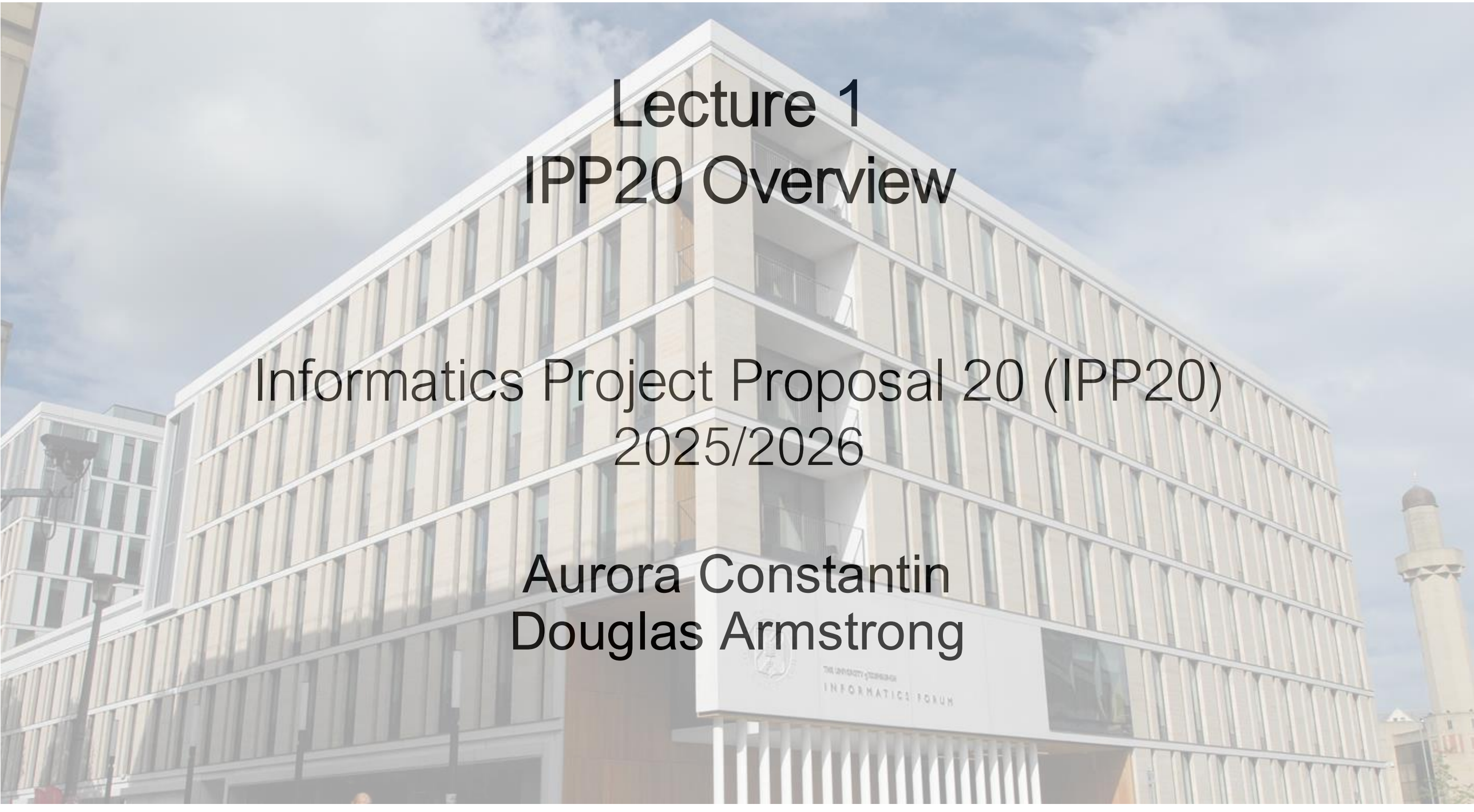

Lecture 1
IPP20 Overview

Informatics Project Proposal 20 (IPP20)
2025/2026

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Core IPP20 Course Team

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Your MSc Programme

- **Taught component (100 credits)**
  - Lectures, tutorials, coursework, exams
  - Learn established techniques that work
- **Research component (80 credits)**
  - Do something that has never been done before
    - Study a new problem, develop a new method, etc.
    - Probably the most exciting (and hardest) part of MSc
  - ***Dissertation*** (**60 credits**, 20-40 pages)
  - **IPP:** write a detailed plan for your specific MSc project (20 credits)

MSc Project Timeline

DISS: MSc Dissertation (Informatics)

- **Thu, 15/1/2026:** Project allocation announced to students.
- **Thu, 22/1/2026:** Special cases processed. Deadline for changes to projects and supervisors.
- **Semester 2 (IPP)**
  - write a detailed **research plan** for what you're going to do (CW, 100%)
- **Summer** (provided you progress to the dissertation stage)
  - Work on your **project** (design, build, test, analyse results)
  - Write a **dissertation** – ***end of August 2026 (TBA)***

DISS vs IPP20

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Open Course Materials

Welcome to Informatics Open Course Materials

Informatics Open Course Materials is home to most teaching materials for Informatics courses at the University of Edinburgh. You can find a list of courses below, with links to associated pages. These materials are for students enrolled on the courses, other University of Edinburgh students who may be interested in taking one or more of the courses, and for everyone across the globe. This initiative is part of the worldwide OpenCourseWare movement.

Students enrolled on these courses have additional materials within the University of Edinburgh's Virtual Learning Environment (VLE) - Learn.

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Audit a course

Year	Course
1	INF1A: Informatics 1 - Introduction to Computation
1	INF1B: Informatics 1 - Object Oriented Programming
1	INF1-CG: Informatics 1 - Cognitive Science

...

PG	DISS: MSc Dissertation (Informatics)
PG	FINET: Financial Networks
PG	FML: Machine Learning in Financial Services
PG	IPP20: Informatics Project Proposal 20
PG	IRR: Informatics Research Review
CDT	MLSP: Machine Learning Systems Project

What is IPP20?

- A preparation course for your Dissertation or major project
- Focuses on **planning**, not execution
- Develops transferable research and professional skills
- Relevant to:
  - Academic research
  - Industry and commercial projects

A strong project plan significantly increases the chance of a successful Dissertation.

Learning Outcomes (Overview)

On successful completion of IPP20, you will be able to:

- **LO1:** Critically evaluate literature to justify planning decisions
- **LO2:** Develop a structured proposal for your Dissertation project
- **LO3:** Apply project management strategies (time, resources, risk)
- **LO4:** Address ethics, responsible research and data management

These outcomes directly shape both teaching activities and assessment.

How IPP20 Fits with Your Dissertation

- IPP20 is tightly aligned with the Informatics Dissertation
- You will:
  - Define and refine a project idea
  - Justify it using relevant literature
  - Plan how it can realistically be completed

Output: a **Project Proposal** that forms the foundation of your Dissertation work

Course Aims

By the end of IPP20, you should be able to:

- Turn an idea into a viable research or implementation project
- Justify design choices using academic and professional literature
- Plan a project with realistic scope, timelines and milestones
- Identify and manage ethical, legal and professional issues

Why?

SCQF LEVEL DESCRIPTORS

scqf scottish credit and qualifications framework

LEVEL 11

The following descriptions are for guidance only –
it is not expected that every point will necessarily be covered.

CHARACTERISTIC 1: KNOWLEDGE AND UNDERSTANDING

- Demonstrate and/or work with:
  - Knowledge that covers and integrates most, if not all, of the main areas of the subject/discipline/sector – including their features, boundaries, terminology and conventions.
  - A critical understanding of the principal theories, concepts and principles.
  - A critical understanding of a range of specialised theories, concepts and principles.
  - Extensive, detailed and critical knowledge and understanding in one or more specialisms, much of which is at, or informed by, developments at the forefront.
  - A critical awareness of current issues in a subject/discipline/sector and one or more specialisms.

CHARACTERISTIC 2: PRACTICE: APPLIED KNOWLEDGE, SKILLS AND UNDERSTANDING

- Apply knowledge, skills and understanding:
  - In using a significant range of the principal professional skills, techniques, practices and/or materials associated with the subject/discipline/sector.
  - In using a range of specialised skills, techniques, practices and/or materials that are at the forefront of, or informed by forefront developments.
  - In applying a range of standard and specialised research and/or equivalent instruments and techniques of enquiry.
  - In planning and executing a significant project of research, investigation or development.
  - In demonstrating originality and/or creativity, including in practices.
  - To practise in a wide and often unpredictable variety of professional level contexts.

CHARACTERISTIC 3: GENERIC COGNITIVE SKILLS

- Apply critical analysis, evaluation and synthesis to forefront issues, or issues that are informed by forefront developments in the subject/discipline/sector.
- Identify, conceptualise and define new and abstract problems and issues.
- Develop original and creative responses to problems and issues.
- Critically review, consolidate and extend knowledge, skills, practices and thinking in a subject/discipline/sector.
- Deal with complex issues and make informed judgements in situations in the absence of complete or consistent data/information.

CHARACTERISTIC 4: COMMUNICATION, ICT AND NUMERACY SKILLS

- Use a wide range of routine skills and a range of advanced and specialised skills as appropriate to a subject/discipline/sector, for example:
  - Communicate, using appropriate methods, to a range of audiences with different levels of knowledge/expertise.
  - Communicate with peers, more senior colleagues and specialists.
  - Use a wide range of ICT applications to support and enhance work at this level and adjust features to suit purpose.
  - Undertake critical evaluations of a wide range of numerical and graphical data.

CHARACTERISTIC 5: AUTONOMY, ACCOUNTABILITY AND WORKING WITH OTHERS

- Exercise substantial autonomy and initiative in professional and equivalent activities.
- Take responsibility for own work and/or significant responsibility for the work of others.
- Take significant responsibility for a range of resources.
- Work in a peer relationship with specialist practitioners.
- Demonstrate leadership and/or initiative and make an identifiable contribution to change and development and/or new thinking.
- Practise in ways which draw on critical reflection on own and others' roles and responsibilities.
- Manage complex ethical and professional issues and make informed judgements on issues not addressed by current professional and/or ethical codes or practices.

Components of the IPP

- **7 lectures + 1 Workshop** – in person in George Square Theatre, **room** GALT (Gordon Aikman Lecture Theatre)
- **6 IPP tutorials, starting from week 3** – in person, in 5.07
- **Coursework** – due in W14, on Mon 20 Apr 2026, 12:00 (Noon)
- **Regular meetings with your project supervisor**

Open Course Materials

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Open Course Materials

IPP20: Informatics Project Propo...

IPP20: Schedule

Week	Lectures Time/Location	Lectures	Tutorials	CW	Deadline
1	13-Jan-2026, 13:10-14:00 Gordon Aikman Lecture Theatre	**L1: Introduction to IPP20** Slides I Video Lecturers: Aurora Constantin Douglas Armstrong	No tutorial		
2	20-Jan-2026, 13:10-14:00 Gordon Aikman Lecture Theatre	**L2: Critical Academic Reading and Literature Evaluation** Slides I Video Lecturer: David Caulton	No tutorial		

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Learn

DRPS

Navigation

IPP20: Schedule
IPP20: Course Materials
IPP20: Resources and Reading
IPP20: Assessment

IPP Tutorials

- Tutorials focus on **generic project planning** skills and **proposal writing**, not the technical content of your plan
- Tutors are there to help you. Get this opportunity.
- Attendance is mandatory
- Tutorial group allocation → TTU
- Don’t email lecturers or TA for a tutorial group change!

Coursework

CW: Writing a project proposal **– due on 20/04/26, 12:00 PM (Noon)**

- Students work individually to write a project proposal focused on their project
- This proposal will guide their summer project.
- Marked by supervisors – Pass/Fail

Role of Your Supervisor

Your supervisor will:

- Support refinement of your project idea
- Advise on scope and feasibility
- Guide methodological and ethical decisions
- Provide feedback on proposal development

Responsibility is shared: guidance from supervisors; initiative from students.

Regular Meetings with Project Supervisor

- Start immediately **after project allocation**
- You are in charge to **schedule regular meetings**
  - Do not let it slip! Supervisors will not chase you
- Keep meetings focused and concise
- If you have little progress, use the meeting to discuss obstacles rather than cancelling

Remember: Supervisors mark your project proposal (CW)

Relation with Your Supervisor

Poor practice

- Asking feedback on many versions of your IPP
- Cancelling meetings at short notice
- Expecting the supervisor to define the project for you

Good practice

- Show initiative in developing and refining your ideas
- Read and engage with relevant literature between meetings
- Arrive with specific questions or points for discussion
- Clearly explain what feedback you are seeking

Essential ingredients

- Clear and timely communication
- Shared understanding of roles and expectations
- Preparation and follow-up after each meeting

Developing Your Project Proposal

Your proposal will typically include:

- Introduction
- Review of relevant literature/ State of the art
- Implementation:
  - methodology or approach
  - expected outcomes
  - evaluation criteria
  - risk assessment and mitigations
  - responsible research including ethics
- Research Plan, Milestones and Deliverables
- References

Goal:

- Convince the reader that your project is interesting, justified, and achievable.

What Makes a Strong Project Proposal?

Strong project proposals are:

- Clearly motivated by literature and/or real-world need
- Scoped appropriately to ensure completion within the available time
- Underpinned by sound and justified methodology
- Ethically and professionally responsible
- Ambitious in intent but realistic in execution

Working with Literature

You will learn to:

- Find relevant academic and professional sources
- Critically evaluate the quality, relevance and limitations of sources
- Use literature to justify:
  - Identify a gap or open questions in existing work
  - Research questions or hypotheses
  - Support experimental or implementation choices
  - Define and justify project scope and feasibility

This is not a summary exercise — it is critical argumentation.

What You Should Do Next

- Read a prior IPP
- Read a relevant research review

Event Advert: AccessAlthon

OPENING CEREMONY (Hybrid):

Time: Mon 2 Feb 2026 | 11:00-13:00

Location: Teams/Informatics Forum G.07

(Registration required for in-person attendees)

£1500+ IN PRIZES

WHY TAKE PART?

- Talks from experts at Google and Skyscanner
- Submissions reviewed by industry leaders
- Real accessibility challenges requiring solutions
- Free pizza from Skyscanner!🍕

Join the hackathon. Be part of meaningful innovation.

SCAN FOR DETAILS AND REGISTRATION

Questions & Open Discussion

Questions about IPP20?

Concerns about project ideas or scope?

What are you most unsure about right now?