

# CHEM30004 Organic Chemistry III

<b>Credit Points:</b>	12.50									
<b>Level:</b>	3 (Undergraduate)									
<b>Dates &amp; Locations:</b>	This subject is not offered in 2014. Lectures, tutorials and practical work									
<b>Time Commitment:</b>	Contact Hours: 24 one-hour lectures throughout the semester; 28 hours of practical classes on average 7 hours per week for 4 weeks. Total 52 hours Total Time Commitment: Estimated total time commitment of 120 hours									
<b>Prerequisites:</b>	<b>This subject is available for exchange students only</b> , who are required to have successfully completed an approved organic chemistry subject at 2 nd year university level, which includes laboratory work. Students are required to contact the subject coordinator prior to enrolment.									
<b>Corequisites:</b>	None									
<b>Recommended Background Knowledge:</b>	None									
<b>Non Allowed Subjects:</b>	<p>Credit cannot be gained for this subject and any of:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>CHEM30016 Reactivity and Mechanism</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>CHEM30015 Advanced Practical Chemistry</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table> <p>An additional non-allowed subject combination normally exists between this subject and CHEM30014 Specialised Topics in Chemistry B. However enrolment in CHEM30014 Specialised Topics in Chemistry B (with a restricted choice of topics) and this subject, may be approved by the subject coordinator.</p>	Subject	Study Period Commencement:	Credit Points:	CHEM30016 Reactivity and Mechanism	Semester 1	12.50	CHEM30015 Advanced Practical Chemistry	Semester 1	12.50
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CHEM30016 Reactivity and Mechanism	Semester 1	12.50								
CHEM30015 Advanced Practical Chemistry	Semester 1	12.50								
<b>Core Participation Requirements:</b>	It is University policy to take all reasonable steps to minimise the impact of disability upon academic study and reasonable steps will be made to enhance a student's participation in the University's programs. This subject requires all students to actively and safely participate in laboratory activities. Students who feel their disability may impact upon their participation are encouraged to discuss this with the subject coordinator and the Disability Liaison Unit. <a href="http://www.services.unimelb.edu.au/disability/">http://www.services.unimelb.edu.au/disability/</a>									
<b>Contact:</b>	<p>Director of Third Year Studies</p> <p><b>Email: <a href="mailto:third-year-director@chemistry.unimelb.edu.au">third-year-director@chemistry.unimelb.edu.au</a> (mailto:third-year-director@chemistry.unimelb.edu.au)</b></p>									
<b>Subject Overview:</b>	<p>The subject includes lecture and practical components. This lecture component is based on the Organic Chemistry lectures from the CHEM30016 course (12 lectures) and those from an approved module relating to Organic Chemistry chosen from the topics offered in CHEM30017 (12 lectures). A limited selection of the following topics will be offered, from which students choose one module:</p> <ul style="list-style-type: none"> <li>• Bio-Organic Chemistry,</li> <li>• Spectroscopy – Identification of Organic Molecules,</li> <li>• Heterocyclic Chemistry,</li> <li>• Polymer Chemistry,</li> <li>• Physical Organic Chemistry,</li> <li>• Methods in Organic Synthesis</li> </ul>									
<b>Learning Outcomes:</b>	Upon completion of this subject students should comprehend the chemical characteristics of various reactive intermediates (carbocations, carbanions and free radicals), and gain an understanding of the principles of orbital-controlled reactions. They should gain knowledge and understanding of various spectroscopic methods for the identification of organic molecules.									

	<p>Students should also appreciate the importance of rational, critical and independent thought in chemical science and in the understanding of organic chemistry.</p> <p>The practical component of this subject will consist of a number of experiments involving the synthesis and/or chemical and/or instrumental investigations of important classes of organic compounds, chosen from practical experiments offered within the CHEM30015 course.</p>
<b>Assessment:</b>	<p>Practical component: Ongoing assessment in the form of up to 5 reports on laboratory-based practical exercises, in addition to an assignment-based report, all due during semester 1 (30%).</p> <p>Lecture components: To address the diversity of material taught in the various modules of this subject, there will be several options for assessment. The assessment for the specific module will be announced in the first lecture. Option 1: One one-hour end of semester exam (80%) and one to two assignments conducted during the module (20%). Option 2: Several assignments (written and/or oral) conducted during the module (100%). Satisfactory completion of both theory and practical work is necessary to pass the subject.</p>
<b>Prescribed Texts:</b>	J McMurry, Organic Chemistry, 6th Ed Thomson Brooks/Cole, 2004 (or newer editions)
<b>Breadth Options:</b>	This subject is not available as a breadth subject.
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>
<b>Generic Skills:</b>	<p>This subject will provide the student with the opportunity to establish and develop the following generic skills: the ability to comprehend complex concepts and effectively communicate this understanding to the scientific community and in a manner accessible to the wider community; the ability to connect and apply the learnt concepts to a broad range of scientific problems beyond the scope of this subject; the ability to think critically and independently; the ability to problem-solving, and the ability to use conceptual models to rationalise observations.</p>
<b>Related Majors/Minors/Specialisations:</b>	Science credit subjects* for pre-2008 BSc, BAsC and combined degree science courses