Assignment hand-ins for Learn: guidance for students

Please read through the following guidance well in advance of any submission deadline you have.

Check file type

The Learn assignment tool will accept any file types but check the instructions for your course to see which file types are required for your individual assignment.

Check file size

If you are submitting very large files, this will affect the time it takes to upload…

Internet Connection

… We therefore strongly advise that you submit your assignment using a reliable and fast internet connection.

Check Browser

Wherever possible, use a computer and browser you are familiar with, or a computer in the public access labs, when submitting an assignment. You can check your browser compatibility from the Browser information box on the My Institution page inside Learn.

Submission Deadlines

Do not submit the assignment minutes before the deadline, because then you will have very limited time to change computers or report a problem if there is one.

Troubleshooting

If you do have a problem submitting your assignment try these troubleshooting steps:

- If it will not upload, try logging out of Learn / MyEd

completely and closing your
browser. If possible try using a different browser.

- If you do not receive the expected confirmation of submission, try submitting again.
- If you cannot resubmit, contact your tutor by email attaching your assignment, and if possible a screenshot of any error message which you may have. (see below).
- If you have a technical problem, contact the IS helpline (is.helpline@ed.ac.uk). Note the course name, type of computer, browser and connection you are using, and where possible take a screenshot of any error message you have.

Always allow yourself time to contact helpline / your tutors if you have a problem submitting your assignment.

Further information can be found on the IS support pages here: https://www.ed.ac.uk/information-services/learning-technology/virtual-environments/learn/assignments-marks-feedback/assignments

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Lecture recording scheduler

The Media Hopper Replay page for your course displays *when* recordings are scheduled, but not *where*. So, when you select the *Lecture recordings* link in Learn…

… you see something like this:

But what if you want to check *where* your classes are scheduled for recording?

You can visit the [Media Hopper Replay scheduler](#)*. Enter the course name or course code (be sure to select the correct instance) and you will see something like this:

1. you can change your recording preference — and give a reason why. Please remember — this changes recording preference for all lectures within your course. If you want to change at a more granular level, please select the specific scheduled lecture (eg TU @ 5pm)
2. you can change the availability of your recordings from the default 24 hour delay to 'immediately' or 'manual release'
3. you can enable live streaming of classes

4. you can check the location of the scheduled recordings.

Further information on the Media Hopper Replay scheduler can be found here: https://www.ed.ac.uk/information-services/learning-technology/media-hopper-replay/help-and-support/staff-help-and-support/replay-scheduler

*By default, only Course Organisers and Course Secretaries are added to a course in the Replay Scheduler, so people can only see information on the site for a specific course where they have one of these two roles. Additional users can be added by the CO or CS, who will then be able to manage opt-outs and release timings.

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".

Computer Security_Lecture/01			January 14, 2019	12:10pm-1:05pm		
Computer Security_Lecture/02 <26-29, 32-36>			January 16, 2019	12:10pm-1:05pm		
Computer Security_Lecture/03 <26-29, 32-37>			January 18, 2019	11:10am-12:05pm		
Computer Security_Lecture/01			January 21, 2019	12:10pm-1:05pm		
Computer Security_Lecture/02 <26-29, 32-36>			January 23, 2019	12:10pm-1:05pm		
Computer Security_Lecture/03 <26-29, 32-37>			January 25, 2019	11:10am-12:05pm		

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.

Course Resources

1. REQUIRED TEXTBOOK Introduction to Computer Security by Michael Goodrich and Robert Tamassia Pearson
2. Additional reading & other references.

Most users clicked here

Resource list
Resource list for Computer Security: Informatics Learn User Testing

One user clicked here

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
3	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
	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

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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 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

Supporting Open Education and Open Knowledge at the University of Edinburgh

Join an informal lunchtime webinar on **Tuesday 5 March, 12.00-13.00** as we share approaches to supporting Open Education and Open Knowledge at the University of Edinburgh.

Come and join Lorna M. Campbell (OER Service), Stuart Nicol (Education Design and Engagement), Ewan McAndrew (Wikimedian in Residence), and Charlie Farley (OER Service) to talk about supporting open education through digital skills development, playful approaches to copyright literacy, embedding Wikipedia in the curriculum, and open approaches to MOOCs and distance learning at scale. Open to all.
Booking and further information.

Teaching Spaces: news and

developments

Image from teaching spaces website homepage

Learning Spaces Technology, part of Information Services, has recently [launched a new website](#) aimed at informing and supporting colleagues using teaching spaces.

Please note: content is still being added to the site. If you have a question relating to teaching spaces, you can log a call with the [IS Helpline](#) or speak with your local [Learning Technologist](#).

Further information

- http://www.teachingspaces.ed.ac.uk

University of Edinburgh to host Project Jupyter

Community Event

Nbgrader Hackathon/Code Sprint
Scotland; James Slack (University of Edinburgh);
james.slack@ed.ac.uk

The University of Edinburgh will be hosting a three-day community event focused using Jupyter notebooks within teaching. The core aspect of this event will be a Hackathon focused on adding improvements, fixes and extra documentation for the nbgrader extension. Alongside this, there is a plan to run introductory open workshops for using Jupyter in teaching, targeting local communities with some exposure to Jupyter as well as those new to Jupyter. Our key aim will be to improve the existing features within nbgrader. This will allow the existing Jupyter user community and new users to adopt and use this as an assessment tool alongside Jupyter notebooks. By enthusing our existing local Jupyter users to be more involved with the wider community and inviting new users to join, we will be increasing the diversity of opinion and experience within the Jupyter user community.

Taken from: https://blog.jupyter.org/jupyter-community-workshops-a7f1dca1735e

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Project Management

There will be occasions when you are looking to facilitate a particular workflow not currently supported by learning technology central services. Sometimes, workarounds need to be found. However, there may be occasions when, working with our colleagues in Information Services, we can build something

which does achieve the desired aim.

In my time as learning technologist for Edinburgh College of Art, I worked with IS Apps colleagues to build a building block for Learn which vastly improved the experience of students accessing learning outcome level grades and feedback via Learn. You can read about the project [here](#).

If you have an idea as to how you can improve current workflows — for academic colleagues, support colleagues, or students — please get in touch to discuss further.

GET IN TOUCH

lt-support@inf.ed.ac.uk

Informatics Learn Template

Note: The template changed completely with the move to Learn Ultra for A/Y 2023-24 and the migration of Informatics courses to OpenCourse.

What is a Learn template?

Templates can be assigned to Learn course pages. They can currently only be applied at *School* level and include the content, design and settings defined in the template (e.g. course menu, colour, banners, rubrics etc).

Why develop a Learn template for Informatics?

When I took up post as Learning Technologist for Informatics in February 2018, students across Informatics had access to Learn via courses shared with Mathematics (and other subject areas). Learn adoption across Informatics however was minimal.

Of the 105 courses listed on the course index page, 70 had a course instance on Learn. However, of these 70 course instances, only eight were the primary site for course content (and of these, four had online learners). The other 62 course instances on Learn were primarily used as a function for students to access recordings of lectures.

There were a few instances of course organisers making use of some other Learn tools (the Leganto Resource List and the Announcements tool) and several used some form of assessment tool in Learn (Turnitin or the Learn quiz tool). However, nearly all simply linked out to information hosted elsewhere (most here: http://www.inf.ed.ac.uk/teaching/courses/, some here: https://blog.inf.ed.ac.uk, some here: https://ease.groups.inf.ed.ac.uk and a couple here: http://wp.inf.ed.ac.uk). This obviously provides a disjointed experience for our students.

Efforts to improve the Learn experience were therefore not only justified but essential. Such efforts were primarily targeted towards the following outcomes:

1. Improve the *student* experience of Learn via a more consistent design
2. Improve the *staff* experience of Learn by offering a more customized, flexible and responsive service to meet the needs of academic and support colleagues.

It is worth mentioning that improving the student experience of Learn via a more consistent design is part of a wider University project called Learn Foundations. The Project page for Learn Foundations can be found here.

Learn template: iteration #1 (Semester 1 2018/19)

Course menu

Course information

Replaces the previous 'landing pages' and provides a quick, at-a-glance summary of course information. Primarily driven by scripts embedding content from Theon.

Announcements

A useful tool for sharing important course information with students, without having to use mailing lists.

Course content

This is where the bulk of the teaching content sits. A table format is frequently favoured, with links to lecture slides, lecture recordings, key readings and tutorial / lab sheets.

Replay lectures

Tool link to Media Hopper Replay, the default service for automated and ad hoc lecture recording.

Resource Lists

Includes a tool link to the centrally supported Resource List service (Leganto). Many courses are still not taking advantage of this service, and instead simply listing recommended books. Advantages of the Resource List service include: key resources become more accessible to students; students can quickly see which items are 'Essential' reading; improved discovery of resources.

Discussions (Piazza)

Many courses use Piazza for class discussions. Unfortunately, we can't take advantage of the LTI link due to concerns around the security of the data.

Coursework and feedback

Includes a link (hidden to students) to a webmark form where

course organisers are instructed to enter key coursework details. On submission of the form, this information is then automatically embedded on the same page. This provides a consistent experience for students when wanting to access key coursework information. The data driving this can then be used to produce customized timelines for each student, to facilitate better workload planning.

Assessment and Exams

Quick and consistently presented information relating to common assessment queries such as late submission policy, academic misconduct, marking criteria and exam information (where relevant).

Student Course Feedback

Consistently presented information on the different ways students can give feedback about their course. Also contains instructions for staff on how they can encourage and collate course feedback (hidden from students).

Help

Information (relevant to course) on how and where to seek help, eg InfPALS, Programming club etc.

Help for Staff

Hidden from students, includes links to avenues of help such as the Informatics Learning Technology Support site.

Groups

Tool link to the Groups function in Learn. This year the ITO, along with course organisers, are managing tutorial groups (and, in some cases, lab groups) via Learn. This tool link allows students to sign-up for specific groups (where appropriate) and allows them to see in which groups they are enrolled, along with access to group specific tools such as

discussion boards, group email, blogs etc.

Course Management

Guest Access

All Learn courses in Informatics are enabled for Guest Access. This means anyone in the world can access the 'home page' of the Learn course (default=Course information page). Course organisers can then choose which content areas they want open to the world, vs restricted to students enrolled on the course. If course organisers want courses restricted to anyone with an EASE password, they can enable the course for self-enrol. If they would like their course promoted on the self-enrol panel in Learn, they should email the Informatics Learning Technology service: lt-support@inf.ed.ac.uk.

Grade Centre

The Grade Centre in the Informatics template contains one marking schema – which maps to Common Marking Scheme 1: Undergraduate Degree Assessment (except BVM&S and MBChB) and CMS 4: Postgraduate Assessment Mark.

Useful links:

[Learn Foundations Projects – background information](#)

[Learn Foundations Project page](#)

Overleaf Cloud Service Project

The School of Engineering in the College of Science and Engineering is undertaking a project to examine the appetite for a LaTeX authoring tool to support staff and students in creating, collaborating and sharing LaTeX documents.

The project has funded a site license for the [Overleaf](#) cloud service, which is **open to all staff and students** and allows access to a pro account, for the duration of the project which concludes at the end of January 2019.

Related links

http://www.projects.ed.ac.uk/project/sce013/brief/overview

https://www.ed.ac.uk/information-services/computing/desktop-personal/software/main-software-deals/other-software/overleaf

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Learning analytics for improving evidence-based teaching

I recently attended a workshop facilitated by [SICSA](#) entitled [Learning analytics for improving evidence-based teaching](#). There were around 20 delegates in all, representing

several universities across Scotland. [Pavlos Andreadis](#) was also representing the University of Edinburgh. Discussion sessions were led by Kassim Terzic.

The invited guest speaker was Andrew Cormack, Chief Regulatory Adviser at Jisc Technologies, who gave an informative talk on *Learning Improvement, Ethics and Law*. You can read more about Andrew's thoughts on GDPR and education on [his blog](#).

For most of the day, we formed smaller groups to discuss various aspects of learning analytics data points at our respective institutions. Summaries of our discussions can be found below.

What learning-related data is currently gathered and stored in your institution?

— Grades (exam, coursework)

— Entry Requirements

— NSS evaluation (likert scale + free text)

— Engagement

    — Attendance (eg Glasgow Caledonian require swipe access to lecture rooms)

    — Lecture capture

    — Forums

— Reading lists (different access methods)

St Andrews also conducts exit type interviews with its students, measuring longer term feedback. Pavlos also noted that feedback is also given in the form of complaints, either to the student union or director of studies (or both). This kind of feedback is less likely to be logged in a central

system.

How is impact of changes on learning currently measured in your institution?

— Scatter plots (modules vs all)

— Average / standard deviation (final grade / exam only / per exam question)

— Student evaluation (module boards)

— Trends per student

— Averages / histograms over years

— Student background (how do students with a programming background compare with those who don't re final classification)

— Selection of exam question.

How can statistical and data-focussed approaches help evidence learning outcomes?

Consistent data points across all courses and all institutions:

— Learning outcomes

— Delivery method

— Assessment method

A proper experiment in this area would require an active intervention and a control group. This, however, would be ethically difficult. It was suggested we look instead at 'passive' interventions. For example, could we use text

analysis of discussion boards to demonstrate understanding of key concepts in the lecture? Or look backwards for evidence of a student request for change and if the resulting change had the desired effect?

We also discussed how machine learning could be useful in predicting students who are 'at risk'. A word of caution here though: the University of Edinburgh has a [Learning Analytics Policy](#) and has developed [seven principles](#) to sit alongside this policy. One of these principles states:

> "Our vision is that learning analytics can benefit all students in reaching their full academic potential. While we recognise that some of the insights from learning analytics may be directed more at some students than others, we do not propose a deficit model targeted only at supporting students at risk of failure."

What data-driven approaches could be applied in a study across Scottish Universities?

We then discussed how we could evaluate a passive intervention across multiple HE institutions. One suggestion was to find a course common to all Computer Science programmes (eg a second year Database course) which has remained relatively consistent across 7-10 years, to use in the data study. We could introduce a guest lecture to this course, which could be delivered remotely. We could then measure:

– Engagement

– Satisfaction

– Learning (grades)

and compare these data points to previous cohorts.

A personal note

Without a clear understanding of what 'gap' this guest lecture was aiming to fill, I remain unsure as to what such an experiment would tell us. I preferred (my own) suggestion of introducing more (and different) types of assessment into a stable, common course across programmes. *How* we assess, *how often* we assess, *why* we assess and the *feedback loop* is ripe material for a lot of research into education just now, and it is my personal opinion that we could contribute to this research in a meaningful way.

Finally, a cautionary tale: on 29 May I attended a talk given by Joel Smith from Carnegie Mellon University entitled: [The Eye of the Needle: New Understandings of the Complex Barriers to Instructional Innovation with Technology](). In this talk, Professor Smith talked about the twin challenges of any TEL project:

– effectiveness in improving learning outcomes

– effectiveness in terms of adoption and sustainability (ie the implementation of innovations).

Demonstrating the former does not necessarily lead to the latter. We should always keep this in mind when looking to evidence better teaching.