



GEOS3136: Applied Marine Science

SESSION 2 2020 - 70 PACE ACTIVITY HOURS



- Combine theory with practice as you work as a team on a research-based activity with your partner organisation, while enhancing your C.V. and professional experience
- Hear from guest speakers so you can reflect on your studies and clarify your career goals
- No matter what stage you are at in life or career, this unit enhances professional pursuits

BACHELOR OF MARINE SCIENCE ALUMNUS VIDEO

[See how PACE influenced Ben's dream of exploring the world's oceans](#)

HOW DOES THE UNIT WORK?

PACE units combine theory-based curriculum with practical experience (PACE activity). This unit is particularly concerned with giving you a chance to collaborate with others in order to explore a current marine issue. You must undertake all curriculum (e.g. workshops/lessons and assessment) and the PACE activity in order to be eligible to complete the unit.

To find out more about GEOS3136 and eligibility requirements visit the [Handbook](#).

HOW DO I FIND MY PACE ACTIVITY?

All GEOS3136 PACE activities will be made available to you through the unit.

You can express an interest for your preferred GEOS3136 activity through iParticipate (a system you will be given access to once enrolled).

The Unit Convenor will finalise the allocation of students to teams and activities.

PACE-SPECIFIC TIMELINES

GEOS3136 Timelines (see Unit Guide for academic dates)

Key dates	Activity information
ASAP	Plan ahead and prepare to enrol in GEOS3136 to maximise outcomes
Week 1 of session	You will be allocated to a team and partner organisation
Ongoing	<ul style="list-style-type: none"> • Throughout the session - spend time reflecting on your PACE activity experiences and the unit curriculum in preparation for completing assessments. • Regular engagement with your partner organisation will depend on what you and the host supervisor have negotiated. • Students should manage and plan carefully so they can meet their other commitments (e.g. part-time work or other university studies).

GEOS3136 STUDENT TESTIMONIAL

"I worked on samples from an International Ocean Discovery Program (IODP) voyage that collected sediment cores from locations along the east coast of Australia. My PACE activity focused on conducting a range of experiments to look at the presence of Rare Earth Elements in ocean sediments to understand more about ocean cycling. These included using a Mastersizer to assess the different grain sizes of the sediment sample and an X-Ray Diffractometre to extract data about the minerals present in a sample. I also was able to be a part of the process of writing up and submitting a scientific journal article which has now been published in the Frontiers in Marine Science journal.

This experience really helped me to understand what is involved with doing research; like ways to effectively collect data, how to collaborate with people and what is involved in writing up results into a journal ready submission. I also learnt how to use some new and exciting pieces of equipment! But most of all, this experience highlighted to me that I have a love for researching and want to understand more about the marine environment!"

MEG TRETHEWY, B.MarSci

IS RECOGNITION OF PRIOR LEARNING (RPL) POSSIBLE?

As per the University's RPL Policy, if you can evidence prior achievement of the [Academic Senate's criteria for PACE units](#) then RPL for PACE might be possible. Acknowledgement of past or current employment alone is not sufficient for this purpose; however, evidence could include demonstration of achieving core PACE criteria through experiential learning that has occurred as part of that employment, or successful completion of a PACE-like unit elsewhere.

Refer to the PACE-specific information in the University's [RPL Policy](#) for more detail. Information on how to apply can be found [here](#).

ANYTHING ELSE I NEED TO KNOW?

STUDENT UNDERTAKING

Once enrolled, you will be asked to agree to your Roles and Responsibilities and provide emergency contact details via a Student Undertaking form in iParticipate. Doing this and receiving approval for your PACE activity are necessary before you can start your PACE activity.

BACKGROUND CHECKS (WWCC, POLICE CHECK, HEALTH CHECK ETC.)

Some PACE activities require background checks before you commence such as Working With Children Check, National Police Check etc. The checks necessary (if any) will depend on your activity and the requirements of your partner organisation.

REASONABLE ADJUSTMENTS

PACE activities are available to ALL undergraduate Macquarie students regardless of their personal circumstances. Students are encouraged to disclose and discuss any personal circumstances which may impact on their ability to complete a PACE Activity before selection or allocation of PACE Activities is finalised. For more information refer to the [PACE Activity Management Procedure](#) and the [Student Disability Support Policy](#).

Refer to our [reasonable adjustments video](#) for more information.

PACE AND ETHICAL PRACTICE

Ethical practice features heavily in PACE and involves negotiating the ethical complexities of the context in which you are working, engaging in activities in an ethical manner, and ethical partnerships. Students should not undertake a PACE activity that would cause a conflict of interest (e.g. with a current employer). Please advise the Unit Convenor as soon as any ethical concerns (including conflict of interest) arise.

PACEWISE

Re-visit [PACEWISE](#) to find out more about:

- Great hints on how to present yourself professionally
- The Judyth Sachs Prize
- PACE Equity and Travel grants
- Your Roles and Responsibilities
- Your Work Health and Safety

INTELLECTUAL PROPERTY RIGHTS

It is possible that a PACE activity might result in the creation of intellectual property (IP). IP is a term that describes the application of the mind to develop something new or original. IP may exist in various forms, such as a new invention, brand, design, software program or artistic creation.

Discussion about this should occur with your partner organisation at the start of the session. You might even be asked to sign an IP agreement. Note: IP generated by students with substantial use of partner organisation resources and input (e.g. the initial problem for which a solution is being developed) will normally be required to be assigned to the partner organisation.

If you are uncertain about your rights, speak with your Unit Convenor or Faculty PACE team. The University does not provide students with legal advice in respect of IP creation, ownership or rights of use and recommends students obtain independent legal advice before signing an IP agreement. The University has developed a draft agreement that could be used by students and partners to assign IP and this is available through your Unit Convenor.

For further advice you can contact the Office of Commercialisation and Innovation by emailing commercialisation@mq.edu.au

FIELDWORK

Not all GEOS3136 activities involve fieldwork, however, in some cases it is an essential part of the project. It is important to clarify up front with the partner organisation if fieldwork will be necessary. Fieldwork-based activities are undertaken in collaboration with a partner and are conducted on a site in the natural and/or built environment in order to collect data (e.g. soil samples, asking questions of humans, documenting information about animals, etc.) for the purposes of informing a study about that environment or site. If fieldwork involves any sample testing or analysis and there is a cost involved, you should confirm who will pay for any associated expenses beforehand, so that this is not expected of your group.

Fieldwork may be led by students as the discipline experts; however, it requires supervision by an appropriately qualified Macquarie University staff or external partner. If your activity will involve fieldwork, consult with GEOS3136 teaching staff regarding any additional WHS and risk procedures that might be necessary. All fieldwork must be officially approved by relevant staff before it commences.



HOW CAN I FIND OUT MORE INFORMATION?

For questions specific to the academic requirements of GEOS3136 contact the Unit Convenor.

For all other enquiries about GEOS3136, contact the Faculty of Science and Engineering PACE team:

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