

Transform Methods and Signal Processing

Matthew Roughan

School of Mathematics, University of Adelaide

• Who: A/Prof. Matthew Roughan <matthew.roughan@adelaide.edu.au>
http://internal.maths.adelaide.edu.au/people/mroughan/Lecture_notes/Transform_methods/

• Info:

- Consulting, Wed 11-12, 10 Pultney St, Rm 4.46.
- **No lectures:** week 4, 17-21st August
- Need to work out an extra time slot

• **fill in the signup sheet**

• Assessment:

- class exercises 10%
- mini-project 30%
- exam 60%

• Students **must** understand the University Plagiarism policy, see

<http://www.adelaide.edu.au/policies/?230>

<http://www.adelaide.edu.au/clpd/plagiarism/students/>

The School encourage students to work together and to seek help from staff, but all assignments and reports submitted for assessment must be the student's own work unless otherwise specified by the lecturer. University policy is that "no candidate shall submit for assessment, whether by examination or otherwise, any piece of work which is not entirely the candidate's own, except where either:

- use of the words or ideas of others is appropriate and is duly acknowledged, or
- the examiner has given prior permission for joint or collaborative work to be submitted. "

I need one signed cover sheet from each student or assignments will get zero.

• Lecture Notes

- you will get a CD with all notes, outlines, resources, matlab files, etc.
- all notes are updated on **my** web page

http://internal.maths.adelaide.edu.au/people/mroughan/Lecture_notes/Transform_methods/

- Copy center will have hard copies of notes for sale.

• Some references

- "Understanding Digital Signal Processing", R.G. Lyons, Prentice-Hall, 2nd edition, 2004.
- "Signals, Systems and Transforms", C.L.Phillips, J.M.Parr and E.A.Riskin, Prentice-Hall, 3rd edition, 2003.
- "The Fourier Transform and its Applications", R.N. Bracewell, McGraw-Hill, 2000.
- "A Wavelet Tour of Signal Processing", Stephan Mallat, Academic Press, 2001.

• Mini-project details on the web page.

http://internal.maths.adelaide.edu.au/people/mroughan/Lecture_notes/Transform_methods/Project/project.html

- Work in groups (preferably of 3)

• Supplementary exam (for those who qualify) will be an oral exam.