Year Two Induction Lecture

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In the Second Year You Learn:

- The Nuts and Bolts of Computer Science
- Team-based Software Engineering: Group Project
- About Real World Applications and Research

⇒ Final Year Project
More Programming

- Imperative and Object-Oriented Programming
- New: Functional Programming and Logic Programming
- Software Engineering, Concurrent Systems, Databases, Computer Graphics I
Important Concepts in Computer Science

- Algorithms and their computational complexity
- Theory of computability and programming languages
- (Formal methods for the description and verification of software, hardware and processes)
Computer Graphics

- Computer graphics basics
- Image processing
- Image synthesis
- Animation techniques
Human Computer Interaction

- Introduction to Human Computer Interaction
- Software Engineering: Interactive System Design and Evaluation
Lecturers and Courses in Year Two: Semester 1

Monika Seisenberger  
CS_205 Declarative Programming

Daniel Archambault  
CS_230 Software Engineering I

Gary Tam  
CS_250 Database Systems

Oliver Kullmann  
CS_270 Algorithms
Teaching Start: Monday Morning

Monday, 29 September:

9am: CS-205 Declarative Programming!
10-12am: CS-205 Practicals in Both Linux and Windows Lab

... 

Good news: Fridays are free (for your own work)!
Lecturers and Courses Year Two: Semester 2

Matt Jones
CS_200 Introduction to HCI

Jen Pearson
CS_200 Introduction to HCI

Jens Blanck
CS_210 Concurrency

Bob Laramee
CS_235 Software Engineering II

Mark Jones
CS_255 Computer Graphics I

John Tucker
CS_275 Language and Computation

Anton Setzer
CS_275 Language and Computation
Tutorials

- Fortnightly, both semesters, start in week 1!
  Slots: Mon, Tue, Wed, Thurs, before/after/between lectures!
- Tutorial allocation table available by Monday!
  On CS Board 2nd Floor/via email/ (on Blackboard).
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- Discussion of work in courses, most important topics, etc...
- Discussion of your progress!
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- Compulsory!
  Monitored: Overall 10 meetings in semester 1 and 2!
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- Contact between Department and Level 2 students.
- Your tutor is also your personal tutor!
Lecture Attendance

Lecture Attendance is crucial, is monitored.
Lectures and Lecture Attendance

Coursework and Lab Classes . . .

. . . are even more important than in Year One.
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. . . try to avoid the accumulation of work.

Let us know if there are problems!
Workload
Preliminary plan for coursework deadlines

Week 4 - 24.10 - CS-230 - Assignment 1 - 30%
Week 5 - 29.10 - CS-250 - Assignment 1 - 10%
Week 5 - 31.10(*) - CS-205 - Assignment 1 - 10%
Week 6 - 7.11 - CS-270 - Assignment 1 - 10%
Week 7 - 15.11 - CS-230 - Assignment 2 - 30%
Week 9 - 28.11 - CS-250 - Assignment 2 - 20%
Week 10 - 3.12 - CS-270 - Assignment 2 - 10%
Week 11 - 8.12 - CS-230 - Assignment 3 - 40%
Week 11 - 12.12 - CS-205 - Assignment 2 - 10%

(*) Submission on weekend accepted.
In doubt check with College of Science Intranet.
And what if ... support is needed?

- Talk to your lecturers, personal tutors!
- Talk to me! Neal,...!
- See student support services! Wellbeing . . .

Do not stay away from uni! Stay in contact!
Balance Your Workload - Plan ahead!

- Be attentive in lectures
- Study your course material
- Ask lecturers for help with coursework and understanding of courses:
  - in groups
  - with questions prepared
  - not one day before the coursework deadline or exam
- Communicate, discuss, use your tutorials!
- Engage!
Progression Rules

- Minimum of 80 credits (out of 120).
- No marks less than 30% in Level 2.
- (60 credits are needed to be granted resits!)

Computation of overall mark (bachelor):
- Best 80 credits of Year 3 count 3 times,
- remaining 40 credits of year 3 + best 40 credits count 2 times,
- remaining 80 credits of year 2 counts once.

For a complete set of rules, see the assessment regulations, in the University's Academic Guide:
www.swansea.ac.uk/registry/academicguide/
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Looking Forward
The third year project actually starts in year two!

- **March** Next Year: Third Year *Project Selection Brochure*—approximately 50 pages, 100+ projects
- **April** Next Year: *Project Selection Fair*—discuss projects with teaching staff
- **May** Next Year: *Third Year Project Fair*—an invitation to see completed third year projects
- **May** Next Year: Project Selection Deadline
Third Year Project

Make cognitive space for the third year project:

- Second (and third) year modules start to specialize in different CS directions
- Project topics often fall into departmental strengths: (1) Theoretical Computer Science, Formal methods, Verification of Railway Control Systems (2) Visual and interactive computing, and (3) Human-computer interaction (4) with link to Industry
- Discover your interests.
- Third year project allocation is influenced by year two student average!
Beyond the Bachelors Degree

We hope that you are interested in our research:

- **MSc Advanced Computer Science**
  - Safe and Secure Systems
  - Software Technology
  - Human Computer Interaction
  - Visual Computing

- **MSc High Performance and Scientific Computing**

- **MSc By Research**

- **MRes Master of Research, MPhil, PhD**
Aim high!

Thank you for your attention! Any questions?

**Acknowledgements**: Thanks go to the previous year heads for their help in preparing this material!