Introduction to Computing Honours 2005

Peter Vamplew (Honours coordinator)

The purpose of Honours

2 objectives

– enhance your education and job prospects
  • coursework provides advanced knowledge in cutting-edge topics
  • units generally aligned with lecturer’s area of research

– provide research training
  • a full-year research project, culminating in a substantial thesis
  • not just building a system - must include a research component
  • the main gateway to postgraduate study (Masters/PhD) and a career in research or academia
The structure of Honours

- 40% coursework
  - choose 4 units from the 10 available
- 60% thesis project
- also school research seminars must be attended
- part-time students do coursework in their first year, and thesis in second year
Each component of Honours assessment, and the year as a whole are graded on the following scale:

- 80-100 First Class
- 70-79 Second Class Upper
- 60-69 Second Class Lower
- 50-59 Third Class
- below 50 Fail

To qualify for to enrol in a PhD you need first or second upper

To obtain a postgraduate scholarship you will need to achieve first-class Honours (and that will still not guarantee a scholarship)
Honours assessment

- to pass Honours you must average at least 50 across all 4 units
- to obtain higher than third-class you must obtain a clear pass in all 4 units
- the results of all coursework unit together with the thesis-related assessments will be considered by the Honours Assessment Committee to determine the overall class of Honours awarded to each student
The thesis is worth 60% of your mark:

– supervisor assessment of thesis 24%
– independent second assessment of thesis 24%
– supervisor assessment of the body of work during the year 6%
– formal oral presentation of the work 6%
– penalty for non-attendance at seminars and meetings, up to -2%

An independent third assessment of the thesis may be used if there is a significant discrepancy between the original two marks. The three assessments will then be used to determine the thesis mark.
Coursework

- KXA452 Advanced Mobile and Ubiquitous Computing (Summer Semester)
- KXA434 Special Topic (Introduction to Bioinformatics)
- KXA453 Advanced Computer Security (Semester 1)
- KXA456 Computation and Functional Programming (Semester 1)
- KXA459 Multimedia and Internet Applications (Semester 1)
- KXA461 Advanced Networking (Semester 1)
Coursework

- KXA454 Advanced Commercial Programming (Semester 2)
- KXA457 Machine Learning and Data Mining (Semester 2)
- KXA458 Linux Internals (Semester 2)
- KXA462 Games Programming (Semester 2)
- KXA463 Intelligent Software Agents (Semester 2)
Thesis Project

- involves working on a research project throughout the year
- usually linked to ongoing research within the School
- you will be supervised by a staff member who will give guidance and technical expertise
- end result is a thesis (40-70 page document) describing the research and analysing the results
- not just a software development project - will require you to research and test alternatives, possibly develop new ideas and techniques
potential projects are proposed by academic staff members
will be presented by staff members in sessions tomorrow
by end of the week you need to nominate a ranked list of projects
we will allocate projects to students by Wednesday of Week 2
– based on student rankings, staff workloads and other factors
there are a number of intermediate deliverables prior to the final thesis

Week 1.3: Thesis proposal
Week 1.11: Preliminary literature review
Week 1.12: Research plan
Week 1.14 (swotvac): Initial project presentation
Week 2.3: Status report
Week 2.13: Draft thesis
Week 2.14: Final presentation
Week 2.16: Final thesis
Research seminars

- The School holds research seminars from 2-3pm on Thursdays in School VC rooms most weeks (a schedule will be published).
- Staff members, postgrads and visitors from other institutions will talk about their research.
- Useful experience for you in preparing your own presentations, and in seeing what is involved in research.
- Attendance is compulsory.
- Notify the Honours coordinator if you cannot attend a seminar.
Honours seminars

- held from 3-4pm on Thursdays in School VC rooms
- tied to components of the project
  - thesis proposal
  - literature review
  - research plan
  - presentation
  - status report
  - thesis writing
- attendance is compulsory
Honours meetings

- held from 3-4pm on Thursdays in School VC rooms in Weeks 5, 9 and 13 of each semester
- a chance to raise issues related to Honours courses and supervision with the Honours coordinator
- you can also contact myself or Jacky directly outside of meetings to raise issues as well
- attendance is compulsory
- don’t arrange other commitments (e.g. tutoring) on Thursday afternoons
Honours resources

每位学生将被提供一台PC/Mac用于基本的计算任务（例如文字处理）。

如果需要，可能会提供更高级的机器。

你将被分配到一个荣研室的办公桌。

这些是共享的工作区域，因此噪音应保持在最低水平。

尊重他人的工作权。

-- 尊重他人的工作权，以保持安静的环境。
Honours resources (2)

- library photocopying cards are available from the School office
- inter-library loan requests should be made via your supervisor
- School office has books for loan on research and thesis writing
  - "How to Write a Better Thesis or Report" by D. Evans
  - The Research Student’s Guide to Success” by P. Cryer
most important resource is your supervisor

- their role is to guide you through the thesis process, and provide technical expertise in the area of research

- you should arrange to meet with them regularly (at least fortnightly, preferably weekly)

- it is your responsibility to keep in touch with them, not vice-versa

- if your supervisor is unavailable for an extended period of time, or you have other issues which can’t be resolved with them, let the Honours coordinator know
some of you will be offered work as part-time tutors for undergraduate units
you must attend tutoring workshops to be held ..... 
Shevonne will tell you more

don’t underestimate the amount of work involved in Honours - be wary of taking on too much external workload
The rest of today

11am Careers Advice within the School
11.20am Computing Resources
11.40am Admin and Tutoring
12pm Lunch
2pm Welcome to Honours
2.15 Unit Overviews from Lecturers
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9am</td>
<td>Overview of Intro to Bioinformatics</td>
</tr>
<tr>
<td>9.10am</td>
<td>Choosing the best Honours Topic for you</td>
</tr>
<tr>
<td>9.45am</td>
<td>Lecturers Explain Honours Thesis Topics</td>
</tr>
<tr>
<td>11am</td>
<td>Morning Tea</td>
</tr>
<tr>
<td>11.30am</td>
<td>Lecturers Explain Honours Thesis Topics</td>
</tr>
<tr>
<td>1.00pm</td>
<td>Lunch</td>
</tr>
<tr>
<td>2pm</td>
<td>Lecturers Explain Honours Thesis Topics</td>
</tr>
<tr>
<td>3.30pm</td>
<td>Afternoon Tea</td>
</tr>
<tr>
<td>4.00pm</td>
<td>Lecturers Explain Honours Thesis Topics</td>
</tr>
<tr>
<td>5.00 pm</td>
<td>End</td>
</tr>
</tbody>
</table>
Wednesday

9am    Accessing Reference Material
      Hobart:   C275
      L'ton:    V196

Noon   Introduction to Research

1pm    Lunch provided for staff and students - mingle and discuss research topics

2pm    Computing Research Paper Talkthrough

2.30pm Ethics Issues

3pm    Break

3.30pm Academic Writing and Producing Your Thesis