Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
GÜV331	Navigation- IV	4	3	0	2	4	5

Prerequisites	
Admission Requirements	

Language of Instruction	Turkish
Course Type	Compulsory
Course Level	Associate Degree
Objective	1. To determine the ship's position on the ocean, 2. To use concept of the Celestial Coordinates, Time and Apparent Motions of Celestial Body, the Celestial Sphere, composition and dimension of the Solar System for understanding and determining the ship's position.
Content	Göksel seyire giriş, Evren, Güneş sistemi iç ve dış gezegenleri, Gök Küresi, Gök Koordinat Sistemi, Güneş sistemi yapısı ve boyutları, Yer Küresi hareketlerinin açıklanması, Güneşin Görünsel yıllık hareketi, Dec-SHA-RA-GHA-LHA kavramları, Gözüken Güneş ve Ortalama Güneş Vakitleri, Zaman, Zaman denklemi, Tarih hattı, Astronomik Seyir Üçgeni, Baş ucu mesafesi, Intersept ve astronomik mevki hattı çizimi, Astronomik pozisyon mevkisi tespit ve işaretleme, NP 401, HO 229 ve Almanak kullanımı.
References	1) Astronomik Seyir 2 Süha Baytura 2) Kişisel Ders Notlarım 3) Notik Almanak

Theory Topics

Week	Weekly Contents
1	Introduction to celestial navigation, definition of the space, celestial sphere
2	Composition and dimensions of the Solar System, explanation of the eccentricity of the earth's orbit and the apparent annual motion of the Sun
3	the meaning of the Dec-SHA-RA-GHA-LHA
4	the meaning of the Dec-SHA-RA-GHA-LHA
5	Definition of the apparent solar time and mean solar time, time, equation of time, date line
6	Definition of the apparent solar time and mean solar time, time, equation of time, date line
7	Explanation of astronomical triangle on the celestial sphere, finding and drawing of the astronomical fix and position
8	Explanation of astronomical triangle on the celestial sphere, finding and drawing of the astronomical fix and position
9	Explanation of astronomical triangle on the celestial sphere, finding and drawing of the astronomical fix and position
10	Explanation of astronomical triangle on the celestial sphere, finding and drawing of the astronomical fix and position
11	Explanation of astronomical triangle on the celestial sphere, finding and drawing of the astronomical fix and position
12	using of NP 401, HO 229 and Almanac.
13	using of NP 401, HO 229 and Almanac.
14	using of NP 401, HO 229 and Almanac.