وزارة التعليم العالي والبحث العلمي
جهاز الإشراف والتقويم العلمي
دائرة ضمان الجودة والاعتماد الأكاديمي
قسم الاعتماد

دليل وصف البرنامج الأكاديمي والمقرر

٢٠٢٤

المقدمة:

يُعد البرنامج التعليمي بمثابة حزمة منسقة ومنظمة من المقررات الدراسية التي تشتمل على إجراءات وخبرات تنظم بشكل مفردات دراسية الغرض الأساس منها بناء وصقل مهارات الخريجين مما يجعلهم مؤهلين لتلبية متطلبات سوق العمل يتم مراجعته وتقييمه سنوياً عبر إجراءات وبرامج التدقيق الداخلي أو الخارجي مثل برنامج الممتحن الخارجي.

يقدم وصف البرنامج الأكاديمي ملخص موجز للسمات الرئيسة للبرنامج ومقرراته مبيناً المهارات التي يتم العمل على اكسابها للطلبة مبنية على وفق اهداف البرنامج الأكاديمي وتتجلى أهمية هذا الوصف لكونه يمثل الحجر الأساس في الحصول على الاعتماد البرامجي ويشترك في كتابته الملاكات التدريسية بإشراف اللجان العلمية في الأقسام العلمية.

ويتضمن هذا الدليل بنسخته الثانية وصفاً للبرنامج الأكاديمي بعد تحديث مفردات وفقرات الدليل السابق في ضوء مستجدات وتطورات النظام التعليمي في العراق والذي تضمن وصف البرنامج الأكاديمي بشكلها التقليدي نظام (سنوي، فصلي) فضلاً عن اعتماد وصف البرنامج الأكاديمي المعمم بموجب كتاب دائرة الدراسات ت م٢٩٠٦/٣ في ٢٠٢٣/٥/٣ فيما يخص البرامج التي تعتمد مسار بولونيا أساساً لعملها.

وفي هذا المجال لا يسعنا إلا أن نؤكد على أهمية كتابة وصف البرامج الاكاديمية والمقررات الدراسية لضمان حسن سير العملية التعليمية.

مفاهيم ومصطلحات:

وصف البرنامج الأكاديمي: يوفر وصف البرنامج الأكاديمي ايجازاً مقتضباً لرؤيته ورسالته وأهدافه متضمناً وصفاً دقيقاً لمخرجات التعلم المستهدفة على وفق استراتيجيات تعلم محددة.

وصف المقرر: يوفر إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ويكون مشتق من وصف البرنامج.

رؤية البرنامج: صورة طموحة لمستقبل البرنامج الأكاديمي ليكون برنامجاً متطوراً وملهماً ومحفزاً وواقعياً وقابلاً للتطبيق.

رسالة البرنامج: توضح الأهداف والأنشطة اللازمة لتحقيقها بشكل موجز كما يحدد مسارات تطور البرنامج واتجاهاته.

اهداف البرنامج: هي عبارات تصف ما ينوي البرنامج الأكاديمي تحقيقه خلال فترة زمنية محددة وتكون قابلة للقياس والملاحظة.

هيكلية المنهج: كافة المقررات الدراسية / المواد الدراسية التي يتضمنها البرنامج الأكاديمي على وفق نظام التعلم المعتمد (فصلي، سنوي، مسار بولونيا) سواء كانت متطلب (وزارة، جامعة، كلية وقسم علمي) مع عدد الوحدات الدراسية.

مخرجات التعلم: مجموعة متوافقة من المعارف والمهارات والقيم التي اكتسبها الطالب بعد انتهاء البرنامج الأكاديمي بنجاح ويجب أن يُحدد مخرجات التعلم لكل مقرر بالشكل الذي يحقق اهداف البرنامج.

استراتيجيات التعليم والتعلم: بأنها الاستراتيجيات المستخدمة من قبل عضو هيئة التدريس لتطوير تعليم وتعلم الطالب وهي خطط يتم إتباعها للوصول إلى أهداف التعلم. أي تصف جميع الأنشطة الصفية واللاصفية لتحقيق نتائج التعلم للبرنامج.

نموذج وصف البرنامج الأكاديمي

اسم الجامعة: جامعة ..كلية الامام الاعظم الجامعة

الكلية/ المعهد: كلية .كلية الامام الاعظم الجامعة

القسم العلمي: قسم ...علوم الحاسبات.

اسم البرنامج الأكاديمي او المهني: بكالوريوس علوم حاسبات

اسم الشهادة النهائية: بكالوريوس في ...علوم الحاسبات

النظام الدراسي: وحدات

تاريخ اعداد الوصف: 2024/2025

تاريخ ملء الملف: 5/9/2024

التوقيع : *Zahraa Adnan*	**التوقيع :**
اسم رئيس القسم: أ.م.د زهراء عدنان عبدالكريم	**اسم المعاون العلمي:** أ.د مكي وليد عبدالكريم
التاريخ : 5/9/2024	**التاريخ :**

دقــق الملف من قبل

شعبة ضمان الجودة والأداء الجامعي

اسم مدير شعبة ضمان الجودة والأداء الجامعي:

التاريخ

التوقيع

مصادقة السيد العميد

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

<table>
<tr><td colspan="5" align="center">Module Information
معلومات المادة الدراسية</td></tr>
<tr><td>Module Title</td><td colspan="2" align="center"><strong style="color:red">Arabic Language</td><td colspan="2">Module Delivery</td></tr>
<tr><td>Module Type</td><td colspan="2" align="center">Supportive</td><td colspan="2" rowspan="4">☒ Theory
☒ Lecture
☐ Lab
☒ Tutorial
☐ Practical
☐ Seminar</td></tr>
<tr><td>Module Code</td><td colspan="2" align="center">IMA-١٠٢</td></tr>
<tr><td>ECTS Credits</td><td colspan="2"></td></tr>
<tr><td>SWL (hr/sem)</td><td colspan="2" align="center"><strong style="color:red">(١- ١٦)</td></tr>
<tr><td>Module Level</td><td>١</td><td colspan="2">Semester of Delivery</td><td>١</td></tr>
<tr><td>Administering Department</td><td></td><td colspan="2">College</td><td></td></tr>
<tr><td>Module Leader</td><td>م.م. محمد حميد محمد</td><td colspan="2">e-mail</td><td><u>m.alsomaidy@imamaladham.edu.iq</u></td></tr>
<tr><td>Module Leader's Acad. Title</td><td>Assistant Teacher</td><td colspan="2">Module Leader's Qualification</td><td>Masters</td></tr>
<tr><td>Module Tutor</td><td></td><td colspan="2">e-mail</td><td></td></tr>
<tr><td>Peer Reviewer Name</td><td></td><td colspan="2">e-mail</td><td></td></tr>
<tr><td>Scientific Committee Approval Date</td><td></td><td colspan="2">Version Number</td><td></td></tr>
</table>

<table>
<tr><td colspan="3" align="center">Relation with other Modules
العلاقة مع المواد الدراسية الأخرى</td></tr>
<tr><td>Prerequisite module</td><td>None</td><td>Semester</td><td></td></tr>
<tr><td>Co-requisites module</td><td>IMA-٢٠٢</td><td>Semester</td><td>٣</td></tr>
</table>

Module Aims, Learning Outcomes and Indicative Contents	
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	١. الحفاظ على سلامة اللغة العربية وتقوية القدرة اللغوية لدى الطلاب واكسابهم مهارة التعبير الصحيح . ٢. تمكين الطلاب من مهارات اللغة العربية. ٣. تقوية ملكة الطلاب الأدبية لتذوق أساليب اللغة وإدراك مواطن الجمال فيها ٤. تنمية قدرات الطلاب ومهاراتهم الخطية والإملائية بحيث يستطيعون الكتابة الصحيحة مع ضرورة استعمال علامات الترقيم . ٥. تدريب الطلاب على استخدام القواعد النحوية والصرفية أثناء القراءة والكتابة والتعبير . ٦. تنمية الثروة اللغوية للطلاب وتزويدهم بكثير من الألفاظ والتراكيب بفضل ما يعرض عليهم من أمثلة وأساليب .
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	• تمكين الطالب من القراءة الصحيحة وان يكتسب القدرة على استعمال اللغة استعمالاً صحيحاً. • اعتياد التكلم باللغة العربية يؤثر على العقل والخلق والدين. • تطوير مهارات الطلاب في الاستماع والقراءة والتعبير.
Indicative Contents المحتويات الإرشادية	١. التوضيح من خلال الرسوم. ٢. التوضيح من خلال البوربوينت ٣. التوضيح من خلال حل التمارين ٤. التوضيح من خلال مشاركة الطلبة.

Learning and Teaching Strategies	
استراتيجيات التعلم والتعليم	
Strategies	الاستراتيجية الرئيسية التي سيتم اعتمادها في تقديم هذه الوحدة هي تشجيع مشاركة الطلاب في التمارين، وفي الوقت نفسه تحسين وتوسيع مهارات التفكير لديهم وسيتم تحقيق ذلك من خلال الفصل الدراسي والبرامج التعليمية التفاعلية ومن خلال النظر في أنواع التجارب البسيطة التي تتضمن بعض الأنشطة التي تهم الطلاب من خلال السؤال والمناقشة والحوار مع التطبيق.

Student Workload (SWL)			
الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل		**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل		**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل			

Module Evaluation

تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	**Quizzes**	٢	١٠٪ (١٠)	٥ and ١٠	LO #١, #٢ and #١٠, #١١
	Assignments	٢	١٠٪ (١٠)	٢ and ١٢	LO #٣, #٤ and #٦, #٧
	Projects / Lab.				
	Homework	١	١٠٪ (١٠)	Continuous	All
	Report	١	١٠٪ (١٠)	١٣	LO #٥, #٨ and #١٠
Summative assessment	**Midterm Exam**	٢hr	١٠٪ (١٠)	٧	LO #١ - #٧
	Final Exam	٣hr	٥٠٪ (٥٠)	١٦	All
Total assessment			١٠٠٪ (١٠٠ Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week ١	• قواعد كتابة الهمزة العربية
Week ٢	• الفصل بين الضاد والظاء
Week ٣	• علامات الترقيم والتنقيط
Week ٤	• الكلام وما يتألف منه
Week ٥	• المعرب والمبني
Week ٦	• العلامات الإعرابية الأصلية والفرعية
Week ٧	• علامات الاسم والفعل والحرف
Week ٨	• امتحان نصف الفصل
Week ٩	• الأسماء الخمسة
Week ١٠	• المثنى والملحق به
Week ١١	• جمع المذكر السالم والملحق به
Week ١٢	• جمع المؤنث السالم والملحق به
Week ١٣	• جمع التكسير
Week ١٤	• النكرة والمعرفة
Week ١٥	• العلم – أسماء الإشارة - الأسماء الموصولة

Week ١٦	• إمتحان نهاية الكورس

Delivery Plan (Weekly Lab. Syllabus)
المنهاج الاسبوعي للمختبر

	Material Covered
Week ١	
Week ٢	
Week ٣	
Week ٤	
Week ٥	
Week ٦	
Week ٧	
Week ٨	
Week ٩	
Week ١٠	
Week ١١	
Week ١٢	
Week ١٣	
Week ١٤	
Week ١٥	

Learning and Teaching Resources		
مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	١. شرح ابن عقيل على ألفية ابن مالك / ابن عقيل، عبد الله بن عبد الرحمن العقيلي الهمداني المصري (ت: ٧٦٩هـ)، **تحقيق:** محمد محيي الدين عبد الحميد، دار التراث ـ القاهرة، دار مصر للطباعة، سعيد جودة السحار وشركاه، ط٢٠، ١٤٠٠ هـ ـ ١٩٨٠م.	yes

	٢. القواعد الأساسية للغة العربية / للسيد أحمد الهاشمي , قدم له وضبط نصه الدكتور محمد التونجي , مؤسسة المعارف للطباعة والنشر – بيروت , ط٤ ١٤٣٣هـ٢٠١٢م .	
Recommended Texts		
Websites		

Grading Scheme مخطط الدرجات				
Group	**Grade**	التقدير	**Marks %**	**Definition**
Success Group (٥٠ - ١٠٠)	**A - Excellent**	امتياز	٩٠ - ١٠٠	Outstanding Performance
	B - Very Good	جيد جدا	٨٠ - ٨٩	Above average with some errors
	C - Good	جيد	٧٠ - ٧٩	Sound work with notable errors
	D - Satisfactory	متوسط	٦٠ - ٦٩	Fair but with major shortcomings
	E - Sufficient	مقبول	٥٠ - ٥٩	Work meets minimum criteria
Fail Group (٠ – ٤٩)	**FX – Fail**	راسب (قيد المعالجة)	(٤٥-٤٩)	More work required but credit awarded
	F – Fail	راسب	(٠-٤٤)	Considerable amount of work required

Note: Marks Decimal places above or below ٠,٥ will be rounded to the higher or lower full mark (for example a mark of ٥٤,٥ will be rounded to ٥٥, whereas a mark of ٥٤,٤ will be rounded to ٥٤. 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.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

<table>
<tr><td colspan="4" align="center">Module Information
معلومات المادة الدراسية</td></tr>
<tr><td>Module Title</td><td colspan="2" align="center">Computer Skill (I)</td><td>Module Delivery</td></tr>
<tr><td>Module Type</td><td colspan="2" align="center">Core</td><td rowspan="4">☒ Theory
☒ Lecture
☒ Lab
☐ Tutorial
☐ Practical
☐ Seminar</td></tr>
<tr><td>Module Code</td><td colspan="2" align="center">COM-١١٣</td></tr>
<tr><td>ECTS Credits</td><td colspan="2"></td></tr>
<tr><td>SWL (hr/sem)</td><td colspan="2"></td></tr>
<tr><td>Module Level</td><td>١</td><td>Semester of Delivery</td><td>١</td></tr>
<tr><td>Administering Department</td><td></td><td>College</td><td></td></tr>
<tr><td>Module Leader</td><td colspan="2" align="center">أ.م. معن نواف عبود
م.تيسير كرم داود</td><td>e-mail maan.alani@imamaladham.edu.iq
tayseer.alshekly@imamaladham.edu.iq</td></tr>
<tr><td>Module Leader's Acad. Title</td><td colspan="2">Assistant Professor
Teacher</td><td>Module Leader's Qualification Masters</td></tr>
<tr><td>Module Tutor</td><td></td><td>e-mail</td><td></td></tr>
<tr><td>Peer Reviewer Name</td><td></td><td>e-mail</td><td></td></tr>
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<tr><td>Prerequisite module</td><td>None</td><td>Semester</td></tr>
<tr><td>Co-requisites module</td><td>Computer Skill (II)</td><td>Semester ٢</td></tr>
</table>

	Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	Students will explore and become more familiar with: ١. The concepts of Information & Communication Technology (ICT) and its applications. ٢. The operating systems such as Windows and application software such as Word and Electronic Spreadsheets. ٣. The continuous exchange of data between any two parts of the world. ٤. Data visualization using different tools and applications. ٥. The general programming concepts and related problem-solving strategies.	
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Upon the completion of the course, students will be able to: ١. The students will have the knowledge to understand the peripheral devices, computer system and the different types of software and skills for managing visual elements, document sources, developing project reports, assignments etc. Which are mandatory at this level of academics. ٢. The students will have the knowledge and skills to create presentations that include academic project presentations, seminars, professional-grade presentations, employee training manuals, instructional materials, and kiosk slideshows. ٣. The students will have the knowledge of the importance of data analysis as a part of strategic growth, allowing students to forecast trends and required actions. ٤. Students will have the knowledge of working independently as well as with a group to deliver effective and well- documented software solutions to all problems. ٥. Students can apply skills by working and completing software-related activities such as MS Word, MS Excel, MS PowerPoint ٦. Mastering the skills taught throughout the course will improve the productivity and the way students are conducting and presenting their work. This course provides students with the basic knowledge and skills that allow them to use different kinds of computer applications.	
Indicative Contents المحتويات الإرشادية	١. Indicative content includes the following. ٢. Introduction To Course ٣. computing Basics and Text Processing Essentials ٤. Presentation Graphics Essentials ٥. Advanced Computing Technologies ٦. Self-Learning(Elective) ٧. Others (Exam, PCA)	

Learning and Teaching Strategies
استراتيجيات التعلم والتعليم

Strategies	The class will "meet" the equivalent of two one-hour & fifteen minutes for lecture/discussion each week. Students must have access to the Internet to facilitate demonstrating and using software. Many of the assignments should stress hands-on applications by the students. Each student will be expected to participate in all lectures. Class participation by all is expected.

Student Workload (SWL)
الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل		Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل		Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل			

Module Evaluation
تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	٢	١٠٪ (١٠)	٥ and ١٠	LO #١, #٢ and #١٠, #١١
	Assignments	٢	١٠٪ (١٠)	٢ and ١٢	LO #٣, #٤ and #٦, #٧
	Projects / **Lab.**	١	١٠٪ (١٠)	Continuous	All
	Report	١	١٠٪ (١٠)	١٣	LO #٥, #٨ and #١٠
Summative assessment	Midterm Exam	٢hr	١٠٪ (١٠)	٧	LO #١ - #٧
	Final Exam	٣hr	٥٠٪ (٥٠)	١٦	All
Total assessment			١٠٠٪ (١٠٠ Marks)		

Delivery Plan (Weekly Syllabus)
المنهاج الاسبوعي النظري

	Material Covered
Week ١	Introduction
Week ٢	Components of Computer System
Week ٣	Concept of Hardware and Software
Week ٤	Concept of computing, data and information
Week ٥	Connecting keyboard, mouse, monitor and printer to CPU
Week ٦	Preparatory week before the final Exam
Week ٧	Basics of Operating System
Week ٨	mid exam
Week ٩	Basics of popular operating system (WINDOWS)
Week ١٠	Operating System Simple Setting
Week ١١	File and Directory Management
Week ١٢	Basic of Computer Networks
Week ١٣	Popular Web Browsing Software's
Week ١٤	Basics of E-mail
Week ١٥	Final exam

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week ١	Knowing computer
Week ٢	Operating Computer using GUI Based Operating System
Week ٣	network and Operating Computer using GUI Based Operating System
Week ٤	Managing files and folders
Week ٥	Basic networking
Week ٦	Using Word processors, spreadsheets
Week ٧	Exam
Week ٨	Creating simple databases
Week ٩	Online safety and computer security
Week ١٠	Creating simple presentations using PowerPoint
Week ١١	Using social media and email communications
Week ١٢	Image editing
Week ١٣	Simple computer programming concepts

Week ١٤	Basic concept of E-mail
Week ١٥	Final exam

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	Computer Skills and Computer Organization and Information Technology	no
Recommended Texts		
Websites		

Grading Scheme
مخطط الدرجات

Group	Grade	التقدير	Marks %	Definition
Success Group (٥٠ - ١٠٠)	**A** - Excellent	امتياز	٩٠ - ١٠٠	Outstanding Performance
	B - Very Good	جيد جدا	٨٠ - ٨٩	Above average with some errors
	C - Good	جيد	٧٠ - ٧٩	Sound work with notable errors
	D - Satisfactory	متوسط	٦٠ - ٦٩	Fair but with major shortcomings
	E - Sufficient	مقبول	٥٠ - ٥٩	Work meets minimum criteria
Fail Group (٠ – ٤٩)	**FX** – Fail	راسب (قيد المعالجة)	(٤٥-٤٩)	More work required but credit awarded
	F – Fail	راسب	(٠-٤٤)	Considerable amount of work required

Note: Marks Decimal places above or below ٠,٥ will be rounded to the higher or lower full mark (for example a mark of ٥٤,٥ will be rounded to ٥٥, whereas a mark of ٥٤,٤ will be rounded to ٥٤. 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.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

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<tr><td colspan="5" align="center">Module Information
معلومات المادة الدراسية</td></tr>
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☐ Lab
☐ Tutorial
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<tr>
<td>Module Leader</td>
<td>أ.م.مصطفى محمد عكاوي</td>
<td>e-mail</td>
<td colspan="2">mostafaakawi@imamaladham.edu.iq</td>
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العلاقة مع المواد الدراسية الأخرى</td></tr>
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Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	١. Evaluate limits (as part of Departmental Objectives in Mathematics ٢. Prove basic theorems using limits of the difference equation ٣. Differentiate algebraic and trigonometric functions using key ٤. Find the tangent line to a given graph at a given point
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Upon successful completion of this course, students will: ١. Solve tangent and area problems using the concepts of limits, derivatives, and integrals. ٢. Draw graphs of algebraic and transcendental functions considering limits, continuity, and differentiability at a point. ٣. Determine whether a function is continuous and/or differentiable at a point using limits. ٤. Use differentiation rules to differentiate algebraic and transcendental functions.
Indicative Contents المحتويات الإرشادية	١. Limits and Continuity Limit of a function, evaluation of limits, continuity. ٢. Differentiation ٣. Derivative of a function, rules of differentiation, higher derivatives.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Develop an effective and time-efficient **homework/study strategy** for, not only your calculus class, but other classes as well. This will help you become a more confident, successful, and well-rounded student. It will lead to a healthier balance between work time and leisure time. Spend at least **two to four hours** on each homework assignment. This affords you extra time to work on challenging homework problems and helps you organize your thoughts, questions, and ideas. The more time you spend on homework, the more likely you are to articulate clear, concise questions to your classmates and teachers. The more time you spend on homework, the less time you will spend on frantic, last-minute preparation for exams. Definitions, formulas, and theorems that are introduced in class or needed to complete homework assignments should be **memorized immediately** . Postponing this until it's needed for the exam will impede your work speed on homework assignments and interfere with clearer and deeper understanding of calculus. Spend time working on calculus **every day** . Doing some calculus every day makes you more familiar with concepts, definitions, and theorems. This familiarity will make calculus get easier and easier one day at a time. Find at least **one or two other students** from your calculus class with whom you can regularly do homework and prepare for exams. Your classmates are perhaps the least used and arguably your best resource. An efficient and effective study group will streamline homework and study time, reduce the need for attendance at office hours,

and greatly improve your written and spoken communication. The best time to use your classmates as study/homework partners is after you have made an honest effort on your own to solve the problems using your own wits, knowledge, and experience. When you encounter an unsolvable problem, don't give up too soon on it. Being stumped is an opportunity for mathematical growth and insight, even if you never solve the problem on your own. If you seek help prematurely, you will never know if you could have solved a tough problem without outside assistance.

Begin preparing/outlining for exams at least **five class days** before the exam. Outlining the topics, definitions, theorems, equations, etc. that you need to know for the exam will help you focus on those areas where you are least prepared. Preparing early for the exam will build your self-confidence and reduce anxiety on the day of the exam. It's also an insurance policy against time lost to illness, unexpected family visits, and last-minute assignments in other classes. Generally speaking, pulling all-nighters and doing last-minute cramming for exams is a recipe for eventual academic disaster.

Prepare for exams by working on **new problems** . Good sources for these problems are unassigned problems from your textbook, review exercises and practice exams at the end of each chapter, old hour exams, or old final exams. Studying exclusively from those problems which you have already been assigned and worked on may not be effective exam preparation. Problems for each topic are generally in the same section of the book, so knowing how to do a problem because you know what section of the book it is in could give you a false sense of security. Working on new randomly mixed problems more closely simulates an exam situation, and requires that you both categorize the problem and then solve it.

Use **all** resources of assistance and information which are available to you. These include classnotes, homework solutions, office hours with your professor or teaching assistants, and problem sessions with your classmates. Do not rely exclusively on just one or two of these resources. Using all of them will help you develop a broader, more natural base of knowledge and understanding.

Expect your exams to be **challenging** . If they are challenging, you will be prepared. If they are not challenging, you can expect to have an easy time getting a very high score !

Student Workload (SWL)			
الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem)		**Structured SWL (h/w)**	
الحمل الدراسي المنتظم للطالب خلال الفصل		الحمل الدراسي المنتظم للطالب أسبوعيا	
Unstructured SWL (h/sem)		**Unstructured SWL (h/w)**	
الحمل الدراسي غير المنتظم للطالب خلال الفصل		الحمل الدراسي غير المنتظم للطالب أسبوعيا	
Total SWL (h/sem)			
الحمل الدراسي الكلي للطالب خلال الفصل			

Module Evaluation

تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	٢	١٠٪ (١٠)	٥ and ١٠	LO #١, #٢ and #١٠, #١١
	Assignments	٢	١٠٪ (١٠)	٢ and ١٢	LO #٣, #٤ and #٦, #٧
	Projects / Lab.	١	١٠٪ (١٠)	Continuous	All
	Report	١	١٠٪ (١٠)	١٣	LO #٥, #٨ and #١٠
Summative assessment	Midterm Exam	٢hr	١٠٪ (١٠)	٧	LO #١ - #٧
	Final Exam	٣hr	٥٠٪ (٥٠)	١٦	All
Total assessment			١٠٠٪ (١٠٠ Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week ١	Abbreviations and Notations
Week ٢	Some trigonometric, Slope, Graph and function
Week ٣	Limits: The Idea of Limits. Definitions of Limits. Techniques for Computing Limits.
Week ٤	Limits and Continuity: Infinite Limits. Limits at Infinity. Continuity. Precise Definitions of Limits
Week ٥	Differentiation: Introducing the Derivative. The Derivative as a Function. Rules of Differentiation
Week ٦	Differentiation: The Product and Quotient Rules. Derivatives of Trigonometric Functions. Derivatives as Rates of Change.
Week ٧	Differentiation: The Chain Rule,
Week ٨	Differentiation Implicit Differentiation
Week ٩	Differentiation: The Chain Rule, Implicit DifferentiationPart١
Week ١٠	Differentiation: The Chain Rule, Implicit DifferentiationPart٢
Week ١١	Differentiation: Derivatives of Inverse Trigonometric Functions. Related Rates. Part١
Week ١٢	Differentiation: Derivatives of Inverse Trigonometric Functions. Related Rates. Part٢
Week ١٣	Applications of Derivatives: Maxima and Minima. Mean Value Theorem. What Derivatives Tell Us part ١
Week ١٤	Applications of Derivatives: Maxima and Minima. Mean Value Theorem. What Derivatives Tell Us part ٢
Week ١٥	Review

Week ١٦	Preparatory week before the final Exam

Delivery Plan (Weekly Lab. Syllabus)
المنهاج الاسبوعي للمختبر

	Material Covered
Week ١	
Week ٢	
Week ٣	
Week ٤	
Week ٥	
Week ٦	
Week ٧	
Week ٨	
Week ٩	
Week ١٠	
Week ١١	
Week ١٢	
Week ١٣	
Week ١٤	
Week ١٥	

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	Edwards, C.H. and Penney, D.E. Elementary Differential Equations. Prentice-Hall. (latest ed.).	Yes
Recommended Texts	Thomas, G. and Finney, R. Calculus and Analytic Geometry. Addison-Wesley. (latest ed.).	Yes

	Adams, R. Single Variable Calculus. Pearson Education. (latest ed.).	
Websites		

Group	Grade	التقدير	Marks %	Definition
Grading Scheme مخطط الدرجات				
Group	**Grade**	**التقدير**	**Marks %**	**Definition**
Success Group **(٥٠ - ١٠٠)**	**A - Excellent**	امتياز	٩٠ - ١٠٠	Outstanding Performance
	B - Very Good	جيد جدا	٨٠ - ٨٩	Above average with some errors
	C - Good	جيد	٧٠ - ٧٩	Sound work with notable errors
	D - Satisfactory	متوسط	٦٠ - ٦٩	Fair but with major shortcomings
	E - Sufficient	مقبول	٥٠ - ٥٩	Work meets minimum criteria
Fail Group **(٠ – ٤٩)**	**FX – Fail**	راسب (قيد المعالجة)	(٤٥-٤٩)	More work required but credit awarded
	F – Fail	راسب	(٠-٤٤)	Considerable amount of work required

Note: Marks Decimal places above or below ٠٫٥ will be rounded to the higher or lower full mark (for example a mark of ٥٤٫٥ will be rounded to ٥٥, whereas a mark of ٥٤٫٤ will be rounded to ٥٤. 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.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية				
Module Title	**Digital Logic**		**Module Delivery**	
Module Type	**Core**		☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**COM-١١٤**			
ECTS Credits	**٥**			
SWL (hr/sem)	**١٢٥**			
Module Level	١		**Semester of Delivery**	١
Administering Department		**College**	Alimam Aladham university college	
Module Leader	م. د. همام خالد ياسين	**e-mail**	humam.khalid@imamaladham.edu.iq	
Module Leader's Acad. Title	Lecturer	**Module Leader's Qualification**	Ph.D	
Module Tutor	Humam Khalid Yaseen	**e-mail**	humam.khalid@imamaladham.edu.iq	
Peer Reviewer Name	Humam Khalid Yaseen	**e-mail**	humam.khalid@imamaladham.edu.iq	
Scientific Committee Approval Date		**Version Number**		

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	**Semester**	١
Co-requisites module	None	**Semester**	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	This course aims to enable the student to know the design of combinational circuits such as Adder – subtractor circuits, Comparators, Decoder and Encoder, Multiplexer and Demultiplexer circuits, analysis and design of sequential circuits such as flip-flop circuits, Resistors and counters.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	١. Ability to design Adder and Subtractor circuits. ٢. Knowledge of designing encoder and decoder circuits and use it to design other circuits. ٣. Knowledge the Comparator, Multiplexer, Demultiplexer and places of use ٤. Learn how to design an asynchronous and synchronous counters
Indicative Contents المحتويات الإرشادية	١. **Introduction to Digital Logic:** • Basics of digital systems and their importance in modern technology. • Number systems (binary, hexadecimal) and conversions. ٢. **Boolean Algebra:** • Boolean operators (AND, OR, NOT, XOR, NAND, NOR). • Laws and theorems of Boolean algebra. • Simplification of Boolean expressions. ٣. **Combinational Logic:** • Design and analysis of combinational logic circuits. • Multiplexers, decoders, encoders. • Adders and subtractors. • Arithmetic logic units (ALU). ٤. **Project Work:** • Hands-on projects that involve designing and building digital circuits

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	١. **Start with Fundamentals:** Begin by introducing the fundamental concepts of digital logic, such as binary numbers and Boolean algebra. Ensure that students have a strong foundation in these basics before moving on to more complex topics. ٢. **Interactive Lectures:** Use engaging and interactive lectures that involve real-life examples and practical applications of logic design. Encourage student participation and questions

Hands-on Labs: Provide opportunities for students to work with actual logic gates and circuits in a laboratory setting. Hands-on experience is invaluable in understanding how digital logic works

Group Work: Encourage collaborative group projects where students work together to design and test digital circuits. Group work can stimulate discussion and problem-solving.

<u>Learning strategy:-</u>

1. **Active Learning:** Engage actively with the subject matter. Solve problems, design circuits, and practice Boolean algebra.
2. **Regular Practice:** Regularly practice solving logic problems, simplifying Boolean expressions, and designing circuits to reinforce learning.
3. **Self-Assessment:** Use self-assessment tools like quizzes, practice exams, and online resources to gauge your understanding and identify areas that need improvement.
4. **Collaboration:** Collaborate with peers through study groups or project teams. Explaining concepts to others can solidify your own understanding.
5. **Ask Questions:** Don't hesitate to ask questions during lectures or seek clarification from your instructor or peers. Logic design can be challenging, and asking questions is a vital learning strategy.
6. **Work on Projects:** If your course includes practical projects, take them seriously. Applying what you've learned to real-world projects can deepen your understanding.

Student Workload (SWL)			
الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	٢	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	١
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	٤٦	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	٤
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	١٢٥		

Module Evaluation				
تقييم المادة الدراسية				
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	٢	١٠٪ (١٠)	٥ and ١٠	LO #١, #٢ and #١٠, #١١
	Assignments	٢	١٠٪ (١٠)	٢ and ١٢	LO #٣, #٤ and #٦, #٧
	Projects / Lab.	١	١٠٪ (١٠)	Continuous	All
	Report	١	١٠٪ (١٠)	١٣	LO #٥, #٨ and #١٠
Summative assessment	Midterm Exam	٢hr	١٠٪ (١٠)	٧	LO #١ - #٧
	Final Exam	٣hr	٥٠٪ (٥٠)	١٦	All
Total assessment			١٠٠٪ (١٠٠ Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week ١	• Number Systems, and conversions
Week ٢	• Binary arithmetic, Logic Gates, and truth table
Week ٣	• Boolean Algebra and Extract Boolean expression from truth table and from logic circuit
Week ٤	• Logic Simplification
Week ٥	• Half and full adder
Week ٦	• Half and full Subtractor, Another functions of combinational logic circuits
Week ٧	• Function implementation using a decoder
Week ٨	• Encoders
Week ٩	• Multiplexer and Demultiplexer
Week ١٠	• Function implementation using multiplexer
Week ١١	• Mini project
Week ١٢	• Flip-flops
Week ١٣	• Asynchronous counters
Week ١٤	• Synchronous counter
Week ١٥	• **Exam**

	Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered	
Week ١	Introduction to combinational design a. OR gate b. AND gate c. NAND gate d. NOR gate	
Week ٢	Design and implementation using NAND gate	
Week ٣	Design and implementation using NAND gate	
Week ٤	Mini Project	
Week ٥	Half Adder and Full Adder b. Half Subtractor and Full Subtractor by using Basic gates and NAND gates	
Week ٦	Design and implement the decoder	
Week ٧	Design and implement the encoder	
Week ٨	Mid exam	
Week ٩	Multiplexer AND De-multiplexer	
Week ١٠	Flip-flops	
Week ١١	Test	
Week ١٢	counters	
Week ١٣	Asynchronous counters & Synchronous counters	
Week ١٤	Mini Project	
Week ١٥	Final exam	

	Learning and Teaching Resources مصادر التعلم والتدريس	
	Text	**Available in the Library?**
Required Texts	Digital fundamentals Thomas L. Floyd ٢٠١٥	Yes
Recommended Texts		
Websites	http://www.pearsonglobaleditions.com/floyd	

Grading Scheme مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group **(٥٠ - ١٠٠)**	**A** - Excellent	امتياز	٩٠ - ١٠٠	Outstanding Performance
	B - Very Good	جيد جدا	٨٠ - ٨٩	Above average with some errors
	C - Good	جيد	٧٠ - ٧٩	Sound work with notable errors
	D - Satisfactory	متوسط	٦٠ - ٦٩	Fair but with major shortcomings
	E - Sufficient	مقبول	٥٠ - ٥٩	Work meets minimum criteria
Fail Group **(٠ – ٤٩)**	**FX** – Fail	راسب (قيد المعالجة)	(٤٥-٤٩)	More work required but credit awarded
	F – Fail	راسب	(٠-٤٤)	Considerable amount of work required

Note: Marks Decimal places above or below ٠,٥ will be rounded to the higher or lower full mark (for example a mark of ٥٤,٥ will be rounded to ٥٥, whereas a mark of ٥٤,٤ will be rounded to ٥٤. 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.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية				
Module Title	**Discrete Structures (I)**		**Module Delivery**	
Module Type	**Core**		☒ Theory ☒ Lecture ☐ Lab ☐ Tutorial ☐ Practical ☐ Seminar	
Module Code	**COM-١١٢**			
ECTS Credits				
SWL (hr/sem)				
Module Level	١	**Semester of Delivery**		١
Administering Department		**College**		
Module Leader	أ.م.د.مصطفى عبد الغفور محمد	**e-mail**	mostafamohammed@imamaladham.edu.iq	
Module Leader's Acad. Title	Assistant Professor	**Module Leader's Qualification**		Ph.D
Module Tutor		**e-mail**		
Peer Reviewer Name		**e-mail**		
Scientific Committee Approval Date		**Version Number**		

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	**Semester**	
Co-requisites module	Discrete Structures (II)	**Semester**	٢

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	١. The principal objective of this course is to develop the analytic skills need to learn mathematics. ٢. Studying basic mathematical concepts to solve problems. ٣. To understand analyze systems in a mathematical manner. ٤. This course deals with the basic concept of discrete mathematical. ٥. This is the basic subject for most computer science subjects.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Important: Write at least ٦ Learning Outcomes, better to be equal to the number of study weeks. ١. Recognize the basic concepts in a discrete mathematical structure. ٢. To understand the fundamental properties of sets. ٣. Identify the basic sets operations. ٤. To study the sets types and counting principle. ٥. Recognize the relations and functions to describe the relationship between the elements from two sets. ٦. To learn several basic proof techniques. ٧. Discuss the proof techniques to prove important results in set theory. ٨. To studies properties of integers and use the proof techniques to prove some basic facts in number theory. ٩. To understand the fundamental properties of graph. ١٠. To study how representation of functions by using graph. ١١. Discuss the types of graphs and special graph. Explain the Polish notation.
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. ١. Sets • The basic concepts • Set Operations • Finite sets, counting princple • Classes of sets • Partitions of set ٢. Relations • Representation of relations • Properties of relations • Inverse relations • Composition of relations ٣. Function • One-to-one, onto and invertible functions • Graph of a function • Composition of function ٤. Matrices • Types of Matrices

	• <u>Operations on Matrices</u>

Learning and Teaching Strategies
استراتيجيات التعلم والتعليم

Strategies	Discrete mathematics is foundational material for computer science: Many areas of computer science require the ability to work with concepts from discrete mathematics, specifically material from such areas as set theory, logic, graph theory, combinatorics, and probability theory. The main strategy that will be adopted in delivering the discrete mathematical structures module is to encourage students' participation in the exercises, while at the same time refining and expanding their critical thinking skills. The module will include a combination of classes, and interactive tutorials.

Student Workload (SWL)
الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

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

Module Evaluation
تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	**Quizzes**	٢	١٠٪ (١٠)	٥ and ١٠	LO #١, #٢ and #١٠, #١١
	Assignments	٢	١٠٪ (١٠)	٢ and ١٢	LO #٣, #٤ and #٦, #٧
	Projects / Lab.				
	Report	١	١٠٪ (١٠)	١٣	LO #٥, #٨ and #١٠
Summative assessment	**Midterm Exam**	٢hr	٢٠٪ (٢٠)	٧	LO #١ - #٧
	Final Exam	٣hr	٥٠٪ (٥٠)	١٦	All
Total assessment			١٠٠٪ (١٠٠ Marks)		

	Delivery Plan (Weekly Syllabus)
	المنهاج الاسبوعي النظري
	Material Covered
Week ١	1. Introduction - The basic concepts: Discrete mathematical structure
Week ٢	٢. Sets. ٢,١. Elements.
Week ٣	٣. Sets. ٣,١. Universal set, empty set.
Week ٤	٤. Sets. ٤,١. Subsets.

Week ٥	٥. Sets.
	   ٥,١. Finite Sets, Counting Principle.
	   ٥,٢. Classes of sets.

Week ٦	٦. Sets.
	   ٦,١. Power set.
	   ٦,٢. Cardinality.

Week ٧	٧. Sets.
	   ٧,١. The Cartesian Product.
	   ٧,٢. Partitions of set.

Week ٨	Midterm Exam
Week ٩	٩. Matrices.
Week ١٠	١٠. Matrices. ١٠,١. Types of Matrices.
Week ١١	١١. Matrices. ١١. Operations on Matrices.
Week ١٢	١٢. Matrices. ١٢. Operations on Matrices.
Week ١٣	١٣. Relations.
Week ١٤	١٤. Relations. ١٤,١. Representation of relations.
Week ١٥	١٥. Relations. ١٥,١ Composition of relations.
Week ١٦	Final Exam

Delivery Plan (Weekly Lab. Syllabus)
المنهاج الاسبوعي للمختبر

	Material Covered
Week ١	
Week ٢	
Week ٣	
Week ٤	
Week ٥	
Week ٦	
Week ٧	
Week ٨	
Week ٩	
Week ١٠	
Week ١١	
Week ١٢	
Week ١٣	
Week ١٤	
Week ١٥	

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	- Discrete mathematical structures for computer science by Bernard Kolman & Robert C. Busby	Yes
Recommended Texts	Theory and problems of Discrete mathematics, by Seymour Lipschutz & Marc Lars Lipson, Schaum's Outline Series, third edition ٢٠٠٧. - Mathematical foundation of computer science, Y.N. Singh, ٢٠٠٥. - Discrete Mathematics and Its Applications, Seventh Edition, Kenneth H. Rosen, AT&T Laboratories, ٢٠١٢.	
Websites	- http://www.math.uvic.ca/faculty/gmacgill/guide	

Grading Scheme مخطط الدرجات				
Group	**Grade**	التقدير	**Marks %**	**Definition**
Success Group (٥٠ - ١٠٠)	**A** - Excellent	امتياز	٩٠ - ١٠٠	Outstanding Performance
	B - Very Good	جيد جدا	٨٠ - ٨٩	Above average with some errors
	C - Good	جيد	٧٠ - ٧٩	Sound work with notable errors
	D - Satisfactory	متوسط	٦٠ - ٦٩	Fair but with major shortcomings
	E - Sufficient	مقبول	٥٠ - ٥٩	Work meets minimum criteria
Fail Group (٠ – ٤٩)	**FX** – Fail	راسب (قيد المعالجة)	(٤٩-٤٥)	More work required but credit awarded
	F – Fail	راسب	(٤٤-٠)	Considerable amount of work required

Note: Marks Decimal places above or below ٠,٥ will be rounded to the higher or lower full mark (for example a mark of ٥٤,٥ will be rounded to ٥٥, whereas a mark of ٥٤,٤ will be rounded to ٥٤. 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.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information				
معلومات المادة الدراسية				
Module Title	**English Language (I)**		**Module Delivery**	
Module Type	S		☒ Theory ☒ Lecture ☐ Lab ☐ Tutorial ☐ Practical ☐ Seminar	
Module Code	IMA-١٠٣			
ECTS Credits	١			
SWL (hr/sem)	٢٥			
Module Level	١	**Semester of Delivery**		
Administering Department		**College**	Imam aladham university college	
Module Leader	ا.م.د. فاروق نهاد عبيد	**e-mail**	farookalbadry@imamaladham.edu.iq	
Module Leader's Acad. Title	Teacher	**Module Leader's Qualification**		Master
Module Tutor		**e-mail**		
Peer Reviewer Name		**e-mail**		
Scientific Committee Approval Date		**Version Number**		

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	**Semester**	
Co-requisites module	English Language (II)	**Semester**	

Module Aims, Learning Outcomes and Indicative Contents
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Objectives أهداف المادة الدراسية	The objectives of the syllabus are: ١. Enhance the ability to communicate effectively in both spoken and written English. This includes improving pronunciation, fluency, and vocabulary. ٢. Provide a solid understanding of English grammar rules and sentence structure to facilitate clear and accurate communication. ٣. Expand the students' vocabulary to enable them to express themselves more precisely and with a richer range of language. ٤. Develop the skills needed to understand and interpret various types of written texts, ranging from simple to complex, such as articles, essays, and literature. ٥. Improve the ability to express thoughts and ideas in writing, including the development of essays, reports, and other written forms. ٦. Enhance the ability to understand spoken English in various contexts, including conversations, lectures, and audiovisual materials.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	These outcomes aim to cover the key aspects of language learning, including the four main language skills (listening, speaking, reading, and writing), as well as cultural awareness, critical thinking, and adaptability to different contexts. Adjustments can be made based on the specific level of the course (beginner, intermediate, advanced) and any specialized goals or themes of the course.
Indicative Contents المحتويات الإرشادية	The indicative content for an English Language course encompasses a comprehensive exploration of language skills, grammar, and cultural awareness. Beginning with an introduction to the global significance of English, the course delves into the development of speaking, listening, reading, and writing skills. Grammar and syntax are addressed with a focus on understanding parts of speech, sentence structures, and common errors. Vocabulary building includes exploration of idioms, collocations, and academic terminology. Cultural dimensions of language use and the promotion of critical thinking are integrated, along with practical applications in professional and academic communication. The course also addresses digital literacy in an English context, preparing students for language proficiency tests and fostering an understanding of global English varieties. Students engage in an independent project, allowing for the exploration of a personally relevant English language topic. This indicative content provides a flexible framework for instructors to tailor the course to specific goals and student needs.

Learning and Teaching Strategies	
استراتيجيات التعلم والتعليم	
Strategies	The coursework assessment for the English Language course, accounting for ١٠٪ of the overall grade, incorporates a multifaceted approach to evaluating students' language proficiency. Assessment components encompass individual and group oral presentations, oral interactions including pair work, written tests and tasks, essays, listening/viewing exercises, communicating the gist of simple reading passages, and translation of basic texts on economics. This diverse set of evaluations ensures a comprehensive measurement of students' abilities in both spoken and written English, including critical thinking, comprehension, and application of language skills in the context of economic themes. The inclusion of various tasks reflects a commitment to assessing language proficiency in a well-rounded manner, encompassing both collaborative and independent language competencies.

Student Workload (SWL)			
الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	١٧	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	١
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	٨	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	٢
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	٢٥		

Module Evaluation				
تقييم المادة الدراسية				
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	**Quizzes**	٢	١٠٪ (١٠)	٥ and ١٠	LO #١, #٢ and #١٠, #١١
	Assignments	٢	١٠٪ (١٠)	٢ and ١٢	LO #٣, #٤ and #٦, #٧
	Projects / Lab.				All
	Report	١	١٠٪ (١٠)	١٣	LO #٥, #٨ and #١٠
Summative assessment	**Midterm Exam**	٢hr	٢٠٪ (٢٠)	٧	LO #١ - #٧
	Final Exam	٣hr	٥٠٪ (٥٠)	١٦	All
Total assessment			١٠٠٪ (١٠٠ Marks)		

	Delivery Plan (Weekly Syllabus)
	المنهاج الاسبوعي النظري
	Material Covered
Week ١	Alphabet, basic greetings, introductions, and common expressions.
Week ٢	Numbers, simple vocabulary related to daily life.
Week ٣	Describing yourself, family, and friends.
Week ٤	Introducing likes and dislikes, hobbies.
Week ٥	Daily routines, telling time, and talking about activities.
Week ٦	Present simple tense, adverbs of frequency.
Week ٧	Vocabulary related to food, ordering in a restaurant.
Week ٨	Mid exam
Week ٩	Shopping vocabulary, asking for and giving directions.
Week ١٠	Vocabulary related to places (city, neighborhood, etc.).
Week ١١	Prepositions of place, asking and giving directions.
Week ١٢	Past simple tense, talking about past events.
Week ١٣	Storytelling and writing short narratives.
Week ١٤	Review of key concepts and language points.
Week ١٥	Cultural topics, holidays, and traditions.
Week ١٦	Final exam

	Delivery Plan (Weekly Lab. Syllabus)
	المنهاج الاسبوعي للمختبر
	Material Covered
Week ١	
Week ٢	
Week ٣	
Week ٤	
Week ٥	
Week ٦	
Week ٧	

Week ٨	
Week ٩	
Week ١٠	
Week ١١	
Week ١٢	
Week ١٣	
Week ١٤	
Week ١٥	

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	https://elt.oup.com/catalogue/items/local/ae/new_headway_plus/?cc=global&selLanguage=en	yes
Recommended Texts		
Websites	https://elt.oup.com/catalogue/items/local/ae/new_headway_plus/?cc=global&selLanguage=en	

Grading Scheme
مخطط الدرجات

Group	Grade	التقدير	Marks %	Definition
Success Group (٥٠ - ١٠٠)	**A - Excellent**	امتياز	٩٠ - ١٠٠	Outstanding Performance
	B - Very Good	جيد جدا	٨٠ - ٨٩	Above average with some errors
	C - Good	جيد	٧٠ - ٧٩	Sound work with notable errors
	D - Satisfactory	متوسط	٦٠ - ٦٩	Fair but with major shortcomings
	E - Sufficient	مقبول	٥٠ - ٥٩	Work meets minimum criteria
Fail Group (٠ – ٤٩)	**FX – Fail**	راسب (قيد المعالجة)	(٤٥-٤٩)	More work required but credit awarded
	F – Fail	راسب	(٠-٤٤)	Considerable amount of work required

Note: Marks Decimal places above or below ٠،٥ will be rounded to the higher or lower full mark (for example a mark of ٥٤،٥ will be rounded to ٥٥, whereas a mark of ٥٤،٤ will be rounded to ٥٤. 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.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

<table>
<tr><td colspan="4" align="center">Module Information
معلومات المادة الدراسية</td></tr>
<tr><td>Module Title</td><td align="center">Introduction to Programming</td><td colspan="2">Module Delivery</td></tr>
<tr><td>Module Type</td><td align="center">COM-١١١</td><td colspan="2" rowspan="4">☒ Theory
☒ Lecture
☒ Lab
☐ Tutorial
☐ Practical
☒ Seminar</td></tr>
<tr><td>Module Code</td><td align="center">Core</td></tr>
<tr><td>ECTS Credits</td><td></td></tr>
<tr><td>SWL (hr/sem)</td><td></td></tr>
<tr><td>Module Level</td><td>١</td><td>Semester of Delivery</td><td>١</td></tr>
<tr><td>Administering Department</td><td></td><td>College</td><td>Imam aladham university college</td></tr>
<tr><td>Module Leader</td><td>م.تيسير كرم الشيخلي</td><td>e-mail</td><td>tayseer.alshekly@imamaladham.edu.iq</td></tr>
<tr><td>Module Leader's Acad. Title</td><td>Lecture</td><td>Module Leader's Qualification</td><td>Masters</td></tr>
<tr><td>Module Tutor</td><td></td><td>e-mail</td><td></td></tr>
<tr><td>Peer Reviewer Name</td><td></td><td>e-mail</td><td></td></tr>
<tr><td>Scientific Committee Approval Date</td><td></td><td>Version Number</td><td></td></tr>
</table>

<table>
<tr><td colspan="4" align="center">Relation with other Modules
العلاقة مع المواد الدراسية الأخرى</td></tr>
<tr><td>Prerequisite module</td><td>None</td><td>Semester</td><td></td></tr>
<tr><td>Co-requisites module</td><td>Programming Fundamentals</td><td>Semester</td><td>٢</td></tr>
</table>

Module Aims, Learning Outcomes and Indicative Contents
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Objectives أهداف المادة الدراسية	The educational objectives of this course are ١. To Focus Fundamentals of Computers and Peripherals ٢. To Introduce programming language and aware the students about programming paradigm ٣. To Focus Concept and Methodology of Programming ٤. Brief the students regarding Object Oriented Programming Features ٥. To give clear idea of different strategy of basic programming with C like Looping, Decision Making, Array, Structure, Function, Pointer, etc. to solve real life problems.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	١- On successful completion of the course, the student will be having the basic knowledge of programming paradigm, fundamentals of computer and peripherals and thus being prepared with the programming spectrum in depth as desired. ٢- Student will be able to effectively solve any real-life problem and lead the exploration of new application and techniques for their use.

Indicative Contents
المحتويات الإرشادية
	• Introduction to Computer Programming
	• Basics of C++ language
	• Problem Solving and Algorithm Design
	• Pseudo-codes and Flow charts
	• Arithmetic Operators and Variables
	• Exploring input and output statements
	• Control Structure (Selection and iterative)
	   o Functions
	• Primary data structure of Arrays and its multi – dimensional behavior.
	   o Concepts of Pointers
	• Introductory knowledge of Structures

Learning and Teaching Strategies
استراتيجيات التعلم والتعليم

Strategies	• Lectures • Tutorials • Problem solving • Lab • Case study • Small project

Student Workload (SWL)
الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل		Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل		Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل			

Module Evaluation

تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	**Quizzes**	٢	١٠٪ (١٠)	٥ and ١٠	LO #١, #٢ and #١٠, #١١
	Assignments	٢	١٠٪ (١٠)	٢ and ١٢	LO #٣, #٤ and #٦, #٧
	Projects / Lab.	١	١٠٪ (١٠)	Continuous	All
	Report	١	١٠٪ (١٠)	١٣	LO #٥, #٨ and #١٠
Summative assessment	**Midterm Exam**	٢hr	١٠٪ (١٠)	٧	LO #١ - #٧
	Final Exam	٣hr	٥٠٪ (٥٠)	١٦	All
Total assessment			١٠٠٪ (١٠٠ Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week ١	Introduction – History of programming languages. Low-level languages and High-level languages.
Week ٢	Problem solving - Flowcharts and pseudocode algorithms.
Weeks ٣,٤,٥ and ٦	Introduction to C/C++ programming language: • History of C/C++ • C++ standard Library. • C++ Environment. • General structures of C/C++ • programming language. • Data types. • Variables declaration/definition.

	- Directives. - Inputs and outputs. Simple programming
Week ٧	Mid-term Exam
Week ٨	Arithmetic and operators: Arithmetic operators. Operator's precedence. Equality and relational operators. Sequences.
Weeks ٩ and ١٠	Control Structures: - Selection and Decisions: - if - if…else. - nested if - switch
Weeks ١١,١٢ and ١٣	Control Structures: - Iteration: - for - while - do while
Weeks ١٤ and ١٥	Array: - Array definition (one-dimensional array). - operations on array (add, subtraction, multiplication and invers of array).
Week ١٦	**Preparatory week before the final Exam**

Delivery Plan (Weekly Lab. Syllabus)	
المنهاج الاسبوعي للمختبر	
	Material Covered
Week ١	Problem solving and Algorithms
Week ٢	Introduction to C/C++ Integrated development Environments (IDE).
Weeks	Introduction to C/C++ programming. Writing simple programs that involve using

٣ and ٤	input/output statements. identify and fix common syntax errors.
Weeks ٥ and ٦	Data type, Operators, and Expressions
Weeks ٧,٨,٩ and ١٠	Control structure writing program using if, if..else, switch, for, while &do…while control structure
Weeks ١١,١٢ and ١٣	Array (one-dimensional array). Operations on array

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	The Complete Reference Borland C++, By Herbert Schildt, Mc_GrawHill	No
Recommended Texts		
Websites		

Grading Scheme مخطط الدرجات				
Group	**Grade**	التقدير	**Marks %**	**Definition**
Success Group **(٥٠ - ١٠٠)**	**A - Excellent**	امتياز	٩٠ - ١٠٠	Outstanding Performance
	B - Very Good	جيد جدا	٨٠ - ٨٩	Above average with some errors
	C - Good	جيد	٧٠ - ٧٩	Sound work with notable errors
	D - Satisfactory	متوسط	٦٠ - ٦٩	Fair but with major shortcomings
	E - Sufficient	مقبول	٥٠ - ٥٩	Work meets minimum criteria
Fail Group **(٠ – ٤٩)**	**FX – Fail**	راسب (قيد المعالجة)	(٤٥-٤٩)	More work required but credit awarded
	F – Fail	راسب	(٠-٤٤)	Considerable amount of work required

Note: Marks Decimal places above or below ٠,٥ will be rounded to the higher or lower full mark (for example a mark of ٥٤,٥ will be rounded to ٥٥, whereas a mark of ٥٤,٤ will be rounded to ٥٤. 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.