Lectures

- ¶ Find out what you must learn
- ¶ Learn more details on the methods and theory that are not covered in the notes
- ¶ Follow worked examples
- ¶ Hear announcements on course changes

Week 5	16/03/2020 18/03/2020	FJ	IFD relationships, temporal patterns, design Floods

ASSESSMENT OVERVIEW

Generally, the final exam, the mid-semester quiz and the assignments are designed to assess your understanding of the engineering problems and their solutions. These will require you to apply your professional skills to solve the practical problems. More specifically you will be asked to conduct a hydrological assessment of a catchment; quantify the size of design floods; calculate evaporation; and conduct a basic assessment of groundwater resources. The course objectives, content and assessment focus on encouraging the following attributes in you, with particular application to water resources engineering:

- ¶ Your understanding of the principles of Water Resources Engineering.
- ¶ Capacity for analytical and critical thinking and for creative problem solving. You will be exposed to, and be required to solve, numerous hydrologic problems in the Lectures, the Workshops and the assignments --- "the learning is in the doing". All these problems will cover a variety of scenarios, and where possible, will be drawn from engineering practice.
- ¶ Skills for effective communication: Throughout this course, the skills to be developed are in written communication. In your assignments and exams, it is important that you clearly communicate your knowledge.
- ¶ Ability to engage independent and reflective learning: By revising the material from the lectures and the workshops you will gain improved skills in independent learning.

Details of each assessment component, the marks assigned to it and the dates of submission are set out below (**Note:** It generally takes 3 weeks after the due/exam dates for marking results to be released)

Item	Weight (%)	Learning outcomes assessed	Assessment Criteria	Issue date	Due date
1	**Assignments (30%)**				
Ass#1: ¶ Water cycle ¶ Engineering hydrology	20%	¶ Fundamental understanding on hydrology and various components of hydrologic cycle including evaporation ¶ Knowledge of applied hydrology to estimate design rainfall, rainfall losses and design floods	¶ Students are expected to provide brief and to the point answers to the questions asked. ¶ If some information is missing or not clear, it should be stated clearly in the assignment. ¶ The assessment will broadly be based on their understanding of the subject and answers to the questions asked. ¶ They are expected to justify the reason for going for a particular evaporation model.	17 Feb 2020	11:00PM, 01 April 2020 (to be submitted via l 20

		techniques used to estimate groundwater resources	¶ The assessment will broadly be based on their understanding of the subject and answers to the questions asked. ¶ Students will be assessed against their understanding of the groundwater and the associated assumptions in applying the theory.		(to be submitted via Moodle)
2	**Online Quizzes (5%)**				
Online Quizzes (Moodle)	5%	¶ The 5 online quizzes will each contribute 1% of your mark for the subject (i.e. total 5%) ¶ These quizzes will give you the opportunity to review your progress in the course as you go ¶ You will be given 5 questions for each online quiz taken from a database of questions ¶ You will be able to have 2 attempts at each quiz with your higher mark taken	¶ The assessment will broadly be based on their understanding of the subject and answers to the questions asked ¶ Students will be assessed against their understanding of the theory of the subject and the associated assumptions in applying the theory	Weeks 1,2,4,5 and 8	Each quiz will remain open for 1 week
3	**Mid Semester Quiz (25%)**				
Mid Semester Quiz	25%	¶ The mid semester quiz will be a closed book exam of 90-minute duration ¶ It will be held in the workshop rooms ¶ This confirms that you are on track and have gained a proper understanding on the basics of hydrology and design practices including revised Australian Rainfall and Runoff ¶ Marks will be counted towards the final marks ¶ Allowed to bring one A4 sheet of hand-written/printed information ¶ Should bring a UNSW approved calculator	¶ Students are expected to provide brief and to the point answers to the questions asked ¶ A brief discussion on the distribution fitting and		

Appendix A: Engineers Australia (EA) Competencies

Stage 1 Competencies for Professional Engineers

	Program Intended Learning Outcomes