

<b>New Course Code and Title</b>	ES7003 Communication skills for scientists	
<b>Details of Course</b>	<p><b>Summary of course content</b></p> <p>In pursuing a career in science, it is not enough to be a great researcher. Effectively communicating your research to members of the scientific community, at conferences, workshops, seminars and in teaching is also a critical part of having a successful and impactful career. This course will give students an opportunity to hone their presentation and communication skills through discussion, practice, and feedback on areas that include:</p> <ul style="list-style-type: none"> <li>• Identifying the key points of their results, and framing them in the big picture. Knowing how much information to convey.</li> <li>• Telling a story to make effective and interesting presentations.</li> <li>• Using visual communication techniques—color, typography, design principles; and</li> <li>• Body language and eye contact—how to feel and look confident.</li> </ul> <p>The course will focus around development of a short talk and poster about the students’ research, building throughout the course on the different elements of a presentation, from identifying key points, to developing the graphics, and finally to delivering the presentation.</p> <p><b>Rationale for introducing this course</b></p> <p>It is not enough for us simply to teach our graduate students to be great scientists. To have maximum impact, they must also be able to communicate as clearly and effectively as possible. This course will introduce key concepts in oral and poster presentations, and will give the students ample opportunity to hone their presentation skills. There is no equivalent course currently available that teaches these skills tailored to the needs of Earth science PhD students.</p> <p><b>Aims and objectives</b></p> <p>At the end of this course the students should be able to:</p> <ul style="list-style-type: none"> <li>• Identify the key, big-picture points of their research;</li> <li>• Summarize these points into a clearly-structured presentation or summary;</li> <li>• Formulate the main aim(s) of their presentations;</li> <li>• Know the correct amount of information to convey in different types of presentations;</li> <li>• Know how to identify their audiences’ needs in deciding on content;</li> <li>• Understand the importance of “telling a story” to keep their audiences interested and their presentations memorable;</li> <li>• Use effective body language, eye-contact, posture, etc.;</li> <li>• Be well on their way to being a confident and effective public speaker; and</li> <li>• Understand key concepts of style and visual presentation, and make clear and eye-catching PowerPoint presentations.</li> </ul>	
<b>Assessment</b>	<p>Class participation  Written assignment (poster)  Poster presentation  Oral presentation  (All assessments are individually assessed.)</p>	<p>20%  20%  20%  40%</p>
<b>Hours of Contact/Academic Units</b>	Total: 39 hours / 3 AU	

Week	Topic
1	<ul style="list-style-type: none"> <li>- Examples and discussion of good and bad presentations</li> <li>- Why are good communication skills so important?</li> <li>- What do you want to get out of the class?</li> <li>- Getting your point across—What is it that you are trying to say?</li> </ul>
2	<ul style="list-style-type: none"> <li>• Telling a story.</li> <li>• Presentation myths</li> <li>• Engaging your audience (pronouns, directives, rhetorical questions, appeals to shared knowledge, personal asides, analogies, and personal stories).</li> </ul>
3	<ul style="list-style-type: none"> <li>• The main content of your talk</li> <li>• Not trying to communicate more than 3 main points (MAX!) in a presentation.</li> <li>• Helping your audience remember your point(s).</li> </ul>
4	<ul style="list-style-type: none"> <li>• Introductions and conclusions</li> <li>• Finding your “hook”.</li> <li>• Finishing strong.</li> </ul>
5	<ul style="list-style-type: none"> <li>• Breathing and overcoming stage fright.</li> <li>• Body language and gestures</li> <li>• Eye contact and landing your points</li> <li>• Timing, pausing, and repetition</li> </ul>
6	<ul style="list-style-type: none"> <li>• Vocal delivery and landing points (intonation, rhythm, and pausing)</li> </ul>
7	<ul style="list-style-type: none"> <li>• Poster design and content</li> <li>• Presenting a poster.</li> </ul>
8	<ul style="list-style-type: none"> <li>• Poster presentations</li> </ul>
9	<ul style="list-style-type: none"> <li>• Dealing with questions (focus on post-scientific talk, role playing).</li> <li>• Talking to the professional media (pros and cons, anticipating questions, staying on point and having a plan, political considerations).</li> <li>• Media interview role playing.</li> <li>• Engaging with social media (pros and cons, still doing your work, not getting dragged into arguments).</li> </ul>
10	<p>Designing slides (engaging slide titles, content, colours, figures, font, and legibility).</p>
11	<p>Putting your talk together—practising AGU-style presentations (12 minutes each + 15 minutes of feedback): Group 1</p>
12	<p>Putting it all together—practising AGU-style presentations (12 minutes each + 15 minutes of feedback): Group 2</p>
13	<p>Final AGU-style presentations (12 minutes + 3 minutes Q&amp;A)</p>