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SCC.306 Internet Applications Engineering
Introduction

Matthew Bradbury and Phil Benachour
m.s.bradbury@lancaster.ac.uk and p.benachour@lancaster.ac.uk

Who are we?

Introductions

Course Aims

- To provide you with an appreciation of the issues facing developers of large scale, high-performance and multi-device internet applications (typically web sites)
  - From a technical and architectural level
  - But also in terms of accessibility, responsiveness, security, etc.
- To raise awareness of technologies and the approach to engineering software at scale
- To highlight relevant technologies and skills that are useful when preparing to work in Industry

How is the course taught?

- One 2 hour Lecture session:
  - In person
  - Video material + *interactive elements*
- One 1 hour practical session (Weeks 2 to 9):
  - In-person
  - InfoLab21 B79:
    - Computing labs.
    - Please check your timetables for the venues
  - Experimental focus (e.g. measuring, gaining results)
  - Support & feedback for practical coursework elements

How is the course taught?

- Moodle will be the authoritative source of information for the course
  - *All* material and content will be posted there
- This includes:
    - Slides and recordings of all Lecture material
    - Lab workbooks and submission points
    - Additional reading
    - Announcements

Provisional Lecture Schedule

** Dates & topics subject to change*

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Week	Topic	Date	Who	Where
1	Introduction to the Module & Web Architecture & Performance	10th October	Matthew Bradbury and Phil Benachour	LEC 1 Biology LT
2	Evolution of HTTP	17th October	Phil Benachour	LEC 1 Biology LT
3	Embedded Computing and the Internet	24th October	Matthew Bradbury	LEC 1 Biology LT
4	Values in Computing	31st October	Lucy Hunt – Lancaster University	LEC 1 Biology LT
5	Architecting Online Services	7th November	Chirag Gude – Amazon	LEC 1 Biology LT
6	Responsive Web Design & Web Standards Evolution	14th November	Josh Tumath – BBC	LEC 1 Biology LT
7	Accessible Web Design	21st November	Emma Pratt Richens	Likely to be over Teams
8	Production-quality Software Testing	28th November	James van Hinsbergh and Fraser Hart – Tesco	LEC 1 Biology LT
9	Video Wall	7th December	Sean and Ben – Rinicom	LEC 1 Biology LT
10	Web Security	14th December	Matthew Bradbury & Phil Benachour	LEC 1 Biology LT

How this Course is Assessed

- 1) Exam **60%**
- 2) Coursework **40%**

Component	Title	Deadline	Weight (%)	Submission Method	Feedback Method	Mark Returned
1	Practical Element 1	Friday, Week 5	20	Moodle	*Cohort-wide Verbal and Written	By 6/12/2024
2	Practical Element 2	Friday, Week 9	20	Moodle	*Cohort-wide Verbal and Written	By 6/1/2025

*we will schedule a feedback session for each CW to give thematic feedback to the full cohort

Lab Schedule

Week	Topic	Notes
1	N/A	
2	Practical 1 (Support)	
3	Practical 1 (Support)	
4	Practical 1 (Support)	
5	Practical 1 (Support)	Submit Friday, Week 5
6	Practical 2 (Support)	
7	Practical 2 (Support)	
8	Practical 2 (Support)	
9	Practical 2 (Support)	Submit Friday, Week 9
10	N/A	

- Labs are designed differently in this module compared to other modules
- **Supported self-directed study**
- Content related to, but not directly from lectures
- As the module is primarily delivered by guest speakers from industry, important to have consistent academic content

What is Plagiarism?

- Passing off someone else's work as your own, including:
  - Submitting (e.g.) answers or a report that someone else provided
  - Paying for someone else to do it for you
  - Working on a piece of non-group work together as a group, and submitting it as individual work
  - Sharing of answers/data that you then possibly adapt
- If you **give someone else your work**, you can also be called in for plagiarism
- Coursework is submitted online and checked for plagiarism automatically

What We Expect from You

- Integrity (no plagiarism, no faking results) and effort (active learning):
  - Attend lectures
  - Go to our labs (they're to support you!)
  - Use our/the world's resources effectively
  - Take notes
  - Read around the subject/try things for yourself
  - Ask us questions in lectures and labs
  - Take notes (again, because the slides are not enough when you try to revise, really…!)

What You Can Expect from Us

- We'll do our best
  - To make all our lecture notes available on moodle
  - To personally check the labs are running smoothly and the TAs are offering support
  - To arrange extra support if you've already tried the normal routes (web, forum, TAs)
  - To offer prompt feedback on coursework

Online Expectations

- Online tools will be used to facilitate some aspects of learning e.g. Moodle, Teams, etc.
- However, this is a reminder that the use of these is governed by *existing* policies that you are all currently bound by and have agreed to
- Academic malpractice and plagiarism still applies online
- Direct sharing of code, sharing solutions and/or partial solutions with other students, either privately or in an open chat, is **not acceptable**

Online Expectations

- Don’t forget, these are your fellow students and staff, not some anonymous person on the Internet
- If you’re not sure if you should post or share something, please ask first
- If you see content or a post that you don’t like, in the first instance, message or email the course tutor to alert them to it
- We want these tools to be used; they will give you the best online experience!
  - However, we are asking that you use them sensibly and with respect

How do I get help?

- Please use the labs to ask for help
- Please ask the TAs in the labs: they are experts when it comes to the coursework!
- Please use the course forum on Moodle (outside of the Labs)

- When sending an email asking for help, please send it to both Matthew and Phil
- Prefer email to Teams messages
  - Teams messages will go unanswered

Summary of Feedback from the 2023/24 Academic Year

- Students appreciated the guest lecture format of the module
- Students wanted more guidance in the assignments
  - The workbooks have detail, use labs to engage with us – ask questions!
- Students felt that 1 hour labs were insufficient time to make progress
  - Managed to timetable labs as one block. Will monitor attendance, potential to attend multiple labs depending on capacity.
- Students felt 2 hour lectures were too long
  - Introduced breaks to divide up the lectures

Module Code	SCC.306		**Module Title**	Internet Applications Engineering
Year & Term	3 / Michaelmas		**Students enrolled**	132
Module Convenors	Matthew Bradbury Phillip Benachour		**Students responded**	23
			Response rate (%)	14.39%

Major LUMES question score means (out of 5)	*The module as a whole.*	*The quality of teaching.*	*Helpfulness of teaching staff.*	*Student involvement (eg, engagement, attendance) in the module.*
AY 2021/22	3.9	4.0	4.2	3.95
AY 2022/23	4.00	4.21	4.04	3.79
AY 2023/24	3.63	4.11	4.21	3.53

- Reduced the amount of assessment and increased time to do remaining assessment
- Workbook 1 involves using Google Cloud which needs a credit card
  - We have sourced $9500 of credit for use in this coursework

Interactivity is Key

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- Majority of lectures are delivered by guest speakers
- Interact with them and us
  - We want to see questions and discussion
  - Use this opportunity to get advice on what it is like in industry
- Labs are not just for doing the workbooks
  - Contact time with us for support
  - Opportunity for staff to provide feedback on workbooks prior to submitting them
- It is vital to attend the labs, as you will be working on material that may not have been covered in the lectures
- We are there to support you

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Q&A