MEC E 331
Fluid Mechanics
Winter Term 2013

Instructor: Dr. L. Sigurdson
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Office: Mec 5-1B Office Hours: 3-5 pm Wednesdays, unless otherwise announced, or by appointment in special cases.

Teaching Assistants (office hours unless otherwise announced)
Mr. M. Roes, mroes@ualberta.ca, Office: Mec 6-31, OH 12-2 pm Thurs, Ph: 492-8241
Mr. V. Poddar, vpoddar@ualberta.ca, Office: Mec 6-29, OH 12-1 pm Thurs, Ph: 780-902-0878

Calendar Description
External flow, boundary layers, momentum theories, similitude, fluid metering, fluid friction, fluid friction in pipes, pipe networks. Prerequisites: MEC E 230, 250, MATH 209. Corequisite: CH E 243. Credit can only be granted for one of MEC E 330 or MEC E 331.

eClass Website
Material will be listed on eClass → please check frequently!

Textbook
Required: Fluid Mechanics – Fundamentals and Applications, Yunus Cengel and John Cimbala, McGraw-Hill, 2nd edition (1st edition is ok but may need to see 2nd for assignment questions)

Assignment Problems
Problems will be taken from Cengel and Cimbala, and instructor’s seminar assignments.

Schedule
Lectures: T R 0800 – 0920 NRE 2-003
Seminars: M 0900 – 0950 Mec 3-1 W 0900 – 0950 Mec 3-1 Seminars Begin Week of January 14th!

Grade Weighting
Assignments/Seminars: 20% (Participation required in Seminars)
Midterm Exam: 30%
Final Exam: 50%
Total: 100%

The MIDTERM is scheduled for Thursday Feb 28, 2013, 0800 - 0920 in class.
The FINAL is scheduled for Thursday, April 25th, 2013 from 0900-1100, location TBA.

Notes
1. Assignments are due the next week’s Friday at 1:00 pm or as otherwise announced. (For example Good Friday is March 29th and Easter Monday is April 1st.) Hand in assignments in the appropriate box on the 4th floor near the Mec E office unless otherwise instructed. Some assignments may be made associated with the seminars and deadlines will be announced.

2. LATE ASSIGNMENT PENALTIES: All late assignments must be turned in personally to the TA’s, or failing that, delivered personally to Dr. Sigurdson in Room 5-1B. Please DO NOT leave them in the assignment box or under office doors, in which case there is no way to determine how late the assignment was. This may cost you the maximum late penalty of the following:
< 24 hrs late, -15%;
< 48 hrs late, -30%;
< 72 hrs late, -60%;
>= 72 hrs late, penalty = -100%.

The percentages are applicable to the mark you get, and weekend hours are counted. If you know that you are going to be late with your report, the professional behaviour is to notify the TA as soon as you know, and cc the instructor if it is an email. The late penalties will still apply unless special dispensation has been provided by the instructor for extenuating circumstances.

3. Assignments and exams are based on lecture, seminar and assignment material. No provision for past evaluated course material will be made. This is the first year of the course. Assignment questions will be representative of most questions given in the final exam.

4. The use of Engineering judgment is essential when solving problems as a practicing engineer. Answers from work submitted by the student must follow from the solution development, have consistent units, and have correct magnitude and sign.

5. Only Engineering approved non-programmable calculators permitted.

6. The official University grading system will be implemented using a combination of absolute measures and a distribution to determine grades.

7. Policy about course outlines can be found in section 23.4(2) of the University Calendar.

8. Plagiarism

Plagiarism, to steal or pass off the words or ideas of another as one's own, will not be tolerated. You may discuss with one another key concepts or how to do calculations, but each student must submit their OWN work. Penalties for plagiarized work include permanent marks on your transcript and even suspension or expulsion. See the Code of Student Behavior for more detail.

“The University of Alberta is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the Code of Student Behaviour (online at http://www.uofaweb.ualberta.ca/gfcpolicymanual/content.cfm?ID_page=37633) and avoid any behaviour which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University.”

The quotes are there so you know this was not plagiarized; it and the next quote can be found at: http://www.registrar.ualberta.ca/calendar/Regulations-and-Information/Academic-Regulation/23.4.html#23.4

“Policy about course outlines can be found in §23.4(2) of the University Calendar.”

The "Don't Cheatsheet" is available on the University Governance website: http://www.governance.ualberta.ca/en/StudentAppeals/DontCheatsheet.aspx.

9. Audio or video recording of lectures, labs, seminars or any other teaching environment by students is allowed only with the prior written consent of the instructor or as a part of an approved accommodation plan. Recorded material is to be used solely for personal study, and is not to be used or distributed for any other purpose without prior written consent from the instructor.