

## HPSC10003 Debating Science in Society

<b>Credit Points:</b>	12.5
<b>Level:</b>	1 (Undergraduate)
<b>Dates &amp; Locations:</b>	2016, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.
<b>Time Commitment:</b>	Contact Hours: 34 hours - A 1 hour lecture in week 1 followed by 2 x 1 hour lectures and 1 x 1 hour tutorial per week in weeks 2-12 Total Time Commitment: 170 hours
<b>Prerequisites:</b>	None
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	None
<b>Non Allowed Subjects:</b>	None
<b>Core Participation Requirements:</b>	<p>&lt;p&gt;For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry.&lt;/p&gt; <p>&lt;p&gt;It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: &lt;a href="http://services.unimelb.edu.au/disability"&gt;http://services.unimelb.edu.au/disability&lt;/a&gt;&lt;/p&gt;</p> </p>
<b>Coordinator:</b>	Assoc Prof Michael Arnold
<b>Contact:</b>	<b>Email: <a href="mailto:mvarnold@unimelb.edu.au">mvarnold@unimelb.edu.au</a> (mailto:mvarnold@unimelb.edu.au)</b>
<b>Subject Overview:</b>	<p>In this subject students will attend debates conducted by academics arguing about some of the most important issues in contemporary science and society. The subject places scientific debate in the context of current social and cultural issues, and illustrates how current social and cultural thinking is shaped by scientific controversy. Each week we will take up a contentious issue, and students will hear a lecture clearly arguing for one position, followed by a lecture clearly arguing for a different position. In each case your lecturers will do their best to persuade you of their position. The challenge for students in the tutorials and assessment tasks is to judge what is at issue, weigh the evidence, and determine which case is strongest.</p> <p>Weekly debates will be selected from among the following controversial propositions:</p> <ol style="list-style-type: none"> <li>1 Genetically modified crops are the only way to feed the masses.</li> <li>2 Nuclear fuel is the future of energy production.</li> <li>3 Science and technology is the path to utopia.</li> <li>4 Humans will become Post-human.</li> <li>5 The scientific method is the only way to truly know.</li> <li>6 Catastrophic climate change can be averted.</li> <li>7 There is a physical explanation for everything that exists and everything that happens.</li> <li>8 Digital media is making us stupid.</li> <li>9 A machine more intelligent than you will exist in your lifetime.</li> <li>10 Our history is fundamentally shaped by science and technology.</li> <li>11 This has been a waste of time: controversies cannot be resolved through rational debate.</li> </ol>
<b>Learning Outcomes:</b>	<p>Students who successfully complete this subject will:</p> <ul style="list-style-type: none"> <li># Understand that many important issues in science and technology are not settled.</li> </ul>

	<ul style="list-style-type: none"> <li># Develop an understanding of the particularities of important debates in science and technology, and the reasons that different positions are taken in respect of each issue.</li> <li># Develop the capacity to critically weigh contrasting evidence and argument and to reach defensible and persuasive conclusions based on evidence and argument.</li> <li># Acquire skills in clear, coherent and persuasive written and oral presentation.</li> <li># Begin to develop an understanding of the empirical, methodological, epistemological, and social and cultural foundations of controversies in science and technology</li> </ul>
<b>Assessment:</b>	<p>A 1600 word tutorial paper and a tutorial presentation which judges what is at issue, weighs the evidence, and argues which case is strongest. Assessment will factor in presentation skills and the quality of the written argument. Due Weeks 2-12: 11 debates will take place in lecture classes, students address one debate for their tutorial paper and presentation; the presentation occurs during the tutorial on the week of the debate, and the paper is due at the end of that week. (40%) Three 800 word tutorial papers, each providing an argued adjudication of a debate. Due Weeks 2-12: students adjudicate 3 debates; each 800 word paper is due by the end of the week in which the relevant debate occurs. NOTE: students must submit at least one paper within the first 6 weeks of semester. (60%) Hurdle Requirements: Students must attend a minimum of 75% of tutorials in order to pass this subject. Regular participation in tutorials is required All pieces of written work must be submitted to pass this subject. Note: Assessment submitted late without an approved extension will be penalised at 10% per day. After five working days late assessment will not be marked. In-class tasks missed without approval will not be marked.</p>
<b>Prescribed Texts:</b>	Subject readings for each week's topics will be made available on the LMS before the beginning of the semester.
<b>Breadth Options:</b>	<p>This subject potentially can be taken as a breadth subject component for the following courses:</p> <ul style="list-style-type: none"> <li># <b>Bachelor of Biomedicine</b> (<a href="https://handbook.unimelb.edu.au/view/2016/B-BMED">https://handbook.unimelb.edu.au/view/2016/B-BMED</a>)</li> <li># <b>Bachelor of Commerce</b> (<a href="https://handbook.unimelb.edu.au/view/2016/B-COM">https://handbook.unimelb.edu.au/view/2016/B-COM</a>)</li> <li># <b>Bachelor of Environments</b> (<a href="https://handbook.unimelb.edu.au/view/2016/B-ENVS">https://handbook.unimelb.edu.au/view/2016/B-ENVS</a>)</li> <li># <b>Bachelor of Music</b> (<a href="https://handbook.unimelb.edu.au/view/2016/B-MUS">https://handbook.unimelb.edu.au/view/2016/B-MUS</a>)</li> <li># <b>Bachelor of Science</b> (<a href="https://handbook.unimelb.edu.au/view/2016/B-SCI">https://handbook.unimelb.edu.au/view/2016/B-SCI</a>)</li> </ul> <p>You should visit <b>learn more about breadth subjects</b> (<a href="http://breadth.unimelb.edu.au/breadth/info/index.html">http://breadth.unimelb.edu.au/breadth/info/index.html</a>) and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.</p>
<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>Students who successfully complete this subject will:</p> <ul style="list-style-type: none"> <li># Develop the clear thinking skills required to assess the validity of an argument.</li> <li># Develop effective written and oral communication and presentation skills.</li> <li># Extend their capacity to read effectively and to conduct wider research.</li> </ul>
<b>Links to further information:</b>	<a href="http://shaps.unimelb.edu.au/history-philosophy-science">http://shaps.unimelb.edu.au/history-philosophy-science</a>
<b>Related Majors/Minors/Specialisations:</b>	History and Philosophy of Science
<b>Related Breadth Track(s):</b>	Science and its Margins