

**HARRAN UNIVERSITY FACULTY OF ARTS AND SCIENCES  
DEPARTMENT OF BIOLOGY**

Course Title	Code	Semester	T+P	Credits	ECTS
Hydrobiology	0804735	4.Semester / Fall (Compulsory)	3+0	3	4

Prerequisite Courses	
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Language of Instruction	Turkish
Type of Course	BachelorDegree
Course Coordinator	Asst. Prof. Göksal SEZEN
Teaching	Asst. Prof. Göksal SEZEN
LecturerAssistants	
Purpose of Course	Theimportance of waterfor life; Toexplainthephysical, chemicalandbiologicalcharacteristics of aquaticecosystemsandtheirinteractionswitheachother; Tointroducethefreshwaterandmarineorganisms, toprovidethemwith a basicknowledgeaboutthe life zonesandtheirrelationtotheenvironment
Learning Outcomes of the Course	1. Toreinforcetheimportance of waterforlivingorganisms 2. Be ableto graspwater as a livingenvironment 3. Knowthepropertiesandecologicalimportance of marine, freshwaterand bitter ecosystems 4. Havingknowledgeaboutdifferentlivingspeciesliving in aquaticenvironment 5. Conservation of speciesdiversity in aquaticenvironments 6. Havingknowledge of wateraquacultureandmanagement of aquaticenvironments 7. Evaluateexistingthreats on aquaticecosystemsandproposesolutions 8. Developingstrategiesforthesustainableuse of waterenvironments
Content of Course	Introductionandpromotion of water; Physicalandchemicalproperties of water; Definition, classification, characteristicsandlivingorganismsandecologies of salty, brackishandfreshwaterecosystems; Waterpollutionanditseffects; Biodiversity, preventionandconservation in aquaticecosystems

Weeks	Subjects
1	Theimportance of waterforlivingorganisms, hydrologicalcycle;
2	PhysicalandChemicalProperties of Water,
3	SeaWaterProperties, Marine ecosystem,
4	Classification of marineorganisms,
5	Classification of Marine Organisms, FoodChain in Marine Ecosystem;
6	Midterm
7	Freshwaterecosystem, Classification of freshwaterandwetlands,
8	Classification of Lakes
9	Streamsandtheirclassification
10	Classification of LimnologicalOrganizations
11	Classification of LimnologicalOrganismsandbrackishEcosystem
12	Waterpollution, monitoring of pollution in aquaticenvironmentsandeffects on livingthings
13	Prevention of pollution in theaquaticenvironmentandprevention of biologicaldiversity
14	Final

<b>GenericCompetences</b>

<b>Resources</b>
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1. Hidrobiyoloji ders notları
2. Akman, Y.,Ketenoglu, O., Evren, H., Kurt, L., Düzenli, S., Çevre Kirliliği (Çevre Biyolojisi), PalmeYayıncılık, Ankara, 2000.
3. Cirik, S.,Cirik, Ş., Su Bitkileri II: İçsu Bitkilerinin Biyolojisi, Ekolojisi, Yetiştirme Teknikleri), Ege Üniversitesi Su Ürünleri Fakültesi Yayınları No: 61, Ege Üniversitesi Basımevi, İzmir, 1999.
4. Cirik, Ş.,Cirik, S., Su Bitkileri: Deniz Bitkilerinin Biyolojisi, Ekolojisi, Yetiştirme Teknikleri, Ege Üniversitesi Su Ürünleri Fakültesi Yayınları No: 58, Ege Üniversitesi Basımevi, İzmir, 1999.
5. Dodson, S.,IntroductiontoLimnology, TheMcGraw-HillCompanies, 2005.
6. Geldiay, R., Kocataş, A., Deniz Biyolojisine Giriş, Ege Üniversitesi Fen Fakültesi Kitaplar Serisi No: 31., 1998
7. Hauer, F.R.,Lamberti, G.A., Methods in StreamEcology, Academic Pres, 1996.
8. Kocataş, A.,Oseonoloji, Ege Üniversitesi Su Ürünleri Fakültesi Kitaplar Serisi No: 60, 7. baskı, 2005.
9. Remane, A.,Schlieper, C., Biology of BrackishWater, WileyInterscience, 1971.
10. Seçmen, Ö., Leblebici, E., “Türkiye Sulak Alan Bitkileri ve Bitki Örtüsü”, Ege Üniversitesi Fen Fakültesi Yayınları No: 158, 1997.
11. Wetzel, R.G.,Limnology, ElsevierAcademic Pres, 3rd press, 2001
12. Wetzel, R.G.,Likens, G.E., Limnological Analysis, Springer-Verlag, 1991.,
13. TÜDAV Eğitim Serisi No: 6, Uniprit Basım San. A.Ş., İstanbul, 2003

#### ASSESSMENT SYSTEM

**MidtermExam: 40%**

**Final: 60%**