# PRINCIPLES OF FOOD PRESERVATION

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| 1 | Course Title: | PRINCIPLES OF FOOD PRESERVATION |
| 2 | Course Code: | VBH 5008 |
| 3 | Type of Course: | Compulsory |
| 4 | Level of Course: | Second Cycle |
| 5 | Year of Study: | 1 |
| 6 | Semester: | 2 |
| 7 | ECTS Credits Allocated: | 3.00 |
| 8 | Theoretical (hour/week): | 1.00 |
| 9 | Practice (hour/week): | 0.00 |
| 10 | Laboratory (hour/week): | 0 |
| 11 | Prerequisites: | None |
| 12 | Language: | Turkish |
| 13 | Mode of Delivery: | Face to face |
| 14 | Course Coordinator: | Prof. Dr. FİGEN ÇETİNKAYA |
| 15 | Course Lecturers: | |
| 16 | Contact information of the Course Coordinator: | e-mail: fcetinkaya@uludag.edu.tr<br>Uludağ Ünv. Veteriner Fak. Besin Hijyeni ve Teknolojisi Anabilim Dalı |
| 17 | Website: | |
| 18 | Objective of the Course: | To teach physical, chemical and biological preservation techniques used to prevent food spoilage and to provide the inactivation/inhibition of pathogenic microorganisms which are cause of foodborne diseases |
| 19 | Contribution of the Course to Professional Development: | |
| 20 | Learning Outcomes: | |

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| | 1 | Classification of food preservation methods |
| | 2 | Preservation by heating processes of foods |
| | 3 | Canned food technology |
| | 4 | Cooling and freezing techniques of foods |
| | 5 | Drying and irradiation technologies |
| | 6 | Chemical preservation of foods |
| | 7 | Smoking technology |
| | 8 | Methods of food packaging |
| | 9 | |
| | 10 | |

| 21 | Course Content: | |
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### Course Content:

| Week | Theoretical | Practice |
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| 1 | Definition and classification of food preservation methods |
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| 2 | Preservation by heating processses of foods - pasteurization, UHT sterilization and microwave |
| 3 | Canned food production |
| 4 | Cooling and cold storage of foods |
| 5 | Freezing and frozen storage of foods |
| 6 | Food drying technology |
| 7 | Food irradiation technology |
| 8 | High pressure processing |
| 9 | Chemical methods of food preservation – organic acids and their salts |
| 10 | Chemical methods of food preservation –nitrate and nitrite |
| 11 | Smoking technologies |
| 13 | Controlled atmospheric packaging (CAP) |
| 14 | Vacuum packaging technology |
| 22 | Textbooks, References and/or Other |

| Activites | Number | Duration (hour) | Total Work Load (hour) |
|---|---|---|---|
| Theoretical | 14 | 1.00 | 14.00 |
| Practicals/Labs | 0 | 0.00 | 0.00 |
| Self study and preperation | 3 | 5.00 | 15.00 |
| Homeworks | 2 | 15.00 | 30.00 |
| Projects | 0 | 0.00 | 0.00 |
| Field Studies | 0 | 0.00 | 0.00 |
| Midterm exams | 0 | 0.00 | 0.00 |
| Others | 0 | 0.00 | 0.00 |
| Final Exams | 1 | 31.00 | 31.00 |
| Total Work Load | | | 90.00 |
| Total work load/ 30 hr | | | 3.00 |
| ECTS Credit of the Course | | | 3.00 |

Textbooks, References and/or Other: 1. Jay, JM., Loessner, MJ., Golden, DA., 2005. Modern ... Science Business Media, Inc., USA. ... 975-00131-0-9, Pozitif Matbaacılık Ltd. Şti., Ankara. ... 48048-2-0, Elif yayınevi, İstanbul. ISBN: 978-605-86342-0-4, Meta Basım Matbaacılık Hizmetleri, İzmir.

| 23 | Assesment |
|---|---|

| TERM LEARNING ACTIVITIES | NUMBER | WEIGHT |
|---|---|---|
| Midterm Exam | 0 | 0.00 |
| Quiz | 0 | 0.00 |
| Home work-project | 2 | 10.00 |
| Final Exam | 1 | 90.00 |
| Total | 3 | 100.00 |
| Contribution of Term (Year) Learning Activities to Success Grade | | 10.00 |

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| Contribution of Final Exam to Success Grade | 90.00 | |
| Total | 100.00 | |
| Measurement and Evaluation Techniques Used in the Course | | |

| 24 | ECTS / WORK LOAD TABLE |
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| 25 | CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PQ1 | PQ2 | PQ3 | PQ4 | PQ5 | PQ6 | PQ7 | PQ8 | PQ9 | PQ10 | PQ11 | PQ12 | PQ13 | PQ14 | PQ15 | PQ16 |
| ÖK1 | 1 | 1 | 2 | 5 | 1 | 2 | 2 | 5 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| ÖK2 | 2 | 1 | 3 | 5 | 1 | 2 | 2 | 4 | 3 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| ÖK3 | 1 | 1 | 2 | 4 | 2 | 2 | 3 | 5 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| ÖK4 | 2 | 1 | 3 | 4 | 2 | 2 | 3 | 5 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| ÖK5 | 1 | 1 | 2 | 5 | 1 | 2 | 2 | 5 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| ÖK6 | 1 | 1 | 2 | 4 | 2 | 2 | 3 | 5 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| ÖK7 | 2 | 1 | 3 | 5 | 1 | 2 | 2 | 4 | 3 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| ÖK8 | 1 | 2 | 2 | 4 | 2 | 3 | 2 | 5 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| LO: Learning Objectives    PQ: Program Qualifications | | | | | | | | | | | | | | | | |

| Contribution Level: | 1 very low | 2 low | 3 Medium | 4 High | 5 Very High |
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