وازرة التعليم العالي والبحث العلمي جـــهاز

الإشـــراف والتقـــويم العلـمي

دائرة ضمان الجودة والاعتماد الأكاديمي

استمارة وصف البرنامج الاكاديمي للعام الدراسي ٢٠٢٤_٢٠٢٥ للكليات والمعاهد

الجامعة : جامعة شط العرب الاهلية

الكلية /المعهد : الكلية التقنية الهندسية

القسم العلمي : قسم هندسة تقنيات الأجهزة الطبية

تاريخ ملء الملف : 2025/8/4

التوقيع :

اسم رئيس القسم : د. هناء نبيل حسين

التاريخ : 2025/8/4

التوقيع :

اسم المعاون العلمي: أ.د. كامل حسين السوداني

التاريخ : 4/8/2025

الاستاذ الدكتور
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كيمياء تحليلية

الكلية التقنية الهندسية
اللجنة الامتحانية
هندسة تقنيات الاجهزة الطبية

دقق الملف من قبل

شعبة ضمان الجودة والأداء الجامعي

اسم مدير شعبة ضمان الجودة والأداء الجامعي: التاريخ

/ /

التوقيع

مصادقة السيد العميد

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عميد الكلية التقنية الهندسية

6/3/2023

Computer Applications

MTU1005

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Computer applications**			**Module Delivery**	
Module Type	**Basic**			☒ **Theory** ☐ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**MTU1005**				
ECTS Credits	**3**				
SWL (hr/sem)	**75**				
Module Level	UGII 2		**Semester of Delivery**	3	
Administering Department	MIET		**College**	EETC	
Module Leader			**e-mail**		
Module Leader's Acad. Title			**Module Leader's Qualification**		
Module Tutor			**e-mail**		
Peer Reviewer Name	Ahmed J. Abid		**e-mail**	dr.ahmedjabbar@mtu.edu.iq	
Scientific Committee Approval Date	08/11/2023		**Version Number**	1.0	

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	**Semester**	
Co-requisites module	None	**Semester**	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Aims أهداف المادة الدراسية	The module aims to: 1. To provide an overview of Microsoft Word, Excel, and PowerPoint, and familiarize students with their key features and user interfaces. 2. To develop essential skills in creating, saving, and opening documents in Microsoft Word, including formatting text and paragraphs and working with styles and themes. 3. To explore advanced features in Microsoft Word, such as page layout options, working with headers, footers, and page numbers, and incorporating tables, images, and objects. 4. To introduce spreadsheets and worksheets in Microsoft Excel, and develop students' skills in data entry, manipulation, and basic formulas and functions. 5. To delve into advanced Microsoft Excel features, including working with ranges and cells, sorting and filtering data, and creating charts and graphs. 6. To guide students in creating and editing slides in Microsoft PowerPoint, applying themes and templates, and adding text, images, and multimedia elements. 7. To explore advanced PowerPoint features, such as slide transitions, animations, using SmartArt and shapes, and utilizing presenter tools and slide show options. 8. To teach word processing techniques in Microsoft Word, such as mail merge, document collaboration, creating professional documents, and managing references and citations. 9. To provide advanced data analysis skills in Microsoft Excel, covering advanced formulas and functions, data validation, conditional formatting, and PivotTables. 10. To explore collaboration and sharing features in Microsoft Office, including sharing and co-authoring documents, using comments and track changes, and protecting documents.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Demonstrate a solid understanding of Microsoft Word, Excel, and PowerPoint, including their key features, user interfaces, and common functions. 2. Create, format, and manage documents effectively in Microsoft Word, utilizing styles, themes, page layout options, headers, footers, tables, images, and objects. 3. Utilize Microsoft Excel for data entry, manipulation, basic calculations using formulas and functions, sorting and filtering data, and creating charts and graphs. 4. Develop proficiency in creating and editing slides, applying themes, templates, and multimedia elements, and utilizing advanced features in Microsoft PowerPoint. 5. Employ word processing techniques in Microsoft Word, including mail merge, document collaboration, creating professional documents, and managing references and citations. 6. Apply advanced data analysis skills in Microsoft Excel, including advanced formulas and functions, data validation, conditional formatting, and PivotTables. 7. Collaborate and share documents effectively using Microsoft Office features, such as sharing and co-authoring, comments and track changes, and document protection.

	8. Automate tasks in Word, Excel, and PowerPoint using macros, customizing the ribbon, creating shortcuts, and integrating data between applications for enhanced productivity and efficiency.
Indicative Contents المحتويات الإرشادية	The indicative contents for the Computer Application module may include: 1. Introduction to Microsoft Office Suite: [8 hrs.] 2. Microsoft Word Basics: [8 hrs.] 3. Advanced Microsoft Word Features: [8 hrs.] 4. Microsoft Excel Basics: [8 hrs.] 5. Advanced Microsoft Excel Features: [8 hrs.] 6. Microsoft PowerPoint Basics: [8 hrs.] 7. Advanced Microsoft PowerPoint Features: [8 hrs.] 8. Word Processing Techniques in Microsoft Word: [8 hrs.] 9. Data Analysis in Microsoft Excel: [8 hrs.] 10. Presentation Design in Microsoft PowerPoint: [8 hrs.] 11. Collaboration and sharing in Microsoft Office: [8 hrs.] 12. Automating Tasks in Microsoft Office: [8 hrs.] 13. Integrating Office Applications: [8 hrs.] 14. Advanced Tips and Tricks: [8 hrs.] 15. Final Projects and Review: [8 hrs.]
Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The learning and teaching strategies employed in the applied mathematics module are designed to facilitate active engagement, critical thinking, and practical application of mathematical concepts. The following strategies are commonly used: 1. Lectures: Lectures serve as the primary mode of content delivery, where instructors present key concepts, theories, and techniques. Lectures may include visual aids, examples, and demonstrations to enhance understanding and provide real-world context. 2. Interactive Discussions: Interactive discussions encourage student participation and facilitate deeper understanding of the material. Students are encouraged to ask questions, share their insights, and engage in discussions on specific topics or problem-solving strategies. 3. Problem-solving Sessions: Problem-solving sessions allow students to apply mathematical principles to solve a variety of problems. These sessions may be conducted in groups or individually, allowing students to collaborate, exchange ideas, and develop problem-solving skills. 4. Practical Exercises: Practical exercises involve hands-on application of mathematical concepts through computational tasks, modeling exercises, or simulations. These exercises reinforce theoretical knowledge and help students develop proficiency in using mathematical tools and software. 5. Case Studies and Real-world Applications: Case studies and real-world applications demonstrate the relevance of mathematics in various fields. Students analyze and solve mathematical problems based on real-life scenarios, enabling them to connect theoretical concepts with practical applications. 6. Computer-based Learning: Computer-based learning resources, such as online tutorials, interactive simulations, and mathematical software, are utilized to enhance students' understanding and proficiency in applying mathematical techniques. 7. Group Projects: Group projects promote teamwork, communication, and problem-solving skills. Students work collaboratively on

	mathematical projects or research assignments, allowing them to explore advanced topics or applications of mathematics. 8. Self-directed Learning: Students are encouraged to take responsibility for their learning by engaging in self-directed study. This may involve reading recommended textbooks, exploring additional resources, and practicing problem-solving independently. 9. Assessments: Regular assessments, including quizzes, tests, and assignments, evaluate students' understanding and application of mathematical concepts. These assessments provide feedback and help track progress throughout the module. 10. Tutorial Sessions: Tutorial sessions provide opportunities for students to seek clarification, discuss challenging topics, and receive individualized guidance from instructors or teaching assistants.

Student Workload (SWL)

الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	49	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	3
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	26	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	1
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	75		

Module Evaluation

تقييم المادة الدراسية

		Time/ Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	**Quizzes**	2	10% (10)	5, 10	LO #1, 2, 8 and 9
	Assignments	2	10% (10)	2, 12	LO # 3, 4, 6 and 7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	14	LO # 1-14
Summative assessment	**Midterm Exam**	2 hours	10% (10)	7	LO # 1-7
	Final Exam	4 hours	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري

	Material Covered
Week 1	Introduction to Microsoft Office Suite • Overview of Microsoft Word, Excel, and PowerPoint • Understanding the user interface and common features
Week 2	Microsoft Word Basics • Creating, saving, and opening documents • Formatting text and paragraphs • Working with styles and themes
Week 3	Advanced Microsoft Word Features • Page layout and formatting options • Working with headers, footers, and page numbers • Using tables, images, and other objects
Week 4	Microsoft Excel Basics

	• Introduction to spreadsheets and worksheets • Data entry and manipulation • Formulas and functions
Week 5	Advanced Microsoft Excel Features • Working with ranges and cells • Sorting and filtering data • Creating charts and graphs
Week 6	Microsoft PowerPoint Basics • Creating and editing slides • Applying themes and templates • Adding text, images, and multimedia elements
Week 7	Mid Exam + Advanced Microsoft PowerPoint Features • Slide transitions and animations • Using SmartArt and shapes • Presenter tools and slide show options
Week 8	Word Processing Techniques in Microsoft Word • Mail merge and document collaboration • Creating professional documents (reports, resumes, etc.) • Managing references and citations
Week 9	Data Analysis in Microsoft Excel • Advanced formulas and functions • Data validation and conditional formatting • PivotTables and data visualization
Week 10	Presentation Design in Microsoft PowerPoint • Design principles for effective presentations • Customizing slide layouts and master slides • Adding interactive elements (hyperlinks, buttons, etc.)
Week 11	Collaboration and Sharing in Microsoft Office • Sharing and co-authoring documents • Using comments and track changes • Protecting documents and controlling access
Week 12	Automating Tasks in Microsoft Office • Macros and automation in Word, Excel, and PowerPoint • Customizing the ribbon and creating shortcuts • Using add-ins and productivity tools
Week 13	Integrating Office Applications • Linking data between Word, Excel, and PowerPoint • Embedding objects and creating dynamic content • Importing and exporting data
Week 14	Advanced Tips and Tricks • Time-saving techniques and shortcuts • Troubleshooting common issues • Customizing settings and options
Week 15	Final Projects and Review • Students work on individual or group projects using Word, Excel, and PowerPoint • Review of key concepts and features covered throughout the course
Week 16	Preparatory week before the final Exam.

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
Week	**Material Covered**
Week 1	• Introduction to Lab Environment and Office Suite - Lab setup and software installation. Overview of Microsoft Office Suite tools and features.
Week 2	• Microsoft Word Lab - Creating, editing, and formatting documents. Inserting and formatting images and tables.
Week 3	• Microsoft Excel Lab - Creating spreadsheets and entering data. Formulas and functions for calculations.
Week 4	• Microsoft PowerPoint Lab - Creating, editing, and designing slides. Adding multimedia elements and animations.
Week 5	• Word Processing Techniques Lab - Mail merge and document collaboration exercises. Creating professional documents with advanced formatting.
Week 6	• Data Analysis Lab with Excel - Advanced formula and function exercises. Sorting, filtering, and analyzing data.
Week 7	• Presentation Design Lab with PowerPoint - Applying design principles to create visually appealing slides. Adding interactive elements and customizing slide layouts.
Week 8	• Collaboration and Sharing Lab - Collaborative document editing and reviewing. Sharing and protecting documents with permissions.
Week 9	• Automation and Customization Lab - Recording and running macros for repetitive tasks. Customizing the ribbon and creating shortcuts.
Week 10	• Integrating Office Applications Lab - Linking and embedding data between Word, Excel, and PowerPoint. Importing and exporting data between applications.
Week 11	• Advanced Tips and Tricks Lab - Exploring time-saving techniques and productivity hacks. Troubleshooting common issues and errors.
Week 12-15	• Project-based Labs - Students work on individual or group projects that integrate Word, Excel, and PowerPoint skills. Projects can involve tasks such as creating a professional report, analyzing data, or designing an interactive presentation.

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	M. E. Vermaat, S. M. Freund, C. Hoisington, and E. Schmieder, "Microsoft Office 365 & Office 2019: Introductory," Boston, MA: Cengage Learning, 2020.	Yes
Recommended Texts	Triad Interactive, Inc., "Microsoft Office 2019: A Skills Approach," Boston, MA: Cengage Learning, 2019.	Yes
Websites	The Collage E-Library	

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.