

DERS BİLGİLERİ FORMU	
Dersi Açılan Fakülte/ Enstitü	İktisadi İdari Bilimler Fakültesi
Dersi Açılan Bölüm/ Ana Bilim Dalı	İktisat
Dersin Kodu	ECON 261
Dersin Adı	Mathematics For Economists
Öğretim Dili	İngilizce
Dersi Alan Programlar	Economics, Mathematics...
Ders Türü	Zorunlu
Dersin Seviyesi	Lisans 2. Sınıf
AKTS Kredisi	6
Ön Koşullar	Students should have successfully completed MAT 103 or ECON 105 prior to taking this course.
Dersin İçeriği	This course intends to introduce the basic mathematical tools used in economics with their applications. Mathematical preliminaries and their use in several economics problems will be of interest.
Dersin Amacı	Linear algebra, constrained and un-constrained optimization will be the main subjects of the course.
Dersin Kazanımları	Matrix Linear Algebra, Differentiation, Static Optimization under constraints, Dynamic Lagrange Method, Dynamic Programming and Bellman Equation and Economic Applications
Ders Kitabı ve/veya Kaynaklar	Klein, M. W., Mathematical Methods for Economics, 2nd ed., Addison Wesley, 2002. (K) Chiang, A. and K. Wainwright, Fundamental Methods of Mathematical Economics, 4th ed, McGraw-Hill Irwin, 2005. (CW) Simon, C. P. and L. Blume, Mathematics for Economists, 1st ed. Sundaram, R.K., A First Course in Optimization Theory, Cambridge University Press, 1996.
Değerlendirme Ölçütleri	Katkı payı
Devam	
Laboratuvar	
Uygulama	
Alan Çalışması	
Ödev	15%
Sunum	
Projeler	
Seminer	
Ara Sınavlar	MT-30%
Quiz	15%
Final	40%
Toplam	100%
Ders Planı	Tartışılacak/ İşlenecek Konular
1. Hafta	Matrix Linear Algebra
2. Hafta	Matrix Linear Algebra
3. Hafta	Matrix Linear Algebra
4. Hafta	Review of functions, differentiation etc.
5. Hafta	Static Optimization
6. Hafta	Static Optimization
7. Hafta	Static Optimization
8. Hafta	Static Optimization
9. Hafta	Static Optimization
10. Hafta	Introduction to dynamic optimization in discrete-time: Dynamic Lagrange method
11. Hafta	Introduction to dynamic programming and Bellman equation; and economic applications
12. Hafta	Introduction to dynamic programming and Bellman equation; and economic applications