Course Specifications

Course Title:	General Physics
Course Code:	1003-102
Program:	N/A
Department:	Basic Science
College:	Deanship of Preparatory Year & Supportive Studies
Institution:	Northern Border University

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A. Course Identification

1. Credit hours:
2. Course type **a.** University [√] College [ ] Department [ ] Others [ ] **b.** Required [√] Elective [ ]
3. Level/year at which this course is offered:
4. Pre-requisites for this course (if any)**:** N/A
5. Co-requisites for this course (if any)**:** N/A

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	3	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**	45
2	**Laboratory/Studio**	---
3	**Tutorial**	---
4	**Others** (specify)	---
	Total	45
Other Learning Hours*		
1	**Study**	45
2	**Assignments**	20
3	**Library**	15
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 is an introductory non-calculus Physics course. The course covers Newtonian mechanics; motion, momentum, and energy of particles, rigid rotating bodies, and fluids.

2. Course Main Objective

This Course aims to understand the concept of general physics (movement): theories and principles and the role of this in the scientific and scientific life of society.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge:**	
1.1	Define the physical quantities, units, coordinates, and dimensions.	N/A
1.2	Recognize the Vector and their characteristics.	N/A
1.3	Memorize the kinematic equations, and laws of motion including Newton's laws.	N/A
2	**Skills :**	
2.1	Develop skills of the perception, comprehension.	N/A
2.2	Construct critical and analytical thinking of physical concepts.	N/A
2.3	Formulate the main ideas contained in lessons.	N/A
3	**Competence:**	
3.1	Gain student notice some natural phenomena in daily life..	N/A
3.2	Compare and derive the result.	N/A
3.3	Criticize with others via comments and explanations.	N/A

C. Course Content

No	List of Topics	Contact Hours
1	Introduction –Units and Dimensions	**6**
2	Vectors	**9**
3	Motion in one and two dimensions	**6**
4	Newton's Laws of motion	**6**
5	Work, Energy and Power	**6**
6	Linear Momentum Impulse and Collision	**6**
7	Rotation of Rigid bodies	**6**
Total		**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
1.0	**Knowledge**		
1.1	Define the physical quantities, units, coordinates, and dimensions.	Lectures	Assignments, Worksheet
1.2	Recognize the Vector and their characteristics.	Lectures, Self-learning worksheet	Quizzes, Assignments
1.3	Memorize the kinematic equations, and laws of motion including Newton's laws.	Lectures	Quizzes, Assignments
2.0	**Skills**		
2.1	Develop skills of the perception, comprehension.	Lectures, Self-learning	Assignments, Worksheet
2.2	Construct critical and analytical thinking of physical concepts.	Open discussions. Group work	Quizzes, Small project
2.3	Formulate the main ideas contained in lessons.	Lectures, Self-learning	Assignments, Worksheet
3.0	**Competence**		
3.1	Gain student notice some natural phenomena in daily life.	Lectures	Assignments, Worksheet
3.2	Compare and derive the result.	Lectures worksheet	Quizzes, Assignments
3.3	Criticize with others via comments and explanations.	Self-learning	Assignments, Worksheet

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quizzes (Blackboard)	5,7,12,14	20%
2	Midterm (Blackboard)	8	25%
3	Final Test (Blackboard)	15	40%
4	Assignments	2,4,7,9,11, 13,15	5%
5	Activities & Participation	Every week	10%

***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 :

Office Hours (6 office hours/ week.)

Academic Advisor for Students

Blackboard Forum

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	General Physics for the Preparatory Year Students", First edition. 2017. El-Mutanabbi book store, L.D. no. 1437/262, ISBN:978-603-8182-35-2.
Essential References Materials	1-David Halliday, Robert Resnick, Jearl Walker, "Fundamentals of Physics", 9th Edition, 2011. 2-Serway & Faughn , College Physics, 9th Ed. 2011. 3-Hugh D. Young, Roger A. Freedman, "University Physics with Modern Physics", 13th Edition, , Lewis Ford, 2012.
Electronic Materials	1. Youtube Videos on physics 2. Physics INTERNET web sites
Other Learning Materials	N/A

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classroom enough for 50 students, Black (white) boards. Projector
Technology Resources (AV, data show, Smart Board, software, etc.)	Blackboard system
Other Resources (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
Students evaluation in each semester	Teacher	Direct
Meeting with students	Students, Faculty, Program Leader	Direct, Indirect
e-suggestions	Students, Faculty, Program Leader	Direct, Indirect
Open door policy	Students, Faculty, Program Leader	Direct, Indirect

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	Supervisor of Basic Science Department/ Dean of Preparatory Year & Supportive Studies
Reference No.	10^{th}
Date	10-09-1440 H