

Informatics 2A 2012–13

Lecture 1

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.

Lecture 2 will give a overview and roadmap of the intellectual content of the course. Today's lecture is mainly admin.

Course staff

Lecturers:

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

- TBC

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 (see later).

Course reps: for feedback from you to course staff (see later).

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 **Honours** degree programmes, you need to pass *all* Inf2 courses with at least 50% *on the first attempt*.

Inf2A exam

The main exam takes place in **December 2012**.

The resit is in **August 2013**.

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 are new this year and replace 20 multiple-choice questions in previous years. A sample half-exam using the new format will be made available later in the semester.)

Assessed coursework

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

Assignment 1: issued Mon 15 Oct, due in Mon 29 Oct, 4pm

Assignment 2: issued Mon 12 Nov, due in Mon 26 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

Congratulations on finding your way here. Lectures will be in G.07 Meadows Lecture Theatre, Medical School Teviot (G.07 MLT MST) at **16:10** on **Tuesdays**, **Thursdays** and **Fridays**.

The website contains links to the slides for each lecture. These links will become live immediately after (or just before) the lecture takes place.

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 DoS 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 two assessed course assignments.

This can be done with the help of four worksheets (available via the website), one for each of Weeks 3–6. You can work through these on your own, or you may attend the **Lab Session** to which you have been assigned (or a different one). A **Lab Demonstrator** will be on hand at these sessions to offer help.

Class reps

We require around six volunteers to serve as **class reps** for the course. Their job is to serve as a channel for feedback on the course content and delivery to the course staff. (You can be a rep for more than one Inf2 course.)

Besides collecting and collating such feedback, you will be expected to attend one **Staff-Student Liaison Meeting** for Inf2A, and perhaps invited to other Informatics-wide liaison meetings. You will receive guidance from EUSA on how to be a class rep.

Any volunteers? If so, come and give me your name and email address at the end of this lecture. These details will then be posted on the website.

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 from me, 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, the recommended 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! A link to the videos will appear on the website soon.
- 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

Needing help?

- If you are suffering from **personal circumstances** that may be adversely affecting your work, contact your **DoS**.
- If you wish to apply for a coursework **deadline extension** (for a good reason!), contact the **Year Organizer** Colin Stirling (*not* the lecturers). 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 voice a **complaint** about the course material or delivery, contact one of the **class reps**.

Enjoy the course!

Next lecture: Overview and roadmap of the intellectual content of the course (JL).

Any questions?