

MODULE DOCUMENTATION

Food Packaging and Shelf Life

MANF08003

Mandatory


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|----------------------|-------------------------------|---------------------|--------------------|
| Full Title | Food Packaging and Shelf Life | | |
| Status | Uploaded to Banner | Start Term | 2017 |
| NFQ Level | 08 | ECTS Credits | 05 |
| Module Code | MANF08003 | Duration | Stage - (26 Weeks) |
| Grading Mode | | Department | Culinary Arts |
| Module Author | Francesco Noci | | |

Module Description

The module is designed to provide a solid understanding of the fundamentals principles of food packaging and the factors affecting shelf life of food products.

| Learning Outcomes | |
|--|---|
|  | <i>On completion of this module the learner will/should be able to:</i> |
| 1. | Discuss the primary, secondary and tertiary role of packaging in the food industry |
| 2. | Apply the principles of design packaging for food markets |
| 3. | Illustrate the differences in the composition, manufacture, properties and uses of food packaging materials |
| 4. | Analyse how EU legislation influences food packaging |
| 5. | Identify the important factors food packaging specification documents |
| 6. | Explain the factors influencing food shelf life and how to control them |

Indicative Syllabus

Introduction to food packaging,
 Packaging development,
 Design and printing of food packaging materials,
 Packaging materials(glass, metals, paperboard, corrugated paperboard, plastics and laminates in the food industry) closure systems, use of adhesives,
 MAP, CAP and vacuum packaging of foods,
 Package labelling and legal requirements
 Packaging specification sheets
 The shelf life of foods
 Food deterioration and spoilage
 Factors affecting shelf life
 Methods for shelf life prediction
 Shelf life determination in practice - case studies

Teaching and Learning Strategy

The teaching and learning strategy for this module consists of a combination of theory lectures, practical activities in a laboratory setting and food manufacturing site visits that can strengthen the understanding of the theoretical concepts

Assessment Strategy

Assessment strategy for this module will be based on an end of semester exam, supported by Continuous assessment in the form of in class test and a group project

Repeat Assessment Strategies

Repeat examination

| Indicative Coursework and Continuous Assessment: | | 50 % | | |
|---|---------------|----------------|--------------------------|--------------------------|
| Form | Title | Percent | Week (Indicative) | Learning Outcomes |
| Group Project | Project | 25 % | End of Semester | 1,2,3,4 |
| Assessment | In class test | 25 % | TBA | 1,2,3,6 |

| End of Semester / Year Formal Exam: | | 50 % | | |
|--|--------------|----------------|--------------------------|--------------------------|
| Form | Title | Percent | Week (Indicative) | Learning Outcomes |
| Closed Book Exam | Exam | 50 % | End of Semester | 1,2,3,4,5,6 |

| Full Time Delivery Mode Average Weekly Workload: | | | 3.00 Hours | | |
|---|--------------------|-----------------|-------------------|------------------|-------------------|
| Type | Description | Location | Hours | Frequency | Weekly Avg |
| Lecture | Lecture | Lecture Theatre | 2 | Weekly | 2.00 |
| Practical | Laboratory | Laboratory | 1 | Weekly | 1.00 |

Recommended Reading Book List

Man, D., (2015). *Shelf Life*. Wiley-Blackwell.
ISBN 1118346262 ISBN-13 9781118346266

, L., *Packaging: Specifications: Purchasing, and Quality Control, Fourth Edition, (Packaging and Converting Technology)*. CRC Press.
ISBN 0824797558 ISBN-13 9780824797553

Food Packaging Technology (Sheffield Packaging Technology).
ISBN 1841272213 ISBN-13 9781841272214

Packaging Closures and Sealing Systems (Sheffield Packaging Technology)
ISBN 1841273376 ISBN-13 9781841273372

Robertson, L., (2005). *Food Packaging: Principles and Practice, Second Edition (Food Science and Technology (CRC Press))*. CRC Press.
ISBN 0849337755 ISBN-13 9780849337758

Programme Membership

GA_OCGSG_H08 202000 Bachelor of Arts (Honours) in Culinary and Gastronomic Sciences