## Course Syllabus

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|---|---|
| **Code - Course Title** | **MLY539 - Strategy and Game Theory** |
| **Course Type** | I. SEMESTER |
| **Laboratory + Practice** | 3+0 |
| **ECTS** | **6.0** |
| **Language of Instruction** | Türkçe |
| **Course Type** | Elective Courses |
| **Course Instructor(s)** | DR. ÖĞR. ÜYESİ HATİCE ALTINOK |

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| **Mode of Delivery** | Face to face |
| **Prerequisites** | There is no. |
| **Courses Recomended** | There is no. |
| **Recommended Resources** | There is no. |
| **Work Placement** | There is no. |

## Course Syllabus

| Weeks | Learning Outcomes | Topics | Teaching Methods |
|---|---|---|---|
| **Week - 1** | | Foundations: Optimization and Probability | |
| **Week - 2** | | Basic Concepts | |
| **Week - 3** | | Strategic Form Games and Dominant Strategies | |
| **Week - 4** | | Nash Equilibrium | |
| **Week - 5** | | Nash Equilibrium: Applications | |
| **Week - 6** | | Mixed Strategies and Applications | |
| **Week - 7** | | Statics Games with Incomplete Information and Applications | |
| **Week - 8** | | Statics Games with Complete Games and Applications | |
| **Week - 9** | | Dynamics Games with Complete Games and Applications | |
| **Week - 10** | | Dynamics Games with Incomplete Games and Applications | |
| **Week - 11** | | Zero-Sum Games | |
| **Week - 12** | | Repeated Games | |
| **Week - 13** | | Coalition Games | |
| **Week - 14** | | Bargain Games | |

## Learning Outcomes

| # | Learning Outcome |
|---|---|
| **1** | Learning the mathematical foundation that forms the foundations of game theory, |
| **2** | To know the basic concepts in game theory, |
| **3** | To be able to analyze human and society relations with basic concepts and concepts, |
| **4** | To be able to make microeconomic analysis by using the game and theoretical tools, |
| **5** | To be able to discuss on applications in public finance and other social sciences, |
| **6** | Transferring practical situations with game theory and various applications, |
| **7** | Ability to use problem solving and related techniques, |
| **8** | Providing reasoning skills with various strategies, |

## Sustainable Development Goals

*No content has been provided.*

## Course Theme

*No content has been provided.*

## AKTS Workload

| Activity | Duration (Hour) | Count | Workload |
|---|---|---|---|
| Teorik Derse Katılım | 0 | 0 | 0 |
| Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı) | 0 | 0 | 0 |
| Ödevler | 0 | 0 | 0 |
| Proje - Rapor - Sunum Hazırlama | 0 | 0 | 0 |
| Ara Sınav Hazırlığı (sınav süresi dahil) | 0 | 0 | 0 |
| Final Sınavı Hazırlığı (sınav süresi dahil) | 0 | 0 | 0 |
| Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.) | 0 | 0 | 0 |
| Staj Uygulaması | 0 | 0 | 0 |
| | | **Calculated ECTS** | **0** |

## Assessment Method and Passing Requirements

*No content has been provided.*