Course Enhancement Report: Advanced Mathematical Economics

Advanced Mathematical Economics

Dear Dr Andrew Clausen,

USING THE COURSE ORGANISER REPORT

Standardised Course Enhancement Questionnaires provide a rich source of information on the experience of students within individual courses and across programmes and Schools. Alongside other sources of information, such as external examiner reports, staff judgement, and University level surveys, course enhancement surveys provide insights that can be used to better understand and hence enhance learning, teaching and assessment.

Further information can be found at: http://www.ed.ac.uk/staff/data-matters/course-enhancement-questionnaire

HOW IS THE REPORT PRESENTED?

Each of the core and staff questions uses a scale of 1-5; the scale is located at the bottom of the graph.

• 1 = definitely disagree, 2 = mostly disagree, 3 = neither agree nor disagree, 4 = mostly agree, 5 = definitely agree.

The results are presented with the mean, median and standard deviation (see below for definitions and some points to be aware of when interpreting these results).

For each core and staff question, a histogram is displayed. This is presented on the report by displaying a percentage scale at the top of each graph denoting the percentage respondents who selected that option.

The report contains free text comments from two questions; what did you find most valuable about the course and what improvements, if any, would you make to the course.

THINGS TO BE AWARE OF WHEN INTERPRETING THESE RESULTS

Response rates:
The response rate and count is included within the report. The response rate is expressed as a percentage with the count as the number of students. Please consider how representative this is of the cohort when undertaking analysis of the report.

Sample size:
Please consider the overall size of the cohort e.g. if the cohort is 100 students and the response rate is 50% this is likely to be more representative than an 80% response rate from 10 students, where one or two responses can cause significant fluctuations in the average.

Confidence intervals:
Please be aware that confidence intervals are not currently included within this report.

Context:
Please be aware of the context the course is taught within, for example the time a course is delivered, the subject matter, or whether a course is mandatory or an elective for students.

Staff data:
The Course Organiser for each course will receive a report containing all core course and school questions for their course (a document that can be shared) and on request a report which contains all core course, school, and staff question data for their course (this report cannot be shared).

As part of this it is important that colleagues make themselves aware of their responsibilities with this data (policy) and familiarise themselves with the information on unconscious bias in the box below.

The second report contains information about staff teaching on this course; it is recognised the course organiser does not always have line management responsibility for these members of staff. If there are concerns with regards the data presented this should be referred to your Head of School.

Unconscious bias:
You will be aware that a number of concerns from an Equality & Diversity perspective (including gender and other potential issues of bias) were raised by colleagues in the Athena SWAN network, the UCU and echoed by some Heads of School in relation to the staff question set included in the questionnaires.

Course evaluation and questionnaires are not a new process in the University, and a number of these issues had been reviewed during the consultation and roll-out of the questionnaires. However, the following steps have been agreed to help address further the issues raised:

• The 2016/17 semester 1 questionnaires had the free text comment in the staff question set removed and an agreement was made not to report on any data that had been gathered prior to the questionnaires being changed;
• Managers are asked not to use the semester 1 staff data in relation to performance management (included in point 4 of policy);

In addition a number of steps are being put in place for early 2017 to, amongst other things:

• Carry out analysis of semester 1 data (including gender),
• Review and enhancement of guidance and information available to staff on the use of data for course enhancement and other purposes;
• Review guidance and information available to managers regarding the interpretation of the data; and
• Review and enhance guidance and information available to students.

In the meantime, further information about overcoming unconscious bias can be found here:

http://edin.ac/1RLBhYK

DEFINITION OF TERMS

Mean average:
The **mean** is the **average** of the numbers. Add up the results for each question, then divide by the number of respondents. The practice of meaning ordinal data like this has limitations but is a rough guide to result.

Median score:
The **median** is the middle value in the list of numbers.
• Put all the numbers selected from the scale in numerical order.
• If there is an odd number of results, the median is the middle number.
• If there is an even number of results, the median will be the mean of the two central numbers.

Standard deviation:
A normal distribution of data means that most of the examples in a set of data are close to the average, while relatively few examples tend to one extreme or the other.
The standard deviation can tell you how spread out the examples in a set are from the mean and can help find the story behind the data.

Confidence interval:
A confidence interval is a range of values that describes the uncertainty surrounding an estimate. In this case the estimate would be the mean average. A confidence interval is also itself an estimate. It is made using a model of how sampling, interviewing, measuring, and modeling contribute to uncertainty about the relation between the true value of the quantity we are estimating and our estimate of that value.

Due to the sample size on many courses, small differences between values are not likely to be statistically meaningful. Statistical differences between the ratings could use the standard deviation to calculate confidence intervals.

ECN_School of Economics
Advanced Mathematical Economics
UG; Credit Level: 10; Credits: 20; NYT: 4
Course Organiser: Dr Andrew Clausen

Overall No. of Responses: 9; Overall Response Rate: 100%

Advanced Mathematical Economics (ECNM10085_16-17_SV1_SEM1_PAPER_CACORE15_Advanced Mathematical Economics)

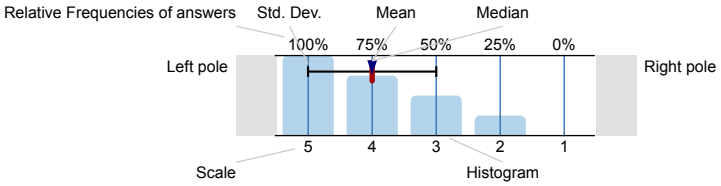
Overall indicators

av.=4.8
dev.=0.4

Survey Results

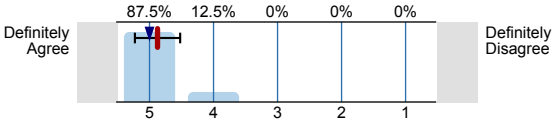
Legend

Question text



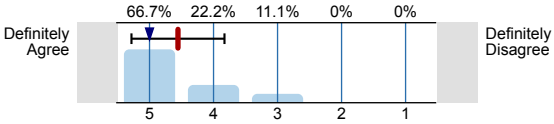
n=No. of responses
av.=Mean
md=Median
dev.=Std. Dev.
ab.=Abstention

The course was well organised



n=8
av.=4.9
md=5
dev.=0.4

The learning aims of the course were clear



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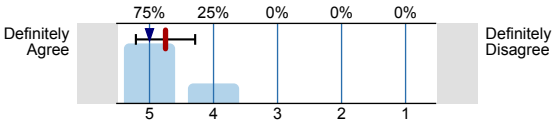
dev.=0.7

Feedback so far has been helpful and informative



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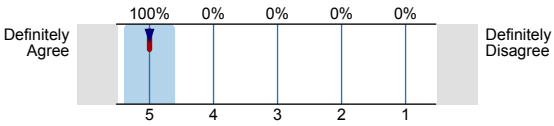
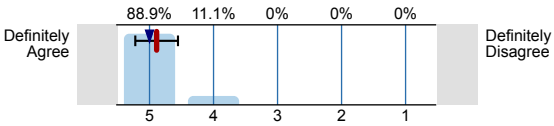
This course has been intellectually challenging



n=9
av.=5
md=5
dev.=0

The course has developed my skills and abilities



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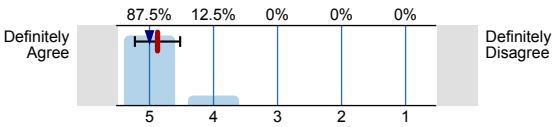
md=5
dev.=0.3

Overall I am satisfied with the quality of the course



n=8
av.=4.9
md=5
dev.=0.4

Comments Report

What did you find most valuable about the course?

This is the hardest course that I have ever done in university. It is terribly hard and very challenging. I really like that and I find that stimulating.

Its been great to have so much feedback on our proofs. Also have found myself applying parts of the course to other subjects already, so clearly very useful.

It's the most challenging course [redacted]. I never spend so many working [redacted] hours on any other courses, but currently I don't find any valuable thing about the course.

Introduction to theoretical math; learning about different aspects of math with direct link to econ; challenging material.

website is extremely useful
Andrew is very approachable

Tutorials were set up in a helpful way. Attempting the questions beforehand then working out issues in the tutorial was very useful

Material is definitely useful for understanding academic papers (proofs), hence helpful for the dissertation. Math-style tutorials were also great.

Andrew has done a fantastic job at teaching advanced materials from scratch. For me, the most valuable parts were the one I could directly relate to economics

Recorded lectures and tutorials, as well as personal feedback, were very useful. I was unable to attend tutorials, but did not miss out because of recorded tutorials. Andrew was also very approachable and willing to give feedback on homework and performance.

What improvements, if any, would you make to the course?

I am not sure how but it would be great to find a way to make topology and other more abstract areas clearer. Maybe go slower or spend more time on explaining the intuition.

It might be nice to have longer tutorials. Topology parts of the course were definitely the most challenging, in particular towards the end of the block.

1. I think it's better to have 2 lectures each week and one hour for each lecture, because it's hard to concentrate for 2 hours.
2. It's better to give us the solutions of all questions on the lecture notes

- More exam style questions to be done in class.
- When learning theory having questions which relate directly to econ would be better
  ↳ explaining what this maths theory means in terms of economics

more practice, e.g. 2 tutorial hours
student study group
one version of textbook that incorporates answers

Perhaps split to have an hour on topology each week and an hour of more economics. Also, potentially in the second half of the course, run two tutorials a week*

Might be good to make 1 hour "abstract" tutorial and 1 hr "economics", or something like this. Lecture material is available online, so might be worth focusing on tutorials / practice more (as it is maths, after all)

Perhaps even more hints about where in economics the materials will actually be useful (i.e. relate them to acad. papers).

Clearer guidelines on exactly what we will be learning. It felt at times that we were "going week-by-week".