

## Course information

### Times

Lectures: MWF 10:00–10:50 am in CENTR 212. Lectures/quizzes: Fridays 2:00–2:50 pm in CENTR 105. Professor's office hours: Mondays and Wednesdays 2:00–3:00 pm in EBU II 574. TA: Vladimir Guzaev ([vguzaev@ucsd.edu](mailto:vguzaev@ucsd.edu)). TA problem sessions: TBD. TA office hours: TBD.

### Text

Welty, Wicks, Wilson & Rorrer, Fundamentals of Momentum, Heat, and Mass Transfer, 4th Edition, Wiley, 2001. Chapters 1–14. (Also for CENG101B.) I have placed other books on reserve that you may find useful.

### Homework

Homework will be assigned every week and will be due by a specific time the following week. Homework should be turned in to the TA in the fourth hour. No late homework will be accepted. I encourage you to discuss the homework among yourselves, but what you write and hand in should be your own work. Some presentation guidelines: print name clearly at top of page; box final answers, especially for problems with multiple (a, b & c) parts; label multiple parts of problems (a, b & c) clearly; list assumptions clearly. Solutions will be placed on the website after the due date.

### Quizzes

There will be five hourly quizzes every other Friday starting October 6. There will be no make-up quizzes. All exams are closed book. Bring pencil and calculator to all quizzes.

### Final

The final will be on Monday December 4, 8:00–11:00 am. A make-up exam will only be provided for medical reasons with proper documentation from a physician. It will cover the material lectured during the course and the material assigned as reading.

## Grading

Method A: Curve based on: Homework 10%, 4 best of 5 quizzes 40%, final 50%.  
Method B: Absolute scale based on final: A > 80%, B > 70%, C > 55%, D > 40%.

Your grade will be computed by methods A and B and you will receive the higher of the two. I may rescale the different components (homework, quizzes, final) separately to arrive at the final grade. I do not recommend planning on Method B from the beginning. Method A is more reliable.

## Cheating

I remind you of UCSD's policy on academic integrity. Action will be taken in cases of cheating. Don't make it happen to you.

## Stefan G. Llewellyn Smith

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### Research interests:

Fluid dynamics. Acoustics and fluid-structure interactions. Asymptotic methods. Industrial mathematics.

### Interests:

Japanese; rowing (B); tennis (C); surfing (D).

### Education:

- Queens' College, University of Cambridge, 1993–Oct 1996. PhD 1996.
- Massachusetts Institute of Technology and Woods Hole Oceanographic Institution, 1992–1993.
- Queens' College, University of Cambridge, 1988–1992. Certificate of Advanced Study (Part III of the Mathematical Tripos) with Distinction, 1992. BA (Honours) First Class (Parts IA, IB & II), 1991.

### Some recent publications:

- Gille, S. T., Llewellyn Smith, S. G. & Statom, N. M. 2005 Global observations of the land breeze. *Geophys. Res. Lett.*, 32, L05605, doi:10.1029/2004GL022139.
- Conroy, D. T., Llewellyn Smith, S. G. & Caulfield, C. P. 2005 Evolution of a chemically reacting plume in a ventilated room. *J. Fluid Mech.*, 537, 221–253.
- Petrelis, F., Llewellyn Smith, S. G. & Young, W. R. 2006 Tidal conversion at a submarine ridge. *J. Phys. Oceanogr.*, 36, 1053–1071, doi: 10.1175/JPO2879.1.
- Adda-Bedia, M. & Llewellyn Smith, S. G. 2006 Supersonic and subsonic states of dynamic contact between elastic bodies. *Proc. R. Soc. Lond. A.*, 462, 2781–2795, doi:10.1098/rspa.2006.1709.