

2 lectures / week

7 / 3009 Monday 11am

Tues 4pm

Also a lab each week (20%)

Friday noon, 2pm

44/1061  
usually

see timetabling

10 labs marked weeks 4-7?

Additional Streams OPTIONAL

Space Cadets

Rikki Prince

- wk 1 Thurs 4-5pm (27-2003)  
wk 2-14 Thurs 3-5pm (27-2003)

weekly challenge + presentation cycle

Intended for more advanced. Can join at any time.

Ground Controllers

Pat McSweeney

optional weekly workshop for new programmers

wks 1-11 Friday 11am (44-1061)

Embrace the right opportunity for you.

BlueJ

Java on the commandline → BlueJ

Course text "Objects First with BlueJ"

later will switch to 'Clips'

lectures ~~least~~ not the essential -  
programming itself is. Practice!

systematic thinking + problem solving.

really important skill.

2 hrs lectures  
2 hrs lab

+ 5 hours personal  
time at least  
per week.

practice programming

codinghorror.com

rails tips.org

Online notes wiki

<https://secure.ecs.soton.ac.uk/notes/comp1202>

leads to

[...ac.uk/student/wiki/w/comp1202](https://secure.ecs.soton.ac.uk/student/wiki/w/comp1202)  
3.2

## TIMETABLES:

courses don't always use all slots in timetable - check the course info too

Use comp 1202 / timetable

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### Intro 2

common theme - clear <sup>(sequence</sup> set of instructions  
to do something

operation or practice - it's a craft not an art or science. Best practices.

### Flavours:

- Procedural C, Pascal

Fixed list of instructions: Do this, if then, that.

- Declarative

More about declaring a set of rules / grammar behaviours emerges from rules applied when questions asked.

# Object Oriented

What are the "things"?

Program is made up of things interacting.

eg properties: "size, number of legs, top speed..."

what can it do?: "jump, eat, bark, bite, poo"

Class is a blue print

have properties whose instances are objects.

(Tomorrow)

Difference between Object + Class

They are specific to Object Oriented Programming.

But common to all:

Variables - colour, size, speed

Methods - blocks of code

defines behaviour

often uses properties

eg. print dog details

Logic

$x == 4$

$> 4$

$= < 4$

"

$x = 3$

false

false

true

"

3.4.

# CONTROL FLOW

## If statements

```
if size < 10
    dog "yip yip"
else
    dog "ruff"
```

## Loops

More complex

Arrays lists, tables, matrices

Hashmaps

key associated with value  
like a dictionary

## Skills

Computational thinking

Program design

Choosing Tools (IDEs) Integrated Development Environments

Testing / Debugging best practice  
3.5