AGRI30016 Irrigation and Water Management

Credit Points:	12.50
Level:	3 (Undergraduate)
Dates & Locations:	This subject is not offered in 2014. To be offered as an intensive 5 day teaching block proposed dates: 30 June - 4 July 2014, at the Dookie campus of the University. Accommodation and catering are available on campus. Single room accommodation with shared bathroom facilities, breakfast and evening meals - Approx $320. Lunches are available to purchase from the dining hall. Transport from the Benalla train station to the campus can be arranged upon request. Intensive block subject held at the Dookie campus- Assignments to be submitted during semester 2 and the 3 hour exam held during the semester 2 exam period The first assignment(worth 20%) in this subject requires students to gain an understanding of continental water management issues. The Murray Darling Basin provides environmental, technical , political, social and economic challenges for case study. During the pre teaching period (27 April - 30 June) students need to read the 2012 Federal Government Murray Darling Basin plan to help complete the assignment. Additional information on the Basin will also be circulated for supplementary reading.
Time Commitment:	Contact Hours: 40 hours contact Total Time Commitment: Approximately 40 hours of teaching/ tutorials during the intensive teaching block at Dookie, with field inspections included during the teaching week. An additional 80 hours, approximately, for completion of test and assignments.
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: http://www.services.unimelb.edu.au/disability/
Contact:	**Melbourne School of Land & Environment Student Centre** Ground Floor, Melbourne School of Land & Environment (building 142) *Enquiries* Phone: 13 MELB (13 6352) Email: **13MELB@unimelb.edu.au (mailto:13MELB@unimelb.edu.au)**
Subject Overview:	On completion of this subject students should be able to: # describe the scale and distribution of the major irrigation systems in south-eastern Australia; # evaluate plant water requirements in terms of water quality and frequency of supply; # apply basic principles of hydraulics to the selection of irrigation systems appurtenances and structures; # assess irrigation systems in terms of efficiency, economy, energy-use and environmental impact; # recognise the advantages and disadvantages of common irrigation systems; and # recognise the need for efficient irrigation drainage as well as water supply. The content includes:

	# water supply potential for the development of irrigation systems, management planning and operation of water allocations, water law, cost benefit analysis, environmental and energy-use implications of resource utilisation and development, efficiency of irrigation systems and long-term viability; # climatic factors in irrigation development, rainfall, evaporation, evapotranspiration and hydrology; # plant physiology and plant water use, transpiration crop water requirements in terms of water quality and quantity; # soils and water, soil moisture retention and movement, plant root zones and development, infiltration and leaching; # irrigation scheduling, soil moisture measurement; and # types of irrigation systems, selection of irrigation systems, irrigation drainage, seepage, surface and subsurface drainage systems, salinity, conveyance and disposal of drained effluent, re-use systems, management of irrigation systems, operations and maintenance requirements.
Learning Outcomes:	N/A
Assessment:	Three-hour examination (50%), a field report (10%) and two assignments equivalent to 2500 words (each worth 20%).
Prescribed Texts:	None
Breadth Options:	This subject potentially can be taken as a breadth subject component for the following courses: # **Bachelor of Arts (https://handbook.unimelb.edu.au/view/2014/B-ARTS)** # **Bachelor of Environments (https://handbook.unimelb.edu.au/view/2014/B-ENVS)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2014/B-MUS)** You should visit **learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html)** and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	Information Not Available
Notes:	Please find here the link to the **Dookie Campus website (http://www.dookie.unimelb.edu.au/)**
Related Majors/Minors/ Specialisations:	Production Animal Health Science-credited subjects - new generation B-SCI and B-ENG. Selective subjects for B-BMED Sustainable Production
Related Breadth Track(s):	Climate and Water