



**المركز الوطني للتقويم والاعتماد الأكاديمي**  
National Center for Academic Accreditation and Evaluation

## **ATTACHMENT 5.**

# **T6. COURSE SPECIFICATIONS (CS)**

## Course Specifications

Institution: <b>University of Tabuk</b>	Date:
College/Department: <b>Ummlaj University College / Department of Biology</b>	

### A. Course Identification and General Information

1. Course title and code: <b>Agriculture and Medical Entomology (BIO 458)</b>			
2. Credit hours: <b>3 hours</b>			
3. Program(s) in which the course is offered. <b>Biology</b> (If general elective available in many programs indicate this rather than list programs)			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: <b>Elective Topic</b>			
6. Pre-requisites for this course (if any): <b>None</b>			
7. Co-requisites for this course (if any): <b>None</b>			
8. Location if not on main campus:			
9. Mode of Instruction (mark all that apply):			
a. traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="75%"/>
b. blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other (Lab work)	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="25%"/>
Comments:			

## B Objectives

1. What is the main purpose for this course?

**At the end of this course should get to:**

- Provide students with modern information needed to reach a clear knowledge and understanding the importance of insect as agricultural pests and causing vertebrate diseases.
- Introduce students to the scientific concept of science terms partition and label scientific.
- Develop student's ability to learn and understand the different method of insect to cause harm to plants and vertebrates.
- Develop the skills of students in the remedy common mistakes to be able to distinguish between agricultural pests and medical importance insects.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Continuous updating of the material of study and work adjustments for modern scientific techniques developed in entomology by looking at recent research and access to the latest versions of the books published in this area and through the Internet.
- Review course content on a regular basis by specialists in entomology to add good and modern knowledge.
- Update the practical materials.
- The use of high-accuracy optical microscopes to examine insect specimens.
- Evaluation of the course content and its scientific benefit by students in practical ways.
- To encourage the student to the discussion during the lecture.

## C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

### 1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
Introduction to economic and medical entomology.	1	3
Types of pathogen transmission.	1	3
Types of problems caused by arthropods (directly).	1	3
Arthropods as vector of diseases (Mechanical)	1	3
Arthropods as vector of diseases (Biological)	1	3
Example of insects causing diseases (bugs)	1	3
Example of insects causing diseases (human lice)	1	3
<b>Revision and Pre Final Exam</b>		

<b>Mid Term Vacation</b>		
Example of insects causing diseases (fleas)	1	3
Example of insects causing diseases (Flies)	1	3
Example of insects causing diseases (mosquitoes)	1	3
Stored products pests -1	1	3
Stored products pests-2	1	3
Wood destroying pests. Revision	1	3
<b>Final Exam</b>		

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	26	N.A.	26	N.A.	N.A.	52
	Actual	2		1			3
Credit	Planned						
	Actual						

3. Additional private study/learning hours expected for students per week. **None**

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

**On the table below are the five NQF Learning Domains, numbered in the left column.**

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
<b>1.0</b>	<b>Knowledge</b>		
1.1	- Define the basics, the most important concepts, and terminology constants for general entomology.	- Lecture	- Written or oral questions.
1.2	- Recognize how to differentiate between different types of insects.	- Ordering of teaching assistants job interviews with students in office hours. - Practical lessons.	- Oral questions. - Practical Exam.

1.3	- Outline the evolutionary relationships between insects and different living organisms.	- Research individually or collectively. - Connect through the internet.	- Group discussion and dialogue. - Activities and homework evaluations
<b>2.0</b>	<b>Cognitive Skills</b>		
2.1	- Summarize most of the special characters of insects.	- Group discussion	- Direct questions.
2.2	- Evaluate the evolutionary relationships between insects and their hosts	- Oral discussion. - Homework. - Practical lessons.	- Measuring the ability to recognize concepts.
2.3	- Interpret the importance and the relation between the insects and the environment surrounding them.	- Ordering of teaching assistants job interviews with students in office hours.	- Periodic texts. - Practical tests.
2.4	- Judge and estimate the type of insects present in a certain location when work in the field.	- The application of the scientific method of thinking. - Collect data from internet, references journals, and record it in tables.	- Measuring the ability for analysis and interpretation.
<b>3.0</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
3.1	- Appraise their time in self-study of the course materials.	- Homework. - Conduct research.	- Project discussion.
3.2	- Operate in a team.	- Working in groups	- Student evaluation by teacher. - Observation of student behavior in the lab.
3.3	- Analyze, write and exchange the data.	- Ordering of teaching assistants job interviews with students in office hours.	- Periodic exam. - Oral discussion.
<b>4.0</b>	<b>Communication, Information Technology, Numerical</b>		
4.1	- Interpret, read the results and take responsibility.	- Homework project.	- Oral discussion.
4.2	- Interpret the modern ways in gather information in the specialty, such as computers and the Internet.	- Homework activities.	- Writing the reports and oral discussion.
4.3	- Commitment to the ethics of scientific research and work in the research team.	- Practical lessons	- Observation of student behavior in the lab.
<b>5.0</b>	<b>Psychomotor</b>		

5.1	- Draw samples of different insect stages thoroughly microscope .	- Practical lessons	- Practical exercises
5.2	- Prepare glass slides in laboratories.	- Practical lessons	- Practical exercises

5. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (i.e., essay, test, quizzes, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Short Quizzes, collective projects and reports	Throughout the semester	10%
2	Pre-final practical exam	8	10%
3	Pre-final theoretical exam	8	25%
4	Final practical exam	15	15%
5	Final Theoretical exam	As defined by Admission and registration	40%
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#### D. Student Academic Counseling and Support

<p>1. 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)</p> <ul style="list-style-type: none"> <li>- Office hours: 8 hours / week.</li> <li>- Academic Guidance for about 10 students as determined by admission and registration.</li> <li>- Direct supervision of staff for lab works.</li> <li>- Electronic communication through university web page and e-mail.</li> </ul>
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#### E Learning Resources

<p>1. List Required Textbooks</p> <ul style="list-style-type: none"> <li>- Mullen, G. L., and Durden, L. A. (2002) Medical and Veterinary Entomology. Academic Press, NY.</li> <li>- Service, M. (2008) medical Entomology for Students 4<sup>th</sup> Edition Cambridge University Press. ISBN 978-0-521-70928-6.</li> </ul>
<p>2. List Essential References Materials (Journals, Reports, etc.)</p> <ul style="list-style-type: none"> <li>- Vincent H.R.; Ring T.C. (2009): Encyclopedia of Insects, second edition. Academic press. ISBN-10: 0123741440</li> <li>- Adham, F. K.(2009) Medical and Veterinary Entomology. First Edition, A.R.E., ISBN: 977-17-6549-3.</li> </ul>
<p>3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.</p>

- Biology: Concepts and Connections- Campbell et al., Pearson International, 6<sup>th</sup> edition.
- WHO (1989) geographical distribution of arthropod-borne diseases and principal vectors.

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

## F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access, etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) - Classrooms accommodate about 60 students/ Room. - Laboratories accommodate about 30 students/ Lab.
2. Technology resources (AV, data show, Smart Board, software, etc.) - Well-equipped lab and lecture room with computers and display screens installed with curtains on the windows are required.
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) - A number of computers should be available for students.

## G Course Evaluation and Improvement Processes

1. Strategies for Obtaining Student Feedback on Effectiveness of Teaching - Questionnaires. - Direct meetings between students and faculty members.
2. Other Strategies for Evaluation of Teaching by the Instructor or by the Department - Peer consultation by departmental course committee.
3. Processes for Improvement of Teaching - Discussion sessions with colleagues and the Quality Assurance Committee of the department and faculty. - Implementation of suggestions by the administration. - Implementation of suggestions by departmental course committee. - Monitoring of teaching activities by the administration.
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)  - Reviewing assessments by chairman, colleagues and the committee of development in the department.
5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement. - Scheduled comparison with similar courses on the local and global level. - Review content periodically by the Committee on development of the department. - Using statistics of student questionnaires to assess course to improve the quality of course.





Name of Course Instructor:

Signature:

Date Specification Completed:

Program Coordinator:

Signature: \_\_\_\_\_

Date Received: \_\_\_\_\_