BO1 History of Mathematics
Lecture I
Introduction
Part 2: Admin

MT 2021 Week 1

Summary

Part 1

- ▶ The nature of history
- ▶ How can we organise/break down the history of mathematics?
- ▶ Rough overview of the course

Part 2

- ▶ **Arrangements: lectures, classes, the nature of the course**
- ▶ **Some advice on reading and taking notes**

Part 3

- ▶ Napier's Logarithms

Contact details

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Course webpage:
https://courses.maths.ox.ac.uk/course/view.php?id=89

Administrative matters, MT

▶ Lectures: to be released online week by week
   (lecture slides to be posted online week by week)

▶ Classes: to be held in person (or online if necessary) on
   Fridays in weeks 2, 4, 6, 8

▶ Work: a short essay (1,000 words) and preparation of a
   discussion topic for each class. Essays to be submitted by
   Wednesday 9am [DETAILS TO BE CONFIRMED]

▶ Sheets: details of weekly reading, and of essay and discussion
   topics, can be found on course webpage

▶ Assessment: written paper in TT 2022

Administrative matters, HT

Topic: Communicating the Differential Calculus in 19th-century Britain

- ▶ A reading course with 'seminars' in weeks 1–8

- ▶ In-depth study of original works, including books, journal or encyclopaedia articles, and question and answer sections of periodicals

- ▶ Three essays of 2,000 words each, and preparation of a discussion topic for each class

- ▶ Assessment: 3,000-word essay, topic revealed in week 7, to be submitted by 12noon on Monday, week 10

Advice on taking notes and writing essays

▶ See the notes on the O1 course webpage

▶ Pay particular attention to the sections on
  ▶ citing sources,
  ▶ bibliographies, and
  ▶ plagiarism

▶ The importance of clear and accurate citations will be stressed throughout the course — these serve the same purpose as proofs in mathematical arguments

Taking notes

From reading:

- ▶ *background* reading is for information, not examination: it is important, but don't spend too long on it
- ▶ read the material (at least) twice
    - ▶ on the first reading, try to get a general feel for the material, its meaning and significance
    - ▶ on the second, take notes (see the online guidance)

From lectures:

- ▶ Don't try to take down every detail
- ▶ Instead, read ahead, listen, think, prepare questions to ask later

The lectures and the reading will cover some of the same ground but are designed to be complementary

Recommended reading: the main texts

Jacqueline Stedall, *Mathematics emerging: a sourcebook 1540–1900*, Oxford University Press, 2008 [available via SOLO]

and *either*

Victor Katz, *The history of mathematics: brief version*, Pearson, 2003

or

Victor Katz, *A history of mathematics: an introduction*, 3rd edition, Addison-Wesley, 2009

(College libraries may have earlier editions of the latter, but these do not differ significantly in content as far as this course is concerned.)

Recommended reading: other useful books

Jacqueline Stedall, *The history of mathematics: a very short introduction*, Oxford University Press, 2012 [available via SOLO]

Benjamin Wardhaugh, *How to read historical mathematics*, Princeton University Press, 2010 [available via SOLO]

John Fauvel and Jeremy Gray, *The history of mathematics: a reader*, Macmillan/Open University, 1987

June Barrow-Green, Jeremy Gray and Robin Wilson, *The history of mathematics: a source-based approach*, vol. 1, MAA Press, 2019

Further books (usually on specific topics) will be cited throughout the course

Recommended reading: other useful resources

Some biographical resources:

(Complete) Dictionary of Scientific Biography (*DSB*): available via SOLO

Oxford Dictionary of National Biography (*ODNB*): available via SOLO

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There are many other general histories of mathematics available — you are encouraged to read widely, but please read critically