Signposting for students

Hybrid Teaching put additional emphasis on the content and communication that comes from your Learn course. We have already looked at the way the Informatics courses follow a standard structure to give some consistency to students to help them know where to look for content… but what additional signposting could we consider?

As course materials will sit on Drupal now and course admin on Learn, it is especially important that students know where to go to find what they need. Find out more about the communication tools available on our blog post: Communicating with students

Some Assumptions

Below are a series of contexts and assumptions that we might expect your students to follow during the semester. We have tried to outline some of the things that a student might expect from the course and have offered some tips on ensuring this information is clearly signposted to them.

Student Behaviour

Below are some loose assumptions about the primary audience for your course, the students:

Some students will not read everything

- Use headings, summaries, and bullet points to present important information in a concise manner
- Don’t bury important information in long prose
- If there is a “call to action” for the student make this clear and include a description of what is expected of them

Some students don’t know what they are looking for

- Provide guidance and pointers to help a student get started
- Announcements are a good way of providing a timely narrative to support your course content – these are generally displayed chronologically so can provide an overview as the course evolves through a semester

Students are not yet subject matter experts

- Avoid using language or concepts in the titles that the student may not yet be familiar with
- Provide overview of what the student is expected to learn in each week / topic unit
- Reference materials that might be pre-requisite or used for revision purposes

Students are juggling multiple courses with varying schedule and deadlines

- Make sure the course schedule is clear
- What synchronous events might be taking place

Students are likely having to plan their own self-study workload

- Provide an overview of how much time a student is expected to spend in a week
- Give insight into which materials are essential reading/viewing, and which might be additional information only, or just for fun/consolidation
- Some students will want to make sure they read everything that is posted to the course, so if you include information that is a reference only you might need to indicate that this is not core-reading

Students might not be able to follow the standard course structure/timeline – this could change at any point during the semester

- Is it clear where recordings or alternative materials

are located?
- Is there a summary of what a student is required to do each week?

Students might not realise that an element in Learn needs to be clicked for more information

- Try only using a short description/summary in clickable elements in Learn as these can often be overlooked by students
- Provide the full information from within the folder/section
- Use a different colour for the link

Why/When are students accessing the course?

Based on previous work students tend to access courses for the following reasons:

Start of term – just browsing all content

- Check the course readiness article (2022 update) for what is expected for Week 0
- If content is not visible and is due to be released, give an indication to students of when materials will be available and where to find them.
- Scheduled items in Drupal and hidden items in Learn do not show anything at all, not even a placeholder. If all content is hidden a student will see an empty page.

Week to week, looking for specific materials to support their studies for a specific week

- Be sure to identify the week number in titles and links, you can include the date too if relevant
- Try to also include a title or summary of the topic for that week, this will make it easier to find materials when reviewing.

- Announcements are a great way of setting the scene for the week's teaching.
- In Drupal, using either the schedule table or having a page for each week of the course makes it easy for students to navigate to what they need

Take part in set learning activities

- If there are set actions, dates, and deadlines required for a student to participate be sure that the instructions and link to activity is displayed clearly and consistently
- It is useful to add an announcement at the start of each week identifying what is expected of a student. Please see this example of an announcement, with the option ticked to also send it as an email, from Week 2 of AML (with thanks to Oisin for letting us share this): Applied Machine Learning (2022-2023)[SEM1]- AML Week 2 Instructions.pdf

Revision of topics before some form of assessment

- If materials are organised by week is it still clear which topics and areas where covered in those sections
- Give content meaningful titles and summaries so resources are not just referenced by Week 1, Lecture 1 – this shows when the lecture took place but not what it covered.
- You can add links to your content in Drupal. This allows you to link to content in a different section without having to duplicate content.

Looking back at courses studied in previous years

- Students have access to their courses studied in previous years and may wish to review content so meaningful titles can aid them in finding the materials they are looking for

Following up on an announcement / notification in Learn

- Many students will use the email or Learn app notifications to trigger them to accessing the course
- Announcements and notifications are pooled into separate lists on the app to make it easy for a student to see all activity across their Learn courses from a single feed without having to navigate each course individually looking for updates.

Signposting and Structure

The above information is looking at how information could be presented to students to make sure it is easy to find and presented consistently. We have touched a little on what content you might want to include in your course setup – but we have listed some outlines of content that a student might be expecting to find in your course.

Take a look at the list below and think about whether this information is available within your course, and if it isn't, how would you expect the student to find it?

Expected Content

Below is a summary of the type of information a student is likely to expect within your Learn course:

- Course Information
  - What is the course all about?
  - What is expected of me in this course?
  - Is there a timetable/schedule of teaching and deadlines?
  - Who is running the course, who can I contact if I need help?
- Course Content
  - What information do I need to prepare for teaching activities?

        - What is happening this week?
        - What should I have learned about this topic?
        - Where can I find the materials used during the teaching?
        - Is there a live teaching session or is it only via recording?
        - How much time should I set aside for this?
        - Is there additional reading or revision materials I should be looking at?
        - Does the teaching refer back to any of my previous studies?
    - Assessment
        - What am I being assessed on?
        - When do I need to submit my assessments / when are assessments taking place?
        - How will I be assessed?
        - How do I submit my work?
        - When will I get my feedback?

Test it out

Sometimes as a course organiser you can be a bit too close to the material to view the materials as a student would. You can use Student Preview in Learn or paste a Drupal URL into a private web browsing window to see what a student can see in your course, but you will need to try and think about the questions above to see if you can find the information that a student would expect to see.

Alternatively why not get a friend or colleague to try the course out as a student would to find specific information. Sometimes a person with no background knowledge of your subject area can be a great person to test the structure of your course; ideally the course should be usable without prior knowledge of the subject.

Improving student experiences in Learn: usability testing showcase and workshop

On 1 March, the IS User Experience (UX) Service, in partnership with the School of Informatics, ran a Learn usability testing showcase event. Participants from across the University watched screencasts of students using an Informatics Learn course, before prioritising the usability issues identified.

Five students in total took part in the testing – four from Informatics, including those enrolled on single programmes, joint programmes with other Schools, and those from our Undergraduate Apprenticeship Scheme – and one from the School of Economics. Each was presented with the following scenario and four 'typical' tasks to perform.

A copy of the Learn course for Computer Security was used for testing purposes. This was chosen as it aligned closely with the Learn template developed for the School.

Scenario

You're a third year student on the joint programme BSc Artificial Intelligence and Computer Science. This semester you are studying a course called Computer Security. It's week 3 of the course, and you're preparing for your first piece of coursework.

Tasks

Task 1: You want to check the deadline for the first piece of coursework and see if it clashes with any other coursework

deadlines. Using the Learn course site, find out the deadline for the first piece of coursework, and then see if it clashes with coursework deadlines for any other courses on which you are enrolled.

Task 2: You missed the third lecture of week 1 because of sickness. You'd like to watch the recording so you can catch-up. Using the Learn course site, find and play the third lecture of week 1.

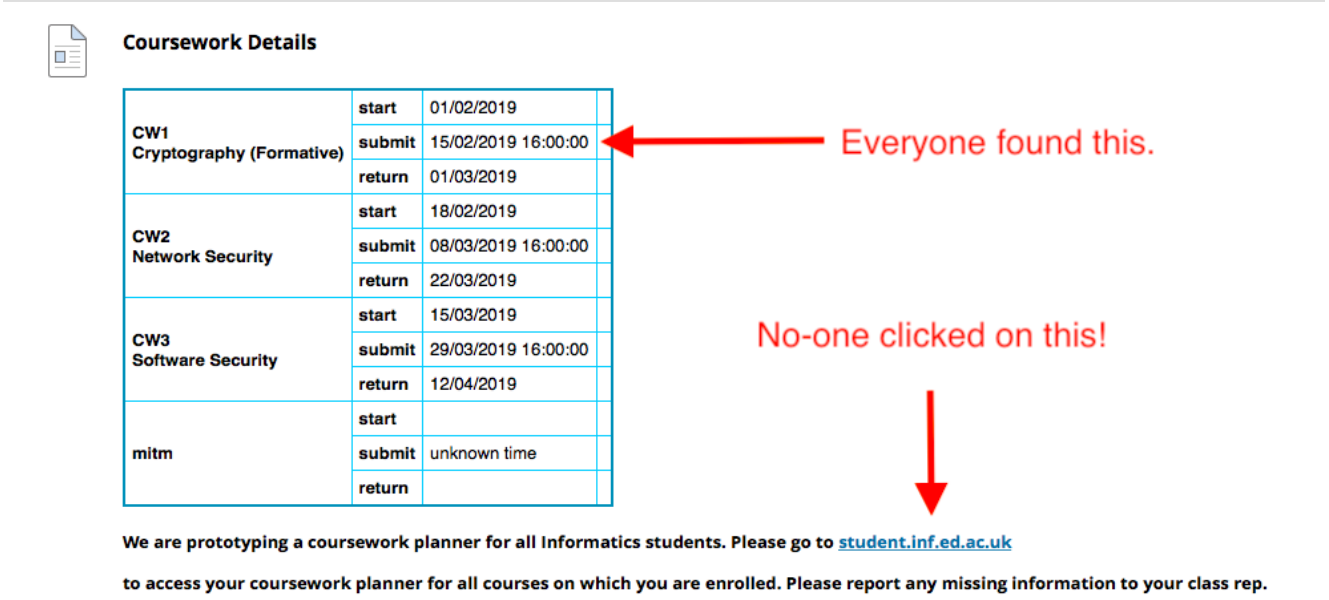
Task 3: You're going away for the weekend and you'd like to do some reading while you're away. You're not sure you'll have access to the internet, so you'd like offline access to your reading. Using the Learn course site, find the required textbook for the course and see if you can download or print a section of the textbook.

Task 4: You'd like to familiarise yourself with the content of the last lecture you attended, called Cryptography – asymmetric encryption. Can you open the lecture notes from this lecture?

Results

Task 1: Most users found the coursework deadline relatively quickly and with ease. One student checked both the *Course Information* and *Course Content* pages prior to selecting the *Coursework and feedback* page.

However, no users were able to easily find the link to the personalised coursework planner. This was expected, and one of the reasons why I included it in the task.



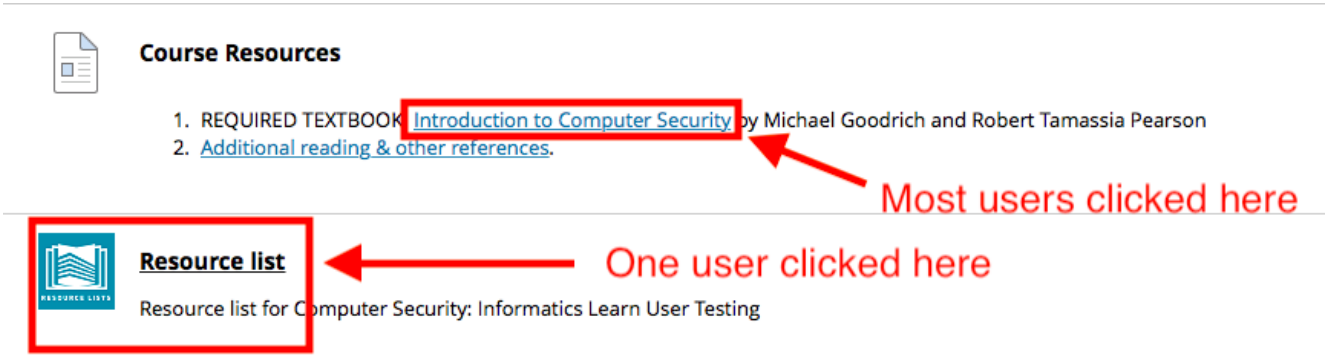
Task 2: Most users found the link to the lecture recording overview page with relative ease. Some users were expecting to find a direct link in the table on the *Course content* page. This was not surprising as the Semester 1 course [Informatics 1: Introduction to Computation] includes this.

There was, however, a significant usability issue identified for all users when it came to identifying a particular recording from the Media Hopper Replay course overview page. This was caused by the unhelpful automatic naming convention of recordings (see below). Users performed a lot of cross-checking between different pages on Learn, various online calendars and and the Media Hopper Replay course overview page to identify the recording from the "third lecture of week 1".

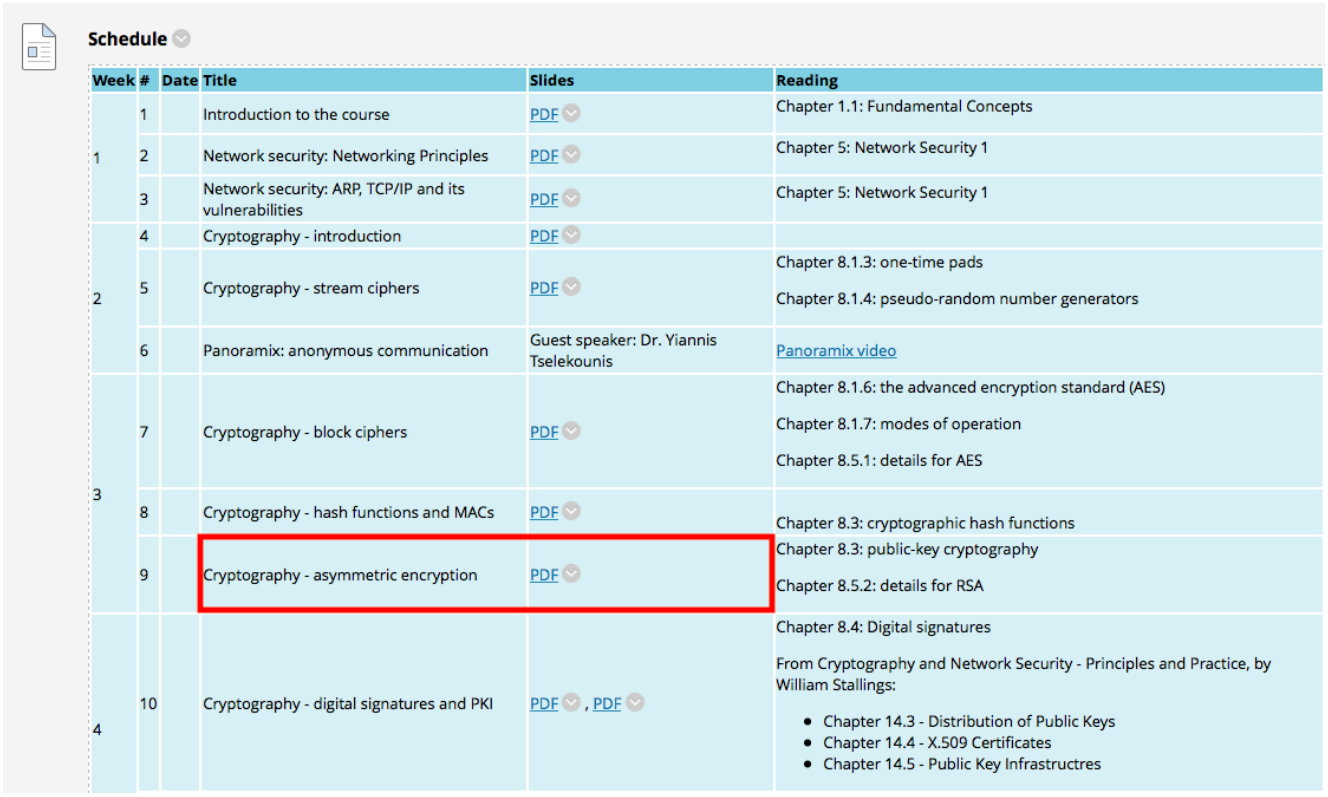
Task 3: The course organiser had used Leganto, the centrally supported Resource List tool, for the course. Users could access the text on Leganto via both an in-text link, or an icon associated with the service link. Most Informatics users found the link to the required textbook with relative ease. There was one instance of users navigating to the table on the *Course content* page where references to specific chapters are included.

This particular textbook was behind an EASE login. As the students were using a dummy account, they were prompted to enter their EASE credentials which would not be the case when logged in as themselves.

Interestingly, the student from Economics searched for the textbook by navigating to the Handbook. This highlights the different approach to content curation and the various roles course and programme handbooks perform across the University.



Task 4: Four users found the link to the lecture notes with ease. One (visiting) student initially checked the *Coursework and feedback* page. It was noted that the terms *lecture notes* and *lecture slides* are sometimes used interchangeably.



Schedule

Week	#	Date	Title	Slides	Reading
	1		Introduction to the course	PDF	Chapter 1.1: Fundamental Concepts
1	2		Network security: Networking Principles	PDF	Chapter 5: Network Security 1
	3		Network security: ARP, TCP/IP and its vulnerabilities	PDF	Chapter 5: Network Security 1
	4		Cryptography - introduction	PDF	
2	5		Cryptography - stream ciphers	PDF	Chapter 8.1.3: one-time pads Chapter 8.1.4: pseudo-random number generators
	6		Panoramix: anonymous communication	Guest speaker: Dr. Yiannis Tselekounis	Panoramix video
	7		Cryptography - block ciphers	PDF	Chapter 8.1.6: the advanced encryption standard (AES) Chapter 8.1.7: modes of operation Chapter 8.5.1: details for AES
3	8		Cryptography - hash functions and MACs	PDF	Chapter 8.3: cryptographic hash functions
	9		Cryptography - asymmetric encryption	PDF	Chapter 8.3: public-key cryptography Chapter 8.5.2: details for RSA
4	10		Cryptography - digital signatures and PKI	PDF, PDF	Chapter 8.4: Digital signatures From Cryptography and Network Security - Principles and Practice, by William Stallings: • Chapter 14.3 - Distribution of Public Keys • Chapter 14.4 - X.509 Certificates • Chapter 14.5 - Public Key Infrastructres

---

Action Points

- Feature request for Media Hopper Replay team: can we automate naming of recordings by date? Venue information would also be helpful here.
- Request for Media Hopper Replay team: can we facilitate production of individual URLs for each recording which will work for enrolled users – *even when they haven't selected initial LTI link*. Only when this can be a achieved, should we encourage course instructors to include links to Media Hopper Replay recordings in the table on the Course Content page.
- Promote coursework planner across the school. Posters / monitor displays etc.
- Include a thumbnail of a 'typical' coursework planner in the next iteration of the template.
- Can the coursework planner display full course name rather than acronym?
- Enquire into possibility of responsive design for

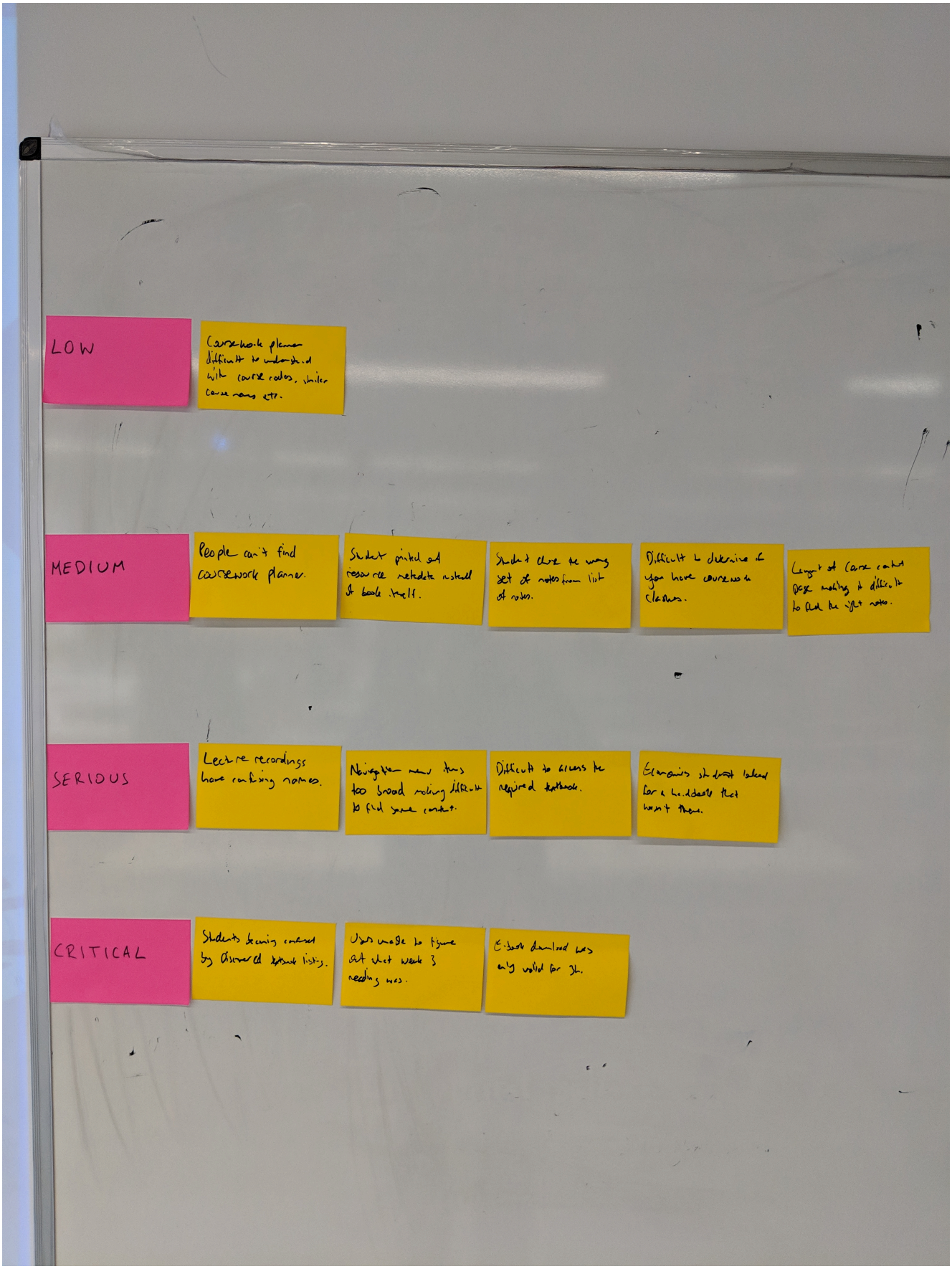
coursework planner.

- Can we have the coursework planner work for tutors (eg marking loads)? Do we need this?
- Work with the web and communication team to research how Informatics students use the yearly handbook.

Reflection

I thoroughly enjoyed working with Duncan Stephen on this mini project. The feedback was informative, encouraging, and a call to action. I'm looking forward to embedding similar practice across the School for alternative platforms for content delivery.

The results of the 'prioritisation of issues' aspect of the workshop can be found below. If you would like to know more about this particular round of testing, or would like to use *your* course for further testing, please don't hesitate to get in touch.



Further links

- User Experience Service: http://www.ed.ac.uk/is/ux
- Join the UX community: http://bit.ly/UX-meetup-blogs

- UX mailing list: http://bit.ly/uoe-ux-mail
- Steve Krug's Rocket Surgery resources: http://bit.ly/1I1muXo
- David Travis's prioritisation flowchart: http://bit.ly/1I1mCWW