Course Syllabus

Code - Course Title	**İEÖ530 - Practices of Teaching Mathematics to the Hearing-Impaired**
Course Type	I. SEMESTER
Laboratory + Practice	3+0
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Elective Courses
Course Instructor(s)	DOÇ. DR. AYŞE TANRIDİLER

Mode of Delivery	The mode of delivery of this course is Face to face
Prerequisites	There is no prerequisite or co-requisite for this course
Courses Recomended	There is no recommended optional programme component.

Recommended Resources	Akman, B. (2019). Erken Çocuklukta Matematik Eğitimi. Ankara: Pegem Akademi. Aktaş-Arnas,Y. (2002). Okulöncesi Dönemde Matematik Eğitimi. Adana; Nobel Tıp Kitabevi.Barham, J. ve Bishop, A. (1991). Mathematics and the deaf children. Language in Mathematical Education. (Ed: Kevin Durkin & Beatrice Shire). Open University Pres.Barton, M. L., Heidema, C. ve Jordan, D. (2002). Teaching in mathematics. Educational Leadership, November, 24–28.Baykul, Y. (2009) İlköğretimde Matematik Öğretimi. Ankara: Pegem Akademi. Epstein, K. I., Hillegeist, E. G. ve Grafman J. (1994). Number processing in deaf college students. American Annals of The Deaf. 139(3), 336-347.Fluentes, P. (1998). Reading comprehension in mathematics. The Cleaning House. 72(2), 81–88.Güldür, F. (2005) İşitme engelliler ilköğretim okuluna devam eden öğrencilerin dört işleme dayalı matematik problemlerini çözme davranışlarının incelenmesi. Yayımlanmamış yüksek lisans tezi. Eskişehir: Anadolu Üniversitesi Eğitim Bilimleri EnstitüsüGürsel, O. (2010). Matematik Öğretimi. İlköğretimde Kaynaştırma. (Ed. İ.H.Diken) Pegem Akademi, Ankara, s.444-478.Hess, L. (2015). Early Childhood Mathematics for Children who are Deaf or Hard-of-Hearing: Amplifying Opportunities to Develop Foundational Math Skills. All Graduate Plan B and other Reports. 482 Hitch, G.J., Arnold, P. ve Philips, L.J. (1983). Counting processes in deaf children’s arithmetic. British Journal of Psychology, 74, 429-437Jones, E. D. ve Southern, W. T. (2003). Balanced perspectives on mathematics instruction. Focus on Exceptional Children, 35(9). Kelly, R. R. ve Mousley, K. (2001). Solving word problems: more than reading issues for deaf students. American Annals of the Deaf, 146(3), 251–Kelly, R. R., Lang, H. G. ve Pagliora, C. M. (2003). Mathematics word problem solving for deaf education: a survey of practices in grades: 6–12. Journal of Deaf Studies and Deaf Education, 8, 104–119.Kritzer,K. L. (2009) Barely Started and Already Left Behind: A Descriptive Analysis of the Mathematics Ability Demonstrated by Young Deaf Children. Journal of Deaf Studies and Deaf Education 14:4 Fall 2009Kritzer, K. L. (2009). Families with young deaf children and the mediation of mathematically-based concepts within a naturalistic environment. American Annals of the Deaf, 153, 474–483.Mousley, K. ve Kelly, R. R. (1998). Problem solving strategies for teaching mathematics to deaf students. American Annals of the Deaf, 143(4), 325–36.MEB (2015). İlköğretim Matematik Dersi Öğretim Programı. T.C. Milli Eğitim Bakanlığı Talim ve Terbiye Kurulu Başkanlığı, Ankara.Nunes, T. (2004). Teaching mathematics to deaf children. London, England: Whurr Publishers, Ltd. Nunes, T. (2004). Teaching Mathematics to Deaf Children. London, England: Whurr Publishers, Ltd. Olkun, S. ve Uçar, Z. T. (2009). İlköğretimde Etkinlik Temelli Matematik Öğretimi. Maya Akademi Eğitim ve Danışmanlık.Özdaş, A. (2011) Okulöncesinde Matematik Öğretimi. Eskişehir: Anadolu Üniversitesi Yayını (No: 2228). Özdaş, A. (1998). Matematik Öğretimi. Eskişehir: Anadolu Üniversitesi Yayınları(Pagliaro, C. M. (1998). Mathematics reform in the education of deaf and hard of hearing students. American Annals Of The Deaf, 143(1), 22-28.Pagliaro, C. A. ve Ansell, E. (2002). Story problems in the deaf education classroom: frequency and the mode of presentation. Journal of Deaf Studies and Deaf Education, 7(2), 107-119.Pagliaro, C. M. (2006). Deaf learners: developments in curriculum and ınstruction. Mathematics Education and the Deaf Learner. (Ed:Moores, D. F. ve Martin, D. S.) Washington DC: Gallaudet University Press Pau, C. S. (1995). The deaf child and solving problems of arithmetic: the importance of comprehensive reading. American Annals of the Deaf, 140, 287-291.Pesen, C. (2008). Matematik Öğretimi. Ankara: Pegem Akademi. Özdemir, A.Ş. ve Sertöz, T. (2006). Okuduğunu anlama davranışının kazandırılmasının matematik başarısına etkisi. M.Ü. Atatürk Eğitim Fakültesi Eğitim Bilimleri Dergisi Sayı 23, Sayfa: 237-257. Stewart, D. A. ve Kluwin, T. N. (2001). Teaching deaf and hard of hearing studients: content, strategies, and curriculum. Boston: Mass, Allyn and Bacon.Swanwick, R., Oddy, A. ve Roper, T. (2005). Mathematics and deaf children: an exploration of barriers to success. Deafness and Education International, 7(1), 1-21.Traxler, C. B. (2000). The Stanford Achievement Test, 9th Edition: National Norming and Performance for Standards for Deaf and Hard-of-Hearing Students. Journal of the Deaf Stadies and Deaf Education, 5(4), 337-348.Van De Walle, J.A., Karp, K.S. ve Bay-Williams, J. M. (2018). İlkokul ve Ortaokul Matematiği Gelişimsel Yaklaşımla Öğretim (Çev. Ed: Durmuş, S.) Ankara: Nobel Akademik YayıncılıkWood, D.J., Wood, H.A. ve Howarth, S.P. (1983). Mathematical abilities of deaf school-leavers. British Journal of Developmental Psychology, 1, 67-73.Wood, H.A., Wood, D.J., Kinsmill, M.C., French, J.R.W. ve Howarth, S.P. (1984). The mathematical achievements of deaf children from different educational environments. British Journal of Education Psychology, 54, 254–264.

Work Placement	Not Applicable

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Hearing impairment and mathematics	
Week - 2		Learning mathematics theories and hearing impaired students	
Week - 3		Mathematics program	
Week - 4		Mathematics program	
Week - 5		Mathematics teaching strategies	
Week - 6		Mathematics learning areas	
Week - 7		Preparation of appropriate materials in mathematics lesson for hearing impaired students	
Week - 8		Preparation of appropriate materials in mathematics lesson for hearing impaired students	
Week - 9		Planning a group lesson in mathematics lesson for hearing impaired students	
Week - 10		Designing activities, preparing and presenting materials and daily plans in the numbers and operations learning area for hearing impaired students	
Week - 11		Designing activities, preparing and presenting materials and daily plans in the field of problem-solving area for hearing impaired students	
Week - 12		Designing activities, preparing and presenting materials and daily plans in geometry learning area for hearing-impaired students	
Week - 13		Designing activities, preparing and presenting materials and daily plans in measurement learning area for hearing-impaired students	
Week - 14		Designing activities, preparing and presenting materials and daily plans in data learning area for hearing-impaired students	

Learning Outcomes

#	Learning Outcome
1	Will be able to explain the effects of hearing impaired on mathematics teaching
2	Will be able to explain the basic concepts of mathematics teaching
3	Will be able to define the Mathematics Program
4	Will be able to explain the activities that can be used in the implementation of Mathematics
5	Will be able to prepare group lessons and one-to-one study materials suitable for the mathematics levels of hearing-impaired students.
6	İşitme engelli öğrencilerin matematik düzeylerine uygun grup ve birebir çalışma planlayabilecektir

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	3.00	14	42
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	3.00	14	42
Ödevler	10.00	3	30
Proje - Rapor - Sunum Hazırlama	20.00	1	20
Ara Sınav Hazırlığı (sınav süresi dahil)	10.00	1	10
Final Sınavı Hazırlığı (sınav süresi dahil)	10.00	1	10
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0.00	0	0
Staj Uygulaması	0.00	0	0
		Calculated ECTS	**6.0**

Assessment Method and Passing Requirements

No content has been provided.

Assessment Method and Passing Requirements	Quamtity	Percentage (%)
1.Midterm Exam	1	30
Final Exam	1	40
Homework	1	30
	Sum (%)	**100**