Informatics 1A
Introduction to Computation
Lecture 0

Introduction

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Who

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Lecturer:
Functional Programming
(FP)

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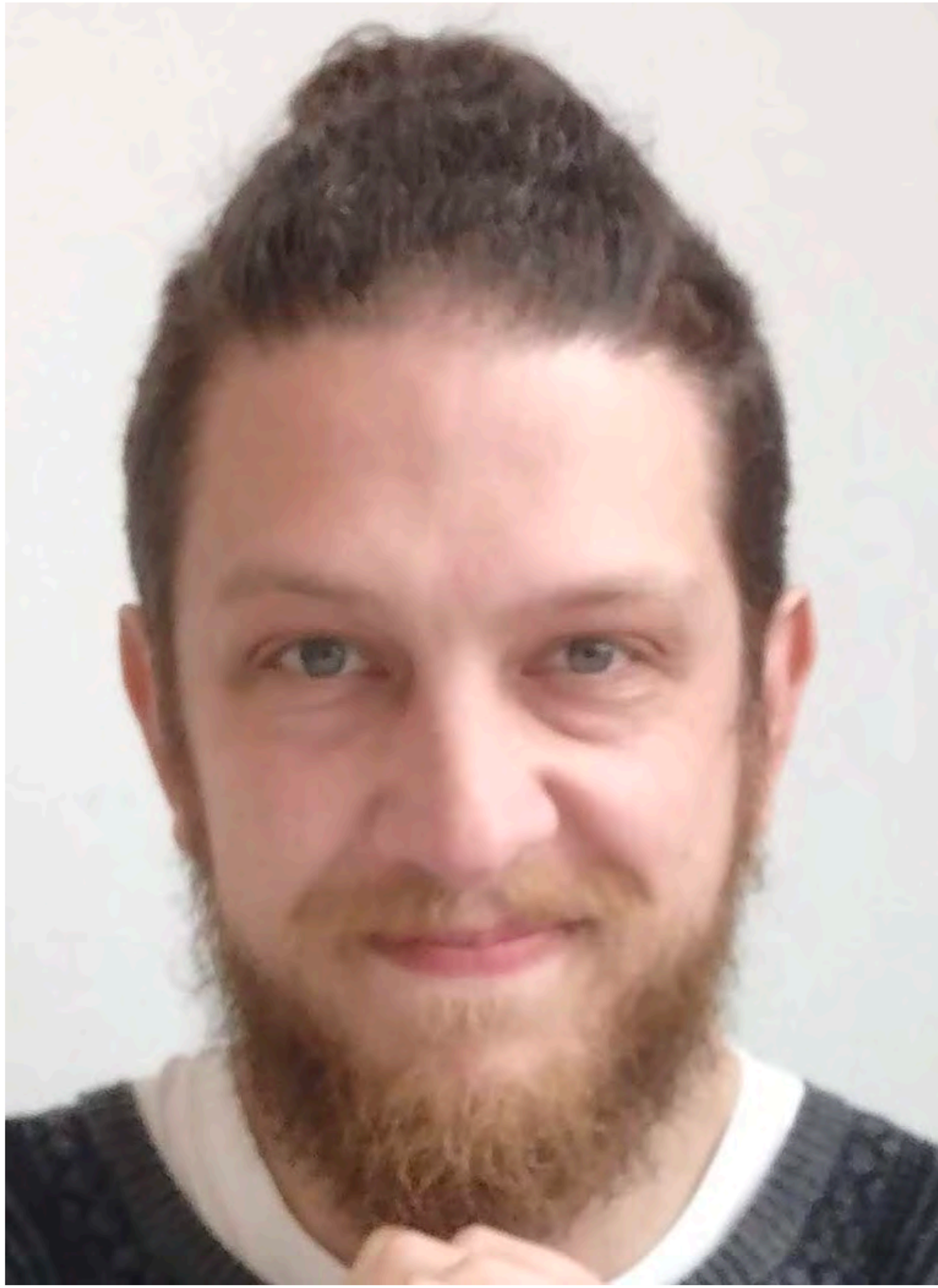

Kendal Reid

Informatics Teaching Organisation (ITO)

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AT 8.12B

What

Functional Programming

- *Haskell:* Computing based on calculation using data structures, without states.
- An introduction to programming and algorithmic thinking.

Logic and Computation

- *Symbolic Logic:* Describing and reasoning about information, where everything is either true or false.
- *Finite Automata:* Computing based on moving between states in response to input.

Why

Foundations for Informatics

- A *solid basis* for study of other topics
- Interesting *connections* between FP and CL, and *practical applications*
- Accessible to all students, *regardless of previous background*
- Demonstrates the *intellectual depth* of Informatics: not just technical skills

When & Where

Lectures

FP 2:10–3:00 Monday, Oak LT

FP 2:10–3:00 Tuesday, Oak LT

CL 2:10–3:00 Thursday, Oak LT

CL 2:10–3:00 Friday, Oak LT

Oak LT = Oak Lecture Theatre,
Nucleus Building, King's Buildings

Lectures

FP 2:10–3:00 Monday, Oak LT

FP 2:10–3:00 Tuesday, Oak LT

CL 2:10–3:00 Thursday, Oak LT

CL 2:10–3:00 Friday, Oak LT

except for week 2, one FP⇔CL

Oak LT = Oak Lecture Theatre,

Nucleus Building, King's Buildings

The King's Buildings Campus

To the Royal Observatory

GATE 1

GATE 2

GATE 3

GATE 4

To the University Central Area

To Edinburgh BioQuarter

West Mains Road

Mayfield Road

Esslemont Road

Hallhead Road

Ross Road

James Hutton Rd.

Charlotte Auerbach Rd.

Colin Maclaurin Rd.

Robert Stevenson Rd.

David Brewster Rd.

Max Born Cres.

Alexander Crum Brown Rd.

James Dewar Rd.

KB Square

Marion Ross Rd.

Engineering Hub development

Nicholas Kemmer Rd.

Peter Guthrie Tait Rd.

Thomas Bayes Rd.

Biology development

Site access

ONE-WAY EXIT

Buildings: 1, 2, 3, 4 C S, 5, 6, 7, 8 C, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18 C, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30 C, 31, 32, 33, 34, 35 C, 36 C S, 37, 38, 39, 41

DP, P, C, S

Tutorials

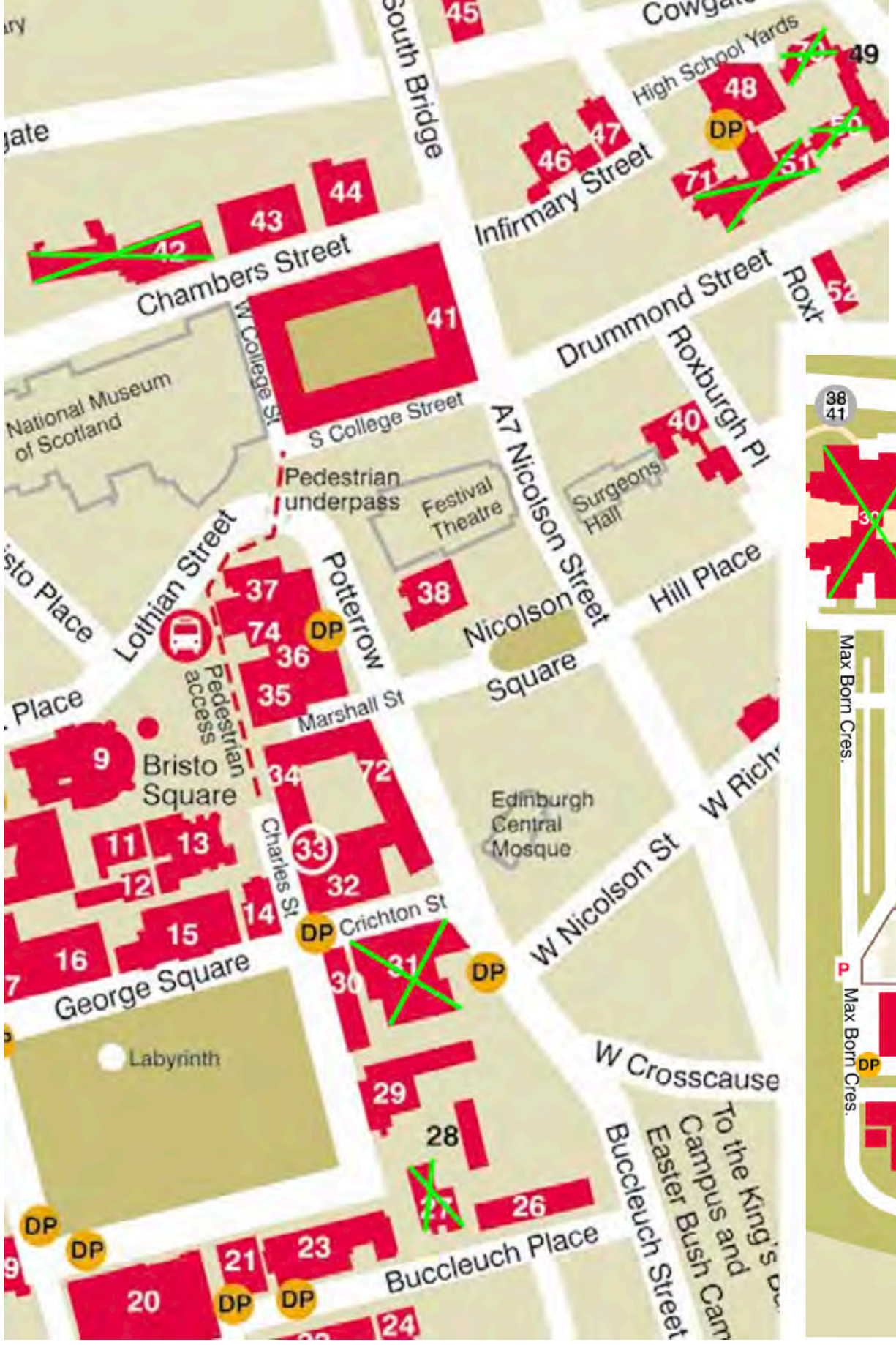
exercises issued: noon Tuesday (week *n*)

due in: noon Tuesday (week *n*+1)

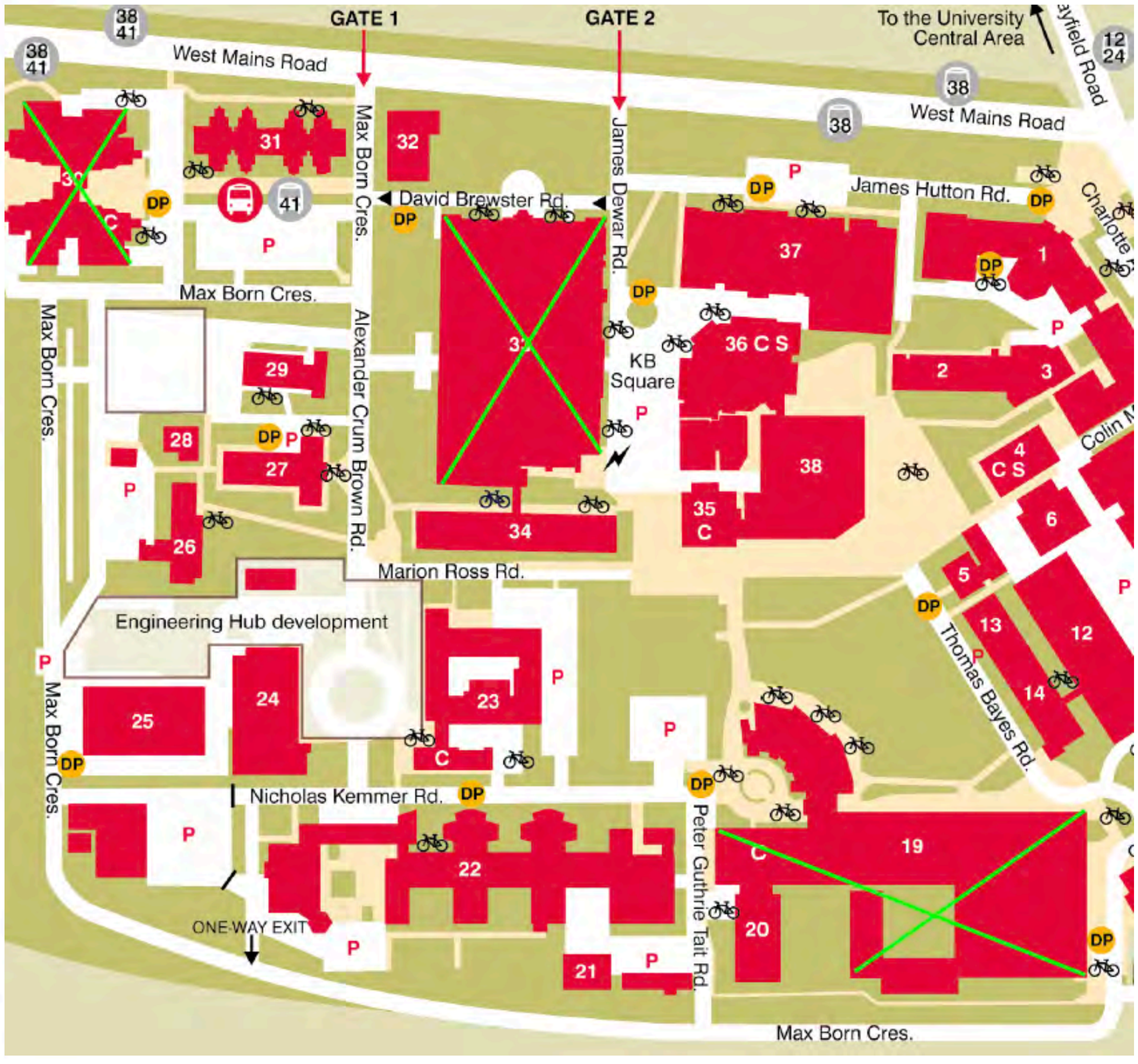
separate exercises for FP and for CL

meeting: 90 minutes in small groups

Thursday and Friday, starting in week 2



6 locations in Central Area



3 locations in King's Buildings

Drop-in Labs

optional, good place to get help in person

every weekday

15:10–17:00 Monday: MH LG.12

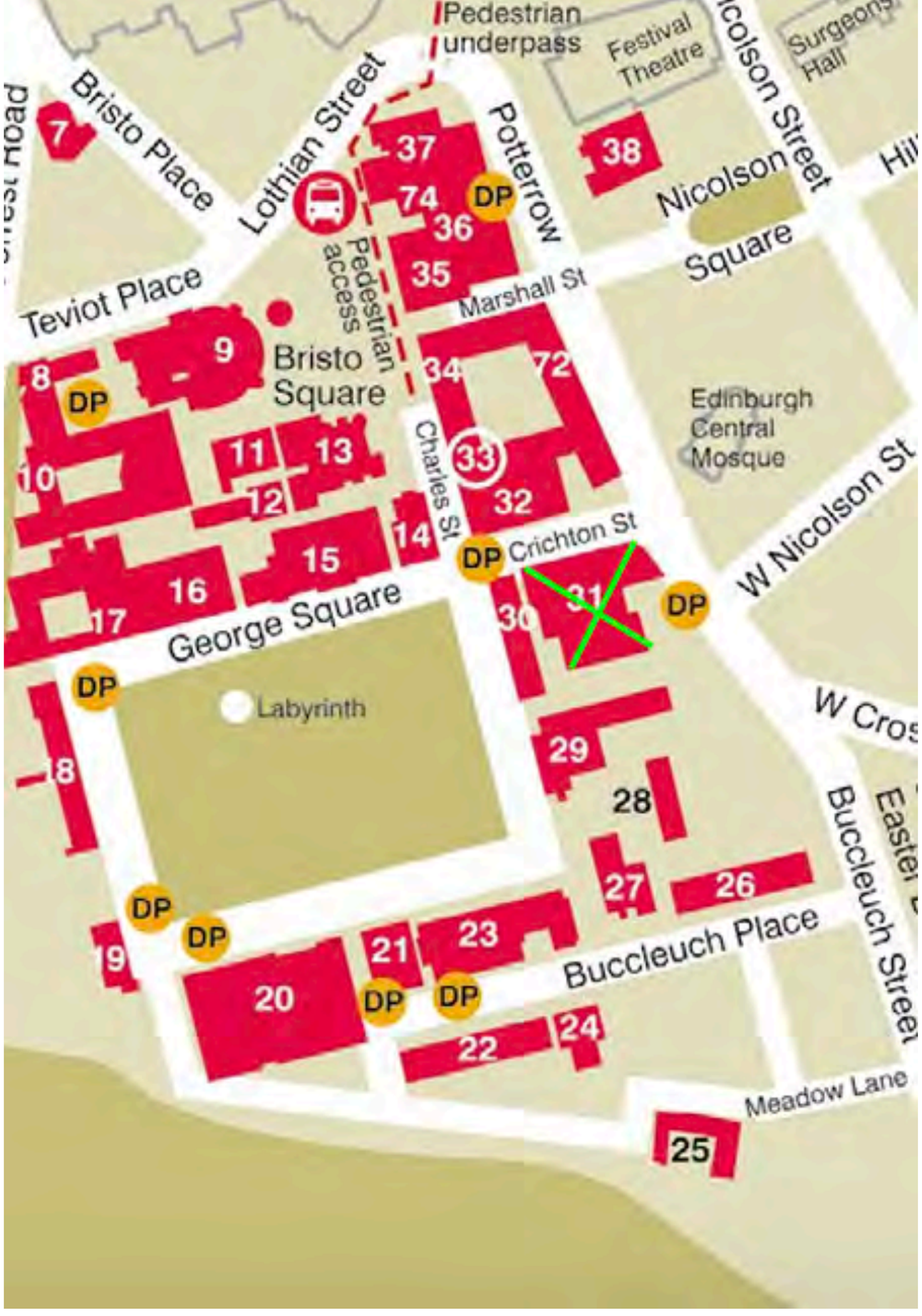
16:10–18:00 Monday, Tuesday: AT 6.06

16:10–18:00 Wednesday: AT 5.05

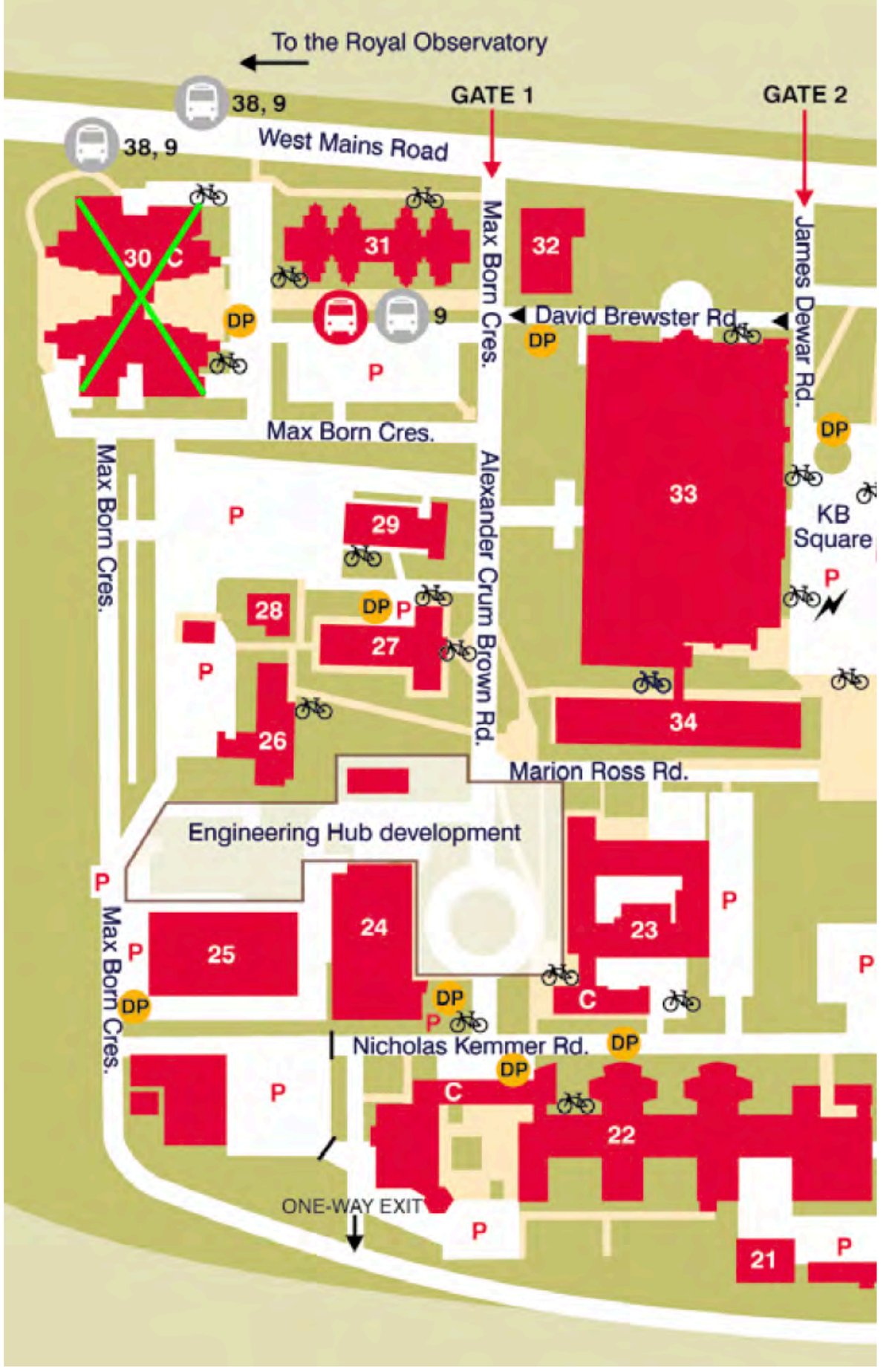
16:10–18:00 Thursday, Friday: AT 6.06

AT = Appleton Tower

MH = Murchison House



Central Area



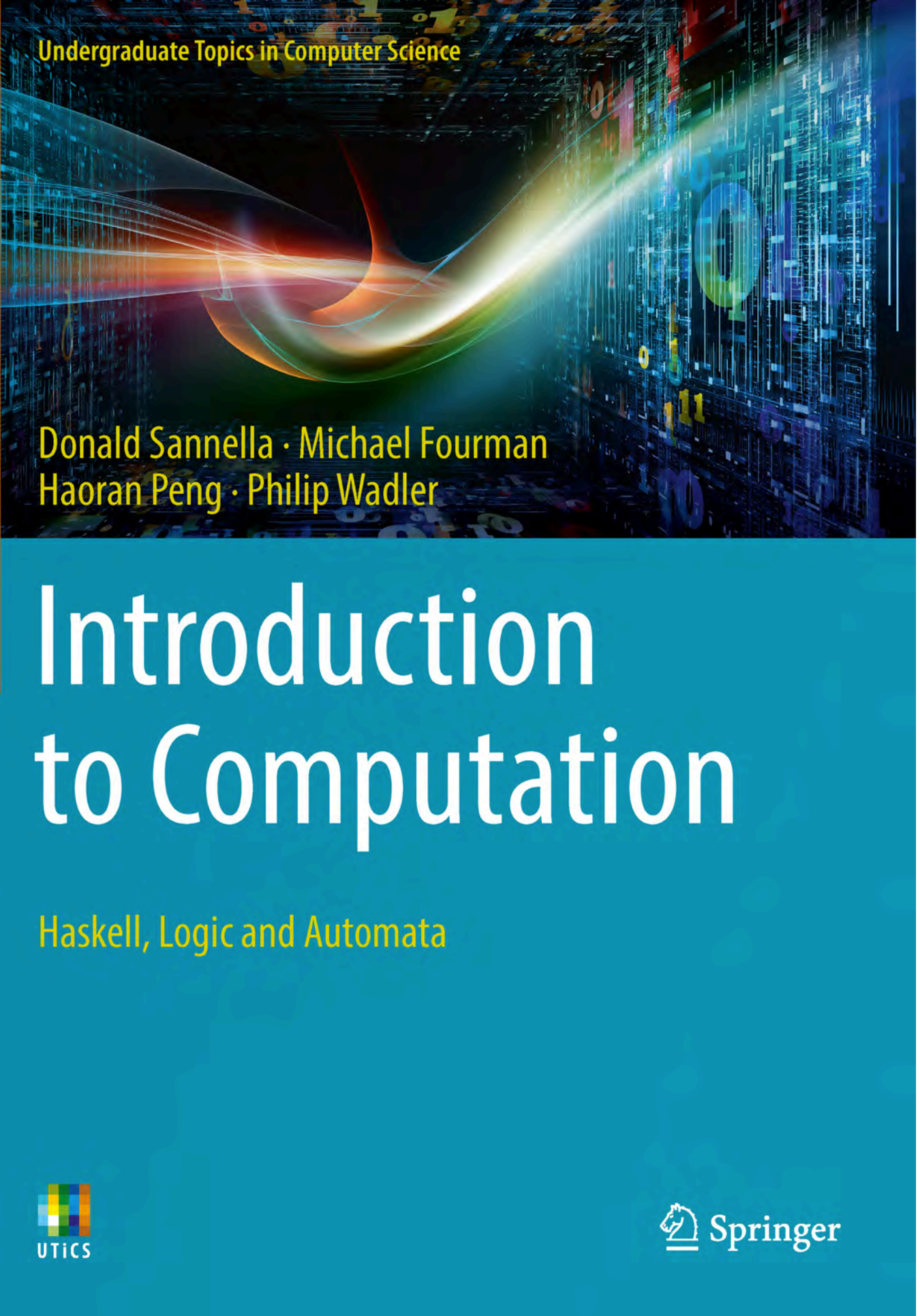
King's Buildings

Learn + Course Webpage

Everything about the course will be published on the course's Learn page and course webpage

- Organisational information: when & where
- Lecture slides, reading assignment, tutorial exercises, solutions
- Programming competition
- Other resources

How



- Electronic copy
  The university library
  (Learn > Library Resources)
  PDF, not EPUB!

- Springer: £17.99 until 26/9
  (may need code: FALL40)

- Blackwells: £25.49 until 5/10
  using 15% student discount

- Amazon: £29.97

Assessment

FP *quiz*, due 12.00 Wednesday

CL *quiz*, due 16.00 Saturday

FP & CL *tutorial*, due 12.00 Tuesday

tutorial meeting Thursday or Friday

each week, starting week 2

(but CL quiz starting week 1)

Programming project, weeks 9-11

Assessment

FP *quiz*, 1 point each

CL *quiz*, 1 point each

FP *tutorial*, 4 points each

CL *tutorial*, 4 points each

each best 8 of 10

Programming project, 20 points

Any questions?

Please ask questions!

- Ask in lectures
- Ask other students
- Ask demonstrators during labs
- Ask your tutor during tutorials
- *Ask in the Piazza online forum*

Do the work

You *must* listen to the lectures each week *before* the tutorial!

You *must* do the assigned reading each week *before* the tutorial!

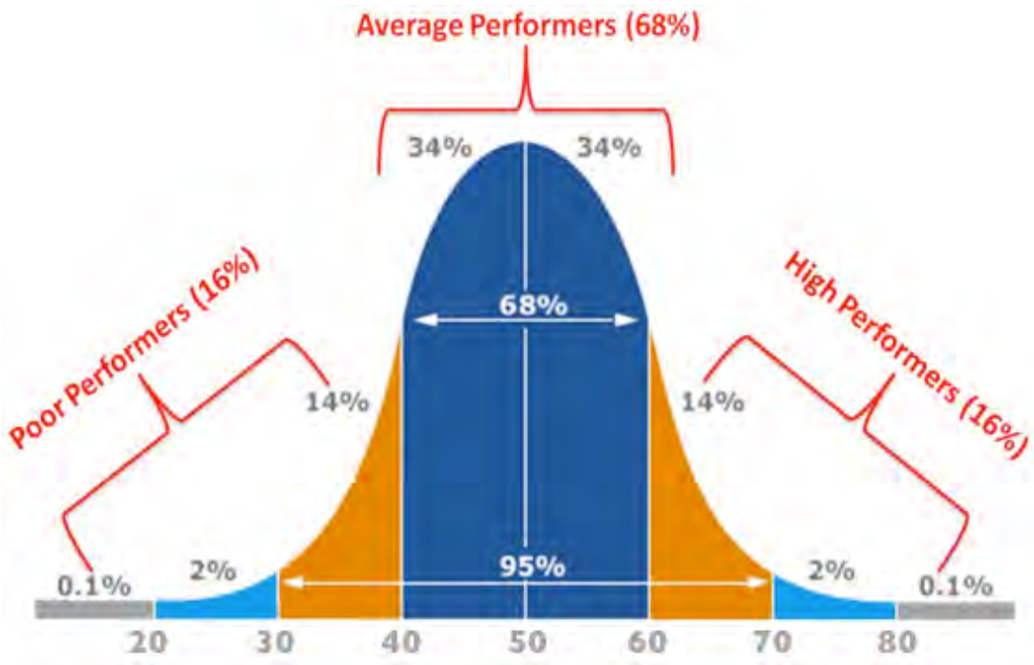
You *must* do the tutorial exercises each week *before* the tutorial!

You will only receive marks for coursework if you *attend* the tutorial.

You will fail the course if you don't do the work!

Common Marking Scheme

A1	90-100	Excellent	D	40-49	Pass
A2	80-89	Excellent	E	30-39	Marginal Fail
A3	70-79	Excellent	F	20-29	Clear Fail
B	60-69	Very Good	F	10-19	Bad Fail
C	50-59	Good	G	0-9	Bad Fail

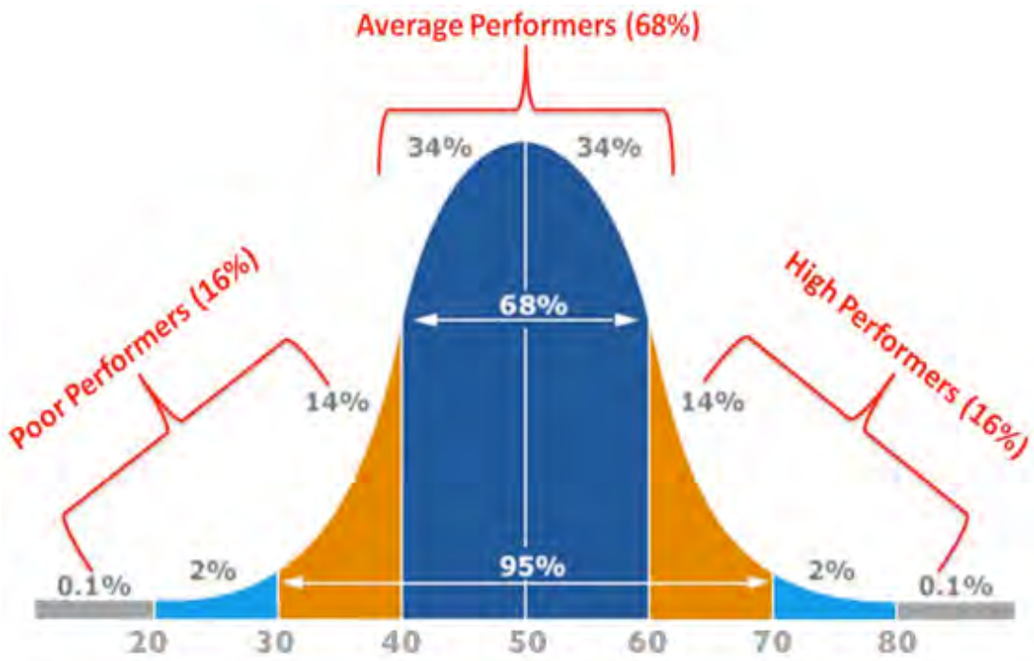


https://web.inf.ed.ac.uk/infweb/student-services/ito/students/common-marking-scheme

Common Marking Scheme

You are expected to get 3/4 on tutorials

Optional questions are optional!



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Good Scholarly Practice

You may collaborate, but you are responsible for knowing the material.

You must pass Inf1A to progress.

The *School Academic Misconduct Officer* will contact you if you break the rules. It will go into your record.

Good Scholarly Practice

Your *mark* in Inf1a has *no* effect on your final degree classification.

What you *learn* in Inf1a has a *huge* effect on your final degree classification.