

Course Specifications

Course Title:	General Physics (1)
Course Code:	31031104
Program:	BSc in Physics
Department:	Department of Physics
College:	Faculty of Science
Institution:	AlBaha University

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A. Course Identification

1. Credit hours:	4 credit hours
2. Course type	
a.	University <input type="checkbox"/> College <input checked="" type="checkbox"/> Department <input type="checkbox"/> Others <input type="checkbox"/>
b.	Required <input checked="" type="checkbox"/> Elective <input type="checkbox"/>
3. Level/year at which this course is offered:	Second level
4. Pre-requisites for this course(if any):	None
5. Co-requisites for this course(if any):	None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	30	40%
2	Blended	15	20%
3	E-learning	-	-
4	Correspondence	-	-
5	Other (Laboratory)	30	40%

7. Actual Learning Hours(based on academic semester)

No	Activity	Learning Hours
Contact Hours		
1	Lecture	45
2	Laboratory/Studio	30
3	Tutorial	-
4	Others (specify)	-
	Total	75
Other Learning Hours*		
1	Study	15
2	Assignments	15
3	Library	15
4	Projects/Research Essays/Theses	-
5	Others(Lab reports and exam preparation time)	20
	Total	65

*The length of time that a learner takes to complete learning activities that lead to achievement of course learning outcomes, such as study time, homework assignments, projects, preparing presentations, library times

B. Course Objectives and Learning Outcomes

1. Course Description
<ul style="list-style-type: none"> - Recognize the concepts of units, dimensions and vectors. - State the different kinds of motion including one-dimension and two-dimension motion and the laws that govern them. - Illustrate the basic principles of fluid mechanics. - Memorize the reflection and refraction of light using different optical devices. - Summarize the elastic inelastic properties of solids
2. Course Main Objective
To introduce the students to the basic concepts of general physics.

3. Course Learning Outcomes

CLOs		AlignedPL Os
1	Knowledge:	
1.1	Recall the fundamental principles of general physics.	K1
1.2	Describe the basic physical laws and apply them to some systems.	K1, K2
1.3	Recognize the latest development in physics.	K3
2	Skills :	
2.1	Explain the physical phenomena related to general physics.	S1
2.2	Apply appropriate mathematical concepts and computational techniques to solve problems in motion, fluid mechanics, elasticity, heat and optics	S2
2.3	Conduct experiments in basic general physics.	S3
2.4	Analyze data using general physics principles.	S4
3	Competence:	
3.1	Demonstrate interpersonal skills of teamwork, individual responsibility for own learning and ethical standards on assigned tasks in general physics.	C1
3.2	Manage a certain topic in the field of general physics with his classmates.	C2
....	-	

C. Course Content

No	List of Topics	Contact Hours
	Lectures	
1	Units, dimensions and vectors	6
2	Displacement, velocity, acceleration, and motion in one dimension	3
3	Motion in two dimensions	3
4	Application of Newton's Laws – work and energy	6
5	Linear momentum and collisions	3
6	Fluid Mechanics: Pressure -Buoyant Forces and Archimedes's Principle- Fluid dynamics - Bernoulli's equation.	6
7	Elasticity: Conditions for Equilibrium-Elastic Properties of Solids.	3
8	Heat: Temperature and work – heat capacity- heat expansion – heat conductivity- kinetic theory of gases.	6
9	Reflection and refraction of light: Dirac's laws (reflection and refraction) -refraction by plane-parallel plate, total internal reflection and the critical angle.	6
10	Geometrical optics: mirrors, lenses, and prisms.	3
	Total (Lectures)	45
	Practical Part	
1	Measuring of length, time, mass and density Experimental errors and statistics of practical physics	2
2	Determining the gravitation constant	2
3	Friction of surfaces	2

No	List of Topics	Contact Hours
4	Free fall	2
5	Modulus of elasticity	2
6	Hooke's law	2
7	Centripetal force	2
8	Surface tension	2
9	heat capacity	2
10	Thermal expansion	2
11	Viscosity using Stocks law	2
12	Speed of sound in air	2
13	Geometrical Optics <ul style="list-style-type: none"> - reflection and refraction - law of imaging - Optical instrument 	6
Total (practical)		30
Total (Lectures + practical)		75

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge		
1.1	Recall the fundamental principles of general physics.	Lectures, blended learning, open discussion and brainstorming	Quizzes, homework periodical Exams, midterm and final exam
1.2	Describe the basic physical laws and apply them to some systems.	Lectures, blended learning, open discussion and brainstorming	Quizzes, homework periodical exams, midterm and final exam.
1.3	Recognize the latest development in physics.	Lectures, blended learning, open discussion and brainstorming	Quizzes, homework periodical exams, midterm and final exam.
2.0	Skills		
2.1	Explain the physical phenomena related to general physics.	Lectures, blended learning, open discussion and brainstorming, Problem based learning, cooperative learning and lab working.	Quizzes, homework periodical Exams, midterm and final exam.
2.2	Apply appropriate mathematical concepts and computational techniques to solve problems in motion, fluid mechanics, elasticity, heat and optics	Lectures, blended learning, open discussion and brainstorming, problem based learning, Cooperative learning and computer Simulated labs	Quizzes, homework periodical exams, midterm and final exam.
2.3	Conduct experiments in basic general physics.	brainstorming, problem based learning, cooperative learning, lab working and computer Simulated labs	Lab report, oral exam, final practical exam
2.4	Analyze data using general	Lectures, cooperative	Quizzes, lab report, oral

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
	physics principles.	learning, lab working and computer Simulated labs	exam, final practical exam
3.0	Competence		
3.1	Demonstrate interpersonal skills of teamwork, individual responsibility for own learning and ethical standards on assigned tasks in general physics.	Group working, cooperative learning	Observation card
3.2	Manage a certain topic in the field of general physics with his classmates.	Group working, cooperative learning	Observation card
...			

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Periodical exam 1	6	5 %
2	Mid- Term exam	9	10 %
3	Periodical exam 2	13	5 %
4	Home works	During the term	10 %
5	Practical (lab reports)	During the term	10 %
6	Final practical	16	10 %
7	Theoretical Exam	17	50%

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :

1. Student Academic Counseling

- The arrangements for academic counseling and advices for the students, including scheduling of faculty office hours, advices on program planning, subjects selection and career planning are announced and published to the students in the physics department and the faculty website.
- The students are divided into groups, whereas each student has academic counseling.

2. Student Appeals

- The regulations for student appeals on academic matters are announced and published in the physics department and the faculty website.

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	- Halliday, David, Robert Resnick, Jearl Walker. Fundamentals of Physics, 7th ed. Hoboken, N.J.: John
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	Wiley and Sons. 2005. - Physics for Scientists and Engineers, Raymond A. Serway, Thomson Brooks, 2004; 6 th Edition.
Essential References Materials	- John D. Cutnell kenneth W. Johnson; John Wiley & Sons; 9th edition; (2012) - Raymond A. Serway and Chris Vuille; Cengage Learning; 9th edition; (2011)
Electronic Materials	None
Other Learning Materials	None

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	- One classroom containing computer access, and white board ,One laboratory
Technology Resources (AV, data show, Smart Board, software, etc.)	- One AV. - One data show. - One Smart Board.
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	None

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
- Effectiveness of teaching. - The course content. - Satisfaction with the course - Quality of Learning Resources	Students	Questionnaire
- Teaching methods. - Planned and actual study hours. - Achievement of course learning outcomes.	Faculty (staff member)	Observation of lectures, analysis of assessment data,
- Teaching methods. - Planned and actual study hours. - Achievement of course learning outcomes.	Program Leader	Observation of lectures, interviews with involved faculty, analysis of assessment data,
- Teaching methods. - Planned and actual study hours. - Achievement of course learning outcomes.	Peer Reviewer	interviews with involved faculty and course participants, analysis of assessment data,

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods(Direct, Indirect)

H. Specification Approval Data

Council / Committee	Curriculum Committee
Reference No.	
Date	

توصيف المقرر الدراسي

اسم المقرر:	القرآن الكريم (تصحيح التلاوة)
رمز المقرر:	11020107
البرنامج:	الدراسات الاسلامية
القسم العلمي:	الدراسات الاسلامية
الكلية:	الآداب والعلوم الإنسانية
المؤسسة:	جامعة الباحة

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أ. التعريف بالمقرر الدراسي:

1. الساعات المعتمدة: 2	
2. نوع المقرر	
أ. <input checked="" type="checkbox"/> متطلب جامعة	<input type="checkbox"/> متطلب كلية
ب. <input checked="" type="checkbox"/> إجباري	<input type="checkbox"/> اختياري
3. السنة / المستوى الذي يقدم فيه المقرر	
4. المتطلبات السابقة لهذا المقرر (إن وجدت)	
لا يوجد	
5. المتطلبات المتزامنة مع هذا المقرر (إن وجدت)	
لا يوجد	

6. نمط الدراسة (اختر كل ما ينطبق)

م	نمط الدراسة	عدد الساعات التدريسية	النسبة
1	المحاضرات التقليدية	30	%100
2	التعليم المدمج		
3	التعليم الإلكتروني		
4	التعليم عن بعد		
5	أخرى		

7. ساعات التعلم الفعلية للمقرر (على مستوى الفصل الدراسي)

م	النشاط	ساعات التعلم
ساعات الاتصال		
1	محاضرات	30
2	معمل أو إستوديو	
3	دروس إضافية	
4	أخرى (تذكر)	
	الإجمالي	
ساعات التعلم الأخرى*		
1	ساعات الاستذكار	
2	الواجبات	
3	المكتبة	
4	إعداد البحوث/ المشاريع	
5	أخرى (تذكر)	
	الإجمالي	

* هي مقدار الوقت المستثمر في النشاطات التي تسهم في تحقيق مخرجات التعلم للمقرر، ويشمل ذلك: جميع أنشطة التعلم، مثل: ساعات الاستذكار، إعداد المشاريع، والواجبات، والعروض، والوقت الذي يقضيه المتعلم في المكتبة

ب- هدف المقرر ومخرجاته التعليمية:

1. الوصف العام للمقرر:

يشتمل المقرر على أحد عشر موضوعا وهي: تعريف القرآن وفضله وآداب تلاوته وأحكام الاستعاذة والبسملة والغنة وأحكام النون الساكنة والتنوين وأحكام الميم الساكنة وأحكام المدود والقلقلة والتفخيم والترقيق وهمزة الوصل والقطع.

2. الهدف الرئيس للمقرر

أن يتعرف الطالب على أحكام التجويد ويتقن تلاوة جزء عم.

3. مخرجات التعلم للمقرر:

رمز مخرج التعلم المرتبط للبرنامج	مخرجات التعلم للمقرر
	المعارف
	1
	1.1 أن يعرف الطالب معنى القرآن الكريم وآداب تلاوته
	1.2 أن يشرح الطالب أحكام النون الساكنة والتنوين والميم الساكنة
	1.3 أن يشرح الطالب أحكام المدود
	1...
	المهارات
	2
	2.1 أن يطبق الطالب أحكام التجويد أثناء تلاوة القرآن.
	2.2 أن يكتب الطالب بحثا مميزا في آداب تلاوة القرآن
	2.3 أن يميز الطالب بين التفخيم والترقيق
	2...
	الكفاءات
	3
	3.1 أن يتحمل الطالب مسؤولية تعلمه الذاتي.
	3.2 أن يعمل الطالب في مجموعة بشكل فعال ويمارس القيادة عند الحاجة.
	3.3
	3...

ج. موضوعات المقرر

م	قائمة الموضوعات	ساعات الاتصال
1	تعريف القرآن والتجويد، وفضل القرآن	2
2	آداب التلاوة.	2
3	أحكام الاستعاذة والبسملة.	2
4	تعريف الغنة، حكم النون والميم المشددين. ثم التطبيق بتصحيح تلاوة سور جزء	2
5	أحكام النون الساكنة والتنوين: الإظهار. ثم التطبيق بتصحيح تلاوة سور جزء عم	2
6	تكملة أحكام النون الساكنة والتنوين: الإدغام، الإقلاب. ثم التطبيق بتصحيح التلاوة	2
7	تكملة أحكام النون الساكنة والتنوين: الإخفاء. ثم التطبيق بتصحيح تلاوة سور جزء	2

2	أحكام الميم الساكنة. ثم التطبيق بتصحيح تلاوة سور جزء عم بالترتيب.	8
2	أحكام المدود: مد المتصل، المنفصل. ثم التطبيق بتصحيح تلاوة سور جزء عم	9
2	تكملة أحكام المدود: البدل، اللازم الكلمي. ثم التطبيق بتصحيح تلاوة سور جزء عم	10
2	تكملة أحكام المدود: اللازم الحرفي. ثم التطبيق بتصحيح تلاوة سور جزء عم	11
2	حروف القلقلة. ثم التطبيق بتصحيح تلاوة سور جزء عم بالترتيب	12
2	التفخيم. ثم التطبيق بتصحيح تلاوة سور جزء عم بالترتيب.	13
2	- الترقيق. ثم التطبيق بتصحيح تلاوة سور جزء عم بالترتيب.	14
2	همزتا الوصل والقطع. ثم التطبيق بتصحيح تلاوة سور جزء عم بالترتيب.	15
30	المجموع	

د. التدريس والتقييم:

1. ربط مخرجات التعلم للمقرر مع كل من استراتيجيات التدريس وطرق التقييم

الرمز	مخرجات التعلم	استراتيجيات التدريس	طرق التقييم
1.0	المعارف		
1.1	أن يعرف الطالب معنى القرآن الكريم وآداب تلاوته	المحاضرات	الاختبار الدوري الأول
1.2	أن يشرح الطالب أحكام النون الساكنة والتنوين والميم الساكنة	الحوار والمناقشات	والاختبار النهائي
...	أن يشرح الطالب أحكام المدود	تكليف الطلاب ببعض الواجبات.	الاختبار النصفى والنهائي
2.0	المهارات		
2.1	أن يطبق الطالب أحكام التجويد أثناء تلاوة القرآن.	المحاضرات	الاختبار الدوري الأول
2.2	أن يكتب الطالب بحثاً مميزاً في آداب تلاوة القرآن	الحوار والمناقشات	والاختبار النهائي
...	أن يميز الطالب بين التفخيم والترقيق	تكليف الطلاب ببعض الواجبات	الاختبار النصفى والنهائي
3.0	الكفاءات		
3.1	أن يتحمل الطالب مسؤولية تعلمه الذاتي.	الملاحظة	
3.2	أن يعمل الطالب في مجموعة بشكل فعال ويمارس القيادة عند الحاجة.	الملاحظة	
...			

2. أنشطة تقييم الطلبة

م	أنشطة التقييم	توقيت التقييم (بالأسبوع)	النسبة من إجمالي درجة التقييم
1	اختبار دوري أول	الأسبوع الخامس	10%
2	اختبار نصفى	الأسبوع التاسع	20%
3	الاختبار الدوري الثاني	الأسبوع الثاني عشر	10%

م	أنشطة التقييم	توقيت التقييم (بالأسبوع)	النسبة من إجمالي درجة التقييم
4	الواجبات والأبحاث (فردية وجماعية)	على مدار الفصل	10%
5	الاختبار النهائي	الأسبوع السادس عشر	50%
6			
7			
8			

أنشطة التقييم (اختبار تحريري، شفهي، عرض تقديمي، مشروع جماعي، ورقة عمل الخ)

هـ - أنشطة الإرشاد الأكاديمي والدعم الطلابي:

- 1- تحديد الساعات المكتبية في بداية الفصل .
- 2- تفعيل البريد الإلكتروني في تواصل الطلاب بأستاذهم.
- 3- يتم مراجعة الطلبة لوحدة الإرشاد الأكاديمي التابعة للكلية فيما يخص خدمتهم من الناحية الأكاديمية.
- 4- يتاح لجميع الطلبة مراجعة وحدة الإرشاد الأكاديمي في مقرهم، وللوحدة برامج وأنشطة، وتضم بعضاً من أعضاء الهيئة التعليمية.
- 5- التواصل من خلال برنامج البلاك بورد، والبريد الإلكتروني لعضو هيئة التدريس، وغيرها من الوسائل

و - مصادر التعلم والمرافق:

1. قائمة مصادر التعلم:

المرجع الرئيس للمقرر	دراسات في التجويد والأصوات - د. عبد الحميد أبو مسكين.
المراجع المساندة	البرهان في تجويد القرآن- للشيخ محمد القمحاوي. غاية المريد في أحكام التجويد - للشيخ عطية قابل نصر. التجويد الميسر - للشيخ عبد العزيز القارئ. التجويد والأصوات - د. إبراهيم النجا.
المصادر الإلكترونية	http://www.al-mostafa.com/index.htm http://www.alwaraq.net/index http://www.almeshkat.net/books/index.php
أخرى	

2. المرافق والتجهيزات المطلوبة:

العناصر	متطلبات المقرر
المرافق (القاعات الدراسية، المختبرات، قاعات العرض، قاعات المحاكاة ... إلخ)	1- قاعات درس مناسبة . 2- مقاعد مريحة للطلاب .
التجهيزات التقنية (جهاز عرض البيانات، السبورة الذكية، البرمجيات)	أجهزة عرض متنوعة
تجهيزات أخرى (تبعاً لطبيعة التخصص)	

ز. تقويم جودة المقرر:

مجالات التقويم	المقيمون	طرق التقييم
<ul style="list-style-type: none"> توزيع استبانة تقويم المقرر على الطلبة في نهاية كل الفصل الدراسي للحصول على تقويم المقرر. . . 	الطلاب	الاستبانات
استخدام حلقات نقاش مع عدد محدود من الطلاب.	الطلاب والمدرسين	الملاحظة
تحليل درجات الطلبة في الاختبارات إحصائياً وتفسيرها.	المدرسين	الاستبانات
عدد مشاركات الطلبة أثناء الشرح يعد مؤشراً لفاعلية التدريس.	المدرسين	الملاحظة

مجالات التقويم (مثل: فاعلية التدريس، فاعلة طرق تقييم الطلاب، مدى تحصيل مخرجات التعلم للمقرر، مصادر التعلم ... إلخ)
المقيمون (الطلبة، أعضاء هيئة التدريس، قيادات البرنامج، المراجع النظير، أخرى (يتم تحديدها)
طرق التقييم (مباشر وغير مباشر)

ح. اعتماد التوصيف

جهة الاعتماد	مجلس القسم
رقم الجلسة	
تاريخ الجلسة	

Course Specifications

Course Title:	English (2)
Course Code:	11030118
Program:	Computer Science and Information Technology
Department:	English Language Center
College:	Deanship of Preparatory Year
Institution:	Albaha University

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A. Course Identification

1. Credit hours: 3			
2. Course type			
a.	University <input type="checkbox"/>	College <input checked="" type="checkbox"/>	Department <input type="checkbox"/> Others <input type="checkbox"/>
b.	Required <input checked="" type="checkbox"/>	Elective <input type="checkbox"/>	
3. Level/year at which this course is offered: level 2- First Year			
4. Pre-requisites for this course (if any): English (1) – 11030118			
5. Co-requisites for this course (if any): No			

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	90	70%
2	Blended		
3	E-learning	36	30%
4	Correspondence		
5	Other		

7. Actual Learning Hours (based on academic semester)

No	Activity	Learning Hours
Contact Hours		
1	Lecture	126
2	Laboratory/Studio	
3	Tutorial	
4	Others (specify)	
	Total	126
Other Learning Hours*		
1	Study	42
2	Assignments	28
3	Library	
4	Projects/Research Essays/Theses	
5	Others (specify)	
	Total	70

* The length of time that a learner takes to complete learning activities that lead to achievement of course learning outcomes, such as study time, homework assignments, projects, preparing presentations, library times

B. Course Objectives and Learning Outcomes

1. Course Description

It is a goals-based English language course which prepares first year students to interact successfully in real-life situations. It aims to provide them with rich, high-frequency vocabulary and explicit grammar syllabus to achieve such goals. It also builds cultural awareness and develops A2 level of proficiency across the four skills via explicit presentation of grammar, vocabulary, reading texts and social exchange in conversations and listening activities related to general topics.

2. Course Main Objective

This course is taught as part of the first year program for students majoring in business administration related fields. It is designed to provide students with a strong foundation in general English. Its main goal is to develop and to improve students' English language proficiency level A2: listening, reading, speaking and writing, vocabulary and grammar.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	Knowledge:	
1.1	Knowledge of Grammar: Recall A2 level grammar structures.	
1.2	Knowledge of Vocabulary: Recognize the meaning of A2 level words and expressions used in different real-life contexts.	
2	Skills :	
2.1	Reading Comprehension: Analyze A2 level reading passages to determine their main idea and details.	
2.2	Listening Comprehension: Understand short talks about different topics covered in class.	
3	Competence:	
3.1	Written Interaction Compose very short paragraphs related to the covered topics.	
3.2	Spoken Interaction Deliver short talks about different topics covered in class.	

C. Course Content

No	List of Topics	Contact Hours
English Unlimited (Special Edition) Book (2)		
1	Introduction Unit 3 - Your time	9
2	Unit 4 – Changes	9
3	Unit 5 – Your Space	9
4	Unit 6 – What would you like?	9
5	Unit 7 –Work life balance	9
6	Unit 8 – What does She Like?	9

7	Revision and Midterm Exam	9
8	Unit 9 – Getting around	9
9	Unit 10 – Getting together	9
10	Unit 11 – Journeys	9
11	Unit 12- Are you Ok?	9
12	Unit 13- Experiences	9
13	Unit 14 – Choices	9
14	Final Revision	9
Total		126

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge		
1.1	Knowledge of Grammar: Recall A2 level grammar structures.	Using both deductive and inductive approaches, as well as pair and group work	Assignments and midterm and final exams
1.2	Knowledge of Vocabulary: Recognize the meaning of A2 level words and expressions used in different real-life contexts.	Classroom discussions, reading texts, and representations of new vocabulary (e.g. Photos and realia).	Assignments and midterm and final exams
2.0	Skills		
2.1	Reading Comprehension: Analyze A2 level reading passages to determine their main idea and details	Reading activities done individually, in pairs, and in groups	Assignments, and midterm and final exams
2.2	Listening Comprehension: Understand short talks about different topics covered in class.	Playing recorded lectures and dialogs	listening activities and quizzes
3.0	Competence		
3.1	Written Interaction Compose very short paragraphs related to the covered topics.	Writing activities done individually, in pairs, and in groups.	Assignments, midterm and final exams
3.2	Spoken Interaction Deliver short talks about different topics covered in class	Oral presentation, pair work, group work, games, and role-play	speaking activities and quizzes

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Midterm (Grammar, Vocabulary, Reading and Writing)	Week Seven	40%
2	Activities (Oral Skills)	Weekly	20%
3	Final Exam (Grammar, Vocabulary, Reading and Writing)	Week Fifteen	40%

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :

Six office hours per week.

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	Tilbury, A, Clementson, T, Hendra, L. A, & Rea, D. (2017). <i>English Unlimited Series</i> , Special Edition, Book (2). Cambridge: Cambridge University Press.
Essential References Materials	<ul style="list-style-type: none"> English Unlimited E-Portfolio DVDs.
Electronic Materials	<ul style="list-style-type: none"> Web sites, digital book version, My English Lab https://www.englishclub.com https://www.englishlive.ef.com/ar-sa/learn-english-online/ https://www.esl-lab.com/ https://www.podcastsinenglish.com/ Cambridge :LMS.
Other Learning Materials	<ul style="list-style-type: none"> Reader's Digest Magazine Sunset Magazine British Council Magazine

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	<ul style="list-style-type: none"> Spacious classrooms to accommodate 25 students per class with traditional and smart whiteboards.
Technology Resources (AV, data show, Smart Board, software, etc.)	<ul style="list-style-type: none"> Smart boards. Internet connection
Other Resources	N/A

Item	Resources
(Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of Teaching	<ul style="list-style-type: none"> Students Quality and Development Unit 	<ul style="list-style-type: none"> Analyzing students' marks of the midterm exam and the final exam. Students' surveys to collect their feedback about the course materials and instructors Formal classroom observation
Effectiveness of Assessment	Quality and Development Unit	<ul style="list-style-type: none"> Item Analysis Data Teacher Feedback Student Feedback Course Reports
Extent of Achievement of Course Learning Outcomes	Quality and Development Unit	<ul style="list-style-type: none"> Item Analysis Data Course Reports Annual Program Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

Assessment Methods (Direct, Indirect)

H. Specification Approval Data

..Council / Committee	Quality and Development Unit
Reference No.	
Date	1 st March 2020

Course Specifications

Course Title:	Introduction to Algorithmic Problem Solving
Course Code:	41011152
Program:	Computer Science
Department:	Computer Science and Engineering
College:	Computer Science and information technology
Institution:	Albaha University

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A. Course Identification

1. Credit hours: 3			
2. Course type			
a.	University <input type="checkbox"/>	College <input type="checkbox"/>	Department <input checked="" type="checkbox"/>
b.	Required <input checked="" type="checkbox"/>	Elective <input type="checkbox"/>	Others <input type="checkbox"/>
3. Level/year at which this course is offered: 2 / 1 st			
4. Pre-requisites for this course (if any): none			
5. Co-requisites for this course (if any): none			

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	54	90%
2	Blended	-	-
3	E-learning	6	10%
4	Correspondence	-	-
5	Other (Lab)	-	-

7. Actual Learning Hours (based on academic semester)

No	Activity	Learning Hours
Contact Hours		
1	Lecture	60
2	Laboratory/Studio	-
3	Tutorial	-
4	Others (specify)	-
	Total	60
Other Learning Hours*		
1	Study	30
2	Assignments	10
3	Library	-
4	Projects/Research Essays/Theses	10
5	Others(specify)	-
	Total	50

*The length of time that a learner takes to complete learning activities that lead to achievement of course learning outcomes, such as study time, homework assignments, projects, preparing presentations, library times

B. Course Objectives and Learning Outcomes

1. Course Description

This course is given to provide students with fundamentals of problem solving and algorithms. Students will learn how to write algorithms to solve basic computational problems. In addition, the students will learn how to represent algorithms in pseudocodes and flowcharts.

2. Course Main Objective

The main purpose for this course is to teach students how to:

- Describe the concepts of problem solving and algorithms.
- Explain the primary data types.
- Explain fundamental structures of algorithms.
- Explain fundamental searching and sorting algorithms.
- Explain the notion of sub-algorithms.
- Interact in groups collaboratively.
- Communicate concepts and techniques in oral presentations

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	Knowledge:	
1.1	Describe the concepts of problem solving and algorithms.	K1
1.2	Explain the primary data types.	K2
2	Skills :	
2.1	Explain fundamental structures of algorithms	S1
2.2	Explain fundamental searching and sorting algorithms.	S2
2.3	Explain the notion of sub-algorithms.	S3
3	Competence:	
3.1	Interact in groups collaboratively	C1
3.2	Communicate concepts and techniques in oral presentations	C2

C. Course Content

No	List of Topics (Lecture)	Contact Hours
1	Introduction to problem solving and algorithms	3
2	Algorithm and Flowchart	6
3	Data types and Important Programming Concepts	3
4	Pseudo-code and control structures: sequential and selection	6
5	Pseudo-code and control structures: loops	6
6	Arrays	6
7	Searching algorithms	3
8	Sorting algorithms	6
9	Sub-algorithms: Functions and procedures	6
Total		30

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge		
1.1	Describe the concepts of problem solving and algorithms.	- Lectures - Assignments	- Homework - Midterm - Quiz
1.2	Explain the primary data types.	- Lectures - assignments	- Homework - Midterm - Quiz
2.0	Skills		
2.1	Explain fundamental structures of algorithms	- Lectures - Assignments	- Quiz - Homework - Final exam
2.2	Explain fundamental searching and sorting algorithms.	- Lectures - Assignments	- Homework - Final exam
2.3	Explain the notion of sub-algorithms.	- Lectures - Assignments	- Homework - Final exam
2.4	Explain fundamental structures of algorithms	- Lectures - Assignments	- Homework - Final exam
3.0	Competence		
3.1	Interact in groups collaboratively	- Small groups	- Class discussions
3.2	Communicate concepts and techniques in oral presentations.	- Oral presentation	- Class discussions

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Homework	Every 4 weeks	10%
2	Class discussions	Every week	10%
3	Quiz	6	10%
4	Midterm Exam	8	20%
5	Final Exam	16	50%

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :

- Faculty 3 hours per week

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	- Introduction to Algorithms, 3rd edition, by Cormen, Thomas, Charles Leiserson, Ronald Rivest, and Clifford Stein. MIT Press,
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Essential References Materials	- Problem Solving with Algorithms and Data Structures Using Python. 2nd edition, by Miller, Bradley, and David Ranum. Franklin, Beedle & Associates, 2011.
Electronic Materials	- Access to the Saudi Digital Library (SDL). - Using the learning management system of the university – Rafid System (https://lms.bu.edu.sa/). - IEEE/ACM Transactions on algorithms - https://www.tutorialspoint.com/data_structures_algorithms/index.htm
Other Learning Materials	None

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	A classroom or lecture hall with whiteboard for 28 students.
Technology Resources (AV, data show, Smart Board, software, etc.)	- A digital image projection system with connection to desktop computer and laptop computer. - High speed Internet connection. - An instructor computer station.
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	• None

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of Teaching	<ul style="list-style-type: none"> Students Faculty Peer Reviewers Program Leader Course Coordinator 	<ul style="list-style-type: none"> Surveys (indirect). Direct feedback from students (interview between Program leader and students). Course evaluation by Peer Reviewers (indirect). Class visit by Program Leader Comprehensive Course report (where we can find information about teaching difficulties and action plan, ...)
Effectiveness of Assessment	<ul style="list-style-type: none"> Students Faculty Peer Reviewers Course Coordinator Exam Evaluation Committee Course Coordinator 	<ul style="list-style-type: none"> Surveys (indirect). Direct feedback from students (interview between Program leader and students). Assessment results (direct) Course evaluation by Peer Reviewers (indirect). Comprehensive Course report (where we can find information about assessment difficulties and action plan, ...) Exam evaluation by the Exam Evaluation


Evaluation Areas/Issues	Evaluators	Evaluation Methods
		Committee (indirect)
Extent of achievement of course learning outcomes	<ul style="list-style-type: none"> • Faculty • Program Leader • Course Coordinator 	<ul style="list-style-type: none"> • Student Results (direct) • Comprehensive Course report (where we can find the CLO assessment results)
Quality of learning resources	<ul style="list-style-type: none"> • Students • Faculty • Peer Reviewers • Course Coordinator 	<ul style="list-style-type: none"> • Surveys (indirect) • Course evaluation by Peer Reviewers (indirect). • Comprehensive Course report (where we can find information about difficulties and challenges about learning resources as well as consequences and action plan, ...)

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	Computer science & Engineering department council 
Reference No.	Second meeting 2020-2021 academic year
Date	1-september-2020

Course Specifications

Course Title:	English Language for Special Purposes
Course Code:	41011154
Program:	Computer Science
Department:	Computer Science and Engineering
College:	Computer Science and information technology
Institution:	Albaha University

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A. Course Identification

1. Credit hours: 2			
2. Course type			
a.	University <input type="checkbox"/>	College <input checked="" type="checkbox"/>	Department <input type="checkbox"/> Others <input type="checkbox"/>
b.	Required <input checked="" type="checkbox"/>	Elective <input type="checkbox"/>	
3. Level/year at which this course is offered: 2/ 1 st			
4. Pre-requisites for this course (if any): None			
5. Co-requisites for this course (if any): None			

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	30	100%
2	Blended		
3	E-learning		
4	Correspondence		
5	Other		

7. Actual Learning Hours (based on academic semester)

No	Activity	Learning Hours
Contact Hours		
1	Lecture	30
2	Laboratory/Studio	-
3	Tutorial	-
4	Others (specify)	-
	Total	30
Other Learning Hours*		
1	Study	60
2	Assignments	20
3	Library	-
4	Projects/Research Essays/Theses	10
5	Others (specify)	-
	Total	90

* The length of time that a learner takes to complete learning activities that lead to achievement of course learning outcomes, such as study time, homework assignments, projects, preparing presentations, library times

B. Course Objectives and Learning Outcomes

1. Course Description

This course familiarizes students with the techniques to maximize their learning potential, using different strategies for success for the college, including critical thinking skills, note-taking, goal-setting, time management and more. Students also learn APA style of writing and avoiding plagiarism.

2. Course Main Objective

At the end of the course students will be able to:

- Write lecture notes effectively using the note-taking method/s, which works best for them.
- Reproduce APA style of writing by avoiding plagiarism.
- Describe their critical thinking and creative thinking skills.
- Outline personal, academic and career goals.
- Develop time management skills and prepare daily, weekly and monthly calendar by setting the priorities.
- Judge learning styles and get most out of it.
- Operate well, in different situations.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	Knowledge:	
1.1	Write lecture notes effectively using the note-taking method/s, which works best for them.	K1
1.2	Reproduce APA style of writing by avoiding plagiarism.	K1
1.3	Describe their critical thinking and creative thinking skills.	K1
2	Skills :	
2.1	Outline personal, academic and career goals.	S1
2.2	Develop time management skills and prepare daily, weekly and monthly calendar by setting the priorities.	S1
3	Competence:	
3.1	Judge learning styles and get most out of it.	C1
3.2	Operate well, in different situations.	C3

C. Course Content

No	List of Topics	Contact Hours
1	Introduction	2
2	Introduction, self-test (You and your college experience)	2
3	Note-taking and organization, APA Style of writing, self test	4
4	Critical thinking, self test	2
5	Goal setting, self test	4
6	Time Management, self test	2
7	Principles of learning and memory, self test	2
8	Concentration, self test	2
9	Study strategies, self test	2
10	Reading and listening, self test	2
11	Exam writing and stress management, self test	4
12	Resources and information literacy, self test	2
Total		30

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge		
1.1	Write lecture notes effectively using the note-taking method/s, which works best for them.	Lectures Class Discussions	Homework Midterm Quiz Final Exam
1.2	Reproduce APA style of writing by avoiding plagiarism.	Lectures Assignments	Homework Midterm Quiz Final Exam
1.3	Describe their critical thinking and creative thinking skills.	Lectures Class Discussions	Homework Midterm Quiz Final Exam
2.0	Skills		
2.1	Outline personal, academic and career goals.	Lectures Assignments	Homework Midterm Quiz Final Exam
2.2	Develop time management skills and prepare daily, weekly and monthly calendar by setting the priorities.	Lectures	Homework Midterm Quiz Final Exam
3.0	Competence		
3.1	Judge learning styles and get most out of it.	Lectures Class Discussions	Midterm Quiz Final Exam
3.2	Operate well, in different situations.	Lectures Class Discussions	Midterm Quiz Final Exam

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Homework	Periodically	15%
2	Class Participation/Discussions	Weekly	05%
3	Midterm	8th Week	15%
4	Quiz	11th week	15%
5	Final Exam	16th week	50%

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :

The faculty offered 3 hours per week for each group of students as office hour. In addition, the students are welcomed to send their enquires via the official email or the LMS (Rafid).

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	There is no textbook for this course
Essential References Materials	<ol style="list-style-type: none"> 1. American Psychological Association (APA) Manual (6th Edition). 2. Strategies for Success, NAIT Student Counseling, Academic Success Centre, Canada. 3. College Success, The Saylor Foundation. http://www.saylor.org/books. 4. Thinking Critically, The Open University Walton Hall, Milton Keynes MK7 6AA.
Electronic Materials	<ol style="list-style-type: none"> 1. Access to the Saudi Digital Library (SDL). https://sdl.edu.sa/SDLPortal/en/Publishers.aspx 2. Using the learning management system of the university (Rafid) https://rafid.bu.edu.sa/webapps/login/
Other Learning Materials	None

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	<ul style="list-style-type: none"> • Standard classroom, size depends upon number of students registered.
Technology Resources (AV, data show, Smart Board, software, etc.)	<ul style="list-style-type: none"> • AV (Female section) • Data show, smart board/white board (Male section)
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	None

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of Teaching	<ul style="list-style-type: none"> • Students • Faculty • Peer Reviewers • Program Leader • Course Coordinator 	<ul style="list-style-type: none"> • Surveys (indirect). • Direct feedback from students (interview between Program leader and students). • Course evaluation by Peer Reviewers (indirect). • Class visit by Program Leader • Comprehensive Course report (where we can find information about teaching difficulties and action plan, ...)


Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of Assessment	<ul style="list-style-type: none"> Students Faculty Peer Reviewers Course Coordinator Exam Evaluation Committee Course Coordinator 	<ul style="list-style-type: none"> Surveys (indirect). Direct feedback from students (interview between Program leader and students). Assessment results (direct) Course evaluation by Peer Reviewers (indirect). Comprehensive Course report (where we can find information about assessment difficulties and action plan, ...) Exam evaluation by the Exam Evaluation Committee (indirect)
Extent of achievement of course learning outcomes	<ul style="list-style-type: none"> Faculty Program Leader Course Coordinator 	<ul style="list-style-type: none"> Student Results (direct) Comprehensive Course report (where we can find the CLO assessment results)
Quality of learning resources	<ul style="list-style-type: none"> Students Faculty Peer Reviewers Course Coordinator 	<ul style="list-style-type: none"> Surveys (indirect) Course evaluation by Peer Reviewers (indirect). Comprehensive Course report (where we can find information about difficulties and challenges about learning resources as well as consequences and action plan, ...)

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	Computer science & Engineering department council 
Reference No.	Second meeting 2020-2021 academic year
Date	1-september-2020

Course Specifications

Course Title:	Scientific Programming
Course Code:	41011156
Program:	Computer Science
Department:	Computer Science and Engineering
College:	Computer Science and Information Technology
Institution:	Albaha University

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2. Facilities Required.....	7
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A. Course Identification

1. Credit hours: 3			
2. Course type			
a.	University <input type="checkbox"/>	College <input type="checkbox"/>	Department <input checked="" type="checkbox"/> Others <input type="checkbox"/>
b.	Required <input checked="" type="checkbox"/>	Elective <input type="checkbox"/>	
3. Level/year at which this course is offered: 2 / 1st			
4. Pre-requisites for this course (if any): Programming Basics (41011151)			
5. Co-requisites for this course (if any):			

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	30	50%
2	Blended		
3	E-learning		
4	Correspondence		
5	Other (lab)	30	50%

7. Actual Learning Hours (based on academic semester)

No	Activity	Learning Hours
Contact Hours		
1	Lecture	30
2	Laboratory/Studio	30
3	Tutorial	
4	Others (specify)	
	Total	60
Other Learning Hours*		
1	Study	50
2	Assignments	10
3	Library	
4	Projects/Research Essays/Theses	
5	Others (specify)	
	Total	60

* The length of time that a learner takes to complete learning activities that lead to achievement of course learning outcomes, such as study time, homework assignments, projects, preparing presentations, library times

B. Course Objectives and Learning Outcomes

1. Course Description

The course is planned to provide students with an overview of essential concepts and principles of programming to solve some simple / complex problems of mathematics, statistics and physics. It introduces some of the software that are used for scientific purposes.

Upon successful completion of the course, the student will develop fundamental understanding and competency in algorithms as well as programming to solve the following:

- Simple problems of mathematics.
- Simple problems of physics.
- Simple problems of geometry.
- Simple problems of statistics.

In addition, students will be able of choosing an appropriate software to solve scientific problems.

2. Course Main Objective

The main purpose for this course is to teach students how to:

- Introduce the history and related concepts of the common scientific programming languages.
- Introduce the software, data and file types, and standard library functions/methods, which are used for scientific purposes.
- Analyze scientific problems to find their computational solutions.
- Use the appropriate built-in functions and software to solve mathematical, statistical and physical problems.
- Interpret scientific equations into programming code.
- Work both independently and collaboratively.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	Knowledge:	
1.1	Introduce the history and related concepts of the common scientific programming languages.	K1
1.2	Introduce the software, data and file types, and standard library functions/methods, which are used for scientific purposes.	K1
2	Skills :	
2.1	Analyze scientific problems to find their computational solutions.	S1
2.2	Use the appropriate built-in functions and software to solve mathematical, statistical and physical problems.	S2
2.3	Interpret scientific equations into programming code.	S2
3	Competence:	
3.1	Work both independently and collaboratively.	C1

C. Course Content

No	List of Topics	Contact Hours
Lectures		
1	Introduction to scientific programming and computing	8
2	Fundamentals of Scientific Software and Programming	8
3	Programming and Mathematics	6
4	Programming and Statistics	4
5	Programming and Physics	4

Labs		
1	Setting up and introducing the environment/ software	8
2	Fundamentals of Scientific Software and Programming	8
3	Programming and Mathematics	6
4	Programming and Statistics	4
5	Programming and Physics	4
Total		60

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge		
1.1	Introduce the history and related concepts of the common scientific programming languages.	- Lectures	- Midterm exam - Final exam
1.2	Introduce the software, data and file types, and standard library functions/methods, which are used for scientific purposes.	- Lectures	- Quiz - Homework - Midterm exam - Final exam
2.0	Skills		
2.1	Analyze scientific problems to find their computational solutions.	- Tutorials - Lectures - Exercises	- Homework - Quiz - Midterm exam - Lab exam - Final exam
2.2	Use the appropriate built-in functions and software to solve mathematical, statistical and physical problems.	- Tutorials - Lectures - Exercises	- Homework - Midterm exam - Lab exam - Final exam
2.3	Interpret scientific equations into programming code.	- Tutorials - Lectures - Exercises	- Homework - Lab exam - Final exam
3.0	Competence		
3.1	Work both independently and collaboratively	- Flipped classroom - Roleplay	- Lab/social network hubs discussion and contribution

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Homework	periodically	10%
2	Quizzes	w.7,10	7% → w.7 8% → w.10
3	Midterm exam	w.8	15%
4	Lab exam	w. 15	20%
5	Final exam	w. 16	40%
Total			100%

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :

The faculty offered 3 hours per week for each group as office hours. In addition, the students are welcomed to send their enquires via email or the LMS (Rafid).

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	<ul style="list-style-type: none"> • “Elements of Scientific Computing” by Aslak Tveito et al., Springer, 2010 <p>Python → 1- “<i>A Primer on Scientific Programming with Python</i>” by Hans Petter Langtangen, Springer, 2014.</p> <p>2- “<i>Learning Python</i>” by Mark Lutz, O'Reilly Media, 2008.</p> <p>Java → 1- “<i>Introduction to Java Programming, Comprehensive</i>” by D. Liang, Prentice Hall, 2015.</p> <p>2- “<i>Introduction to Scientific and Technical Computing with Java</i>” by Lindsey C.S., Tolliver J.S., Lindblad T. JavaTech. Cambridge. 2005.</p> <p>Excel → 1- “<i>Excel 2019 Bible</i>” by Michael Alexander et al. , Wiley, 2018</p>
Essential References Materials	<ul style="list-style-type: none"> • Computer Science Curriculum 2013 – http://cs2013.org • ACM (Association for Computer Machinery) Curricula Recommendations - http://www.acm.org/education/curricula-recommendations
Electronic Materials	<ul style="list-style-type: none"> • ACM (Association for Computer Machinery) web site - http://www.acm.org/ • IEEE Computer Society web site - http://www.computer.org/portal/web/guest/home • Access to the Saudi Digital Library (SDL). • Using the learning management system of the university – Rafid System (https://lms.bu.edu.sa/). • <u>For API:</u> <ul style="list-style-type: none"> ○ https://docs.oracle.com/javase/8/docs/api/ • <u>For tutorials:</u> <ul style="list-style-type: none"> ○ <u>Excel:</u> <ul style="list-style-type: none"> ▪ https://support.office.com/en-us/article/excel-2013-training-aaae974d-3f47-41d9-895e-97a71c2e8a4a ▪ https://www.udemy.com/course/microsoft-excel-2013-from-beginner-to-advanced-and-beyond/ ▪ https://www.excel-easy.com/ ○ <u>Python:</u> <ul style="list-style-type: none"> ▪ https://docs.python.org/3/tutorial/ ▪ https://www.w3schools.com/python

	<ul style="list-style-type: none"> ▪ https://www.tutorialspoint.com/python ▪ https://www.udemy.com/python-the-complete-python-developer-course/ ○ Java: <ul style="list-style-type: none"> ▪ https://docs.oracle.com/javase/tutorial/ ▪ https://www.tutorialspoint.com/java/ ▪ https://www.javatpoint.com/java-tutorial ▪ https://www.codecademy.com/learn/learn-java ▪ https://netbeans.org/kb/index.html ▪ https://www.udemy.com/java-tutorial/
Other Learning Materials	<ul style="list-style-type: none"> • Sololearn (mobile app)

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	All the lectures should be in a well prepared lab that can accommodate 25 students at most.
Technology Resources (AV, data show, Smart Board, software, etc.)	<ul style="list-style-type: none"> • A digital image projection system with connection to desktop computer and laptop computer. • High speed Internet connection. • An instructor computer station. • An application to manage labs and learning sessions (NetSupport School).
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	None

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of Teaching	<ul style="list-style-type: none"> • Students • Faculty • Peer Reviewers • Program Leader • Course Coordinator 	<ul style="list-style-type: none"> • Surveys (indirect). • Direct feedback from students (interview between Program leader and students). • Course evaluation by Peer Reviewers (indirect). • Class visit by Program Leader • Comprehensive Course report (where we can find information about teaching difficulties and action plan, ...)
Effectiveness of Assessment	<ul style="list-style-type: none"> • Students • Faculty • Peer Reviewers • Course Coordinator • Exam Evaluation Committee • Course Coordinator 	<ul style="list-style-type: none"> • Surveys (indirect). • Direct feedback from students (interview between Program leader and students). • Assessment results (direct) • Course evaluation by Peer Reviewers (indirect). • Comprehensive Course report (where we can find information about assessment difficulties and action plan, ...)


Evaluation Areas/Issues	Evaluators	Evaluation Methods
		<ul style="list-style-type: none"> Exam evaluation by the Exam Evaluation Committee (indirect)
Extent of achievement of course learning outcomes	<ul style="list-style-type: none"> Faculty Program Leader Course Coordinator 	<ul style="list-style-type: none"> Student Results (direct) Comprehensive Course report (where we can find the CLO assessment results)
Quality of learning resources	<ul style="list-style-type: none"> Students Faculty Peer Reviewers Course Coordinator 	<ul style="list-style-type: none"> Surveys (indirect) Course evaluation by Peer Reviewers (indirect). Comprehensive Course report (where we can find information about difficulties and challenges about learning resources as well as consequences and action plan, ...)

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	Computer science & Engineering department council 
Reference No.	Second meeting 2020-2021 academic year
Date	1-september-2020