



# Course Specification

— (Bachelor)

Course Title **Fundamentals of Public Health Informatics**

Course Code: **PHE26343**

Program: **Bachelor of Sciences in Public Health**

Department: **Public Health**

College: **Applied Medical Sciences**

Institution: **University of Bisha**

Version: **1**

Last Revision Date: **2-8-2023**





## Table of Contents

A. General information about the course: .....	3
B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods .....	4
C. Course Content .....	4
D. Students Assessment Activities .....	5
E. Learning Resources and Facilities .....	5
F. Assessment of Course Quality .....	5
G. Specification Approval .....	6



## A. General information about the course:

### 1. Course Identification

<b>1. Credit hours:</b>					
<b>2 (2+0)</b>					
<b>2. Course type</b>					
A.	<input type="checkbox"/> University	<input type="checkbox"/> College	<input checked="" type="checkbox"/> Department	<input type="checkbox"/> Track	<input type="checkbox"/> Others
B.	<input checked="" type="checkbox"/> Required		<input type="checkbox"/> Elective		
<b>3. Level/year at which this course is offered: 6<sup>th</sup> level 3<sup>rd</sup> year</b>					
<b>4. Course general Description:</b>					
Focuses on the principles and application of Health Informatics in Public Health as well as fundamental aspects of Geographic Information System.					
<b>5. Pre-requirements for this course (if any):</b>					
NA					
<b>6. Co-requirements for this course (if any):</b>					
NA					
<b>7. Course Main Objective(s):</b>					
<ul style="list-style-type: none"> <li>• Present the fundamental concepts of Public Health Informatics including its development, significance, infrastructure, standards, ethical principles, and evaluation;</li> <li>• Discuss the data sources and tools;</li> <li>• Present the application of Health Informatics in various fields of Public Health; and</li> <li>• Equip students with basic skills in designing Geographic Information System.</li> </ul>					

### 2. Teaching mode

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	26	86.6%
2	E-learning	2	6.7%
3	Tutorial		
4	Interactive learning	2	6.7%
5	Practical		

### 3. Contact Hours

No	Activity	Contact Hours
1.	Lectures	26
2.	E-learning	2
3	Practical	





4.	Interactive learning	2
5.	Seminars	
6.	Self-Learning	45
<b>Total</b>		<b>75</b>

## B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
<b>1.0</b>	<b>Knowledge and understanding</b>			
1.1	Explain the concept of Public Health Informatics.	K2	Lecture, discussion	Written exam,
1.2	Discuss the applications of Informatics in various fields of Public Health.	K2		
<b>2.0</b>	<b>Skills</b>			
2.1	Design a Geographic Information System.	S1	Group project presentation	Project output using Rubric
<b>3.0</b>	<b>Values, autonomy, and responsibility</b>			
3.1	Demonstrate teamwork and apply ethical standards in project development.	V1	Group project presentation	Project output using Rubric

## C. Course Content

No	List of Topics (Theory)	Contact Hours
1	Introduction to Public Health Informatics	2
2	Public Health Informatics Infrastructure and Architecture	4
3	Public Health Data Source, Tools and Information Standards	4
4	Privacy, Confidentiality, Security and Ethics	2
5	Electronic Health Records	2
6	Evaluation for Public Health Informatics	2
7	Informatics in Disease Prevention and Epidemiology	4
8	Informatics in Environmental Public Health	2
9	Informatics in Public Health Laboratories	2
10	Information Systems for Vital Statistics, Risk Factors and Immunizations	2
11	Introduction to Geographic Information Systems	4
<b>Total</b>		<b>30</b>



## D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Quiz #1	3 <sup>rd</sup>	5%
2.	E-Learning activities 1, In class, In lab evaluation	4 <sup>th</sup>	5%
3.	Midterm Examination	8 <sup>th</sup>	25%
4.	Quiz #2	11 <sup>th</sup>	5%
5.	E-Learning activities 2, In class, In lab evaluation	12 <sup>th</sup>	10%
6.	Final Examination	15 <sup>th</sup>	50%
	<b>Total</b>		<b>100%</b>

## E. Learning Resources and Facilities

### 1. References and Learning Resources

<b>Essential References</b>	Magnuson, J.A., and P.C. Fu, Jr. (Eds.). (2014) <b>Public Health Informatics and Information Systems</b> , 2 <sup>nd</sup> Edition. Springer-Verlag London. ISBN: 978-1-4471-4236-2
<b>Supportive References</b>	
<b>Electronic Materials</b>	Chortle.ccsu.edu/java5/cs151java.html Google, Altavista, Medline.
<b>Other Learning Materials</b>	1. Saudi digital library

### 2. Required Facilities and equipment

Items	Resources
<b>facilities</b>	1. Middle size classroom well-equipped laboratory
<b>Technology equipment</b>	1. Multimedia projector • Smart board
<b>Other equipment</b>	• NA

## F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students, Faculty, Quality committee	Direct / indirect - Using well-structured questionnaire





Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of student's assessment	Faculty members Peer Reviewer	Direct / indirect - Continuous reviewing and course portfolio
Quality of learning resources	Faculty members Curriculum committee	Direct / indirect - Annual review course report
The extent to which CLOs have been achieved	Course coordinator	Direct / indirect

### G. Specification Approval

<b>COUNCIL /COMMITTEE</b>	PH DEPARTMENT BOARD
<b>REFERENCE NO.</b>	
<b>DATE</b>	

