

Module designation	<i>Water Economics (AGBP22)</i>
Semester(s) in which the module is taught	<i>6th semester</i>
Person responsible for the module	<i>Edy Marsudi</i>
Language	<i>English</i>
Relation to curriculum	<i>Elective course</i>
Teaching methods	<i>lecture, lesson, discussion</i>
Workload	<ul style="list-style-type: none"> ▪ <i>100 minutes of lecture and discussion per week</i> ▪ <i>120 minutes of structured tasks per week</i> ▪ <i>120 minutes of independent activity per week</i>
Credit points	<i>2 (lesson 2)= 3.2 ECTS</i>
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	<ol style="list-style-type: none"> 1. <i>Able to apply and develop conceptual understanding of economics to conduct investment analysis and managerial analysis of irrigation projects.</i> 2. <i>Able to explain comprehensively about water management, starting from water sources to users in relation to economic aspects, technical aspects of irrigation and hydrology, as well as institutional and socio-cultural aspects, for utilization in agriculture in a broad sense.</i> 3. <i>Able to implement water technology in a broad sense in building, applying, managing, and developing irrigation and further applying it to the agribusiness system.</i>
Content	<i>This course aims to provide a comprehensive understanding and explanation of water management. The discussion is directed at obtaining students' ability to apply and develop an understanding of socio-economic and quantitative concepts to answer various increasingly complex irrigation problems, as well as their role in sustainable agricultural development. Students get a complete understanding of the management of water and water sources including the various natural resources contained therein, as well as the role of institutional aspects of the Community in its utilization and maintenance.</i>
Exams and assessment formats	<i>Essay, case study</i>
Study and examination requirements	<p><i>10 % activity participative</i> <i>10% quiz</i> <i>20% course work and study cases analysis</i> <i>30% midterm examination</i> <i>30% final examination</i></p>

Reading list	<ol style="list-style-type: none"> 1. Arsyad, S., Bahrin S, Husainy A, 1986. <i>Ilmu Pengairan</i>. CV. Yasaguna. Jakarta 2. Dinas Sumberdaya Air. 2015a. <i>Penetapan Pokja Dalam Rangka Pembaharuan Kebijakan Pengelolaan Irigasi. Bagian Proyek Tataguna Air Dinas Sumberdaya Air Provinsi Nanggroe Aceh Darussalam</i>. Banda Aceh. 3. Dinas Sumberdaya Air. 2015b. <i>Kegiatan Profil Sosio Ekonomi Teknik dan Kelembagaan. Bagian Proyek Tataguna Air Dinas Sumberdaya Air Provinsi Nanggroe Aceh Darussalam</i>. Banda Aceh. 4. Dirjen Pengairan. 2009. <i>Masalah Pengembangan Sumberdaya Air, Pembiayaan Investasi dan Cara Pengelolaan Sistem Irigasi</i>. Bagian Diklat Direktorat Jenderal Pengairan. Jakarta. 5. Dumairy. 1992. <i>Ekonomika Sumberdaya Air, Pengantar ke Hidronomika</i>. BPFE Yogyakarta. Yogyakarta. 6. Fauzi, Ahmad. 2006. <i>Ekonomi Sumberdaya Alam dan Lingkungan, Teori dan Aplikasi</i>. PT.Gramedia Pustaka Utama. Jakarta. 7. Hardjodinomo, Soekirno. 2003. <i>Ilmu Pengairan</i>. Binacipta. Bandung 8. Honing. 2007. <i>Konstruksi Bangunan Air</i>. Pradnya Paramita. Jakarta. 9. Linsley R.K., Joseph B.Franzini. 1994. <i>Teknik Sumberdaya Air Jilid I</i>. Penerbit Erlangga. Jakarta. 10. Linsley R.K., Joseph B.Franzini. 1986. <i>Teknik Sumberdaya Air Jilid 2</i>. Penerbit Erlangga. Jakarta. 11. Nuwirman. 2002. <i>Panduan Perencanaan Bersama Masyarakat</i>. Perform-Project-RTI International. Jakarta. 12. Pasandaran, Efendi. 1976. <i>Irigasi I dan Irigasi II</i>. Pusat Studi Ekonomi Pertanian IPB Bogor. Bogor. 13. Samuelson, PA. 1985. <i>Teori Ekonomi</i>, Bhratara Jakarta dan Kausius Yogyakarta. Yogyakarta. 14. Rukmana, Didi. 1995. <i>Manajemen Siklus Proyek Alat Manajemen Untuk Bantuan Pembangunan</i>. Foundation for Advanced Studies On International Development. Jakarta. 15. Suparmoko, M. 1997. <i>Ekonomi Sumberdaya Alam dan Lingkungan (Suatu Pendekatan Teoritis)</i>. Penerbit BPFE. Yogyakarta. 16. Waluyo, Hamuji. 2013. <i>Pengantar Umum EP Jaringan Irigasi</i>. Edisi Revisi. Direktorat Jenderal Pengairan. Jakarta. 17. Wonnacott, Paul dan Ronald Wonnacott. 1986. <i>Economics. Third Edition</i>. McGraw-Hill Book Company. New York.
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