

Course Syllabus

1	Course title	New Food Product Development
2	Course number	603932
3	Credit hours (theory, practical)	3
	Contact hours (theory, practical)	3
4	Prerequisites/corequisites	X (Graduate Level).
5	Program title	Ph.D. Food Science and Technology
6	Program code	032
7	Awarding institution	University of Jordan
8	School	Agriculture
9	Department	Nutrition and Food Technology
10	Level of course	Graduate
11	Year of study and semester (s)	Spring 2020
12	Final Qualification	Ph.D.
13	Other department (s) involved in teaching the course	X
14	Language of Instruction	English
15	Date of production/revision	Jan./2020

16. Course Coordinator: Dr. Ayed S. Amr

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17. Other instructors:

None

18. Course Description:

An advanced level study of new food products with respect to history, basics and criteria used, driving forces and stages of development, ingredient function and section, role of sensory analysis, consumer satisfaction and quality motivation in product development, roles of packaging and preservation in marketing and innovation . The course includes case studies of important success stories in new food development.

19. Course aims and outcomes:

A- Aims:

After completing the course, the student is expected to:

- 1- Introduce the student to the advanced concepts of product development.
- 2- Involve the student in actual product development steps.
- 3- Equip the student with the advanced techniques he(she) needs to solve the problems they might encounter in product development.
- 4- Familiarize the students with the methods followed by the industry in market research and consumer behavior.

B- Intended Learning Outcomes (ILOs): Successful completion of the course should lead to the following outcomes:

Successful completion of the course should lead to the following outcomes:

A. Knowledge and Understanding: Student is expected to

A1- Become familiar with the major landmarks of the food product development and how they are impacted by social and economic changes.

A2- Understand the driving forces of new product development.

A3- Describe the role ingredients play in the development of new products.

B. Intellectual Analytical and Cognitive Skills: Student is expected to

B1- List down the stages followed in product development.

B2- Understand the strategies of new product development.

B3- Distinguish between a meaningful and an ordinary brand.

C. Subject- Specific Skills: Student is expected to

C1- Use innovative techniques in product development.

C2- Solve the market and quality problems encountered in the development of new products. .

C3- Develop and launch a new product.

D. Transferable Key Skills: Student is expected to

D1- Apply the principles of sensory analysis and statistics to the development of new products.

D2- Apply statistical methods to new products.

D3- Design an experiment and analyze its results.

D4- Conduct a research in new product development.

20. Topic Outline and Schedule:

Topic	Lecture	Instructor	Achieved ILOs	Evaluation Methods	Reference
Introduction to product development, How Did the Food Industry Get (from There)to Here?	1	Amr	A1	Group discussion.	1,2
The Product Development Project in the Company, Understanding Product Development in Today's Food Industry.	2	Amr	A2	Group discussion.	1,2
The Organisation of the Product Development Project.	3	Amr	A2,A3	Group discussion.	1,2
The Organisation of the Product Development Project.	4	Amr	B1,B2,B3	Group Discussion	2
Product Strategy Development Idea Generation and Screening	5,6	Amr	B2,B3	First Quiz	1
Product Strategy Development Idea Generation and Screening.	6	Amr	B3	Group Discussion	1
Developing Partnerships: Using Outside Resources for Product Development.	7, 8	Amr	B5	Group Discussion	2
Developing Partnerships: Using Outside Resources for Product Development.	9,10	Amr	C1,C2,C3	Group Discussion, Term paper, Midterm.	2
Building Superior R&D Organizations 41 Control.	11	Amr	D2	Group Discussion,	2
Commercial Enzyme Production	12,13	Amr	D3, D4	Group Discussion,	2
A Supplier Perspective: Superior Services and Products Help Change Happen	14	Amr	D1	Group Discussion, Project. Final.	2
Brands: A Discussion on the Difference Between Creating Good Brands and Meaningful Brands	15,16,17		D2	Second Quiz	1
Market Forces: The Push-Pull of Marketing and Advertising in the New Product Business	18,19		C1,D3, D4	Group discussion	1
Speed Bump or	20,21		A2,C2,D2	Group discussion	1

Opportunity: Innovative Packaging and Its Impact on Accelerated Product Development Time					
Identifying Critical Steps in the New Product Development Process	22,23		C1,D1	Group discussion	1
Statistical Design: Experimental Units and Proper Designs	24,25,26,27		C1, A1	Group discussion	1
Category Appraisal and Ingredient Search: Identifying Key Sensory Factors and Product Features at the Early Development Stage	28,29		C2,D2	Term Paper Presentation	1
Applications of Discriminant and Logistic Regression Analysis for Consumer Acceptance and Consumer-Oriented Product Optimization Study	30,31,32		D1, D3, C3	Group discussion	1
Final Examination				Final	

21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods: Lectures, Group discussions, Term paper, Project, Midterm and Final Exams. Term papers and projects are presented by the students.

22. Evaluation Methods and Course Requirements:

As shown in table.

23. Course Policies:

- A- Attendance policies: Attendance is taken in the beginning of every lecture.
- B- Absences from exams and handing in assignments on time: Subject to university rules and regulations.
- C- Health and safety procedures: Subject to University Regulations.
- D- Honesty policy regarding cheating, plagiarism, misbehavior: Subject to university regulations.
- E- Grading policy: Midterm(30%), Term paper, quizzes, assignments and Project(30%), Final (40%).
- F- Available university services that support achievement in the course: Internet.

24. Required equipment: (Facilities, Tools, Labs, Training...)

Lecture Hall, Computer Lab., Data show

25. References:

Required book (s), assigned reading and audio-visuals:
1-Beckley, Jacqueline H.; Foley, M. Michele; Topp, Elizabeth J.; Huang, J.C.; Prinyawiwatkul, Witoon . 2007. Accelerating New Food Product Design and Development. John Wiley & Sons. Ames, Iowa. USA.
2-Mary D. Earle and Richard L. Earle.2009. Creating New Foods. The Product Developer's Guide, the Web Edition The New Zealand Institute of Food Science & Technology. Wellington, New Zealand.

26. Additional information:

- Concerns or complaints should be expressed in the first instance to the module lecturer; if no resolution is forthcoming, then the issue should be brought to the attention of the module coordinator (for multiple sections) who will take the concerns to the module representative meeting. Thereafter, problems are dealt with by the Department Chair and if still unresolved the Dean and then ultimately the Vice President. For final complaints, there will be a committee to review grading the final exam.
- For more details on University regulations please visit:
<http://www.ju.edu.jo/rules/index.htm>

Name of Course Coordinator: Ayed Amr -Signature: _____ Date: June/2020.

Head of curriculum committee/Department: ----- Signature: -----

Head of Department: ----- Signature: -----

Head of curriculum committee/Faculty: ----- Signature: -----

Dean: ----- -Signature: -----