

Year 11 & 12 TSFX Winter School 2021

What Will be Addressed at the Unit 3 Exam Revision Lectures?

Accounting (Unit 3)

Topics include: The application of Accounting Assumptions and Qualitative Characteristics to recording and reporting financial information. The double entry recording of cash and credit transactions into the General Journal and Ledger accounts, including the GST Clearing ledger. Inventory recording using the FIFO and Identified Cost methods, distinguishing between product and period costs and the application of the Lower of Cost and Net Realisable Value rule. Preparing the Income Statement, Balance Sheet and Statements of Cash Flows. Ethical considerations and financial analysis.

Biology (Unit 3)

Topics include: Plasma membranes, nucleic acids and proteins, gene structure and regulation, structure and regulation of biochemical pathways, photosynthesis, cellular respiration, cellular signals, responding to antigens and immunity.

Business Management (Unit 3)

Topics include: Businesses and their objectives; stakeholders; management responsibilities, styles and skills, corporate culture; managing employees and business objectives; motivation theories and strategies; training, performance management, termination, workplace relations and dispute resolution; the link between managing operations and business objectives; operations systems and strategies; corporate social responsibility and global considerations in operations management.

Chemistry (Unit 3)

Topics include: Fossil fuels, biofuels, energy transformations, enthalpy, thermochemical equations, the Universal Gas Equation, comparison of fuels, stoichiometry of combustion reactions, specific heat capacity of water, galvanic, fuel and electrolytic cells, reaction rates and equilibrium.

English (Unit 3)

Part 1: Analysing Argument in Exams

You will extend on your ability to dissect and present your analysis about how points of view are presented and learn how to write controlled, high quality responses which present arguments and points of view using language that is specific to the exam assessment criteria.

Part 2: A+ Exam Text Responses

You will refine the skills you've developed in Area of Study 1 – Reading & Creating Texts and perfect the art of writing structured and sophisticated arguments that use detailed analysis of the key elements of text.

Part 3: Individual Text Analysis Lectures

Each 2 hour session will explore the context, themes, plots, characters, settings and language style of each individual text. You will also be shown how to use specific evidence from the text in your response, and participate in a detailed examination of all key passages of the text.

Further Maths (Unit 3)

Topics include: Data analysis (data distributions two variable associations, modelling linear associations and time series data). Recursion and financial modelling (using first-order linear recurrence relations to model, analyse and solve problems involving appreciation, depreciation, compound interest investments and loans, reducing balance loans, annuities, perpetuities and annuity investments).

Health & Human Development (Unit 3)

Topics include: The complex, dynamic and global nature of health and wellbeing, Australia's health status data, variations in health status, changes to public health approaches, improvements in population health over time and an evaluation of health promotion strategies.

Legal Studies (Unit 3)

Topics include: Principles of justice; Victorian criminal and civil justice systems; court hierarchy; responsibilities of key personnel in trials; the rights of the accused and victims; referendums; pre-trial procedures; sanctions and remedies; dispute resolution methods; factors that affect the ability of justice systems to achieve the principles of justice; reforms to the criminal and civil justice systems.

Maths Methods (Unit 3)

Topics include: Solving systems of simultaneous linear equations with infinite, unique or no solutions, transformations and graphs of harder functions, functional equations, circular, exponential, logarithmic and inverse functions, sums, differences, products and composite functions, differentiation techniques and select applications in differentiation.

Physical Education (Unit 3)

Topics include: Development and refinement of movement skills through the application of biomechanical and skill acquisition principles, systems and mechanisms associated with the production of energy, factors contributing to fatigue and recovery strategies used to return to pre-exercise conditions.

Physics (Unit 3)

Topics include: Straight-line, projectile, circular and orbital motion; inclined planes; Newton's Laws of Motion; momentum and impulse; kinetic, gravitational and elastic potential energy; special relativity; electrical, magnetic and gravitational fields; generation, transmission and use of electricity; electric motors, generators, alternators and transformers; magnetic forces, induced voltage (Faraday's Law), transformers, power loss, DC motors and generators.

Psychology (Unit 3)

Topics include: Nervous system functioning, stress as an example of a psychobiological process, the neural basis of learning and memory, models to explain learning, the process of memory, the reliability of memory and research methodologies.

Specialist Maths (Unit 3)

Topics include: Restricted circular functions and their inverses; reciprocal, absolute value, rational and other simple quotient functions; partial fractions; complex numbers; vectors (algebra, linear dependence and independence, resolving vectors into rectangular components and vector proofs), advanced calculus techniques and applications.



“Getting another perspective on challenging concepts really helped me understand them in ways that I wouldn't at school.”
Student – Xavier College