



Course specification

1-Basic information

Course Code:	MKST-5164
Course title :	Table Egg, Edible Fat and Oil Safety and Technology
Academic year:	4th Academic year
Program title:	B. Sc. Veterinary Medical sciences
Contact hours/ week	2 hours/week, (1 Lect./week, 1 Practical/week)
Approval Date	

2-Professional information

Overall aims of course:

By the end of this course, the student should gain the knowledge about:

- 1- Hygienic production of Fats & Oils and Eggs.
- 2- Microbiology of eggs.
- 3- Assessing the quality and safety of eggs at both farm and plant.
- 4- Assessing the quality of fats & oils.
- 5- Contaminants in fats, oils and eggs.
- 6- HACCP system and quality assurance.

3- Intended learning outcomes of course (ILOs)

A-Knowledge and understanding:

By the end of this course the student should be able to:

- a1. Recall the egg composition and its nutritive value.
- a2. Recall the fats and oils composition and its nutritive value.
- a3. Recognize the properties of fats and oils.
- a4. Describe fat & oils and eggs hygiene.
- a5. Recognize the chemical residues in milk & milk products.
- a6. Explain the application of HACCP system in production of Fats & Oils and Eggs.
- a7. Recognize the technology, processing of Fats & Oils and Eggs.

b- Intellectual skills

By the end of this course the student should be able to:

- b1. Identify the quality of Fats & Oils and Eggs.
- b2. Examine the fat & oils and eggs with the judgment on different defects which present.
- b3. Identify food borne disease, food poisoning and suitable control measures.
- b4. Discuss the egg quality defects and its impact on human health.

c- Professional and practical skills

By the end of this course the student should be able to:

- c1. Collect samples for physical and chemical examination.
- c2. Assess the quality of fat, oil and eggs.



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- c3. Demonstrate the critical points during Fats & Oils and Eggs processing.
 c4. Detect and isolate contaminating and food poisoning microorganisms of Fats & Oils and Eggs
 c5. Perform full microbiological examination of egg.

d- General and transferable skills

By the end of studying the course, the student should be able to:

- d1. Decision making.
 d2. Manage time.
 d3. Work in group teams.

4-Topics and contents

Course	Topic	No. of hours	Lectures	Practical
Title (Lec. h./week, Pract. h./week) 5 th year second term	composition of fats and oils and its importance	2	1	1
	characterization of fats and oils	4	3	1
	examination of fats and oils	7	3	4
	margarines and spreads	2	1	1
	composition of the egg	2	1	1
	changes of the egg after laying	1	1	-
	Egg processing and preservation	4	2	2
	Microbiology of egg	3	1	2
	Egg quality defects	2	1	1
	Examination of egg	3	1	2
	Total	30	15	15

Total

5-Teaching and learning methods

- 5.1- Lectures depending on the sharing efforts of the students and supported with macromedia and multimedia aids.
 5.2- Training visits to farms as well as processing plants.
 5.3- Practical sections: Laboratory examination of Fat & Oils and Eggs by chemical and microbiological methods.
 5.4- Self learning (Electronic learning, Seminars, scientific search on related websites, international, national and local journals, related books in faculty library).
 5.5- Summer training course
 5.6- Assays and reviews
 5.7- Discussion groups

6-Teaching and learning methods for the students with disabilities

Office hours and special meeting



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7-Student assessment

7.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
Final Exam	a1 to a10	b1 to b5		
Practical Exam			c1 to c9	
Oral Exam	a1 to a10	b1 to b5	c1 to c9	d1 to d3

7.2. Assessment schedules/semester:

Method	Week(s)
Practical exams	14 th week
Final exams	managed by administrations
Oral Exam	managed by the department
Student activities	-

7.3. Weight of assessments:

Assessment	Weight of assessment
Practical exams	30%
Final exams	50%
Oral Exam	%20
	100%

8- List of references

8.1. Essential books:

- Microbial food poisoning (A.R. Eley, 1992)
- Fundamental food microbiology (B. Ray, 1996)
- Manuals of food quality (FAO, 1997)
- Food microbiology (W.C. Frazier, 1978)

8.2. Journals, Websitesetc

Journals:

- Journal of food protection
- International journal of food microbiology
- Journal of dairy science
- Journal of Food science

Websites:

- cms.nelc.edu.eg
- www.pubmed.com
- www.foodprotection.org
- www.directscience.com
- www.IDF.com

Course Coordinators

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Head of Department

Prof. Dr. Arafa meshref



Beni-Suef University
Faculty of Veterinary Medicine

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Topics		Week	Intended learning outcomes of course (ILOs)			
			K&U (a)	I.S (b)	P.P.S (c)	G.T.S (d)
1.	composition of fats and oils and its importance	2	a2	-	-	
2.	characterization of fats and oils	4	a3	-	c1	
3.	examination of fats and oils	7		b2	c1, c2	
4.	margarines and spreads	2	-	-	c1	
5.	composition of the egg	2	a1	b1	-	
6.	changes of the egg after laying	1	-	-	-	
7.	Egg processing and preservation	4	a9	b4	-	
8.	Microbiology of egg	3	-	B3	c4, c5	
9.	Egg quality defects	2	a2	b4	-	
10.	Examination of egg	3	-		-	
11.	Student activities: - Dairy plants visits. - Writing assays - Internet search - Fat & Oils and Eggs samples collection and preparation		-	-	-	d1-d3



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