

**Ankara Üniversitesi  
Kütüphane ve Dokümantasyon Daire Başkanlığı  
Açık Ders Malzemeleri**

**Ders izlenme Formu**

<b>Dersin Kodu ve İsmi</b>	CHE236 sayısal yöntemler (Numerical Methods)
<b>Dersin Sorumlusu</b>	Prof. Dr. Hale Hapoğlu , Doç. Dr. Hakan Kayı (KYM236 : Prof. Dr. Zehra Zeybek)
<b>Dersin Düzeyi</b>	İkinci sınıf dersi
<b>Dersin Kredisi</b>	(1 4) 3
<b>Dersin Türü</b>	Zorunlu
<b>Dersin İçeriği</b>	Numerical methods, approximations and errors, roots of equations and polynomials, solution of linear and nonlinear systems of equations, linear and nonlinear regression, Interpolation, numerical differentiation and integration, solution of ordinary differential equations, boundary-value and eigenvalue problems.
<b>Dersin Amacı</b>	To explain numerical methods, find roots of equations and polynomials, solve linear, nonlinear systems of equations, choose and apply linear and nonlinear regression, interpolating polynomials and spline interpolation, apply numerical differentiation and integration, solve differential equations.
<b>Dersin Süresi</b>	Bahar dönemi
<b>Eğitim Dili</b>	İngilizce
<b>Ön Koşul</b>	yok
<b>Önerilen Kaynaklar</b>	<p>1. Chapra S.C. and Canale R.P. "Numerical Methods for Engineers", Sixth Edition, McGraw Hill, International Edition 2010.</p> <p>2. Chapra S.C. and Canale R. P. "Yazılım ve programlama Uygulamalarıyla Mühendisler için Sayısal Yöntemler" 4.Basımdan Çevirenler: Hasan Heperkan ve Uğur Kesgin 2003.</p> <p>3. Chapra S.C. "Applied Numerical Methods with MATLAB for engineers and Scientists" Third Edition, McGraw Hill, International Edition 2012.</p> <p>4. Mathews J.H. and Fink K.D. "Numerical Methods using MATLAB", Fourth Edition, Pearson P. Hall, International Edition 2004.</p> <p>5. Fausett L.V. "Applied Numerical Analysis Using MATLAB, Second Edition, PearsonP. Hall, International Edition, 2008.</p> <p>6. Gilat A. And Subramaniam V. "Numerical Methods, An introduction with Applications Using MATLAB", Second Edition, John Wiley and Sons. Inc. 2011.</p>

<b>Dersin Kredisi</b>	4 AKTS Kredisi
<b>Laboratuvar</b>	--
<b>Diğer-1</b>	İki arasınav, Ödevler, finalsınavı