



# Course Specifications

<b>Course Title:</b>	<b>General Chemistry (1)</b>
<b>Course Code:</b>	<b>42020102</b>
<b>Program:</b>	<b>Bachelor of Science in Chemistry</b>
<b>Department:</b>	<b>Chemistry</b>
<b>College:</b>	<b>Faculty of Science</b>
<b>Institution:</b>	<b>Albaha University</b>



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## A. Course Identification

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

### 6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	75	100%
2	Blended		
3	E-learning		
4	Correspondence		
5	Other		

### 7. Actual Learning Hours (based on academic semester)

No	Activity	Learning Hours
<b>Contact Hours</b>		
1	Lecture	45
2	Laboratory/Studio	30
3	Tutorial	
4	Others (specify)	
	<b>Total</b>	75
<b>Other Learning Hours*</b>		
1	Study	45
2	Assignments	15
3	Library	15
4	Projects/Research Essays/Theses	
5	Others(specify)	
	<b>Total</b>	75

\*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 the first semester course in the General Chemistry sequence that provides a thorough foundation of chemical principles. This course is appropriate both as a introductory course for chemistry and other science majors as well as an introductory and terminal course for non-science majors who desire a basic foundation in chemical principles. The primary

learning outcomes are: learning the fundamental of Matter, Structure of the atom, Periodic Table, Electron Configurations, Chemical Substances, The Mole Concept, Chemical Reactions, Chemical bonding, States of Matter, Gases state, Liquid state, Solids state, Acids and Bases , as well as an Introduction to organic.

## 2. Course Main Objective

This course aimed at providing the students with fundamental understanding of chemistry concepts and principles.

## 3. Course Learning Outcomes

CLOs		Aligned PLOs
1	<b>Knowledge:</b>	
1.1	Define the basic concepts in general Chemistry.	1-1
1.2	Recall symbols, formulas, chemical equations for reactions.	1-2
1.3	Explain and interpret atomic structure, basic chemical and physical properties, and bonding and chemical forces.	1-3
1...		
2	<b>Skills :</b>	
2.1	Use laws in calculations and principle to interpret the behavior of different states (gases, liquids and solids) of materials.	2-1
2.2	Conduct laboratory experiments by using different techniques and effective communication	2-4
2.3		
2...		
3	<b>Competence:</b>	
3.1	Cooperate with his colleagues in teamwork and actively collaborate within one team in solving chemical problems.	3-1
3.2	Bear self-learning responsibility.	3-2
3.3	Write the lab reports from results obtained from using practical techniques.	3.3
3...		

## C. Course Content

No	List of Topics	Contact Hours
1	<b>Introduction to Matter:</b> Physical states; elements and compounds; chemical changes	3
2	<b>Structure of the atom:</b>	3
3	<b>Periodic Table,</b> Periodic Properties: Atomic radius, Ionization energy, Electron affinity, properties of Groups on the Periodic Table	3
4	<b>Electron Configurations:</b> Orbital diagrams, Aufbau Principle, writing electron configurations, Hund's rule,.....	3
5	<b>Chemical Substances:</b> Formulas and names; chemical reactions, writing and balancing chemical equations <b>Exam 1</b>	3
6	<b>The Mole Concept:</b> Molar mass, empirical and molecular formulas, significant figures in calculations, Molar concentration and Solution, Stoichiometry: Limiting reactants, percent yield	3

7	<b>Chemical Reactions:</b> Aqueous solutions; Precipitation reactions; Acid-Base reactions; Oxidation-Reduction reactions	3
8	<b>Chemical bonding,</b> Covalent Bonds, Intermolecular Forces: dipole-dipole, London, Hydrogen bonding, Ionic bonding, metallic bonds, coordination bonds....	6
9	<b>States of Matter:</b> Intermolecular forces and changes of state; solid-liquid-gas; <b>Midterm Exam</b>	3
10	<b>Gases state:</b> Kinetic Molecular theory of gases, Gas laws, partial pressures, diffusion, effusion, Ideal vs. Real gases	3
11	<b>Liquid state:</b> Surface tension, viscosity. boiling point, vapour pressure, Types of solutions the solution process, molality, colligative properties,	3
12	<b>Solids state:</b> Types of solids, melting point, hardness, conductivity,	3
13	<b>Acids and Bases:</b> PH, PH scale, indicators, Arrhenius, Bronsted-Lowry, hydronium ion, conjugate acid-base pairs, Relative strength	3
14	<b>Introduction to organic chemistry</b>	3
<b>Total</b>		45

## D. Teaching and Assessment

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

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>1.0</b>	<b>Knowledge</b>		
1.1	Define the basic concepts in general Chemistry.	Lectures PowerPoint presentation Debate and discussion. Assignments (Co-operative & Individual assignments).	quizzes assigned textbook problems; Responses to in-class questions asked by instructor. students group work Mid-term and Final exam
1.2	Recall symbols, formulas, chemical equations for reactions.		
1.3	Explain and interpret atomic structure, basic chemical and physical properties, and bonding and chemical forces.		
<b>2.0</b>	<b>Skills</b>		
2.1	Use laws in calculations and principle to interpret the behavior of different states (gases, liquids and solids) of materials.	* Lectures * Discussion questions during class * Assignments	* Short quizzes * Mid-term exam * Final exam * Individual and group assignments
2.2	Conduct laboratory experiments by using different techniques and effective communication	<ul style="list-style-type: none"> <li>• Lectures</li> <li>• Scientific movies and animated life cycles.</li> <li>• Debate and discussion.</li> <li>• Assignments (Co-operative &amp; Individual assignments).</li> <li>• Cooperative Learning</li> <li>• Working in small groups</li> <li>Individual &amp; group research</li> </ul>	<ul style="list-style-type: none"> <li>• Continuous evaluation through interaction during work in the laboratory.</li> <li>• Presentation of summaries and reports during experimentation.</li> <li>• Evaluation of assignments.</li> <li>• Lab reports.</li> <li>• Midterm exam.</li> <li>Final practical exam</li> </ul>

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
2.3			
<b>3.0</b>	<b>Competence</b>		
3.1	Cooperate with his colleagues in teamwork and actively collaborate within one team in solving chemical problems.	*The classroom strategy of student-teacher and student-student discussions and group work. *problem-solving encourages the development of these skills.	*participation and interaction with peers during class. *Monitoring individual behavior during the class and group work.
3.2	Bear self-learning responsibility.	• Working in small groups Individual & group assignments	• Evaluation of individual & group works. Observation Card
...			

## 2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quiz 1	5	5%
2	Midterm Written Theoretical Exam	9	10%
3	Quiz2	13	5%
4	Assignments and Activities	During Semester	10%
5	Final Practical Exam	16	10%
6	Lab Reports	During semester	10%
7	Final Written 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 :**

(include amount of time teaching staff are expected to be available each week)

- The presence of faculty members to provide advice, academic advice and academic guidance to the student in need within the six hours a week available to all students.
- Arrange extra hours gifted students or Program for students who default in scholastic achievement.

## F. Learning Resources and Facilities

### 1. Learning Resources

<b>Required Textbooks</b>	1. General Chemistry <b>Enhanced</b> by Ebbing and Gammon 9 <sup>th</sup> Edition Houghton Mifflin 2. Foundations of Chemistry: Applying POGIL Principles. D. Hanson; Pacific Crest: Lisle IL, 2007. 3. Chemistry: A Guided Inquiry. R. Moog and J. Farrell; John Wiley
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	& Sons: New York, 2008. اساسيات في الكيمياء العامة، أ.د. سهير نظمي عبدالرحمن، د. احلام عبدالعزيز العرفج، 4. أ.د. شيخة محمد الغنام، مكتبة المتنبى، 2014.
<b>Essential References Materials</b>	General Chemistry: Principles and Structure; by: James E. Brady; 5 <sup>th</sup> edition, Wiley (2000). ISBN-13: 978-0471528746
<b>Electronic Materials</b>	
<b>Other Learning Materials</b>	

## 2. Facilities Required

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	<ul style="list-style-type: none"> <li>• Classrooms equipped with smart board and display screen for (40) students</li> <li>• Practical labs provided with glassware, chemicals and different equipment for (20-25) students.</li> </ul>
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Provision of computers for students training to be used in research on scientific topics that serve the course.
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	<ul style="list-style-type: none"> <li>• Glass wares.</li> <li>• A sensitive balance and melting point equipment and other lab instruments.</li> <li>• Chemicals.</li> </ul>

## G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of teaching strategies.	Students	Direct Students feedback/survey
Course contents and Learning resources	Students, Faculty and external reviewer.	Direct
Verifying Standards of Student Achievement	Independent member teaching staff	Direct, check marking and assessment methods. Analyzing results of students.

**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

<b>Council / Committee</b>	
<b>Reference No.</b>	
<b>Date</b>	



# Course Specifications

<b>Course Title:</b>	<b>English (2)</b>
<b>Course Code:</b>	<b>11030119</b>
<b>Program:</b>	<b>Science (Biology, Chemistry, Physics, and Mathematics)</b>
<b>Department:</b>	<b>English Language Center</b>
<b>College:</b>	<b>Deanship of Preparatory Year</b>
<b>Institution:</b>	<b>Albaha University</b>



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## A. Course Identification

<b>1. Credit hours:</b> 3
<b>2. Course type</b> 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"/>
<b>3. Level/year at which this course is offered:</b> level 1- First Year
<b>4. Pre-requisites for this course (if any):</b> English (1)- 11030119
<b>5. Co-requisites for this course (if any):</b> No

### 6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	60	70%
2	Blended		
3	E-learning	24	30%
4	Correspondence		
5	Other		

### 7. Actual Learning Hours (based on academic semester)

No	Activity	Learning Hours
<b>Contact Hours</b>		
1	Lecture	84
2	Laboratory/Studio	
3	Tutorial	
4	Others (specify)	
	<b>Total</b>	84
<b>Other Learning Hours*</b>		
1	Study	28
2	Assignments	14
3	Library	
4	Projects/Research Essays/Theses	
5	Others(specify)	
	<b>Total</b>	42

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

## C. Course Content

No	List of Topics	Contact Hours
<b>English Unlimited(Special Edition) Book (2)</b>		
1	Introduction	6
2	Unit 1 – People in your life	6
3	Unit 2- Away from how	6
4	Unit 3 – Your time	6
5	Unit 4 – Change	6
6	Unit 5 – Your space	6
7	Revision and Midterm Exam	6
8	Unit 6 – What would you like	6

9	Unit 7- Work life balance	6
10	Unit 8- What's she like?	6
11	Unit 9- Getting around	6
12	Unit 10- Getting together	6
13	Final revision	6
14	Final Revision	6
<b>Total</b>		<b>84</b>

## D. Teaching and Assessment

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

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>1.0 Knowledge</b>			
1.1	<b>Knowledge of Grammar:</b> 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	<b>Knowledge of Vocabulary:</b> 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
<b>2.0 Skills</b>			
2.1	<b>Reading Comprehension:</b> 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	<b>Listening Comprehension:</b> Understand short talks about different topics covered in class.	Playing recorded lectures and dialogs	listening activities and quizzes
<b>3.0 Competence</b>			
3.1	<b>Written Interaction</b> 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	<b>Spoken Interaction</b> 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
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#	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

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

### 2. Facilities Required

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	<ul style="list-style-type: none"> <li>• <i>Spacious classrooms to accommodate 25 students per class with traditional and smart whiteboards.</i></li> </ul>

Item	Resources
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	<ul style="list-style-type: none"> <li>• <i>Smart boards.</i></li> <li>• <i>Internet connection</i></li> </ul>
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	N/A

## G. Course Quality Evaluation

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

**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 <sup>st</sup> March 2020



# Course Specifications

<b>Course Title:</b>	General Physics (1)
<b>Course Code:</b>	42032102
<b>Program:</b>	BSc in Physics
<b>Department:</b>	Department of Physics
<b>College:</b>	Faculty of Science
<b>Institution:</b>	AlBaha University



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5. Co-requisites for this course.....	3
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**A. Course Identification**

<b>1. Credit hours:</b> 4credit hours
<b>2. Course type</b>
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"/>
<b>3. Level/year at which this course is offered:</b> Second level
<b>4. Pre-requisites for this course(if any):</b> None
<b>5. Co-requisites for this course(if any):</b> 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
<b>Contact Hours</b>		
1	Lecture	45
2	Laboratory/Studio	30
3	Tutorial	-
4	Others (specify)	-
	<b>Total</b>	<b>75</b>
<b>Other Learning Hours*</b>		
1	Study	15
2	Assignments	15
3	Library	15
4	Projects/Research Essays/Theses	-
5	Others(Lab reports and exam preparation time)	20
	<b>Total</b>	<b>65</b>

\*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**

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

## 3. Course Learning Outcomes

CLOs		AlignedPL Os
<b>1</b>	<b>Knowledge:</b>	
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
<b>2</b>	<b>Skills :</b>	
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
<b>3</b>	<b>Competence:</b>	
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
	<b>Lectures</b>	
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: Snell'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
	<b>Total (Lectures)</b>	45
	<b>Practical Part</b>	
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 - reflection and refraction - law of imaging - Optical instrument	6
Total (practical)		30
<b>Total (Lectures + practical)</b>		<b>75</b>

## D. Teaching and Assessment

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

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>1.0</b>	<b>Knowledge</b>		
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 using in General Physics	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.
<b>2.0</b>	<b>Skills</b>		
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, Newton's law and collisions	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	Explain the characteristics of heat and fluid mechanics and their interaction with environment	brainstorming, problem based learning, cooperative learning, lab working and computer Simulated labs	Lab report, oral exam, final practical exam
2.4	Explain the nature of light	Lectures, cooperative learning, lab working and	Quizzes, lab report, oral exam, final practical exam

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
	and its propagation and handle geometrical	computer Simulated labs	
<b>3.0</b>	<b>Competence</b>		
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 discussion in 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

<b>Required Textbooks</b>	<ul style="list-style-type: none"> <li>- Halliday, David, Robert Resnick, Jearl Walker. Fundamentals of Physics, 7th ed. Hoboken, N.J.: John Wiley and Sons. 2005.</li> <li>- Physics for Scientists and Engineers, Raymond A. Serway, ThomsonBrooks, 2004; 6<sup>th</sup> Edition.</li> </ul>
<b>Essential References Materials</b>	<ul style="list-style-type: none"> <li>- John D. Cutnellkenneth W. Johnson; John Wiley&amp; Sons; 9th edition; (2012)</li> <li>- Raymond A. Serway and Chris Vuille; Cengage Learning; 9th edition; (2011)</li> </ul>
<b>Electronic Materials</b>	None
<b>Other Learning Materials</b>	None

### 2. Facilities Required

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	<ul style="list-style-type: none"> <li>- One classroom containing computer access, and white board ,One laboratory</li> </ul>
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	<ul style="list-style-type: none"> <li>- One AV.</li> <li>- One data show.</li> <li>- One Smart Board.</li> </ul>
<b>Other Resources</b> (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
<ul style="list-style-type: none"> <li>- Effectiveness of teaching.</li> <li>- The course content.</li> <li>- Satisfaction with the course</li> <li>- Quality of Learning Resources</li> </ul>	Students	Questionnaire
<ul style="list-style-type: none"> <li>- Teaching methods.</li> <li>- Planned and actual study hours.</li> <li>- Achievement of course learning outcomes.</li> </ul>	Faculty (staff member)	Observation of lectures, analysis of assessment data,
<ul style="list-style-type: none"> <li>- Teaching methods.</li> <li>- Planned and actual study hours.</li> <li>- Achievement of course learning outcomes.</li> </ul>	Program Leader	Observation of lectures, interviews with involved faculty, analysis of assessment data,
<ul style="list-style-type: none"> <li>- Teaching methods.</li> <li>- Planned and actual study hours.</li> <li>- Achievement of course learning outcomes.</li> </ul>	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	