Exams in 2024

Briefing for MSc Students

5 December 2023

By the end of this session, you will know:

- ✓ How to use the Warwick Assessment System (WAS)
- ✓ How to prepare for online exams
- ✓ What support you can access

Exams: Overview

- All online, with exams accessed through WAS
- The exams will be invigilated
- Type your answers directly into editable sections, supplemented by equations and diagrams drawn and uploaded as images into the system
- A PDF question paper can be downloaded once the exam starts
- A recording of this demonstration on how to use WAS will be uploaded showing you how to complete your examination

Demonstration of WAS System

Preparing for Exams: Timetable

- MSc exam period: 8 – 12 January 2024
- The University's exam timetable will be released in the week commencing 4 December 2023
- By the following week, your personalised exam timetable will be shown on WAS
- You are encouraged to make a revision plan for all of your modules prior to the timetable being released, and then to revise your plan once you have your final exam timetable

Exams: Timings

- Each of your January exams has a duration of 3 hours 25 minutes plus 15 minutes' reading time and will start at 9.30am or 2.00pm GMT
- If you have previously arranged it with Disability Services, you will see extra time has been allocated for your exam.
- 25 minutes of the exam duration is provided for you to upload images into your exam. There is no further upload time beyond that.
- The window is designed to allow students to resolve any minor technical issues and should allow assessments to be submitted by the deadline
- Leave sufficient time to check your answers and that all your images have been inserted in the correct place

Preparing for Exams: Revision

The revision process has several phases

- Make sure you are aware of all module resources, including asynchronous videos, synchronous lecture captures, slides, notes, problem sets, class material, readings, past papers, and so on (Past Exam Papers, University of Warwick)
- Make sure you can answer questions and problems discussed during your module
- Check you fully understand the material
- Consider using study groups
- Make use of Advice and Feedback hours
- Try to explain the material to yourself or someone else
- Know your rubric for each module and how marks are allocated. These will all be available in advance at Exam Resources

Preparing for Exams: Guidance

- Answer the questions set, not the questions you want!
- Take time to read the questions and decide what to answer before starting
- Don't submit answers to more than the required number of questions. If you do, we will mark the questions in the order that they appear, up to the required number of questions in each section.
- For some question types (e.g. algebraic or numerical problems), marks are given for correct answers
- Errors in one part are not subsequently carried forward
  - Marks are awarded for answers that would have been correct if the initial error had not been made
  - Where workings are important, they may be awarded some marks even if the final answer is incorrect

Exams: Resources Permitted

- Open book exams - there are no restrictions on resources you are allowed to use but time is limited so you will not have time to search for or use a wide range of resources during the exam
- We expect scripts to conform to typical exam answers, which will tend to have fewer explicit references to others' work compared to coursework assessments
- The best scripts will:
  - express ideas in your own words and avoid quoting others' words, with or without citations;
  - demonstrate understanding and mastery of the material such that they do not have to refer to resources (or do so only to check particular points);
  - reflect deep understanding and thorough knowledge, having done sufficient advance revision that there is little need to refer to resources.

Exams: Academic Integrity

- Breaches of academic integrity are dealt with severely by the University
  - 7% of students had a penalty applied for the 22/23 January exams
- Outright cheating:
  - Being in contact with other students during online exams is not permitted
  - Sharing questions/answers during exams is not acceptable and do not copy from shared study notes
- Plagiarism and self-plagiarism:
  - Using translation websites/AI chat tools is a breach of academic integrity
  - Reproducing your own work from another assessment or the work of others without citation is not acceptable
  - You must use your own words
  - If you copy text or graphs from any source, including lecture notes or solutions in Moodle, this will constitute plagiarism. You are permitted to include graphs that you have drawn yourself
- Within the WAS you will be asked to declare that you have read and understood our academic integrity expectations

Preparing for Exams: Workspace

- Arrange a suitable workspace in which to take the exam.
- Make sure others in your household know your timetable and those periods in which you should not be disturbed
- Consider using headphones if you feel this will help you
- Consider asking others to minimise internet usage during that time, and particularly at the end of your exam, when you will be submitting your answers

Preparing for Exams: Equipment

- Make sure you can keep track of the time
- Collect together materials for hand-writing equations and drawing figures: paper, a black or blue pen, and a ruler.
- Check that you have the use of a device (PC, laptop) for completion of your exam paper
- Check that the device you are planning to use does not have any pending system updates that may cause it to slow down or reboot during the exam
- Check that the device you are using has a good internet connection, is fully charged and you have a charging cable

Preparing for exams: Writing Maths

- You are expected to type your answers, apart from mathematical expressions and figures/diagrams, which can be handwritten and photographed
- Large chunks of handwritten text as an image are not acceptable
  - Take a picture of a (few) equation(s), not a page-long derivation
  - Don't snapshot lecture notes/online derivations
  - Don't paste equations from another document as this may duplicate your symbols
- **Don't use the drawing tool** in WAS to write your answers; this tool is just for notetaking and won't be seen by the markers
- Simple expressions and symbols are available in the formula keypad or via the keyboard shortcuts. The shortcuts shown on the next page have been uploaded to the exam resources webpage. Practice before the exams!

Preparing for exams: Keyboard shortcuts

Basic		Greek Letters	
Symbol Name	**Shortcut**	**Symbol Name**	**Shortcut**
x^2 Square	Shift + alt + pt	Alpha	Shift + alt + al
√ Square Root	Shift + alt + sq	Beta	Shift + alt + be
Fraction using previous expression as numerator	/	Gamma	Shift + alt + ga
Fraction	Shift + alt + mf	Delta	Shift + alt + de
Exponent	^	Epsilon	Shift + alt + vep
Subscript	_	Zeta	Shift + alt + ze
< Less than	<	Eta	Shift + alt + et
> Greater than	>	Theta	Shift + alt + th
Greater than or equal to	Shift + alt + gte	Lambda	Shift + alt + ibd
Less than or equal to	Shift + alt + lte	Mu	Shift + alt + mu
Plus or minus	Shift + alt + pm	Xi	Shift + alt + xi
% Percentage	%	Pi	Shift + alt + pi
Degree symbol	Shift + alt + dg	Rho	Shift + alt + rh
: Ratio	:	Sigma	Shift + alt + sig
Group in parentheses	Shift + alt + rd	Tau	Shift + alt + ta
Absolute value	Shift + alt + abs	Upsilon	Shift + alt + ups
Infinity	Shift + alt + ift	Phi	Shift + alt + ph
Nth Root	Shift + alt + nsq	Chi	Shift + alt + ch
Integral	Shift + alt + int	Omega	Shift + alt + omg
		Delta (uppercase)	Shift + alt + ude
		Lambda (uppercase)	Shift + alt + ulbd
		Theta (uppercase)	Shift + alt + uth
		Pi (uppercase)	Shift + alt + upi
		Sigma (uppercase)	Shift + alt + w

Mostly right

Answer:

We start by applying iterated elimination of strictly dominated strategies.
A 50/50 randomization over T and M strictly dominates B for the Row player.
Once B is eliminated, a 50/50 randomization over L and C strictly dominates R for the Column player.

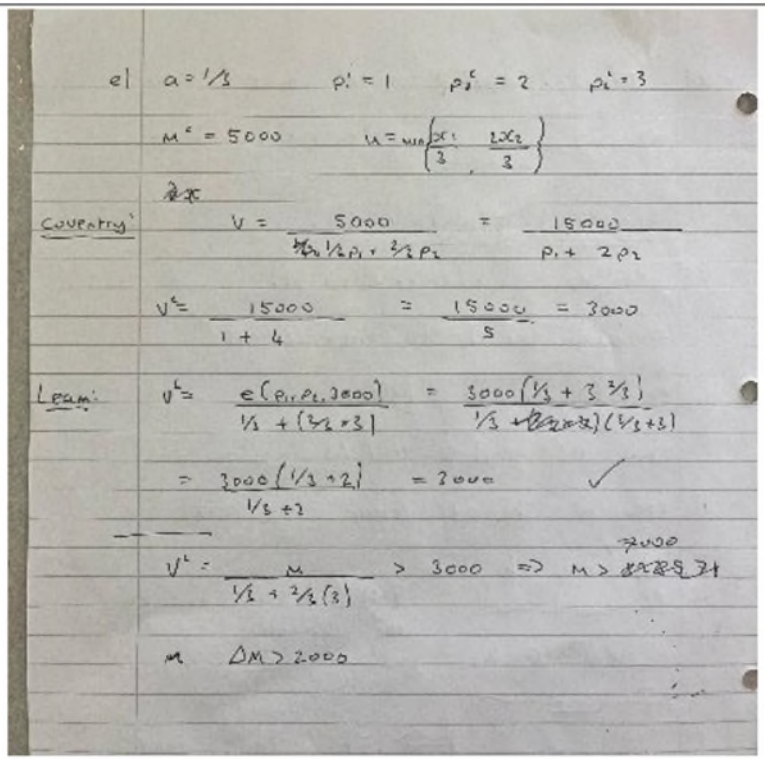
Once R is eliminated:

	L	C
T	(10, −10)	(−10, 10)
M	(−10, 10)	(10, −10)

There is no pure strategy Nash Equilibria.
For mixed strategy, let p denote the probability with which row player select T in a mixed-strategy equilibrium. Indifference between playing L and playing C, it requires $p \times (-10) + (1-p) \times 10 = p \times 10 + (1-p) \times (-10)$
which gives $p = \frac{1}{2}$.
Similarly let q denote the probability with which column player select L in a mixed-strategy equilibrium. We get $q = \frac{1}{2}$

Still OK

Answer:



The consumer faces higher prices in leamington and so needs a higher level of income to achieve a strictly greater utility than the one she gets in Coventry. Due to her Leontief preferences, the increase of m > 2000 represents the increase in income needed to maintain an optimal proportion of good 1 to good 2. Therefore the first 2000 of this income increase is spent on the second good: to achieve proportional parity between the 2 goods. Then the marginal increase in m beyond 2000 is spent in the desired proportion between the 2 goods, specifically every amount of good 2 she buys must be matched by 2 of good 1.

Too much typesetting

Answer:

As the utility function is L-shaped, at the equilibrium, $\frac{x_1}{a}$ should be equal to $\frac{x_2}{1-a}$.

Thus, $x_1 = \frac{ax_2}{1-a}$

Insert the above equation into the budget constraint.

$$p_1 \frac{ax_2}{1-a} + p_2 x_2 = m$$

$$\Leftrightarrow \left(ap_1 + (1-a)p_2 \Big/ 1-a \right) x_2 = m$$

$$x_2^* = \left((1-a)m \Big/ ap_1 + (1-a)p_2 \right)$$

Therefore,

$$x_1^* = \left(am \Big/ ap_1 + (1-a)p_2 \right)$$

The goods are Marshallian substitutes because partial derivative of x with respect to p is positive.

Preparing for Exams: Handwritten Work

- Make sure you have some means of taking photographs or scans of your work
- Draw diagrams on paper using blue or black ink (or a very dark pencil that you have tested beforehand and shows up clearly when photographed/scanned)
- Use a ruler for straight lines
- **Check** that your images are clear (not blurred)
  - Image files need to be saved and inserted in the correct part of your answer
  - WAS doesn't allow you to copy and paste images into your answer

Tips for taking good quality images are given here:
https://warwick.ac.uk/fac/sci/statistics/currentstudents/assessment/onlinesubmission

Preparing for Exams: Saving images

- Don’t email images to yourself – this is too slow!
  - Plug phone to laptop/PC with a USB cable and upload images using file transfer
  - Compose an email to yourself in draft on phone, add the images as attachments, but not send email. Log onto email on the laptop/PC and access the draft outgoing messages
  - Upload images to OneDrive (app available) from phone and access files from OneDrive on laptop/PC
  - Upload images to Teams (app available) from phone and access files from Teams on laptop/PC
  - Airdrop (iPhone to Mac)
  - Discord/Dropbox
  - Google photos
  - …

Exams: Submitting your paper

- You are responsible for the answers you submit so please check you have included everything
- Once you have submitted your paper you will not be able to withdraw and replace it
- If you have not submitted your work by the deadline then it will be automatically submitted in WAS
- It is possible to work in WAS without an internet connection, but you must be connected to submit your work
- **If you have lost your connection at the exam deadline, leave open the WAS browser** and your work will automatically submit once the connected is re-established. You won't be able to change your answers

Exams: Technical difficulties

- If you are unable to finish your exam because of technical problems or other mitigating circumstance, then inform us **before the end of the exam** by emailing economics.pgoffice@warwick.ac.uk
- The PG Office will extend your deadline by 15 minutes to allow you to complete your work
- No work can be accepted via email (e.g. missing images)
- You must also submit a claim via Tabula Personal Circumstances, providing information about the issue and relevant timestamped evidence from within the window of the exam
- The time-based evidence could be a screenshot, photograph or video of the issue – make sure that your evidence has a timestamp!!
- **Warning: failing to submit the exam on time without supporting evidence could lead to a zero mark**
- 6.5% of students had a late penalty in January 2023
- If you cannot submit in the 15 minute window you will be offered a September resit or further first attempt.

Preparing for Exams: Mock Exams

- Practice using the Micro/Macro Mock Exams
  - Typing
  - adding short mathematical expressions using the formula keypad/ keypad shortcuts
  - Inserting images
  - Submitting your work.
- The Mock Exams will be available on your WAS from 9.30am each day on:

  Monday 11 – Friday 15 December 2023

  Monday 8 – Tuesday 9 January 2024
- We will take into account if you did a mock when reviewing claims for mitigating circumstances

Exams Support Available

- The first place to check is the MSc cohort-specific guidance on our Exams Resources page
- Detailed guidance on using WAS is available online and we recommend you read this: WAS guidance
- Here, you will find a range of useful resources which you should look at in preparation for your exams
- It includes:
  - A copy of these slides and a recording of this presentation
  - Keyboard shortcuts
  - Statistical Tables
  - Other resources may be added in response to student requests and developments – so please check the Exam Resources page regularly

Further Sources of Support

- Your module Moodle pages for module content
- Academic Staff via Advice and Feedback hours
- Pastoral support sessions
- Your Personal Tutor; Senior Tutor (Mahnaz Nazneen)
- Wellbeing Support Services
- Economics Handbook for degree regulations and other information
- The PG Office: economics.pgoffice@warwick.ac.uk

During the exam

Links are provided in WAS that enable you to contact the invigilator or access technical support

Exam Results

- Provisional January marks will be released in mid February, date tbc.
- Each module's pass mark is 50%.
- The mean mark for our core modules in a normal year is typically around 62%.
- To obtain a mark of 70%, your work needs to be very good indeed.
- Although we do use the full marking scale of 0% to 100%, in practice marks of above 80% are quite rare (<10%, typically).

Thank you
Any questions?