

## **LC Accounting (H) Course 1**

- Club Accounts.
- Interpretation of Accounts (Ratio Analysis)

## **LC Accounting (H) Course 2**

- Suspense Accounts.
- Cashflow Statements.

## **LC Accounting (H) Course 3**

- Q1 – Final Accounts
  - Sole Trader.
  - Company & Manufacturing.

## **LC Applied Maths (H) Course 3**

- Integration by Parts & Substitution – Chapter 9.
- Simple Harmonic Motion – Chapter 7.
- Trigonometric Function types in Differential Equations – Chapter 10.
- Inhomogeneous first & second order Difference Equation – Chapter 8.
- Dijkstra Algorithms & Bellman Optimality – Chapter 12.

## **LC Ag Science (H) Course 2**

- Plant Physiology.
- Grassland.
- Beef.
- Pigs.
- Soil.

## **LC Biology (H) Course 1**

- Digestive System.
- Respirations.
- Enzymes.
- Food.

## **LC Biology (H) Course 2**

- Variation & Evolution.
- Genetic Engineering.
- Genetic Crosses.
- DNA & RNA.

## **LC Biology (H) Course 3**

- Reproductive System.
- Circulatory System.
- Breathing System.
- Nervous System.

## **LC Biology (H) Course 4**

- Defence System.
- Cell Division.
- Bacteria.
- Viruses.
- Fungi.

## **LC Biology (H) Course 5**

- Plant Reproduction.
- Plant Transport.
- Plant Structure.
- Plant Responses.

## **LC Business (H) Course 1**

### **ABQ Focused:**

- Unit 3: Managing 1.
- Unit 4: Managing 2.
- Unit 5: Business in Action.
- How to answer the ABQ & Theory from these Units.

## **LC Business (H) Course 2**

- Unit 1: People in Business.
- Unit 6: Domestic Environment.
- Unit 7: International Environment.
- Short Questions.

## **6<sup>th</sup> Computer Science (H) Course 3**

- Unit Testing.
- Turing machines & Finite State Machines & examples such as parity checking.
- Full adders versus half adders.
- Software development – In dept compared to Syllabus.
- OS & Internet Protocols.
- Impact of AI.
- Section C – Nex examples in Python.

## **LC Chemistry (H) Course 1**

- Chemical Equilibrium.
- Rates of Reaction.

## **LC Chemistry (H) Course 2**

- Practical Organic Chemistry Experiments.

### **LC Chemistry (H) Course 3**

- Generic Titration Q1 on Acid – Base Titrations.
- Acid/Bases/pH/Indicators.
- pH Titres.

### **LC Chemistry (H) Course 4**

- Fuels/Octane Numbers – Q6.
- Thermochemistry.

### **LC Chemistry (H) Course 5**

- Redox Titration's in Q1.
- Oxidation & Reduction.
- Water Analysis.

### **LC Chemistry (H) Course 6**

- Organic Chemistry.
- Ionic Addition/Free Radical Substitution Mechanism.
- Reactions of Alkanes/Alkenes/Alkynes/Aldehydes/Ketones/Carboxylic Acids.

## **LC Chemistry (H) Course 7 (Easter Only Course)**

- Radioactivity.
- Properties of Gases.
- Trends in Periodic Table.
- Bonding.
- Shapes of Molecules.

## **LC Economics (H) Course 3**

- Market Failure.
- Sustainability goals of Government with examples such as HDI & Gini.
- Deep exploration of concepts such as Economics Rent, Supernormal Profits, MEC & MRPL, also in context of Market Structures.
- Overview of current state of the Irish Economy, Key Statistics.
- Government Intervention.
- Three levels of Price Discrimination & Collusion.
- An overview of contributions to Economic thought such as Mercantilism, Marxism & Austrian School of Economics.

## LC English (H) Course 1

### **Paper 1:**

- Comprehending Question A.
- Writing about Visual Texts.
- Comprehending Question B.
- Composing.
- Unseen Poetry.

### **Paper 2:**

- Unseen Poetry.

## LC English (H) Course 2

### **Single Text Shakespeare question which is Macbeth:**

- Comprehensive analysis of the plot
- Detailed description of the main characters
- Analysis of character relationships
- Overview of the main themes in the drama
- Sample Leaving Cert Exam Answers

## LC English (H) Course 3

### **Poetry:**

6 poems by Elizabeth Bishop & 6 poems from W.B Yeats, concentrating on:

- Theme.
- Language.
- Imagery

## LC English (H) Course 4

### **Poetry: Eileen Ni Chuileanain**

- Overview of poems
- Themes & Language Features
- Written Exam Structure Technique

### **Comparative Study**

- Registers
- Overview of Popular Texts
- Written Exam Structure Technique

### **Paper 1 - Composition**

- Writing Techniques for Short Story, Opinion Piece & Personal Essay
- Exam Tips & Sample Responses

## LC English (H) Course 5

### **Poetry: Seamus Heaney**

- Overview of poems
- Themes & Language Features
- Written Exam Structure Technique

### **Paper 1 Question A - Comprehension**

- How to answer all Question Types:
  - (i) Extract Evidence
  - (ii) Opinion Piece
  - (iii) Writing Techniques

### **Paper 1 Question B - Functional Writing**

- All Written and Spoken Word Formats eg Podcast, Blog etc.
- Exam Tips & Sample Responses

## LC French (H)

- Exam Layout, Marking Scheme & Timings.
- Reading Comprehension –
  - Approaching the Questions.
  - Key Vocabulary.
  - Question Words Analysis.
- Grammar –
  - Tenses.
  - Sentence Structures etc.
- Written Production – Breakdown of possible questions –
  - Journal Intime.
  - Email.
  - Récit & Opinion Questions.
- Aural Work.
- Q & A.

## LC Geography (H) Course 1

- Plate Tectonics.
  - Boundaries.
  - Volcanoes.
  - Earthquakes.
- Rocks.
- Rivers.
- Isostasy.
- Biomes

## LC Geography (H) Course 2

- Folding & Faulting.
- Weathering.
- Karst Landscapes.
- OS Maps & Aerial Photograph Skills.
- **Geoecology:** Soils

## LC Geography (H) Course 3

Effective Essay Writing & Skills in Geography.

- Question decoding & essay structure.
- Physical Geography –
  - Surface Processes.
  - Landscape Development.
  - Tectonic Activity.
- Electives (Human & Economic)
- Geoecology: Approaching the 80m question & overall coherence.
- Sketch Map & Aerial Photograph construction.

## LC German (H)

- Overview of Paper & Timing.
- Key Grammar Topics & Past Paper Exercises.
- *Reading Comprehension, Extension on the Topic & Letter Writing:* Word Order Rules, Key Vocabulary, German Idioms, Opening/Closings, Marking Scheme, Past Paper Examples.
- Exam Strategy.

## LC Home Economics (H) Course 1

- Focus on Long Q1, Q2 & Core Elective.
- Nutrients.
- Food Commodities.
- Processing & Packaging.

## LC Home Economics (H) Course 2

- Focus on Long Q3, Q4 & Core Elective.
- Microbiology.
- Food Spoilage & Preservation.
- Food Safety & Hygiene.
- Technology in the Home.
- Finance & Housing.

## LC History (H) Course 1

### **DBQ Day:**

- 85/86 Elections.
- Founding of the GAA.
- 1913 Strike & Lockout.

## LC History (H) Course 2

### **America:**

- Vietnam & Technological Advancement.
- Civil Rights Movements & Culture.

## LC History (H) Course 3 (Easter Course Only)

### **Dictatorship & Democracy:**

- Germany & Russia

## LC Irish (H)

### **Páipéar 1**

- *An Aiste*: 3 Sample essay's given.

### **Páipéar 2**

- *Dánta*: The 3 most likely Poems to come up in 2026 will be covered.
- *Prós*: The 3 most likely Prós to come up in 2026 will be covered.

## LC Maths (H) Course 1

### Differentiation Calculus

- ***Applying the Rules of Differentiation:*** This includes using the product, quotient, and chain rule. Applying these rules to differentiate Trigonometric, Exponential, Logarithmic and Inverse Trigonometric Functions.
- Limits, Asymptotes & Continuity of Functions.
- Differentiation using first principles.
- ***Applications of Differentiation:*** Turning Points, The Second Derivative Test, Maximum & Minimum Points, Increasing & Decreasing Functions.
- ***Differentiation Word Problems:*** Maximum & Minimum Word Problems, Rates of Change & Related Rates of Change.
- Exam Questions from Section A & Section B of the Exam Papers on Differentiation.

## LC Maths (H) Course 2

### Probability and Statistics

- ***Statistics:*** The Correlation Coefficient & Line of Best Fit. The Normal Distribution, Z Scores & Solving problems using the Normal Distribution Tables.
- ***Probability:*** The Addition Rule, The Multiplication Rule, Independent Events, Mutually Exclusive Events, Conditional Probability, Expected Value, Bernoulli Trials & The Binomial Distribution, Difficult Word Problems on Probability.
- ***Inferential Statistics:*** The Central Limit Theorem, Confidence Intervals & Hypothesis Testing using sample means, Proportions & P Values.
- Exam Questions from Section A & Section B of the Exam Papers on Probability & Statistics.

## LC Maths (H) Course 3

### **Co Ordinate Geometry of the Line & Circle**

- **Co Ordinate Geometry of the Line:** The Area of a Triangle, Internal & External Division of a Line Segment, The Perpendicular Distance Formula, The Angle Between 2 Lines, Finding the Circumcentre, Orthocentre & Centroid of a Triangle using Co Ordinate Geometry.
- **Co Ordinate Geometry of the Circle:** Finding the Centre & Radius of Circles, The Intersection of a Line & Circle, Tangents & Circles, More Difficult Problems in finding the Equation of a Circle when you are given certain restrictions.
- Exam Questions from Section A & Section B of the Exam Papers on Co Ordinate Geometry of the Line & Circle.

## LC Maths (H) Course 4

### **Trigonometry**

- The Sine Rule, Cosine Rule, Area of a Triangle & 3-Dimensional Problems.
- Solving Trigonometric Equations using CAST.
- The Graphs of Trigonometric Functions.
- Using the Formulae from The Log Tables to prove Trigonometric Identities.
- Exam Questions from Section A & Section B of the Exam Papers on Trigonometry.

## LC Maths (H) Course 5

### **Functions, Indices & Logarithms**

- ***Functions:*** Composite Functions, Completed Square Form, Inverse Functions, Injective Surjective & Bijective Functions.
- ***Indices:*** Solving Quadratic Equations Using Indices.
- ***Logarithms:*** Solving Log Equations, Writing Expressions a Single Logs,
- Using the Natural Log to get a Power Down, Log Word Problems.

Exam Questions from Section A & Section B of the Exam Papers on Functions, Indices & Logarithm.

## LC Maths (H) Course 6

### **Financial Maths**

- Lump Sum & Depreciation Questions.
- Annuity, Savings & Investment Questions.
- Amortisation Schedules & Using the Amortisation Formula.
- The Present Value Series.
- Problems Involving Bonds & Pensions.
- Deriving the Amortisation Formula.
- Exam Questions from Section A & Section B of the Exam Papers on Financial Maths.

# LC Maths (H) Course 7

## **Paper 1**

- Focus on Long Questions.
  - Algebra.
  - Differentiation.
  - Integration.
  - Sequences & Series.

## **Paper 2**

- **Focus on Long Questions.**
  - Trigonometry.
  - Geometry.
  - Volumes & Areas.
  - Probability.
  - Statistics & Hypothesis Testing.

\*\*Techniques from Section A will be reviewed as session progresses.

# LC Maths (O) Course 1

## **Unit 1: Algebra**

- Algebraic Operations on Polynomials & Rational Functions.
- Addition, Subtraction, Multiplication & Division & the use of Brackets & Surds.
- Laws of Indices.
- Factorisation of such Polynomials (The Linear & Quadratic Factors having Integer Coefficient).
- Solution of Cubic Equations with at least One Integer Root.
- Quadratic Equations by Factoring or using the -B Formula.
- Form a Quadratic from its Roots.
- Inequalities with X.
- Solving for X as a Power.

## **Unit 2: Functions with Differential Calculus**

- Differentiation by Rule & First Principles.
- Rules of Sums, Products & Quotients.
- First Derivatives of Polynomials, Rational, Power.
- First Derivatives of Products.
- First Derivatives of Quotients.
- Simple Second Derivatives.
- Maxima & Minima.

## **Unit 3: Complex Numbers**

- Real & Imaginary Part to Complex Numbers.
- Adding/Subtracting Complex Numbers.
- Multiplying Complex Numbers.
- The Conjugate.
- Dividing Complex Numbers.

- Plotting Complex Numbers on a Graph (Argand Diagrams).
- The Modules.
- Quadratic Equations with Complex Numbers.
- Transformations with Complex Numbers.

## LC Maths (O) Course 2

### **Unit 1: Co Ordinate Geometry of the Straight Line & Circle**

- General Equation of the Line in Form  $-ax + by + c = 0$ .
- Length of Perpendicular from  $(x_1, y_1)$  to  $ax + by + c = 0$ .
- Angle Between Two Lines with Slopes  $m_1$  &  $m_2$ .
- Equation Circle Centre  $(0,0)$  & Radius  $r$  ( $x^2 + y^2 = r^2$ ).
- Equation of Tangent at  $(x_1, y_1)$  to  $x^2 + y^2 = r^2$ .
- Intersection of Line & Specific Circle.

### **Unit 2:**

- Probability of an Outcome with one event happening.
- Probability of an Outcome with two events happening.
- Fundamental Principle of Counting.
- Arrangements – Permutations.
- Expected Frequency.
- Or Rule (Add): Mutually Exclusive Events.
- And Rule/The Multiplication Rule – Bernoulli Trial.
- Tree Diagram.
- Expected Values – Law of Large Numbers.

### **Unit 3: Trigonometry**

- Calculate the Area of a Sector of a Circle & the Length of an Arc & Solve Problems Involving these Calculations.
- Pythagoras Theorem.
- Use Trigonometry to Calculate the Area of a Triangle.
- Use the Sine & Cosine Rules to Solve Problems 2D & 3D.
- Define Sine A, Cos A & Tan A for all values of A.

## LC Physics (H) Course 1

- **Optics**: Reflection & Mirrors.
- **Optics**: Refraction & Lenses.
- **Current Electricity**: Circuits, Ohm's Law, Resistivity, Resistance, Wheatstone & Metre Bridges.
- **Circuit Problems**: Resistors, Inductance Coils, Diodes with DC & AC Sources.

## LC Physics (H) Course 2

- **Sound**: Sound Intensity, Decibel Scale, Velocity of Sound, Doppler Effect.
- **Sound**: Travelling Waves, Standing Waves, Open & Closed Pipes, Sonometer.
- **Electrostatics**: Coulomb Law, Definition of Charge, Electroscope.
- **Capacitance**: Parrell Plate, Van De Graaf Generator, Energy Heat & Temperature, Calibration, Latent & Specific Heat, Heat Exchangers, Heat Engines, Heat Pumps, Refrigerators.

## LC Physics (H) Course 3

- **Atomic Theory**: Rutherford, Millikan, Planck, Bohr, Electromagnetic Radiation & Spectrum, Electron, Photon, Line & Continuous Spectra.
- **Photoelectric Effect**: Importance & Photocells.
- **X- Rays**: Rontgen, X-Ray Tubes, Applications.
- **Cathode Ray Tubes**: Electric & Magnetic Fields, Faraday, Fluorescence.
- **Semiconductors**: Theory, Diodes.
- **Radioactivity**: Detectors, Nuclear Decay Processes.
- **Fission & Fusion**: Nuclear Processes, Reactors, Link to Heat Exchangers & Power.

## LC Physics (H) Course 4

- **Vectors**: Addition, Equilibrium.
- **Newton's Laws**: Force, Momentum, Momentum Conservation, Friction.
- **Kinematics**: Equations & Problem Solving.
- **Work**: Energy & Power, Mechanical Energy.
- **Conservation Centripetal Forces**: Types of Centripetal Forces, Radians, Problem Solving.
- **Gravitation**: Satellites, Weightlessness, Earth Spin, Link to Doppler & Speed of Light.
- **Simple Harmonic Motion**: Pendulums, Spring Constants.
- **Moments**: Equilibrium, Couples.
- **Archimedes**: Flotation, Hot Air Ballons, Density, Boyle's Law.

## LC Physics (H) Course 5

- Mechanics.
- Electricity.
- Sound.
- Optics.
- Heat.
- Light.

## LC Spanish (H)

### **Section 1:**

- Comprehension Strategies.

### **Section 2:**

- Opinion Piece & Writing Skills.

### **Section 3:**

- Verbs & Tenses Practice.

### **Section 4:**

- Vocabulary Learning & Synonym Skills.

### **Section 5:**

- Aural & Oral Exam Strategies.