

YEAR 12 • SACE STAGE 2



ADELAIDE
TUITION
CENTRE



Revision Seminars

TERM 2 2018





How to enrol

Enrol online and be eligible to win five seminar sessions (worth \$350) or fill out the enrolment form at the back of this brochure.

.....

Online

Find out more information and enrol online



adelaidetuition.com.au/revision-seminars

Mail

Send the form at the back of this brochure to:

Adelaide Tuition Centre

21 Fourth Street

Bowden SA 5007





Let's do this.

We've helped

over 45,000

Year 12 students
since 1980.

Contents

Students	4
Parents	5
Seminar benefits and fees	6
<hr/>	
Personal Performance	10
Biology	11
Business & Enterprise	12
Chemistry	13
Economics	14
English Literary Studies	15
Essay & Writing Skills	16
General Mathematics	17
Legal Studies	18
Mathematical Methods	19
Modern History	20
Nutrition	21
Physical Education	22
Physics	24
Psychology	25
Specialist Mathematics	26
UMAT	28
<hr/>	
Enrolment form	30
Directions and facilities	31

Students

Take a breath. We've got your back.

The end of school is in sight. That means the rest of your life starts at the end of this year. That can be both exciting and scary at the same time. So let's talk about your marks. Every extra one you score this year, or don't score, can see you either in or out of your tertiary course. That's enough to make anyone feel insecure, vulnerable and just about ready to explode. You can handle it, of course. But imagine having someone extra on your side. Someone who understands where you're coming from, and can support you both personally and academically, to gain those vital extra marks. It's possible with our Holiday Seminars, which have helped more than 45,000 students just like you.

Why? We introduced this seminar concept to South Australia **32 years ago**. We offer specialist seminar staff, more academic benefits and more options than any other seminar program in South Australia. Importantly, we also give more of ourselves to help you win a more secure future.

So we suggest you do three things. First, keep calm because there's still time to gain more marks. Second, read this booklet, think carefully about what you really want, then talk it over with your parents. Third, remember this simple truth about your future success: **if it's to be, it's up to me.**

Where we meet

All seminars are held at St Aloysius College, Adelaide (entry via 38 Angas Street).

The school is located only two minutes' walk from Victoria Square, close to lots of public transport options. For students who need to drive, there are various parking options in the surrounding streets – see adelaidetuition.com.au/about-our-revision-seminars for details.

If you have any questions, you can contact Adelaide Tuition Centre on (08) 8241 5568. Please do not telephone St Aloysius College.

For more information visit adelaidetuition.com.au



Parents

We've got your back, too.

It's true what they say: when someone in the family does Year 12, the entire family does Year 12. Some parents have a dream run with their son or daughter, but most don't. You're possibly battling as many emotions as they are. You may feel worried or angry, helpless, fed up and pessimistic. And now, to add to your problems, you're probably confused about which study courses you should choose for your child in this critical year.

***More individual options,
more individual
attention, more staff
with more seminar
experience, and more
dedicated support.***

We know you want to get it right so we recommend you read all the seminar brochures, including this one, then make a decision based on facts only. The most important fact we'd like you to consider is this: Adelaide Tuition Centre's Revision Seminars offer your child much more. More individual options, more individual attention, more staff with more seminar experience, and more dedicated support. Even though we offer much more, our fees are comparable with other organisations.

We introduced the holiday seminar concept to Adelaide in 1986, and since then have helped more than 45,000 Year 12 students achieve extra marks. Our regular surveys conducted with past clients show the average improvement in marks is consistently between 10% and 14% per subject. In the end, the value is in results.

Find out first

Keep in touch by signing up to our newsletter. As the year progresses, more subjects will be added to the revision program. Be the first to know about upcoming seminars, UMAT revision, exam preparation short courses, new books and special offers.



adelaide tuition.com.au/subscribe



Benefits

Adelaide Tuition Centre's seminars are more effective for more students because we offer more. Compare these unique learning benefits.

1. Learn from the best

All of our seminar instructors are senior specialist teachers with previous SACE examining experience.

2. Gain expert knowledge

Our course material reinforces theory and encourages problem-solving through exam-style exercises. The seminars often include input from the people who wrote the renowned Essentials workbooks and Key Ideas textbooks.

3. Revise twice as much in half the time

Our seminars are far more focused and efficient compared to you trying to work at home alone. The more time you put in, the higher your marks. Our seminars also save you hours of wasted effort and pointless worry. Get the work done quickly and thoroughly and enjoy the rest of your holidays.

4. Work in smaller class groups

You won't be in a lecture hall surrounded by hundreds of other students. Our group sizes average 8 to 18 students per class. You gain more personal attention, can ask more questions and work at your own pace.

5. Choose your own program

Take the full program for a subject, or focus on key topics by choosing individual three-hour sessions. This freedom means you can spend your time more effectively according to your needs.

6. Work at your own level

We design unique approaches and material for different ability levels. Where possible we'll place you within an ability group best suited to your test marks. In high-demand subjects, our numbers usually allow for a:

- high achievers program (A grade or above)
- mid-range program (B–C grade)
- special support program (D grade or less).

Feel secure knowing your individual needs will be catered for.

Study the topics most important to you.

Extra seminar benefits mean extra marks.

Work at your own level and pace.

Fees

Pay in advance & save

\$70

Per three-hour session

\$65

When you book four or more sessions

As you've read, our seminars offer much more. However, our fees are comparable with other study programs, especially if you pay in advance. Our early bird offer applies to bookings paid in full by Monday, June 25th.

These quality seminars cost \$70 (inc. GST) per three-hour session. Take four or more sessions in any combination of subjects, and get \$5 off each when you pay by the early bird deadline.

How many seminars should I take?

To revise an entire subject, it is recommended you attend all sessions. However, **you know your study needs best**, which is why we let you choose any combination of sessions.

Guarantee of quality

We unconditionally guarantee the quality of our seminars. If you book a full subject course and tell us you're dissatisfied before session two, we'll refund the remainder of your fee.

Hall of fame

Adelaide Tuition Centre can help you do more than just improve. The results speak for themselves.

Since 1986 it's been a regular occurrence for students who attend our seminars to achieve perfect scores in all their subjects or be awarded subject medals.

- 2017** J. Lee, C. Larobina
- 2016** E. Johnson, K. MacDonald, J. Smith
- 2015** S. Singh
- 2014** A. Makarowsky, C. Ong
- 2013** C. Proudman, M. Ong, D. Rebello
- 2012** L. Huynh

These results demonstrate the real ability of our seminars to complement South Australia's excellent daily classroom teaching standards.

Do I have to be a top student?

No. Our seminars are designed for students of all ability levels. After revising each topic, you go on to solve problems using special notes and exercises. These allow you to work at your own level. Your individual needs are met in personal discussion with your seminar leader.

Surveys show average students attending our seminars achieve an average of a 10% to 14% increase in marks from their extra holiday effort.

Workbooks



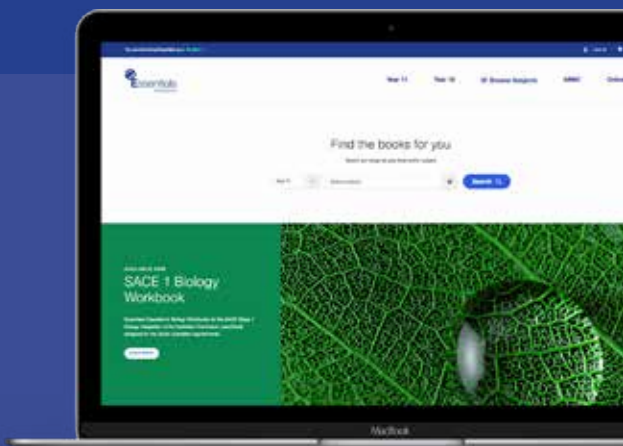
Essentials Education publishes the *Essentials* series of workbooks and the *Key Ideas* textbooks. These books are designed to suit the SACE Subject Outlines. These publications and their authors have a long-standing reputation for excellence. Essentials material helps you consolidate your

understanding quickly and teaches you how to apply it to complex problems. The workbooks are supplemented by seminar notes and exam-style exercises carefully designed by the Essentials authors, giving you a consistent approach and direction.

Essentials online

 essentialseducation.com.au

You can view our range and access sample pages of all Essentials Education titles at our website.



Learn about yourself

Our seminars are about you, who you are and the way you feel about learning, not just about your results.

Improving your personal performance

Even the most motivated students often waste energy through anxiety, lack of concentration or fatigue. Jacqui Smoler is a specialist in motivation, calming and advanced study skills who can help you develop a winning attitude.

In an optional 'Personal Performance' seminar, Jacqui will show you how to achieve more work of higher quality in less time, and how to internalise this advice and act upon it in your own unique way.

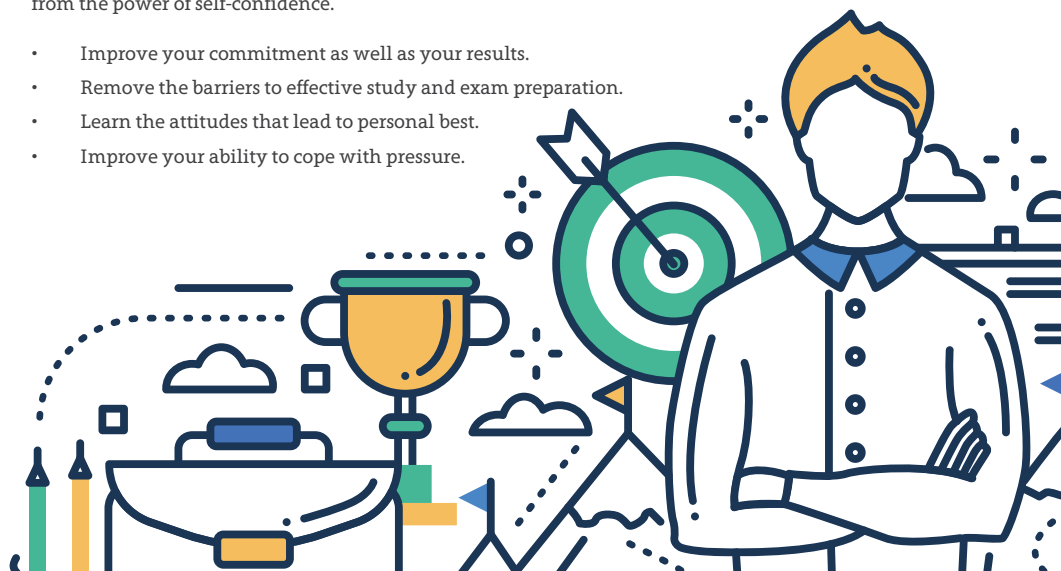
You will learn how to:

- Reduce fatigue and control your natural anxiety
- Become calmer and increase your personal commitment
- Use your time more efficiently
- Boost your memory
- Increase your concentration while preparing efficiently for test and exams
- Use a step-by-step approach to solving complex problems under pressure

Building your confidence

The academic quality of our seminars is evident in our outstanding results, year after year. You'll discover the key to this success is the way we focus on developing your attitude so you can benefit from the power of self-confidence.

- Improve your commitment as well as your results.
- Remove the barriers to effective study and exam preparation.
- Learn the attitudes that lead to personal best.
- Improve your ability to cope with pressure.





Personal Performance

Over the years, we have found that students who show the highest rate of improvement from our subject seminars have usually taken this session (research data from student surveys).

This seminar is useful for students of all ability levels. It is highly recommended but not compulsory.

Tue 10 July

9.30am – 12.30pm

Learning skills

- Achieve more in less time with higher results.
- Learn the secret to solving complex questions.
- Study special test preparation techniques.
- Develop skills for long-term memory.

Motivational skills

- Understand stress and control it.
- Use techniques of inner mental training to develop calmness, concentration and mental flexibility.
- Overcome setbacks quickly.
- Maintain your winning attitude of 'personal best'.

Teacher-in-charge:

Jacqui Smoler

B.Sc.(Hons), Grad. Dip. Ed.
(Sec.), Grad. Cert. Maths &
Sci Ed.

Jacqui is a passionate and highly experienced specialist in Senior SACE and IB Biology. She has taught these subjects in both public and leading independent schools in South Australia for more than 25 years.

Jacqui was the recipient of a World Teachers' Day award in 2010 and runner-up in the national Australian BHP Billiton Science Teacher award in 2010. Jacqui has undertaken extensive professional development in both Australia and the United States of America in the fields of science-teaching and preparation of senior students for examinations.



YEAR 12

Biology

You need five sessions to revise this subject thoroughly.
Choose one or more sessions.

Mon 9 Jul

9.30am – 12.30pm
or 1.30pm – 4.30pm
or **Mon 16 Jul**
9.30am – 12.30pm

Session A • DNA and proteins 1

- Chromosomes, chromatids, genes
- Roles of DNA, mRNA, tRNA, rRNA, miRNA
- Transcription including exons, introns and splicing
- DNA replication
- Translation at ribosomes
- Structure and function of proteins.

Tue 10 Jul

9.30am – 12.30pm
or 1.30pm – 4.30pm
or **Tue 17 Jul**
9.30am – 12.30pm

Session B • DNA and proteins 2

- Enzymes
- Gene expression
- Mutations
- Biotechnology
- DNA sequencing, PCR, transgenesis, DNA profiling.

Wed 11 Jul

9.30am – 12.30pm
or 1.30pm – 4.30pm
or **Wed 18 Jul**
9.30am – 12.30pm

Session C • Cells as the basis of life 1

- Cell theory
- Two types of cells
- Energy in cells (including equations and ADP/ATP)
- Movement through cell membranes
- Writing practical reports.

Thu 12 Jul

9.30am – 12.30pm
or 1.30pm – 4.30pm
or **Thu 19 Jul**
9.30am – 12.30pm

Session D • Cells as the basis of life 2

- Cell metabolism
- Binary fission and mitosis
- Meiotic cell division
- Culturing cells
- Science as a human endeavour.

Fri 13 Jul

9.30am – 12.30pm
or 1.30pm – 4.30pm
or **Fri 20 Jul**
9.30am – 12.30pm

Session E • Homeostasis

- Homeostasis tolerance limits
- Stimulus response model
- Positive and negative feedback
- The nervous system
- Types of neurones, synapses and neurotransmitters
- The reflex arc as a homeostatic mechanism.

Teacher-in-charge:

Maurice Wetherall

B.Sc.(Hons) Dip.Ed.

Maurice is a highly successful senior Biology specialist teacher, with more than 30 years' experience, including exam marking. He is a lecturer at Adelaide University (Senior Biology Curriculum and Methodology).

YEAR 12

Business & Enterprise



Mon 16 Jul
1.30pm – 4.30pm

Make a successful start to your report: situation analysis

This session will cover:

- getting started
- interviewing
- gathering information
- presenting your report
- using diagrams, tables and statistical data
- using appendices
- writing bibliographies and references.

Teacher-in-charge:

Jane Ratsch-Jenke

B.Ed.(Sec. Bus.)

Jane is a highly successful senior teacher of Business and Enterprise. She has 13 years' experience, including exam marking and moderation. Jane is co-author of our Essentials Business and Enterprise Workbook and Textbook.

Further learning

Juggling major assignments and exam preparation? Our Personal Performance seminar (page 10) can help with study strategies and stress management.



For more information and to enrol, visit adelaidetuition.com.au/revision-seminars



YEAR 12

Chemistry

You need five sessions to revise this subject thoroughly.
Choose one or more sessions.

Mon 9 Jul

1.30pm – 4.30pm

or Mon 16 Jul

1.30pm – 4.30pm

Tue 10 Jul

1.30pm – 4.30pm

or Tue 17 Jul

1.30pm – 4.30pm

Wed 11 Jul

1.30pm – 4.30pm

or Wed 18 Jul

1.30pm – 4.30pm

Thu 12 Jul

1.30pm – 4.30pm

or Thu 19 Jul

1.30pm – 4.30pm

Fri 13 Jul

1.30pm – 4.30pm

or Fri 20 Jul

1.30pm – 4.30pm

Session A • Monitoring the environment 1

- Greenhouse effect
- Acid rain
- Photochemical smog
- Revision of Stage 1 (assumed knowledge).

Session B • Monitoring the environment 2

- Volum
- Chromatography
- Atomic spectroscopy.

Session C • Managing chemical processes

- Rates of reactions
- Equilibrium and yield
- Optimising production.

Session D • Organic and biological chemistry 1

- Alcohols
- Aldehydes and ketones
- Carbohydrates
- Carboxylic acids
- Hydrocarbons
- Benzene
- Amines.

Session E • Organic and biological chemistry 2

- Esters
- Amides
- Triglycerides
- Proteins
- Energy (managing resources).

Teacher-in-charge:**Franklin Kovilpillai**

B.Sc.(Hons.)

Franklin has more than 30 years of teaching experience, both in South Australia and Malaysia (teaching HSC Chemistry, equivalent to British A levels). In SA, Franklin has taught SACE and IB courses, and has many years' experience marking examinations. He is currently a Chemistry teacher at a leading independent school.

YEAR 12

Economics



You need five sessions to revise this subject thoroughly.
Choose one or more sessions.

Mon 9 Jul

9.30am – 12.30pm

Session A • The economic problem and market mechanism

Essential points relating to the production possibility model, economic systems, demand and supply, and elasticity.

Tue 10 Jul

9.30am – 12.30pm

Session B • Markets in practice

Concentration on market objectives, structures (characteristics and evaluation) and market failure (reasons, groups affected and measures to overcome).

Wed 11 Jul

9.30am – 12.30pm

Session C • Macro-economic objectives and measurement

Investigation of full employment, price stability, economic growth and external balance.

Thu 12 Jul

9.30am – 12.30pm

Session D • Determination of output and price level

Revision of the business cycle, aggregate demand and supply models and application (changes in AD, LAS and SAS).

Fri 13 Jul

9.30am – 12.30pm

Session E • Economic policy

Consideration of demand and supply-side policies, and difficulties in economic management.

Teacher-in-charge:

Dianne Averis

B.Ed., Dip.T., Grad.Cert.Ed.

Dianne has been a specialist Year 12 teacher for more than 20 years. Her experience includes exam marking and curriculum development. Her students regularly attain A+ standards.

Dianne has assisted the Adelaide Tuition Centre for many years and is the author of Essentials Education's highly successful *SACE 2 Economics Workbook* and *SACE 1 Economics 'Key Ideas' Textbook*.

YEAR 12

English Literary Studies



Mon 9 Jul

9.30am – 12.30pm

or Tue 10 Jul

9.30am – 12.30pm

Session A • Exam preparation

Critical reading of written and visual texts

This session provides a range of strategies for critically analysing techniques used by writers to convey their messages to an audience.

You will also be shown how to prepare answers to critical reading questions.

Further learning

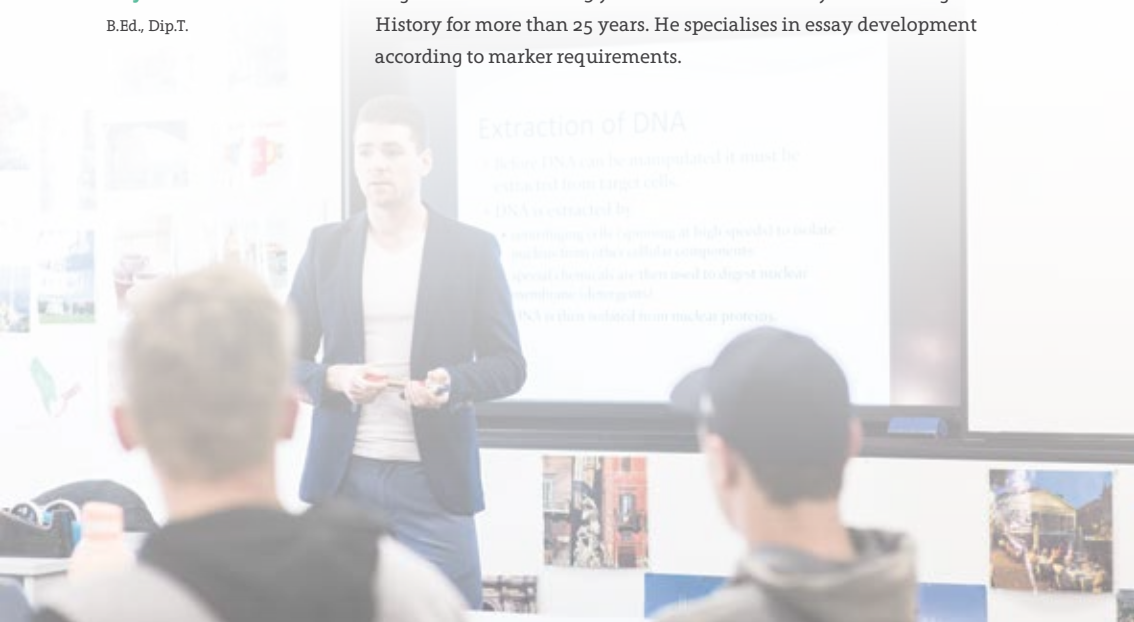
Understand the course material but need help with expression?
Try our Essay & Writing Skills session (see page 16).

Teacher-in-charge:

Roy Webb

B.Ed., Dip.T.

Roy is an enthusiastic, highly successful senior teacher. He has taught English for more than 25 years at Year 12 level. Roy has also taught History for more than 25 years. He specialises in essay development according to marker requirements.



Extraction of DNA

- Before DNA can be manipulated it must be extracted from target cells.
- DNA is extracted by:
 - sonotraging cells (spinning at high speeds to isolate nucleus from other cellular components)
 - special chemicals are then used to digest nuclear membrane (detergents)
 - DNA is then isolated from nucleate proteins.



Essay & Writing Skills

This session will assist students who are required to write extended responses for any of their school subjects.

Please bring examples of your writing to this workshop.

Tue 10 Jul

1.30pm – 4.30pm

Improving the efficiency and power of your writing

- Learn how to maximise the impact of your writing on your subject teachers and SACE moderators and markers
- Plan and research your writing for increased success
- Develop a logical progression of ideas/meaning
- Improve your writing structure
- Write effective introductions and conclusions for a greater impact.

Teacher-in-charge:

Roy Webb

B.Ed., Dip.T.

Roy has taught English for more than 25 years at Year 12 level. He specialises in essay development according to examiners' requirements.



For more information and to enrol, visit adelaidetuition.com.au/revision-seminars

YEAR 12

General Mathematics



You need two sessions to revise this subject thoroughly.
Choose one or more sessions.

Mon 9 Jul

9.30am – 12.30pm

or **Mon 16 Jul**

9.30am – 12.30pm

Session A • Topic 3 – Statistical models

- Examined topic

Tue 10 Jul

9.30am – 12.30pm

or **Tue 17 Jul**

9.30am – 12.30pm

Session B • Topic 4 – Financial models

- Examined topic

Wed 11 Jul

9.30am – 12.30pm

or **Wed 18 Jul**

9.30am – 12.30pm

Session C • Topic 5 – Discrete models

- Examined topic

Teacher-in-charge:**Anna Bassani**

B.Ed., Grad.Cert.Maths Ed.

Anna is a highly successful teacher with more than 20 years' experience in Business Mathematics and Mathematical Applications.

YEAR 12

Legal Studies



You need five sessions to revise this subject thoroughly.
Choose one or more sessions.

Mon 9 Jul

1.30pm – 4.30pm

Session A

The Australian legal system.

Tue 10 Jul

1.30pm – 4.30pm

Session B

Constitutional government.

Wed 11 Jul

1.30pm – 4.30pm

Session C

Australia's global links and international law.

Thu 12 Jul

1.30pm – 4.30pm

Session D

Legislation, delegated legislation.

Fri 13 Jul

1.30pm – 4.30pm

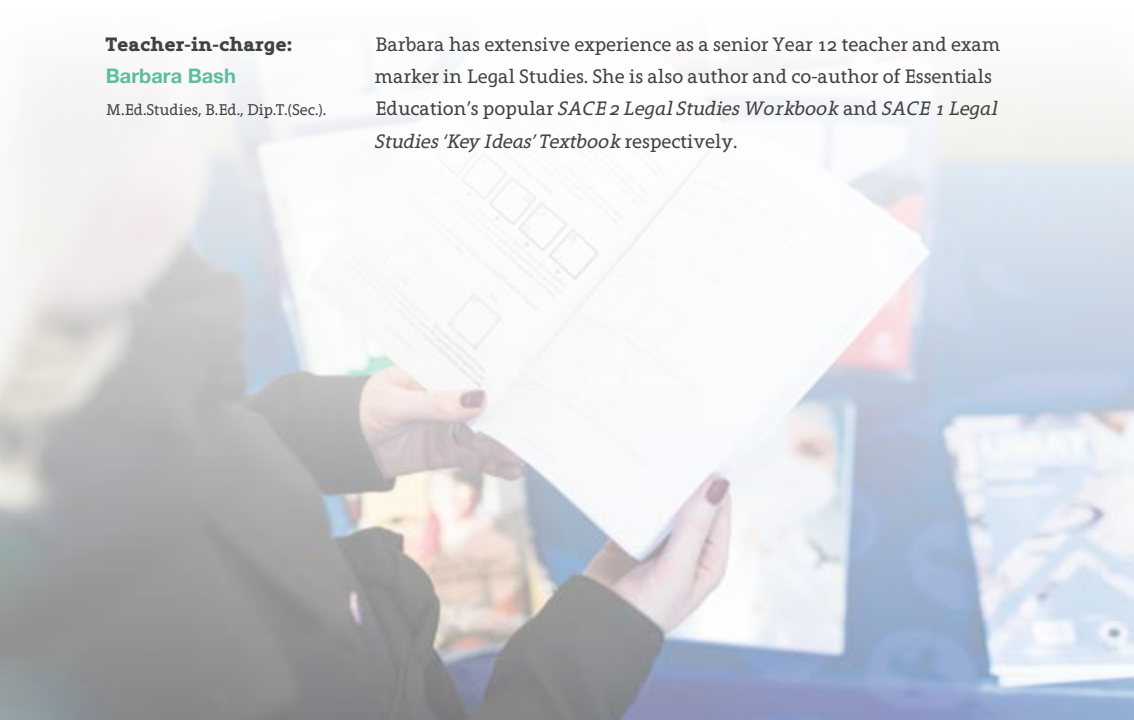
Session E

Case law.

Teacher-in-charge:**Barbara Bash**

M.Ed.Studies, B.Ed., Dip.T.(Sec.).

Barbara has extensive experience as a senior Year 12 teacher and exam marker in Legal Studies. She is also author and co-author of Essentials Education's popular *SACE 2 Legal Studies Workbook* and *SACE 1 Legal Studies 'Key Ideas' Textbook* respectively.





YEAR 12

Mathematical Methods

You need five sessions to revise this subject thoroughly.
Choose one or more sessions.

Mon 9 Jul

1.30pm – 4.30pm

or Mon 16 Jul

1.30pm – 4.30pm

Session A • Introductory differential calculus

- Derivatives from first principles
- Rules of differentiation, including chain rule, product rule and quotient rule
- Graphing of functions $y=x^n$
- Deriving local maxima and minima
- Increasing and decreasing functions.

Tue 10 Jul

1.30pm – 4.30pm

or Tue 17 Jul

1.30pm – 4.30pm

Session B • Derivatives of exponential and logarithmic functions

- Slopes of tangents of the exponential and logarithmic functions
- Local maxima and minima
- Graphing of $y = \ln x$ and $y = e^x$
- Application of exponential and logarithmic functions, including growth and decay, surge and logistic functions.

Wed 11 Jul

1.30pm – 4.30pm

or Wed 18 Jul

1.30pm – 4.30pm

Session C • Derivatives of trigonometric functions

- Derivatives of trigonometric functions
- Kinematics: displacement, velocity, acceleration
- Application of trigonometric functions, including tidal heights and temperature changes
- Graphing of $\sin x$ and $\cos x$.

Thu 12 Jul

1.30pm – 4.30pm

or Thu 19 Jul

1.30pm – 4.30pm

Session D • The second derivative

- Relationship between the 1st and 2nd derivatives
- Optimisation
- Points of inflection.

Fri 13 Jul

1.30pm – 4.30pm

or Fri 20 Jul

1.30pm – 4.30pm

Session E • Integration and statistics

Integration

- Area under a curve
- Problem-solving by integration

Statistics

- Measuring centre and spread of data
- Continuous random variables – normal distribution
- Discrete random variables – the Bernoulli and Binomial

Teacher-in-charge:

Caterina Jones

B.Sc., B.Ed., Dip.T.

Caterina is a highly successful Mathematics teacher with more than 15 years' teaching experience.

YEAR 12

Modern History



Mon 9 Jul
1.30pm – 4.30pm

Session A • How to do a Source Analysis

Source Analysis will be part of your final exam. This session will cover:

- understanding which skills are being examined
- recognising and classifying a source
- evaluating, comparing and cross-referencing sources
- understanding and answering questions.

Teacher-in-charge:

Roy Webb

B.Ed., Dip.T.

Roy is an enthusiastic, highly successful senior teacher. He has taught History for more than 20 years. Expect clear, concise explanations and a highly interactive approach.

Further learning

Thinking about your Historical Study? If you want to learn how to improve your written expression, check out our Essay & Writing Skills session (page 16).



For more information and to enrol, visit adelaidetuition.com.au/revision-seminars

YEAR 12

Nutrition



You need four sessions to revise this subject thoroughly.
Choose one or more sessions.

Please bring a calculator to each session.

Mon 9 Jul
9.30am – 12.30pm

Session A • Macronutrients

Tue 10 Jul
9.30am – 12.30pm

Session B • Water, micronutrients and micronutrient deficiency diseases

Wed 11 Jul
9.30am – 12.30pm

Session C • Digestion, malabsorption syndromes and metabolism

Thu 12 Jul
9.30am – 12.30pm

Session D • Macronutrient dietary diseases, diagnostic tools and tools for food selection

Teacher-in-charge:

Vicki Dent

B.Ed.(Sec.), B.ExerSc.

Vicki has been a Stage 2 Nutrition teacher for more than 10 years. Her experience includes moderation and exam marking. She has worked with Merit and A+ students in her classes and through private tuition.

YEAR 12

Physical Education

You need five sessions to revise this subject thoroughly.
Choose one or more sessions.

Mon 16 Jul

1.30pm – 4.30pm

Session A • Key concept 1**Sources of energy affecting physical performance**

- Sources of macro-nutrients: fats, carbohydrates, protein
- Food breakdown into nutrients: glucose, glycogen, triglycerides, free fatty acids
- Aerobic and anaerobic energy: ATP-CP system, lactic acid system, oxygen system
- Contribution of energy systems in specific activities
- Acute responses to exercise: responses in the circulatory, respiratory, and muscular systems.

Tue 17 Jul

1.30pm – 4.30pm

Session B • Key concept 2**Effects of training and evaluation on physical performance**

- Chronic adaptations to aerobic and anaerobic training: circulatory, respiratory and muscular systems at different levels of intensity and duration (rest, submaximal and maximal effort)
- Activity analysis in relation to the demands of sport and physical activity
- Measurement and monitoring of fitness and energy components relevant to performance
- Training principles & methods specific to fitness factors & to physical activities.

Wed 18 Jul

1.30pm – 4.30pm

Session C • Key concept 3**Specific physiological factors affecting performance**

- Body stature and composition
- Environmental considerations and performance
- Nutrition and performance: pre-event, during the event, post-event, and hydration
- Fatigue, recovery and physical performance.

Physical Education cont.



Thu 19 Jul

1.30pm – 4.30pm

Session D • Key concepts 4 and 5

Skills acquisition

- The classification of skills
- The characteristics of a skilled performer
- The stages of skill learning
- The learning process in acquiring physical skills.

Specific factors affecting skill learning

- The nature of the task
- Practice and feedback
- Physical environmental factors
- Characteristics of a skilled learner
- Retention of learning
- Timing and anticipation.

Fri 20 Jul

1.30pm – 4.30pm

Session E • Exam preparation

- A detailed analysis of the structure of the exam
- Exam skills and techniques.

Teacher-in-charge:

Glen Urbani

B.Ed.

Glen has taught Year 12 Physical Education for more than 25 years and has spoken at conferences, run workshops and written textbooks on concept integration for Year 12 Physical Education exam technique and preparation.



YEAR 12

Physics



You need five sessions to revise this subject thoroughly.
Choose one or more sessions.

Mon 9 Jul

9.30am – 12.30pm

or Mon 16 Jul

9.30am – 12.30pm

Session A • Projectile motion

- Topics 1.1 and 1.2: projectile motion, forces and momentum.

Tue 10 Jul

9.30am – 12.30pm

or Tue 17 Jul

9.30am – 12.30pm

Session B • Circular motion

- Topics 1.3 and 1.4: circular motion, gravitation and relativity.

Wed 11 Jul

9.30am – 12.30pm

or Wed 18 Jul

9.30am – 12.30pm

Session C • Electric fields

- Topics 2.1 and 2.2: electric fields and motion of charged particles in electric fields.

Thu 12 Jul

9.30am – 12.30pm

or Thu 19 Jul

9.30am – 12.30pm

Session D • Magnetic fields

- Topics 2.3 and 2.4: magnetic fields and motion of charged particles in magnetic fields.

Fri 13 Jul

9.30am – 12.30pm

or Fri 20 Jul

9.30am – 12.30pm

Session E • Electromagnetic induction

- Topic 2.5: electromagnetic induction

Teacher-in-charge:**Maria Caruso**

B. Sc. Dip.Ed.

Maria Caruso has extensive experience in SACE Stage 2 Physics moderation and exam marking, and is the author of Essentials Education's Stage 1 and 2 Physics Workbooks for the new Australian Curriculum. Maria is currently the science coordinator at a leading independent school, where she teaches both SACE and IB Physics.

YEAR 12

Psychology

You need five sessions to revise this subject thoroughly. Choose any session.



Mon 9 Jul

9.30am – 12.30pm

Session A • Introduction to Psychology & research investigations

- Research designs used in Psychology, including unique qualities of each design and advantages/disadvantages of each design
- Objective quantitative measures and subjective quantitative measures
- Quantitative data analysis and interpretation (statistical methods)
- Analysis of qualitative data – content analysis of focus group and Delphi technique data
- The ethics of psychological research and investigations
- How to write a proposal document
- Report writing in Psychology.

Tue 10 Jul

9.30am – 12.30pm

Session B • Social cognition

- Advertising and social norms
- Behavioural therapy and applications to larger social issues.
- Attitudes and behaviour
- Impression formation.

Wed 11 Jul

9.30am – 12.30pm

Session C • Learning

- Classical and operant conditioning
- Social learning theory
- Changing behaviour and treating phobias
- Reinforcement and punishment
- Contiguity, contingency and preparedness
- Social issues associated with learning – learning experiments, research and ethics.

Thu 12 Jul

9.30am – 12.30pm

Session D • Personality

- Psychodynamic, humanistic and trait conceptions of personality
- Personality assessments
- Psychological interventions and social issues
- Ethical issues of personality assessment and research.

Fri 13 Jul

9.30am – 12.30pm

Session E • Psychobiology of altered states of awareness

- Stages of sleep
- Sleep disorders
- Arousal and task performance
- Stress
- Psychological interventions
- Social/ethical issues associated with sleep and sleep research.

Teacher-in-charge:

Paul Hudson

B.A., Dip.Ed.

Paul has been teaching Stage 2 Psychology since its introduction in 2004. He has been an exam marker and supervisor for many of those years and has extensive experience as a moderator in Psychology.

YEAR 12

Specialist Mathematics

You need five sessions to revise this subject thoroughly. Choose one or more.

Mon 9 Jul**9.30am – 12.30pm****Session A • Functions and sketching graphs**

- Composition of functions including domain and range
- One-to-one functions, their inverses and graphs of each
- Sketching graphs including absolute value functions, composition involving absolute value and reciprocal functions, rational functions and behaviour near asymptotes

Tue 10 Jul**9.30am – 12.30pm****Session B • Complex numbers with polynomials and induction**

- Principle of Mathematical Induction (PMI)
- Proofs of complex number properties (including the use of PMI)
- Polynomials; operations (\pm, \times, \div) division algorithm; roots, zeros and factors; remainder and factor theorems; real polynomials and irreducible quadratic factors associated with conjugate pair zeros.
- Application of De Moivre's Theorem to finding roots of complex numbers and geometric descriptions of these roots

Wed 11 Jul**9.30am – 12.30pm****Session C • Vector geometry in 2 & 3 dimensions**

- Basic concept of scalars and 2D and 3D vectors together with the geometry and algebra of vectors
- Operations with vectors including addition, subtraction, scalar multiplication and the product of vectors in two different ways
- Parallel and perpendicular vectors
- Problem solving with 2D and 3D vectors
- Finding areas of triangles and parallelograms using vectors





Specialist Maths cont.

Thu 12 Jul

9.30am – 12.30pm

Session D • Applications of vectors

- Equations of lines and planes
- Finding angles between lines, line and plane, planes
- Vector proof of geometric properties
- Problem solving in 2D and 3D geometry including the use of row operations on a system of linear equations

Fri 13 Jul

9.30am – 12.30pm

Session E • Integration techniques and applications

- Basic rules derived from the fundamental theorem of calculus
- Integration by substitution and by parts
- Using partial fractions
- The use of inverse trigonometric functions for integration (need for one-to-one functions)
- Applications involving finding areas and volumes

Teacher-in-charge:

Paul Urban

B.Sc. (Hons.), B.Ec.

Paul is a highly successful senior Mathematics teacher with more than 30 years' experience including as a SACE marker and, more recently, IB Diploma Maths. He will focus you quickly and make time for personal discussion.

Further learning

Feeling overwhelmed, or lacking motivation? Our **Personal Performance session** (page 10) can help you develop strategies to handle stress and your study load.

SHORT COURSE

UMAT



Our UMAT course is designed to give you a clear introduction to the entire UMAT process. This will help you feel as confident and prepared to sit the exam as possible.

The course provides a clear, practical approach to UMAT revision while also offering invaluable hints and tips. The Term 2 holidays are the last study break before the exam takes place, so get in quick. The better and earlier you revise, the better your chances of getting your best marks.

.....

These sessions book out fast, so secure your place early to avoid disappointment! | **Price \$330**

.....

ATTENDANCE

Students must attend all three sessions in the course.

Mon 9 Jul

9.30am – 12.30pm

Day 1 • In-depth review of Sections 1 and 2

- Explanation of the format and purpose of the sections
- Individual, group and guided practice of questions from each section with answers and explanations.

Tue 10 Jul

9.30am – 12.30pm

Day 2 • In-depth review of Section 3

- Explanation of the format and purpose of the section
- Individual, group and guided practice of questions from the section with answers and explanations.

Wed 11 Jul

9.30am – 1.30pm

Day 3 • Mock exam and review

- Three-hour mock exam
- One-hour review session.

UMAT Course Books



Revise for the UMAT at your own pace with the MedEssentials & Essentials Education UMAT Course Books. These books:

- cover each section of the test separately and thoroughly
- provide dozens of practice questions
- give detailed answers that explain how you can solve UMAT problems.

You can view our range and access sample pages of all Essentials Education titles at our website.

 essentialseducation.com.au

**Second edition
available now.**

\$44 per section.

 **Essentials**
education.



Enrolment form

I wish to enrol (name):

Address:

Postcode:

Phone (home): (work):

Email:

Name of school:

Before your enrolment form can be processed we need an indication of your ability level in each subject. Include your current test marks (%) here.

Subject	↓	Sessions (please circle)	Week 1/2	Time am/pm
Personal Performance		A		
		A B C D		
		A B C D		
		A B C D		
		A B C D		
		A B C D		

Standard fee: \$70 per session No. sessions at \$70 each Cost \$

Early bird*: \$65 per session No. sessions at \$65 each Cost \$

*Discount applies when you book four or more sessions and pay by Monday June 25.

All fees are GST inclusive. Total cost \$

PAYMENT METHOD (please tick) Cash ☐ Visa ☐ Mastercard ☐

Please debit my credit card no: with \$

Cardholder's name: Expiry date:

A confirmation letter will be sent once your enrolment is received. CCV:

Directions and facilities

St Aloysius College Entry via 38 Angas Street*

Finding your class

Classlists will be on display before each session.
Find your name on the list and check the room number for your session each day.
Adelaide Tuition staff will be present to direct you to your room before your session commences.

Car parking

There is limited, ticketed carparking in the streets near the school. Visit adelaidetuition.com.au/about-our-revision-seminars for details.

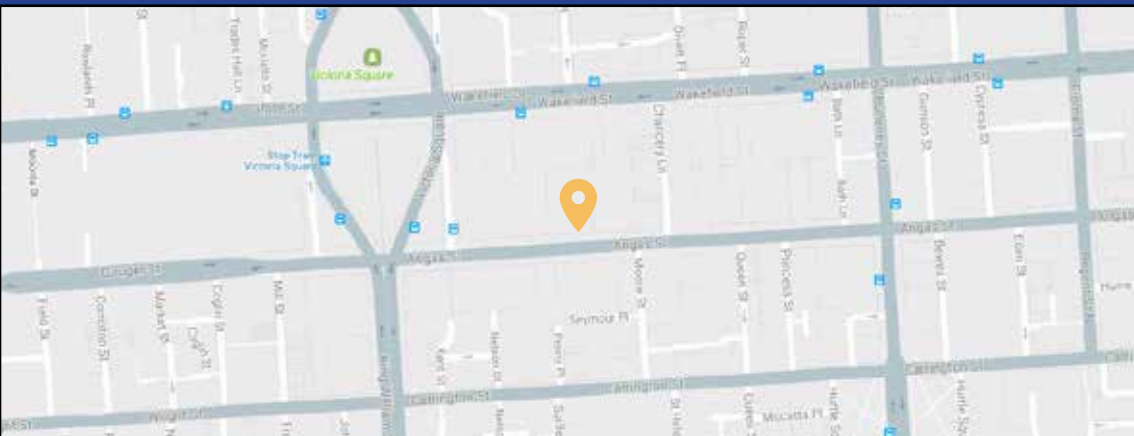
Food and refreshments

Coffee, tea and snacks are provided free of charge.
Cafes and the Central Market are located nearby.

Further questions

Please do not ring St Aloysius College.
Call Adelaide Tuition Centre (08) 8241 5568 with any enquiries.

.....
*If there are other events on at St Aloysius, we may be required to use a different entrance to access the seminar venue. Please check adelaidetuition.com.au before attending your first seminar to confirm the entrance.





ADELAIDE
TUITION
CENTRE

SEMINAR LOCATION

St Aloysius College
38 Angas Street
Adelaide SA 5000

Adelaide Tuition Centre
P (08) 8241 5568
F (08) 8241 5597

adelaidetuition.com.au
ABN 17 162 631 647

