جامعة الشرقية
A' SHARQIYAH UNIVERSITY

Course Descriptor

FSHN N482: Emerging Issues in Food Science and Nutrition

ACADEMIC YEAR	2020-21		
Course Code & Title	FSHN N482: Emerging Issues in Food Science and Nutrition		
Credit hours	02	**Level of study**	BSc Food science and human nutrition
College / Centre	CAHS		
Co-requisites		**Pre-requisites**	FSHN N162, FSHN N111

1. COURSE OUTLINE

In today's modern world, the most reliable guide to predicting future developments in health is a careful examination of current trends in society and progress in research. Emerging food and nutritional issues are those that pose either a threat or relief from threat to the overall health of the population. This subject explores emerging issues that concern public health today.

2. AIMS

The purpose of this course is to train students in understanding the recent advances and research in the new emerging issues for food and nutrition. It will help students to understand the positive and negative consequences of changes in relation to food, human nutrition and daily lifestyle.

3. LEARNING OUTCOMES, TEACHING, LEARNING and ASSESSMENT METHODS (Indicative)

Learning Outcomes		Teaching and Learning	Assessment
	(Definitive) Student should be able to	Methods (Indicative)	(Indicative)
1	Introduce the critical issues in food science & nutrition	Discussion, lecture, in-class activities	Assignment, Quiz, Written exam
2	Discuss the metabolic syndrome and its role in obesity	Discussion, lecture, in-class activities	Assignment, Quiz, Written exam
3	Describe the importance of vitamin D in daily life.	Discussion, lecture, in-class activities	Assignment, Quiz, Written exam
4	Describe the sources of antioxidants and their use in atherosclerosis	Discussion, lecture, in-class activities	Assignment, Quiz, Written exam
5.	Describe food Toxicology, global food security, water issues, plastic waste	Discussion, lecture, in-class activities	Assignment, Quiz, Written exam

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4. ASSESSMENT WEIGHTING

Assessment	Percentage of final mark (%)
Quizzes	20
Midterm exam	30
Online Discussion (Class activities)	10
Final exam	40
TOTAL	**100%**

5. ACHIEVING A PASS

Students will achieve **02** credit hours for this course by passing **ALL** of the course assessments *(Assignments and quizzes, Midterm examinations and Final examinations)* and achieving a **minimum overall score of 50%**

6. COURSE CONTENT (Indicative)

LECTURE TOPIC	TIME (HOURS)
Introduction of critical issues in food science & nutrition	2
Introduction of emerging issues and challenges in food science & nutrition	2
Concept of Food toxicology Basics of toxicology, Classes of chemicals, Natural vs Synthetic Chemicals,	2
Concept of Food toxicology concept of dose-response relationship, Microbial, Pesticides, additives, Allergens and related toxicity	2
Metabolic syndrome Overview, sign and symptoms, insulin resistance, prevalence of MetS, Risk factors	2
Metabolic syndrome Diagnosis, treatment, management, conclusion	2
Atherosclerosis and dietary antioxidants Introduction, free radical, ROS, oxidative stress, atherosclerosis and inflammation	2
Atherosclerosis and dietary antioxidants Polyphenols (classification and their role in atherosclerosis), management and conclusion	2
Vitamin D and Health Overview, types of vitamin D, biology and metabolism	2
Vitamin D and Health Absorption of Vitamin D, units of measurement, recommended doses of vitamin D, important sources	2
Vitamin D and Health Storage and mechanism of action, biological activity, physiologic functions,	2
Vitamin D and Health Duration of sun exposure, precaution, recommendation and conclusion	2
Plastic waste contamination	2
Plastic waste contamination and control measures	2
Global Food security and water issues	2

6. COURSE CONTENT (Indicative)

LECTURE TOPIC	TIME (HOURS)
TOTAL HOURS	**30**
Plus **RECOMMENDED INDEPENDENT STUDY HOURS**	**60**
TOTAL COURSE HOURS	**90**

7. RECOMMENDED READING

Recommended Reference:

1. Roger Gomm (2008), *"Social Research Methodology – A critical Introduction"*. 2nd Edition, Palgrave MacMillan.

2. Johnson, Christensen (2007) *"Educational Research"* Sage Pub. Inc.

3. Leedy, PD and Ormrod, JE (2004) "*Practical Research Planning and Design",* 8th Ed, Macmillan Publishing.

4. Roger Gomm (2008), *"Social Research Methodology – A critical Introduction"*. 2nd Edition, Palgrave MacMillan.