CATAM @ induction

• Find these slides (PDF with links) at the CATAM webpage http://www.maths.cam.ac.uk/undergrad/catam

• Helpline: catam@maths.cam.ac.uk

• Dr Mark Spivack, CATAM-Director@maths.cam.ac.uk
Marks available — Part II

* Maximum of 150 Tripos marks
* For the average student, CATAM contributes $\approx 20\%$ or more
* Credit added directly to marks total: no $\alpha$ or $\beta$'s

see Schedule and CATAM manual for more detail
Marks available

Don’t sacrifice your CATAM marks unnecessarily!
Deadline — Part II

✦ Wednesday, 2 May 2018, 10am — 4pm

✦ ∃ many reasons to work diligently and “finish” well ahead of deadline
  ✦ to deal with unforeseen problems including graphs, tables, program listings
  ✦ to be familiar with submission procedure
  ✦ to have ample time/ink to print out hardcopy

✦ Be aware some projects link more closely than others with lecture courses, e.g. 10.16 Tennis Modelling Challenge closely linked with Statistical Modelling.

see CATAM manual for more detail
MATLAB

GOOD NEWS!

MATLAB makes computational maths easier (w/ some exceptions, e.g. R)
You don’t have to learn to be an ace programmer.
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GOOD NEWS!

You can learn to be an ace programmer!

The University Information Services (UIS, formerly UCS) offers short courses in C++,
python, R, and MATLAB, http://www.ucs.cam.ac.uk/training

My rec: julia/python/R using jupyter notebook and atom editor: e.g. see anaconda distribution

You can use these languages and others for CATAM*

*Ask helpline if an in-built function makes question/task trivial

see CATAM manual for more detail
Openendedness

Unlike tripos questions, CATAM projects often have open-ended questions, e.g. invitations to comment.

This is deliberate.

Figuring things out for yourself is a “transferable skill”.

Frustration might actually be productive discomfort (think: yoga, strength/athletic training, music practice, essay writing).

see CATAM manual for more detail.
Communicating mathematics

- Communicating by writing is a “transferable skill”
- Proofread for typos & mistakes
- Reread, imagining you are not the author:
  - Would you like to read your write-up?
  - Would you learn any mathematics from it?
98-100% of you work very hard studying mathematics

You have earned an examination procedure which respects your efforts

Achievement of tripos marks by unfair means is an insult to all of you

We promise to protect the academic integrity of CATAM
Unfair means

**Unacceptable** collaboration includes (but is not limited to):

- Copying any person’s program
- Using someone else’s program or any part of it as a model, or working from a jointly produced detailed program outline
- Copying or paraphrasing someone else’s report in whole or in part
- Posting questions on the internet, e.g. StackExchange
- Sharing your work with other students

see [CATAM manual](#) for more detail
Unfortunately, upholding Academic Integrity means we all have to undertake some administrative tasks

- **Submit code/programs electronically**
  - Comparison with projects submitted this year and previous years

- **Produce & submit write-up electronically**
  - Checked against Turnitin UK database

- Student declaration form (e-mail to be sent soon)

see [CATAM manual](#) for more detail
“If it is concluded that you have used unfair means for the whole or any part of the Computational Projects the likely outcome is that you will receive a mark of zero for the Computational Projects in their entirety.”

see CATAM manual for more detail
Consequences of plagiarising

“If it is concluded that you have used unfair means for the whole or any part of the Computational Projects the likely outcome is that you will receive a mark of zero for the Computational Projects in their entirety.”

Unfortunately, this happened 2 years ago.

see CATAM manual for more detail
Consequences of plagiarising

“If it is concluded that you have used unfair means for the whole or any part of the Computational Projects the likely outcome is that you will receive a mark of zero for the Computational Projects in their entirety.”

Unfortunately, this happened 2 years ago.

Marks were also deducted from someone who “donated” their computer code to their friend.

see CATAM manual for more detail
Submit your code and write-up electronically

Free to produce your write-up using

- LaTeX — Introductory lecture by Dr Stephen Eglen
  Mon 9 Oct 2017, 2-3pm, CMS, MR2
- Microsoft Word
- LibreOffice/OpenOffice
- most any word processor (see CATAM manual)

Not permitted: anything scanned
Resources — Part II

[MATLAB classes]

CATAM manual

LaTeX manual & lecture Mon 9 Oct 2017, 2-3pm, CMS, MR2

Helpline: catam@maths.cam.ac.uk

Ask your DoS to arrange a supervision on Part IB CATAM projects (They can e-mail the helpline or the Director for suggested supervisors.)

(For those who missed it in IB): Lecture on introductory project, Oct 2017, Mill Lane (tbc) — watch CATAM page http://www.maths.cam.ac.uk/undergrad/catam

Library
Have a good year!