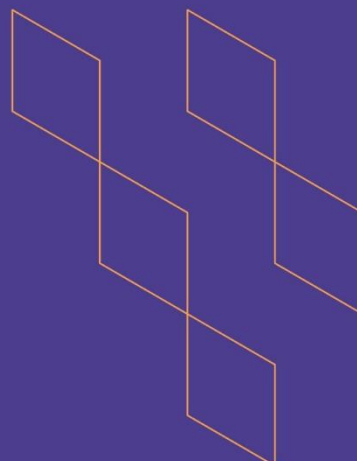




T-104  
2022

## Course Specification



Course Title:	<b>Introduction to Medical Entomology</b>
Course Code:	<b>PHE26354</b>
Program:	<b>Bachelor of Sciences in Public Health</b>
Department:	<b>Public Health</b>
College:	<b>Applied Medical Sciences</b>
Institution:	<b>University of Bisha</b>
Version:	<b>1</b>
Last Revision Date:	<b>2-8-2023</b>



## Table of Contents:

Content	Page																		
A. General Information about the course	3																		
1. Teaching mode 2. Contact Hours	3																		
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<table border="1"> <thead> <tr> <th>Mode of Instruction</th> <th>Contact Hours</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Traditional classroom</td> <td>26</td> <td>86.6%</td> </tr> <tr> <td>Blended</td> <td></td> <td></td> </tr> <tr> <td>E-learning</td> <td>2</td> <td>6.7%</td> </tr> <tr> <td>Interactive learning</td> <td>2</td> <td>6.7%</td> </tr> <tr> <td>Other</td> <td></td> <td></td> </tr> </tbody> </table>		Mode of Instruction	Contact Hours	Percent	Traditional classroom	26	86.6%	Blended			E-learning	2	6.7%	Interactive learning	2	6.7%	Other		
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B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods																			
C. Course Content	5																		
	5																		
D. Student Assessment Activities																			
	5																		
E. Learning Resources and Facilities																			
1. References and Learning Resources	5																		





2. Required Facilities and Equipment	6
F. Assessment of Course Quality	6
G. Specification Approval Data	6





## A. General information about the course:

### Course Identification

1. Credit hours: 2(2+0)

#### 2. Course type

a. University  College  Department  Track  Others

b. Required  Elective

3. Level/year at which this course is offered: 6<sup>th</sup> level 3<sup>rd</sup> year

#### 4. Course general Description

In this course, students will be providing with a foundational understanding of insects and arthropods that impact human health, the roles of vectors in disease transmission, vector-borne diseases, and the ecological aspects of vector control, and will develop a comprehensive grasp of the entomological factors influencing public health outcomes.

5. Pre-requirements for this course (if any): NA

6. Co- requirements for this course (if any): NA

#### 7. Course Main Objective(s)

The main objective of Medical Entomology course is to equip the students with a fundamental understanding of insects and arthropods that play a crucial role in the transmission of diseases affecting human populations.

By studying vector biology, ecology, and control strategies, students will develop the knowledge necessary to assess and manage entomological factors impacting public health.

### 1. Teaching mode

No	Mode of Instruction	Contact Hours	Percentage
6.	Traditional classroom	26	86.6%
7.	Blended		
8.	E-learning	2	6.7%
9.	Interactive learning	2	6.7%
10.	Other		

### 2. Contact Hours

No	Activity	Contact Hours
5.	Lecture	26
6.	E-learning	2
7.	Interactive learning	2
8.	Self-learning	45
	Total	75





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

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Discuss the principles of integrated vector management, focusing on ecological and sustainable approaches to vector control.	K3	Lectures	Written exam
1.2	Explain the epidemiology of vector-borne diseases, including the identification of key pathogens and their vectors, and the geographical distribution of these diseases.	K5		
1.3	Describe the life cycles and behaviors of common disease vectors, emphasizing their role in disease transmission and public health implications	K7		
2.0	Skills			
2.1	Apply entomological techniques for the identification and classification of disease vectors, using appropriate tools and methods.	S3	Lecture-discussion demonstrations	In class evaluation
2.2	Demonstrate the ability to design and implement basic vector control strategies, considering factors such as habitat modification, insecticide application, and community involvement.	S4		
3.0	Values, autonomy, and responsibility			
3.1	Recognize the ethical responsibilities and implications associated with vector control interventions, considering potential ecological impacts and community sensitivities.	V1	Lecture In class evaluation	In class evaluation
3.2	Collaborate effectively within a multidisciplinary team to develop and implement entomological interventions that prioritize public health and environmental sustainability.	V2		



## C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to Medical Entomology and Disease Vectors	2
2.	Life Cycles & Behaviors of Disease Vectors	2
3.	Epidemiology of Vector-Borne Diseases	2
4.	Emerging Vector-Borne Diseases: Challenges	2
5.	Principles of Integrated Vector Management	2
6.	Vector Surveillance: Tools & Techniques	2
7.	Case Studies: Vector-Borne Disease Outbreaks	2
8.	Zoonotic Vectors & Disease Transmission	2
9.	Climate Change & Vector Dynamics	2
10.	Geographical Information Systems GIS in Medical Entomology & Mapping	2
11.	Entomological Techniques for Vector ID	2
12.	Designing Effective Vector Control Strategies	2
13.	Insecticide Application for Vector Control	2
14.	Practical Vector Management: Field Exercises	2
15.	Community Engagement in Vector Control	2
<b>Total</b>		<b>30</b>

## D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Continuous assessment	All through	15%
2.	Mid exam	8 <sup>th</sup>	20%
3.	E-Learning activities	11 <sup>th</sup>	15%
4.	Final exam	16 <sup>th</sup>	50%
5.	<b>Total</b>		<b>100%</b>

\*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

## E. Learning Resources and Facilities

### 1. References and Learning Resources

#### Essential References

- Parasites and their vectors : a special focus on Southeast Asia / Yvonne Ai Lian Lim, Indra Vythilingam, editors. Wien : Springer, [2013]



	<ul style="list-style-type: none"> <li>• Mike Service.2008 4th ed. Medical Entomology for Students ISBN 978-0-521-70928-6</li> </ul>
Supportive References	<ul style="list-style-type: none"> <li>• Journal of Medical Entomology, Published by: Oxford Academic</li> <li>• Journal of Medical Entomology, Published by: Entomological Society of America</li> <li>• Parasites &amp; Vectors</li> </ul>
Electronic Materials	<ul style="list-style-type: none"> <li>• Electronic Atlas for parasitology</li> </ul>
Other Learning Materials	<ul style="list-style-type: none"> <li>• Digital library</li> </ul>

## 2. Required Facilities and equipment

Items	Resources
facilities	<ul style="list-style-type: none"> <li>○ Classrooms</li> </ul>
Technology equipment (projector, smart board, software)	<ul style="list-style-type: none"> <li>○ Data show projector</li> <li>○ Blackboard</li> <li>○ smart board</li> </ul>
Other equipment	-

## F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students, Course coordinator Program Leaders	Direct /indirect
Effectiveness of students assessment	Students, Course coordinator, Program Leaders, Examination revision committee	Direct /indirect
Quality of learning resources	Course coordinator Peer reviewer Examination revision committee	Direct /indirect
The extent to which CLOs have been achieved	Course coordinator	Direct /indirect

**Assessor** (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

**Assessment Methods** (Direct, Indirect)

## G. Specification Approval Data

COUNCIL /COMMITTEE	
REFERENCE NO.	
DATE	

