A- Basic Information

Title: Genetic control of insect Code: E 6512

Credit Hours: 2 hrs

Lecture: 2 Tutorial: 0 Practical: 0 Total: 2

B- Professional Information

1- Overall Aims of the Course: By the end of this course, the student should be able to**: *** application ofgenetics to the protiction of man. * crop plants and livestock against insects. * sterilizing techniques for control of insects.* Identify the DNA degradation. * understand the apoptosis in insect. * RNA interference.

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2- Intended Learning Outcomes of Course (ILOs):

a.Knowledge and Understanding: the student should be able to

a1.understand the molecular organization of DNA,RNA

a2. Know types of genes.

b- Intellectual Skills:

b1- Conclude different techniques applied in gene control

b2. Apply and analysis of DNA

b3. Apply of genes in insect control

c- Professional and Practical Skills:

c1- Use appropriate lab equipment and tools for gene control

c2- Design and perform experiments in the lab and field within proper technical,

d- General and Transferable Skills:

d1- Computer-based mining of databases and references about biotechnology.

d2- Work coherently and successfully as a part of team in projects and assignments.

3- Contents

Topic	No. of Hours	Lecture	Tutorial / Practical
Basic princeples	2	2	0
insect resistance	2	2	0
the DNA And RNA	2	2	0
Biology of inscets organs	2	2	0
Insect taxonomy	2	2	0
Genetics of insects	2	2	0
Genetics of man	2	2	0
Crop plants and livestock against of insect	2	2	0
General Entomology	2	2	0

4- Teaching and Learning methods

* Oral and writer *Video presentation
*Poster presentation *Projector presentation
*Lab top presentation

5- Student assessment methods

* Tables and models *Report per week
*Med term exam. To assess success * Final term exam. to assess success
* Oral exam. Per week

Weighting of assessments

Mid-term examination 20
Final-term examination 40
Oral examination 20

Semester work 20
Other type of assessment 0
Total 100%

6- List of references

Hodgson ,Emest (2012): pesticide biotransformation and disposition

Fayez ,A.A (2011): pesticide residues analysis of chloropyrifos- ethyl ,penconazol and imidacloprid on tomato fruits and their stability under environmental conditions

El-TEMSAH,Y.S.I (2007): potential uses of mycorrhizal fungi as a pesticide bioremediation agent

7- Facilities required for teaching and learning

*Journey and visits of different ecological natures. * Dark room for presentation
* lab. Top. *- Computer *-LCD projector * Video * Internet

Course coordinator: Prof. Mohamed Khalil

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Head of Department: Prof. Saber Sakr