Subject Information Guide

Computational projects

Semester 1, 2014

Administration and contact details

Host Department	School of Mathematics and Statistics
Host Institution	University of Sydney
Name of lecturer	Sheehan Olver
Phone number	+61 2 9351 5782
Email Address	sheehan.Olver@sydney.edu.au
Homepage	http://www.maths.usyd.edu.au/u/olver/
Name of Honours coordinator	Robbie Marangell
Phone number	
Email Address	robert.Marangell@sydney.edu.au

Subject details

Handbook entry URL	Click here to enter text.
Subject homepage URL	Click here to enter text.
Honours student hand-out URL	Click here to enter text.
Start date:	3/3/2014
End date:	30/4/2014
Contact hours per week:	Click here to enter text.

Lecture day and time:	Monday, Tuesday 10.00-11.00am
Description of electronic access arrangements for students (for example, WebCT)	Click here to enter text.

Subject content

1. Subject content description

Three topics in computation:

1) Fast Fourier Transform and function approximation

2) Spectral methods for differential equations

3) Numerical linear algebra

The course is project based

2. Week-by-week topic overview

Week 1–3 Fast Fourier Transform

Week 4-6 Function approximation

Week 7–9 Spectral methods

Week 11–13 Linear Algebra

3. Assumed prerequisite knowledge and capabilities

Basic programming skills

4. Learning outcomes and objectives

That they understand the topics I just mentioned, and do an interesting project

5. Learning resources

Not specified

6. Assessment

Exam/assignment/classwork breakdown					
Exam	0	**Assignment**	3, 33.3% each	**Class work**	0
Assignment due dates		Click here to enter a date.	Click here to enter a date.	Click here to enter a date.	Click here to enter a date.
Approximate exam date			n/a		

7. Institution Honours program details

Weight of subject in total honours assessment at host department	10%
Thesis/subject split at host department	40 % thesis, 60% course work (6 courses x 10%)
Honours grade ranges at host department:	
H1	80-100
H2a	75-79
H2b	70-74
H3	65-69