, Utilizing Styles and Themes.	1
14.	Word Processing (Cont.): Spell Check and Grammar Tools, Using Headers and Footers.	1
15.	Spread Sheet: Introduction to Spreadsheet Software, Creating and Formatting Worksheets.	1
16.	Spread Sheet (Cont.): Sorting and Filtering Data, Using Formulas and Functions.	1
17.	Spread Sheet (Cont.): Using Formulas and Functions, Using Pivot Tables for Data Analysis.	1
18.	Spread Sheet (Cont.): Data Validation and Error Checking, Data Visualization: Creating Charts and Graphs.	1
19.	Presentation Software: Introduction to Presentation Software, Overview of Popular Presentation Tools, Creating a New Presentation.	1
20.	Presentation Software (Cont.): Using Templates and Themes, Inserting and Formatting Text and Images, Transition and Animation Effects	1
21.	Presentation Software (Cont.): Using Speaker Notes and Timers, Advanced Features: Hyperlinks and Action Buttons.	1
22.	Presentation Software (Cont.): Troubleshooting Common Presentation Issues, Future Trends in Presentation Technology.	1



23.	Introduction to Internet and Web Browsers: Computer networks Basic; LAN, WAN.	1
24.	Introduction to Internet and Web Browsers (Cont.): Concept of Internet and its Applications; connecting to internet.	1
25.	Introduction to Internet and Web Browsers (Cont.): World Wide Web; Web Browsing software's, Search Engines.	1
26.	Introduction to Internet and Web Browsers (Cont.): Understanding URL; Domain name; IP Address.	1
27.	Communications and Emails: Basics of electronic mail; Getting an email account; Sending and receiving emails; Accessing sent emails; Using Emails; Document collaboration.	1
28.	Communications and Emails (Cont.): Sending and receiving emails; Accessing sent emails; Using Emails; Document collaboration.	1
29.	Introduction to Cloud Computing and Services: Definition of Cloud Computing and its concept, Cloud-Based Office Suites (Office 365 and Google Workspace).	1
30.	Introduction to Cloud Computing and Services (Cont.): Google Workspace: Google Docs, Google Sheets, Google Drive, Google Meet.	1



Computer Course Syllabus: Second-Year

Week No.	Content	No. of Hours
1.	Security and Networking: What is a network? Types of networks. Basic network components.	1
2.	Security and Networking (Cont.): Basic network components.	1
3.	Security and Networking (Cont.): Network Security Basics. Understanding network threats. Network Troubleshooting	1
4.	Security and Networking (Cont.): Introduction to Network Troubleshooting, Common Network Issues and Symptoms, Network Troubleshooting Tools and Utilities.	1
5.	Security and Networking (Cont.): Using Command-Line Tools for Diagnostics, Identifying and Resolving Connectivity Issues, Diagnosing Network Performance Problems	1
6.	E-Commerce: Concepts of Electronic banking services this include online banking: ATM and debit card services.	1
7.	E-Commerce (Cont.): Phone banking, SMS banking, electronic alert, Mobile banking.	1
8.	Computer Troubleshooting: Introduction to Computer Troubleshooting, Common Hardware Issues and Solutions, Diagnosing Software Problems.	1
9.	Computer Troubleshooting (Cont.): Hardware Components: Diagnosis and Repair, Using Safe Mode for Troubleshooting.	1
10.	Computer Troubleshooting (Cont.): Troubleshooting Operating System Issues, Identifying and Resolving Blue Screen Errors, Dealing with Slow Computer Performance.	1



11.	Computer Troubleshooting (Cont.): Virus and Malware Removal Techniques, Updating Drivers and Software.	1
12.	Introduction to AI: Definition of AI, History of AI, AI Techniques and Approaches.	1
13.	Introduction to AI(Cont.): Key Characteristics of AI, Benefits of AI, Challenges and Ethical considerations.	1
14.	Introduction to AI (Cont.): Challenges and Limitations of AI, The Role of Data in AI Systems.	1
15.	Introduction to AI (Cont.): AI Tools and Frameworks.	1
16.	The Role of AI in Modern Smartphones: AI-Driven Mobile Technologies, Virtual Assistants (Siri, Google Assistant, Alexa).	1
17.	The Role of AI in Modern Smartphones (Cont.): Adaptive Learning, Real-Time Translation Services.	1
18.	The Role of AI in Modern Smartphones (Cont.): The Future of AI in Smartphone Technology, Challenges of Implementing AI in Mobile Devices.	1
19.	Applications and Tools of AI: Overview of AI Applications in Various Industries, Education and Healthcare.	1
20.	Applications and Tools of AI (Cont.): Transportation and Advertising.	1
21.	Applications and Tools of AI (Cont.): Finance, Robotics and Automation Technologies.	1
22.	Applications and Tools of AI(Cont.): AI in Marketing: Targeting and Personalization.	1
23.	Applications and Tools of AI(Cont.): AI in Image and Video Analysis, Smart Cities	1
24.	Applications and Tools of AI (Cont.): Future Trends in AI Applications and Tools.	1
25.	AI and Society: Introduction to AI and Its Societal Impact, The Role of AI in Enhancing Public Safety.	1



26	AI and Society (Cont.): Cultural Perspectives on AI Adoption, AI and Governance: Policy Implications	1
27.	Ethical Challenges in AI: Introduction to Ethics in AI, Transparency and Explainability of AI Systems, Privacy Concerns in AI Data Usage	1
28.	Ethical Challenges in AI (Cont.): The Ethical Implications of Autonomous Systems, Ethics in AI-Driven Marketing and Advertising	1
29.	Ethical Challenges in AI (Cont.): Ethical Considerations in Education, Human Rights and AI Implementation	1
30	The Future of AI: Future trends in AI, recent research and emerging technologies.	1

Suggested Books

- Graham Brown, David Watson, "Cambridge IGCSE Information and Communication Technology", 3rd Edition (2020)
- Alan Evans, Kendall Martin, Mary Anne Poatsy, "Technology In Action Complete", 16th Edition (2020).
- Ahmed Banafa, "Introduction to Artificial Intelligence (AI)", 1st Edition (2024).
- Microsoft Office 2019 Step by Step 1st Edition by Curtis Frye & Joan Lambert
- 2016 "أساسيات الحاسوب" الخضر علي الخضر باحث ,
- 2005 "مدخل إلى عالم الذكاء الاصطناعي" الدكتور عادل عبدالنور ,