



# Revision Programs

## Unit 3 & 4 Examinations November 2011

Saturday 8 October to Sunday 23 October 2011  
Monash University - Caulfield

LESS THAN  
**\$12.50**  
PER HOUR

ACCOUNTING, BIOLOGY, BUSINESS MANAGEMENT,  
CHEMISTRY, ENGLISH, FURTHER MATHEMATICS,  
HEALTH & HUMAN DEVELOPMENT, LEGAL STUDIES,  
MATHEMATICAL METHODS (CAS), & PSYCHOLOGY.

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### ABOUT THE PROGRAM

**For 20 years the VCE Essentials revision program has assisted over 125,000 students to attain the highest grades possible for their VCE studies. What makes our revision programs so popular?**

- ▶ Our programs address essential key areas of learning and study.
- ▶ Students will clarify their existing levels of knowledge and more fully develop their understanding of the course.
- ▶ Our programs will equip students to apply the content to the examination questions to a very high level.
- ▶ We have excellent presenters who are highly skilled and experienced teachers who understand the educational needs of senior students undertaking Unit 3 & 4 studies. They are experienced assessors of the VCE study and many hold senior positions of responsibility with the VCAA.
- ▶ Detailed revision materials are provided to all students and teachers who attend our programs. These materials are very detailed with supporting diagrams, tables and charts and are prepared specifically for our revision programs.
- ▶ Programs are very reasonably priced – the cost is less than \$12.50 per hour for a four hour program.

#### ACCOUNTING

##### Presentation 1

##### RECORDING FOR TRADING FIRMS

This presentation will cover Area of Study 1 and includes recording from source documents into special journals and the effect of transactions on the accounting equation and reports. Extensions to stock recording using FIFO and balance day adjustments for prepaid revenue and accrued revenue will be detailed. The treatment of accruals in subsequent periods, lower of cost and Net Realisable Value will be addressed. Product and Period Costing, purchase, sale and trade-in of noncurrent depreciable assets will also be covered. Recording transactions into journals (special and general), general and subsidiary ledgers and stock cards will be detailed including strategies for applying Unit 4 material to the examination.

##### Presentation 2

##### DECISION MAKING AND PREPARING ACCOUNTING REPORTS

This presentation will cover Area of Study 2 and includes preparing budgets (including reconstruction of accounts), Variance Reports for cash and profit – analysis and interpretation. Distinction between cash and profit, analysis and interpretation of the

performance of a business using financial and non-financial information will also be presented. Evaluating profitability, liquidity, efficiency and stability through the use and explanation of trends, ratios, variances, vertical and horizontal analysis and benchmarks will be detailed. Managing and controlling debtors, creditors and stock will be explored and strategies to improve profitability and liquidity and the strategies for the management of stock, debtors and creditors will also be explored including strategies for applying Unit 4 material to the examination.

##### PRESENTERS

**Vicki Baron** – Haileybury.  
**Anthony Simmons** – Penleigh and Essendon Grammar School.

#### BIOLOGY

##### Presentation 1

##### HEREDITY

Students will examine DNA -its structure and function; cell reproduction; molecular genetics: transcription and translation into proteins and tools and techniques of manipulating DNA. The transmission of heritable characteristics – eukaryotes and prokaryotes; variation in offspring: influences of genotype and environmental factors,

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mutations in DNA and the relationship between alleles; patterns of inheritance in sexually reproducing organisms: monohybrid and dihybrid crosses will also be explored.

#### Presentation 2

### VARIATION, NATURAL SELECTION AND EVOLUTION

This presentation will examine variation and natural selection, including, for example, the causes of variation between individuals; the genetic basis of natural selection; selective pressures, speciation and extinction. Evolution and diversity will also be explored including evidence for evolution; divergent, convergent and parallel evolution; homology; human evolution and human intervention in the process of evolution. Methods used to investigate variation, natural selection and evolution will be detailed.

#### Presentation 3

### PREPARING FOR THE UNIT 4 EXAMINATION

Strategies for applying Unit 4 material to examination questions will be explored in detail. Students will also explore the critical elements that examiners look for when assessing the Biology exam papers. Highly effective exam strategies and how to avoid common areas of difficulty will be examined. Time will be allocated to answer questions and clarify individual problem areas.

#### PRESENTERS

**Merrin Evergreen** – St. Leonard’s College.

**Bree Pretzel** – Educational Consultant.

**Michael Wilton** – Mentone Grammar.

## BUSINESS MANAGEMENT

#### Presentation 1

### CORPORATE MANAGEMENT

Students will examine the organisation’s impact on stakeholder interests and possible conflicts between different stakeholder interests and related issues of ethical and social responsibility. They will also investigate the key elements of the internal environment and evaluate different management styles and skills. The implications of ethical and socially responsible management of the internal environment will be undertaken. The operations management function within a competitive, global environment will also be explored. Past examination questions and key features required in answers to the examination will be addressed.

#### Presentation 2

### MANAGING PEOPLE AND CHANGE

This presentation will explore human resources and employment cycles and employee relations. The management of change will also be explored and various strategies to effectively manage change will be evaluated. This will be applied to examples of significant change management issues. Past examination questions and key features required in answers in the examination will be covered.

#### PRESENTERS

**Michael Allison** – Trinity Grammar School.

**Elly Martin** – Marist-Sion College.

## CHEMISTRY

#### Presentation 1

### INDUSTRIAL CHEMISTRY

This presentation will focus on an overview of Area of Study 1 with a particular emphasis placed on question interpretation and answer presentation as a key component of examination preparation. The presentation will include energy profiles and how equilibrium law is applied to homogeneous equilibria. Students will explore temperature, concentration of reagents, pressure and catalysts on the position of equilibrium of a reaction and applying Le Chatelier’s Principle. Factors affecting rate and equilibrium to achieve the optimum reaction conditions in the industrial production of chemicals will be examined together with ammonia, ethane, sulfuric acid and nitric acid.

#### Presentation 2

### SUPPLYING AND USING ENERGY

This presentation will focus on Area of Study 2 with a particular emphasis on question interpretation and answer presentation as a key component of examination preparation. The presentation includes an evaluation of the extent of the reserves of different energy resources, how each resource is used and advantages and disadvantages of their continued use. Electrochemical series is reviewed and the application of Faraday’s laws to solve problems involving quantitative calculations for electrolysis reactions is explored.

#### PRESENTERS

**Chris Dwyer** – Vermont College and Monash University.

**Julie Plymin** – Strathcona BGGGS.

## ENGLISH

#### Presentation 1

### SESSION 1 – LANGUAGE ANALYSIS AND EXAMINATION PREPARATION AND SKILLS ADVICE

This session is open to all English students and teachers attending:

▶ **Language Analysis** (9:00 - 10:00am)

▶ **Examination Preparation and Skills Advice** (10.00-10.30am)

### SESSION 2 – CONTEXT

(10.45 - 11.45PM)

Select one of the four context areas:

▶ **The imaginative landscape**

▶ **Whose reality**

▶ **Encountering Conflict**

▶ **Exploring issues of identity and belonging**

### SESSION 3 – TEXT RESPONSE

(12.15 - 1.45PM)

Students select one of the following:

▶ **A Christmas Carol**

▶ **Maestro**

▶ **Twelve Angry Men**

▶ **On the Waterfront**

### SESSION 4 – TEXT RESPONSE

(2.00 - 3.30PM)

Students select one of the following:

▶ **The Reluctant Fundamentalist**

▶ **Cosi**

▶ **Year of Wonders**

#### PRESENTERS

**Anna Cerreto** – University of Melbourne.

**Peter Farrar** – Star of the Sea College.

**Kellie Heintz** – Avila College.

**Chris Pearson** – Presentation College.

**Mark Stracey** – Mount Saint Joseph Girls’ College.

## FURTHER MATHEMATICS

#### Presentation 1

### DATA ANALYSIS

This presentation will examine univariate data and relationships in bivariate data. Students will explore regression and displaying, summarizing and describing time series data.

**Students select three of the following six application modules and tick on the application form**

Each of the 45 minute modules will be presented with reference to past and possible examination questions. Once student preferences are finalized, the presentation order of the modules will be finalised.

### MODULE 1 – NUMBER PATTERNS

Arithmetic and geometric sequences, first order differences equations, fibonacci and related sequences and the solution of related equations numerically or graphically.

### MODULE 2 – GEOMETRY & TRIGONOMETRY

The application of geometric and trigonometric knowledge and techniques to various two-dimensional and three-dimensional practical spatial problems.

### MODULE 3 – GRAPHS & RELATIONSHIPS

The graphical representation and analysis of linear and non-linear relations as models for various practical contexts as well as graphical and algebraic approaches to solving equations and inequalities.

### MODULE 4 – BUSINESS RELATED MATHEMATICS

The application of numerical computations and graphical techniques to the formulation and solution of various problems in business and financial contexts, including the solution of related equations.

### MODULE 5 – NETWORK & DECISION MATHEMATICS

The use of undirected and directed graphs (networks) to the modelling of situations involving the spatial representation of relationships and the optimization of various measures such as coverage, flow, time and allocation.

### MODULE 6 - MATRICES

The matrix representation of discrete data in rectangular arrays, and the application of the matrix arithmetic to the analysis of problems in practical situations. Technology is to be used to carry out computations as applicable.

#### PRESENTERS

**Jo Bradley** – Mentone Grammar School.

**Geoff Wreidt** – Strathcona BGGGS.

# HEALTH AND HUMAN DEVELOPMENT

## Presentation 1

### AUSTRALIA'S HEALTH

Students will examine the burden of disease and the health of population groups. Key health measures will be compared with other developed countries and the biological, behavioural and social determinants of health as they contribute to variations in health status will be analysed. The NHPAs initiative will be examined and analysed. Students will also explore different health models and health promotion including the roles and responsibilities of governments and organisations in providing programs and support for the promotion of healthy eating. Past examination questions and key features required in answers in the examination will be covered.

## Presentation 2

### GLOBAL HEALTH AND HUMAN DEVELOPMENT

This presentation will identify and analyse the similarities and differences in health status between developing countries and Australia. An investigation of the role of the UN Millennium Development Goals will be undertaken. Students will explore the role of international organisations in achieving sustainable improvements in health and human development and strategies to promote health and sustainable development including Australia's contribution to international health programs and contributions to non-government organisations. Past examination questions and key features required in answers in the examination will be covered.

## PRESENTER

**Sonia Goodacre** - Teacher, author and VCAA.

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# LEGAL STUDIES

## Presentation 1

### PARLIAMENT, THE CONSTITUTION AND THE PROTECTION OF RIGHTS

Students will examine the principles of the parliamentary system and factors that may influence changes in the law. An evaluation of parliaments effectiveness will be undertaken and the restrictions imposed by the constitution on the law-making powers of the parliaments and the impact of change by referendum. The role and significance of the High Court and their impact on the protection of rights in the constitution will be explored with a comparison of the constitutional approach used to protect rights in Australia with other countries.

## Presentation 2

### ROLE OF THE COURTS IN LAW-MAKING

This presentation will explore the operation of the doctrine of precedent and the ability of judges to make law. Statutory interpretation and its effect will be examined. Students will analyse the strengths and weaknesses of law-making through the courts and the relationship between the courts and parliament in law-making.

## Presentation 3

### RESOLVING DISPUTES AND JUSTICE

#### Part A – An evaluation of dispute resolution methods

This presentation will compare and evaluate dispute resolution methods. This will include the court hierarchy, VCAT and alternative dispute resolution methods as a means of resolving civil disputes. The extent to which these methods contribute to an effective legal system will be explored.

#### Part B – Court processes and procedures, and engaging in justice

Students will examine court processes and procedures in Australia including the major features of the inquisitorial system. The extent to which we have an effective legal system will be applied to our court processes and procedures and an evaluation of the extent to which our legal system is user friendly and changes and recommendations for change will be presented.

## Presentation 4

### EXAMINATION

The 2011 examination paper will reflect the new course. This presentation will examine the expectations examiners have for this paper and how best students can meet those expectations. Particular emphasis will be placed on question interpretation and answer presentation as a key component of examination preparation. Sample examination papers with worked solutions will be provided to the students.

## PRESENTERS

**David Brisset** – Methodist Ladies College.

**Jeff Cameron** – Stawell Secondary College.

**Peter Farrar** – Star of the Sea College.

**Peter Mouritz** – Star of the Sea College.

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# MATHEMATICAL METHODS (CAS)

## Presentation 1

### FUNCTIONS AND GRAPHS

The behaviour of functions of a single real variable, including key features of their graphs such as axis intercepts, stationary points and points of inflection, domain (including maximal domain) and range, asymptotic behaviour and symmetry. The behaviour of these functions will be linked to applications in practical situations.

## Presentation 2

### ALGEBRA

Algebra functions including composition of functions, simple functional equations, inverse functions and the solution of equations. Identification of appropriate solution processes for solving equations, and systems of simultaneous equations. The recognition of equations and systems of equations that are solvable using inverse operations or factorisation, and the use of graphical and numerical approaches for problems involving equations where exact value solutions are not required or which are not solvable by other means.

## Presentation 3

### CALCULUS

Graphical treatment of limits, continuity and differentiability (including local linearity) of functions of a single real variable and differentiation, anti-differentiation and integration of these functions. This material will be linked to applications in practical situations.

## Presentation 4

### PROBABILITY

An examination of discrete and continuous random variables, their representation using tables, probability functions or probability density functions and the calculation and interpretation of central measures and measures of spread. The focus will be on understanding the notion of a random variable, related parameters, properties and application and interpretation in context for a given probability distribution.

## PRESENTER

**Wei Wang** – Melbourne Grammar School.

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# PSYCHOLOGY

## Presentation 1

### LEARNING

This presentation explores the characteristics of learning as a process that plays a part in determining behaviour. Neural basis of learning will be examined together with different types of learning: classical conditioning, operant conditioning, observational, one-trial, trial and error, insight and latent learning. Behaviour not dependent on learning is also explored.

## Presentation 2

### RESEARCH METHODS

An evaluation of the contribution that classic and contemporary studies have made to this field of study will be made. Techniques used to gather data and the associated ethical implications will be analysed.

## Presentation 3

### MENTAL HEALTH

Biopsychosocial framework is used to investigate how biological, psychological and socio-cultural factors interact to contribute to the development of an individual's mental functioning and mental health. Mechanisms underpinning the range of usual human emotions will be explored. The distinguishing elements between normal and universal experiences will also be explored. The relationship between stress and mental health is investigated together with strategies for coping with stress.

## Presentation 4

### UNIT 4 EXAMINATION

Strategies for applying Unit 4 material to examination questions will be explored in detail. The questions presented and approaches students should adopt will reflect the requirements of the new Psychology course. Students will also explore the critical elements that examiners look for when assessing exam papers. Highly effective exam strategies and how to avoid common areas of difficulty will be examined. Time will be allocated to answer questions and clarify individual problem areas.

## PRESENTERS

**Ross Down** - Sandringham Secondary College.

**Roger Edwards** – VCAA and Psychologist.

“Excellent presenters...enormous help...I got an A+ for the exam.”

“Fantastic revision program...I feel far more confident after the presentations.”

## TIMETABLE

ACCOUNTING	Sunday 16 October 2011 - 1.30pm to 5.30pm
BIOLOGY	Sunday 16 October 2011 - 1.30pm to 5.30pm
BUSINESS MANAGEMENT	Saturday 22 October 2011 - 9.00am to 1.00pm
CHEMISTRY	Sunday 16 October 2011 - 9.00am to 1.15pm
ENGLISH	Sunday 9 October 2011 - 9.00am to 3.30pm
FURTHER MATHEMATICS	Saturday 8 October 2011 - 9.00am to 3.15pm
HEALTH & HUMAN DEVELOPMENT	Sunday 23 October 2011 - 9.00am to 1.00pm
LEGAL STUDIES	Saturday 22 October 2011 - 1.30pm to 5.45pm
MATHEMATICAL METHODS (CAS)	Saturday 22 October 2011 - 9.00am to 1.00pm
PSYCHOLOGY	Saturday 15 October & repeated Sunday 23 October 2011 - 1.30pm to 5.30pm

## REGISTER ONLINE ( [www.pathwayseducation.com.au](http://www.pathwayseducation.com.au) )

### GROUP DISCOUNTS

**English** group discounts – \$25.00 per ticket will be reduced to \$23.00 per ticket and an \$18.50 ticket will be reduced to \$16.50 per ticket for bookings of **five or more students** on the **one** application form with **one** payment. Please include a separate list of student names.

**Further Mathematics** group discount - \$59.50 per ticket will be reduced to \$55.00 per ticket for bookings of five or more students on the one application form with the **one** payment. Please include a separate list of student names.

**All other subjects** group discounts – \$49.50 per ticket will be reduced to \$45.00 per ticket for bookings of **five or more students** on the **one** application form with **one** payment. Please include a separate list of student names.

### LOCATION

Monash University - Caulfield Campus is well served by the Dandenong and Frankston train lines. Free parking is available. A location map will be provided on the reverse side of your entry ticket.

### BOOKINGS AND ENQUIRIES

Online bookings at: [www.pathwayseducation.com.au](http://www.pathwayseducation.com.au) Email: [info@pathwayseducation.com.au](mailto:info@pathwayseducation.com.au)

Postal bookings to: **Pathways Education - PO Box 510 BLACK ROCK 3193**

Phone bookings and enquiries: **Phone (03) 9533 1929 Mobile 0411 234 012**

Office Hours: **8.30 am to 6.00 pm Monday to Friday; 9.00 am to 1.00 pm Saturday.** ABN: 53 074 714 846

Postal bookings accepted until the Tuesday prior to the program. Refunds are subject to a \$10.00 service fee and tickets must be cancelled by the Friday prior to the program. Pathways Education reserves the right to vary or cancel the advertised program.

**APPLICATION FORM** ▶ Please complete and mail to: Pathways Education – PO Box 510 BLACK ROCK 3193

Surname \_\_\_\_\_ Given Name \_\_\_\_\_

Mailing Address \_\_\_\_\_ Postcode \_\_\_\_\_

Email address \_\_\_\_\_ Mobile No. \_\_\_\_\_

Phone ( ) \_\_\_\_\_ School attending \_\_\_\_\_ Year Level \_\_\_\_\_

Subjects	Session	No. of Tickets	Cost	Sub-Totals
ACCOUNTING			@ \$49.50	
BIOLOGY			@ \$49.50	
BUSINESS MANAGEMENT			@ \$49.50	
CHEMISTRY			@ \$49.50	
ENGLISH	Session 1	Language Analysis & Examination Preparation & Skills Advice	@ \$25.00	
	Session 2 – Context (select one)	The imaginative landscape	@ \$18.50	
		Whose reality	@ \$18.50	
		Encountering conflict	@ \$18.50	
		Exploring issues of identity and belonging	@ \$18.50	
	Session 3 (select one)	A Christmas Carol	@ \$25.00	
		Maestro	@ \$25.00	
		Twelve Angry Men	@ \$25.00	
	Session 4 (select one)	On the Waterfront	@ \$25.00	
		The Reluctant Fundamentalist	@ \$25.00	
		Cosi	@ \$25.00	
	FURTHER MATHEMATICS (Tick 3 options)	Year of Wonders	@ \$25.00	
Core program plus tick three optional studies from below:				
1 – Number patterns		<input type="checkbox"/>		
2 – Geometry and trigonometry		<input type="checkbox"/>		
3 – Graphs and relationships		<input type="checkbox"/>		
4 – Business related mathematics		<input type="checkbox"/>		
5 – Network and decision mathematics	<input type="checkbox"/>			
6 – Matrices	<input type="checkbox"/>			
			@ \$59.50	
HEALTH & HUMAN DEVELOPMENT			@ \$49.50	
LEGAL STUDIES			@ \$49.50	
MATHEMATICAL METHODS (CAS)			@ \$49.50	
PSYCHOLOGY (SATURDAY)			@ \$49.50	
PSYCHOLOGY (REPEAT - SUNDAY)			@ \$49.50	
			<b>TOTAL</b>	<b>\$</b>

I enclose a cheque/money order (payable to Pathways Education) for \$ \_\_\_\_\_ OR

Please charge \$ \_\_\_\_\_ to my VISA/MASTERCARD as follows:

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