

Informatics 2A 2013–14

Lecture 1a

Introduction and Course Administration

Alex Simpson

John Longley

Subject of the course

The official full title of the course is:

Informatics 2A: Processing Formal and Natural Languages

The course is about ways of describing, specifying and processing both **computer languages** and **human languages**.

Remarkably, many important ideas and methods are common to both of these — though there are also major differences.

Lectures 1b & 2 will give a overview and roadmap of the intellectual content of the course.

Course staff

Lecturers:

- Alex Simpson (als@inf.ed.ac.uk)
Office hour: Tuesday 11.30–12.30 (from Wk 3), IF 5.25
- John Longley (jrl@inf.ed.ac.uk)
Office hour: Thursday 11.30–12.30 (from Wk 3), IF 5.12

Inf2 Year Organiser:

- Colin Stirling (cps@inf.ed.ac.uk)

Course Secretary:

- Kendal Reid, ITO (ito@inf.ed.ac.uk, AT 4.02)

Teaching Assistant:

- Karoliina Lehtinen (karoliina.lehtinen@gmail.com)

Communication mechanisms

Course website: <http://www.inf.ed.ac.uk/teaching/courses/inf2a/>
This is the main anchor point for all course information and material. Bookmark it now!

Email list: inf2a-students@inf.ed.ac.uk
Important administrative announcements (e.g. changes to deadlines) will be posted here.

Discussion forum: for technical aspects of course material.

Course reps: ug2-reps@inf.ed.ac.uk
For feedback from you to course staff.

It is your responsibility to check (especially) the website and your email to stay in touch with what's going on.

Prerequisites and pass criteria

Prerequisite for Inf2A: pass in all Inf1 courses (except for visiting students and second-year-entry students).

Assessment on the course will be 75% exam, 25% coursework.

For a **pass** in Inf2A, you need all of the following:

- At least 40% combined total mark.
- At least 35% in the exam.
- At least 25% on the assessed coursework.

For (safe) progression to Informatics **Honours** degree programmes, you need to pass all/most Inf2 courses with at least 50% *on the first attempt* (the precise rules depend on the degree programme).

Inf2A exam

The main exam takes place in **December 2013**.

The resit is in **August 2014**.

Exam dates are set by Registry, not us. We'll let you know once they are announced.

The exam is pen-and-paper, and lasts **2 hours**. It will consist of 5 compulsory short questions (10% each), and a choice of 2 out of 3 longer questions (25% each).

(The 5 compulsory short questions were new last year. They replaced 20 multiple-choice questions in earlier years.)

Assessed coursework

There will be **two** assessed coursework assignments, carrying equal weight.

Assignment 1: issued Mon 14 Oct, due in Mon 28 Oct, 4pm

Assignment 2: issued Mon 11 Nov, due in Mon 25 Nov, 4pm

Both assignments will be computer-based, and are to be submitted online from DICE machines.

Marked and commented assignments will be available for return to students **2 weeks** after the submission deadline, providing you with **feedback** on your understanding of the course.

Individual assessment

All assessed work must be **your own individual work**.

Breaches of this rule are regarded as **academic misconduct** and are taken **very seriously** by the University.

Academic misconduct includes: **plagiarism, collusion, falsification, cheating, deceit, personification, . . .**

Make sure that you read the following two information pages:

`http://www.ed.ac.uk/schools-departments/
academic-services/students/undergraduate/
discipline/academic-misconduct`

`http://www.inf.ed.ac.uk/admin/IT0/
DivisionalGuidelinesPlagiarism.html`

Course activities: Lectures

Lectures are at **16:10** on **Tuesdays, Thursdays** and **Fridays**.

Tuesday and Friday lectures are in Appleton Tower, LT 3.

Thursday lectures are in David Hume Tower, LT C.

The website contains links to the slides for each lecture. These links will become live immediately after (or just before) the lecture takes place. (For those who wish to see the material in advance, last year's slides are available via a link at the top of the page.)

Printed copies of lecture slides: please print these off yourself if you need them, bearing in mind the cost to **the planet**. (E.g., use the **4up** option.)

Tutorials

Tutorials for Inf2a don't start until **Week 3** (beginning Monday 3 Oct). So Tutorial n happens in Week $n + 2$.

Each tutorial will cover material from the previous week's lectures. A *tutorial sheet*, consisting of problems to be discussed in Tutorial n , will be made handed out at the Friday lecture of Week $n + 1$ (and made available on the website).

You will soon receive an email from Kendal Reid via **inf2a-students**, advertising the preliminary allocation of students to tutor groups. If you can't make the time of your allocated group, please email Kendal suggesting some groups you *could* manage. Or if you change tutor groups for any other reason, please let Kendal know.

N.B. If you miss two tutorials in a row, your PT will be notified and you may be chased up!

Python and Lab Sessions

In parallel with the lecture material, you are also expected to pick up a new programming language (**Python**) and to learn to use the associated Natural Language Toolkit (**NLTK**). These skills will be needed for the second assessed course assignment.

This can be done with the help of worksheets, available via the website, which you can work through at the **Lab Session** to which you have been assigned (or a different one, or on your own).

The purposes of the lab sessions are: to assist you learning Python/NLTK; assistance with coursework; obtaining additional feedback on coursework 1. **Lab Demonstrators** will be on hand at these sessions to offer help.

Class reps

The job of class reps is to serve as a channel for feedback on the course content and delivery to the course staff.

Besides collecting such feedback, class reps attend regular Informatics-wide liaison meetings attended by year organisers and the Informatics teaching directorate. Class reps also represent the class as a whole at a UG2-specific **Staff-Student Liaison Meeting**.

The Informatics 2 class reps are Daniel Gallagher and Connor Stuart. Contact them at: ug2-reps@inf.ed.ac.uk

Informatics 2 needs further class rep volunteers.

Discussion forum

The Inf2A homepage contains a link to a web-based **discussion forum**. This is a place where you can post technical queries relating to the course material — they may be answered by lecturers, the TA, tutors or other students.

Of course, you mustn't post (parts of) **solutions** to assignments or tutorial questions!

To join, follow the link from the Inf2A homepage and click on 'Subscribe'. Then read the introductory message, which explains how to set things up so that you can post to the forum.

Recommended reading

The following textbook is highly recommended for this course and many other Natural Language courses in later years:

- D. Jurafsky and J. Martin, **Speech and Language Processing (2nd edition)**, Prentice-Hall, 2009.

For the formal language side, a comprehensive text is:

- D. Kozen, **Automata and Computability**, Springer, 2000.

Lectures will stick closely to the terminology and notation of these texts. Another useful resource is:

- S. Bird, E. Klein and E. Loper, **Natural Language Processing with Python**, O'Reilly, 2009. Available online at <http://www.nltk.org/book>

Technical wizardry

- Inf2A lectures are being **videoed** this year! The Course Schedule webpage contains a link to the video page; each video will become available a few days after the lecture.
- Many of the lectures will make use of Personal Response Systems, a.k.a. **clickers**. You can collect your clicker (for free) from the Main Library in George Square. The same clicker will work in all courses.

Clicker availability

Where are Clickers available for loan?

1. The Main Library
2. Somewhere else

Formative feedback

Clickers offer one means of for us to provide you with **formative feedback** on your understanding of lecture material.

Formative feedback is feedback on aspects of the course not contributing to the final mark. Other forms of formative feedback provided in Inf2A include:

- Feedback from tutors in tutorials.
- Feedback from demonstrators in lab sessions.
- Feedback from lecturers at drop-in office hours.

Needing help?

- If you are suffering from **personal circumstances** that may be adversely affecting your work, contact your **PT**.
- If you wish to apply for a coursework **deadline extension** (for a good reason!), contact the **Year Organiser** (of the year you are in), *not* the lecturers. (The Informatics UG2 course organiser is Colin Stirling.) Normally, extensions will only be granted if applied for *prior to* the stated deadline.
- If you are having difficulties **understanding** the course material, seek help from (roughly in order) your **friends**, your **tutor**, the **teaching assistant**, the **lecturers**. Or try posting to the discussion forum.
- If you wish to anonymously raise any **issue** about the course material or delivery, contact ug2-reps@inf.ed.ac.uk

Enjoy the course!

Coming up next: Overview and roadmap of the intellectual content of the course (JL).

Any questions?