Year 12 SACE Stage 2

TRINITY COLLEGE Senior

Chemistry

What is Chemistry?

Chemistry helps people to develop an understanding of the processes that determine the behaviour of matter from the small (atoms, molecules, and ions) to larger quantities. Chemistry is a subject for students who are interested in natural and processed materials, and the ways in which people obtain, manufacture, and use materials in their everyday lives.

Why study Chemistry?

Chemistry is designed to promote students' interest in and appreciation of chemistry by encouraging involvement in the scientific process of enquiry into the world of natural and processed materials, as well as by developing an attitude of curiosity and open-mindedness. It focuses on environmental and biological chemistry, two areas of significant growth in the early years of the twenty-first century. Chemistry is designed to develop in students the ability to identify similarities and trends in the properties and behaviour of materials, and to apply this knowledge in different contexts.

Course content of Chemistry

Students study six compulsory topics:

- Topic 1: Skills
- Topic 2: Elemental and Environmental Chemistry
- Topic 3: Analytical Techniques
- Topic 4: Using and Controlling Reactions
- Topic 5: Organic and Biological Chemistry
- Topic 6: Materials

Assessment Components

Assessment in Chemistry consists of the following components:

School Based Component: 70%

- Investigations Folio (40%) – This component will include practical investigations and issues investigations, and is externally moderated.
- Skills and Applications Tasks (30%) – This component will include topic tests, and is externally moderated.

Externally Moderated Component: 30%

- Examination

Learning Requirements of the Course

At the end of the program in Stage 2 Chemistry, students should be able to:

- Demonstrate and apply knowledge and understanding of chemical concepts and interrelationships
- Formulate questions, manipulate apparatus, record observations in practical chemical activities, and design and undertake chemistry investigations
- Demonstrate an understanding of how knowledge of chemistry can be used to draw informed conclusions or make informed decisions, taking into account social and environmental contexts
- Develop possible solutions to a variety of problems in chemistry, in new or familiar contexts
- Critically analyse and evaluate chemical information and procedures from different sources
- Communicate in a variety of forms using appropriate chemical terms and conventions

Chemistry

See over »

Chemistry continued

Future Pathways in Chemistry

- Biotechnology
- Engineering
- Environmental studies
- Medicine
- Nursing
- Science
- Soil science

Required Text(s) for Chemistry

Discovering Chemistry 2 (2nd edition), Stanley

Chemistry Essentials -Workbook SACE Stage 2 (6th edition), Morton & Teague

Chemistry-SASTA Study Guide (2011 Edition)

What are the prerequisites?

B promotion grade in Year 11 Chemistry

TRINITY COLLEGE
Senior

Contact Details

For more information about studying Year 12 at Trinity College Senior, please contact the Head of Year 12 on 8523 8705 or visit: www.trinity.sa.edu.au/curriculum/index.htm

Further Information

More information about SACE may be obtained from the SACE Board of South Australia webpage at: www.sace.sa.edu.au