



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

| | | | | | | | | | |
|--|---|---|----------------------|--|---|--------------------------------|---|------------|---|
| Course Title | | Degredation Factors and Contaminants in Foods | | | | | | | |
| Course Code | | GMP502 | | Couse Level | | Second Cycle (Master's Degree) | | | |
| ECTS Credit | 8 | Workload | 200 (<i>Hours</i>) | Theory | 3 | Practice | 0 | Laboratory | 0 |
| Objectives of the Course | | The aim of this course is to teach the microbial and enzymatic degradation factors and contaminants in food. | | | | | | | |
| Course Content | | Deterioration that may occur during processing and storage of food factors and is planned to be discussed within the course In addition to these food contaminants and potential contamination sources will be discussed | | | | | | | |
| Work Placement | | N/A | | | | | | | |
| Planned Learning Activities and Teaching Methods | | | | Explanation (Presentation), Discussion, Case Study, Individual Study | | | | | |
| Name of Lecturer(s) | | | | | | | | | |

Assessment Methods and Criteria

| Method | Quantity | Percentage (%) |
|---------------------|----------|----------------|
| Midterm Examination | 1 | 40 |
| Final Examination | 1 | 60 |

Recommended or Required Reading

| | |
|---|---|
| 1 | Environmental Health Criteria. Principles of Safety Assesments of Food Additives and Contaminants in Foods World Health Organization.1990 |
| 2 | Science direct üzerinden taranmış son yıllarda yapılmış araştırma makaleleri |

| Week | Weekly Detailed Course Contents | |
|------|---------------------------------|--|
| 1 | Theoretical | Microbiological degradation in food |
| 2 | Theoretical | Lipid oxidation mechanism |
| 3 | Theoretical | Enzymatic reactions |
| 4 | Theoretical | Non-enzymatic reactions |
| 5 | Theoretical | Degredation in fruit and vegetables |
| 6 | Theoretical | Degredation in cereal and cereal products |
| 7 | Intermediate Exam | Exam |
| 8 | Theoretical | Food safety and food contaminants |
| 9 | Theoretical | Environmental contaminants, radioactive elements, trace elements |
| 10 | Theoretical | Agricultural contaminants, pesticides, hormones, antibiotics |
| 11 | Theoretical | Nitroseamines |
| 12 | Theoretical | Contaminants found in food additives |
| 13 | Theoretical | Package sourced contaminants |
| 14 | Final Exam | Final exam |

Workload Calculation

| Activity | Quantity | Preparation | Duration | Total Workload |
|---|----------|-------------|----------|----------------|
| Lecture - Theory | 14 | 9 | 3 | 168 |
| Midterm Examination | 1 | 15 | 1 | 16 |
| Final Examination | 1 | 15 | 1 | 16 |
| Total Workload (Hours) | | | | 200 |
| [Total Workload (Hours) / 25*] = ECTS | | | | 8 |
| *25 hour workload is accepted as 1 ECTS | | | | |

Learning Outcomes

| | |
|---|--|
| 1 | |
| 2 | |



| | |
|---|--|
| 3 | |
| 4 | |
| 5 | |
| 6 | |

Programme Outcomes (Food Engineering Master)

| | |
|---|--|
| 1 | To provide further training and research opportunities to food engineers to meet the needs of the food industry |
| 2 | To develop and deepen the current and advanced knowledge in the field of food engineering with original thought and / or research at the level of expertise, based on the qualifications of the master |
| 3 | To identify, define, formulate and solve problems in applications related to Food Engineering and gain the ability to select and apply appropriate analytical methods and modeling techniques |
| 4 | To gain the ability to evaluate the accuracy of the data obtained from food analysis |
| 5 | To educate students having research, entrepreneur qualifications |

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

| | L1 | L2 | L3 | L4 | L5 | L6 |
|----|----|----|----|----|----|----|
| P1 | 1 | | | | | |
| P2 | 5 | 5 | | | | |
| P3 | 5 | 4 | | | | |
| P4 | | | 3 | 2 | 4 | 4 |
| P5 | | | 3 | 4 | | |

