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| |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | **Dersin Adı** | | **Kodu** | **Yarıyıl** | **T+U** | **Kredi** | **AKTS** | | **Biyofizik** | | 2802204 | 2 | 2+0 | 2 | 2 | | Ön koşul Dersler | Yok | | | | | | | Dersin Dili | Türkçe | | | | | | | Dersin Türü | Zorunlu | | | | | | | Dersin Koordinatörü |  | | | | | | | Dersi Veren |  | | | | | | | Dersin Yardımcıları |  | | | | | | | Dersin Amacı | Sağlık alanında (tıp) biyofiziğin temel kavram ve kuralları, biyofiziksel uygulamaların öğrenilmesi ile fizyoterapi mesleğine ait temel bilgilerin öğretilmesi | | | | | | | Dersin Öğrenme Çıktıları | 1. Biyofizik temel kavramları ve biyoenerjetik bilgisi edinme 2. Hücre zarında madde taşınımı yöntemleri 3. Dinlenim potansiyeli ve aksiyon potansiyeli oluşumu 4. Kas kasılmasının oluşumu ve biyomekanik ilişkiler | | | | | | | Dersin İçeriği | Temel tıbbi biyofizik uygulamaları | | | | | | | **Haftalar** | **Konular** | | | | | | | 1 | Ölçme, birimler, Skaler ve vektör | | | | | | | 2 | Hareket, Hareket denklemleri | | | | | | | 3 | Kuvvet ve hareket, Denge | | | | | | | 4 | Hareket kanunları | | | | | | | 5 | İş ve enerji | | | | | | | 6 | Momentum ve itme | | | | | | | 7 | Çarpışmalar | | | | | | | 8 | Dairesel hareket | | | | | | | 9 | Katı cismin dönmesi, Açısal momentum | | | | | | | 10 | Eylemsizlik momenti, Basit harmonik hareket | | | | | | | 11 | Diğer yaklaşımlar | | | | | | | 12 | Maddenin Mekanik Özellikleri, Isı sıcaklık | | | | | | | 13 | Vaka çalışmaları | | | | | | | 14 | Vaka çalışmaları | | | | | |  |  | | --- | | **Genel Yeterlilikler** | | Biyofizik temel kavramlarını bilir.  Hücre zarında madde taşınımı yöntemleri hakkında bilgi sahibidir.  Dinlenim potansiyeli ve aksiyon potansiyeli oluşumunu bilir.  Kas kasılmasının oluşumu ve biyomekanik ilişkileri bilir. | | **Kaynaklar** | | Çelebi G:2011; Biyofizik, İzmir, Davidovits P:2011; Biyoloji ve Tıpta Fizik, İstanbul | | **Değerlendirme Sistemi** | | Harran Üniversitesi Önlisans ve Lisans Yönetmeliği gereği akademik dönem başında ilan edilen ders izlencelerinde belirtilecektir. |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **PROGRAM ÇIKTILARI VE İLGİLİ DERSİN İLİŞKİSİ** | | | | | | | | | | | | **Ders** | **PÇ1** | **PÇ2** | **PÇ3** | **PÇ4** | **PÇ5** | **PÇ6** | **PÇ7** | **PÇ8** | **PÇ9** | **PÇ10** | | Biyofizik | 2 | 3 |  | 2 | 2 |  |  | 3 | 3 | 3 |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | **PROGRAM ÖĞRENME ÇIKTILARI İLE**  **DERS ÖĞRENİM ÇIKTILARI İLİŞKİSİ TABLOSU** | | | | | | | | | | |  | **PÇ1** | **PÇ2** | **PÇ3** | **PÇ4** | **PÇ5** | **PÇ6** | **PÇ7** | **PÇ8** | **PÇ9** | **PÇ10** | | **ÖÇ1** | 2 | 3 |  | 2 | 2 |  |  | 3 | 3 | 3 | | **ÖÇ2** | 2 | 3 |  | 2 | 2 |  |  | 3 | 3 | 3 | | **ÖÇ3** | 2 | 3 |  | 2 | 2 |  |  | 3 | 3 | 3 | | **ÖÇ4** | 2 | 3 |  | 2 | 2 |  |  | 3 | 3 | 3 | | **ÖÇ: Öğrenme Çıktıları    PÇ: Program Çıktıları** | | | | | | | | | | | | **Katkı Düzeyi** | **1 Çok Düşük** | | | **2 Düşük** | **3 Orta** | | | **4 Yüksek** | **5 Çok Yüksek** | | |