

2018 Series 1 Course B

Title	Antarctica and the Southern Ocean History, science and the future
Dates	Tuesdays 6 March – 17 April 2018
Time	2.15 pm – 4.15 pm
Venue	Otago Golf Club, 125 Balmacewen Road, Dunedin
Convenor	Kevin Helm Email: kevinhelm.training@gmail.com Phone: 473 0037 Mobile: 021 735 458
Developer	Gary Wilson
Course fee	\$45

This series of talks will take a look at why Antarctica occupies such a unique place in the hearts and minds of New Zealanders. From the geological and oceanographic connections to the early explorers that visited New Zealand on their way to and from "the ice". From the unique opportunity New Zealand has in governing Antarctica to the future impact that Antarctic will have on our lives as the Planet continues to warm. The course will be a personal account, drawing on the more than 30 expeditions Gary Wilson has participated in and led to Antarctica and the Sub Antarctic and his many roles representing New Zealand on the international bodies that govern Antarctica and direct the international scientific effort.

All applications must be received by **Thursday 8 February 2018.** You will receive a response to your application by Monday 19 February.

Please contact the U3A Board Secretary (<u>info@u3adunedin.org.nz</u>, 453 4721) with any queries.

## Antarctica and the Southern Ocean

History, science and the future

The presenter of this course is Professor Gary Wilson, Department of Marine Science, University of Otago.

Gary's research interests lie in the general area of marine geology and the marine geological record of ocean and climate change. Specific focuses of his research include:

- Antarctica's role in the evolving global ocean and climate system
- New Zealand ocean and climate response to changing forcing agents (both internal such as atmospheric carbon dioxide and ocean current reorganisation, and external such as changes in the earth's orbital parameters)
- Records of change in marine sediment cores, and the application of paleomagnetic and physical properties methods to dating and correlation and as proxies for environmental change.

Gary's influence on internationally collaborative Antarctic research was acknowledged with a Sir Peter Blake Leadership Award in 2006 for his role in bringing together the multinational team for the ANDRILL (Antarctic Geological Drilling) project, which he chaired between 2004 and 2009.

6 March	<i>Remnants of a Supercontinent</i> – geological connections between the Southern Hemisphere Continents
13 March	<i>Te korowai huku ki te tonga "the icy cloak of the south</i> " – ice sheets, glaciers, ice shelves and sea-ice
20 March	<i>Islands in the current</i> – the Southern Ocean and the Subantarctic Islands
27 March	<i>Discovery and Heroes</i> – from Borchgrevink (1899) to Hillary (1957)
10 April	An enduring Treaty - Governing Antarctica
17 April	<i>The challenge of a warming planet</i> – melting ice and rising sea level