**Ankara Üniversitesi
Kütüphane ve Dokümantasyon Daire Başkanlığı**

**Açık Ders Malzemeleri**

Ders izlence Formu

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| Dersin Kodu ve İsmi | **Mth2202 MATHEMATICAL ANALYSIS II** |
| Dersin Sorumlusu | Doç. Dr. Murat OlgunDoç. Dr. Yelda AygarDoç. Dr. Mehmet Ünver |
| Dersin Düzeyi | Lisans |
| Dersin Kredisi | 5 |
| Dersin Türü | Zorunlu |
| Dersin İçeriği | The Taylor expansion of function of two variables, Extremums of functions of two variables, Change of variables and vector fields, Geometric interpretation of partial derivatives, Double integrals, Change of variables of double integrals, Area, volume and center of mass by double integration, Triple integrals, Evaluations of triple integrals by spherical and cylindrical coordinates, Volume and center of mass by triple integration, Line integrals (line integrals of scalar and vector fields), Fundamental theorems and applications of line integrals, Surface integrals, Fundamental theorems and applications of surface integrals |
| Dersin Amacı | To teach extremums of the functions of several variables. To evaluate multiple integrals and their applications, line and surface integrals |
| Dersin Süresi | 14 Hafta- 5 saat (Haftalık) |
| Eğitim Dili | English |
| Ön Koşul | - |
| Önerilen Kaynaklar | B.Yurtsever: Matematik Analiz Dersleri, Cilt I, 1981. Ekonomist yayınevi, Ankara. J.A.Fridy: Introductory Analysis, The Theory of Calculus, Academic Press, 1987, USA. James Stewart: Kalkülüs- Diferensiyel ve İntegral Hesap,TÜBA yayınları,2007,Ankara K.A.Ross: Elementary Analysis, The Theory of Calculus, Springer Verlag, 1980, New York. M. Balcı: Matematik Analiz, Cilt I, 2000. Ertem matbaası, Ankara  |
| Dersin Kredisi (AKTS) | 7 |
| Laboratuvar | - |
| Diğer-1 | - |