

A LEVEL MATHS EASTER REVISION COURSE



AT THE UNIVERSITY OF YORK

PROSPECTUS



BUILDING CONFIDENCE
IMPROVING EXAM TECHNIQUE
ACHIEVING HIGH GRADES

www.ALevelMathsRevision.com

COURSE OVERVIEW: HELPING STUDENTS GET BETTER RESULTS

Our revision course helps students achieve top grades. It's as simple as that. Our course takes place each year during the school Easter holidays on the prestigious University of York campus.

Located in the picturesque and historic city of York, this quiet and studious campus environment is an ideal place for students to immerse themselves in the experience of learning how to revise for their upcoming A Level Mathematics exams.

Should students be travelling from further afield, the university does have bookable accommodation, further details of which can be found at [ALevelMathsRevision.com](https://www.alevelmathsrevision.com) in the "Frequently Asked Questions" section.

IMPROVING REVISION TECHNIQUE

Revision is a complicated and time-consuming process; students often find it difficult to know where to start. Our courses help students break that cycle by overcoming the three main hurdles to productive revision.

THE THREE KEY FACTORS OF EFFECTIVE REVISION

	The Hurdles	Our Solutions
Motivation	Picking up those books and past papers to revise when you feel behind can seem an immensely arduous task. Finding the motivation to even start can be a huge challenge.	The course teachers are fully qualified and experienced A Level Maths schoolteachers with exam board marking experience. Our enthusiasm and passion for helping young people excel really does help propel students into a positive and productive state of mind. This is imperative for a productive revision regime.
Knowing what to revise	Students often only revise topics which they already know how to do. They find the concept of trying to revise something that they do not yet fully understand quite baffling.	We cover the entire syllabus over the duration of the course so we will uncover and fill any gaps in knowledge that may be present. We will provide a comprehensive revision pack so that whenever gaps are uncovered, students have everything they need to hand in order to revise productively and effectively.
Knowing how to revise	Having overcome the above hurdles, how do you now actually go about improving your understanding of the topics in which you need to improve?	The course teachers are full-time fully-qualified schoolteachers of A Level Maths with extensive knowledge of the curriculum and how to put it across to students. We draw on this vast knowledge and wealth of experience to pass on to students exactly how they too can become self-sufficient when revising, drawing upon and sharing the banks of resources we have built up over the years.

Day 1: Pure Maths

1. Exponentials & Logs

- Solving Exponential Equations
- Solving Logarithmic Equations
- Modelling With Logarithms

2. Trigonometry

- Radians
- Reciprocal Trig Functions (Sec, Cosec & Cot)
- Compound Angle Formulae
- Double Angle Formulae
- Small Angle Approximations

3. Differentiation

- Differentiation From First Principles
- Chain, Product & Quotient Rules
- Second Differential
- Concave & Convex Functions
- Points Of Inflection

4. Integration

- With Partial Fractions
- With Rational Functions
- By Parts, By Substitution, Standard Integrals

Day 2: Pure Maths

1. Proof

- Proof By Deduction
- Disproof By Counterexample
- Proof By Exhaustion
- Proof By Contradiction

2. Numerical Methods

- Change Of Sign
- Newton-Raphson
- Fixed Point Iteration
- Trapezium Rule

3. Parametric Equations

- Differentiation
- Integration

4. Functions

- Domain & Range
- The Modulus Function
- Inverse Of Functions
- Function Transformations

5. Differential Equations

6. Sequences

- Recurrence Relations
- Arithmetic
- Geometric

7. Circles

- Equations
- Tangents & Normals
- Circle Sectors

8. Binomial Expansion

Day 3: Statistics

1. Statistical Diagrams

- Histograms
- Cumulative Frequency Diagrams
- Other Statistical Diagrams

2. Statistical Measures

- Measures Of Location
- Measures Of Spread
- Outliers

3. Binomial Distribution

- Calculating Probabilities
- Performing Hypothesis Tests

4. Normal Distribution

- Calculating Probabilities
- Inverse Normal Distribution
- Distribution Of Sample Mean
- Hypothesis Tests For Sample Mean

5. Correlation & Linear Regression

- Hypothesis Tests For Correlation

6. Probability

- Probability Diagrams
- Independence & Mutual Exclusivity
- Conditional Probability

Day 4: Mechanics

1. Kinematics

- S-T & V-T Graphs
- Suvat Equations
- Variable Acceleration
- Projectiles

2. Forces & Motion

- $F = Ma$
- Coefficient Of Friction
- Connected Particles
- Forces On A Slope

3. Moments

- Moments in 1 Dimension
- Moments in 2 Dimensions

4. Vectors

- Vector Problems in Mechanics

Mop-Up Time

We understand that the needs of individual students are different so we have incorporated into this course some time at the end in which students can work on whichever topics they want. This is a time to ask questions and work at your own pace.

*Actual timings may differ slightly. A judgement as to how long is spent on each topic will be made on the day and topics may be shuffled around to better suit the needs of the individuals attending the course.

HELPING STUDENTS COMBAT EXAM NERVES

If you know the material and can get high marks in your own revision then you are 90% of the way there. There are still, however, the dreaded exam nerves to deal with.

In helping combat exam nerves, a one-size-fits-all approach is simply not good enough. Over the four days we get to know students; their strengths, their weaknesses and, most importantly, their personalities. We draw upon our vast experience of having helped a varied array of students, each with differing needs and character traits, in order to provide helpful and straightforward tips on how to keep calm and target the marks in the upcoming A Level Maths exams.



COST

We are open and honest about the cost of our courses. We charge £600 for a four-day course which works out at £150 per day. This provides excellent value for money; for this you will receive:

- 24 hours of group tuition in total from a fully qualified subject expert
- A ratio of 1 fully qualified and experienced teacher per 10 students
- A revision pack tailored to your individual exam board
- A quiet, studious learning environment located in the University of York

HOW TO BOOK A PLACE

If you would like to book a place or simply would like to talk to us and get more information, there are three easy ways to get in contact with us:

- Visit [ALevelMathsRevision.com](https://www.ALevelMathsRevision.com) to fill in an online form and request a callback.
- Call us on +44 (0)203 4888 040.
- Email us at courses@ALevelMathsRevision.com

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John is a great tutor and his A level revision course is excellent. My children learnt so much from him during the course. He rapidly identifies each student's weak areas which he then resolves through clear explanations and plenty of worked examples. I whole-heartedly recommend him.

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