FLUID MECHANICS I

ENGINEERING 5961

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Technologists: Craig Mitchell & Trevor Clark

Important: Please do not use any electronic devices during lectures.

Student Conduct

"Like Professional Engineers, engineering students are expected to behave in a professional manner at all times. Students are encouraged to conduct themselves in a manner consistent with the PEG-NL code of ethics. MUN has two sets of rules which deal with inappropriate behaviour by students. The first set deals with academic offences such as cheating while the other set deals with non-academic offences such as disruptive behaviour in class. Both sets of rules can be found in the University Calendar under Regulations. It is strongly recommended that students read and follow these rules because the penalties for breaking them can be severe, the severest being expulsion from the University."

Evaluation

Homework and labs are worth 10%. Quiz #1 (Monday 3 February) is worth 15%. Quiz #2 (Monday 17 March) is worth 15%. The final exam is worth 60%. A formula sheet will be provided at each quiz and the final exam. **Both quizzes will be held in the 9am to 10am Monday lab time slot.**

Approximate Due Dates for Labs
27 January; 10 February; 10 March; 17 March; 2 April

Approximate Due Dates for Homework
27 January; 10 February; 3 March; 17 March; 4 April

Content Summary
Fluid Mechanics I examines: fluid statics; conservation laws; scaling laws; loads on bodies; momentum devices; turbomachines; pipe networks.

Resources
Fluid Mechanics by Fox et al
Fluid Mechanics by Potter et al
Fluid Mechanics by Douglas et al
Texts by White; Munson; Cengel
EFLUIDS Videos: www.efluids.com
CFD Software: www.flow3d.com

Laboratory Facilities
Disk Stability Setup
Air Flow Setup
Pelton Wheel Turbine Setup
Centrifugal Pump Setup
Pipe Friction Setup

Lab Safety
Students must wear safety boots in the fluids lab.