ENVS304 Integrated Climate Change

UNIT GUIDE FOR PARTNERS - SESSION 2 (AUG-NOV) - 80 HRS

ENVS304 Integrated Climate Science students have a broad understanding of climate and atmospheric science and are able to work with data sets to apply statistical analysis, graphing, presentation of data plus more.

WHAT IS ENVS304?

ENVS304 is a 80 hour Professional and Community Engagement (PACE) activity for students nearing completion of their degree majoring in Climate Science.

HOW DOES AN ENVS304 ACTIVITY WORK?

Partners are invited to submit an activity to the Faculty of Science and Engineering PACE office which is then assessed for its suitability to meet the learning outcomes of the unit.

Once an activity is accepted the unit convenor will allocate the most suitable students to your activity. Partners are then introduced via email to their student(s) and are free to commence working with their student(s).

At the end of the session partners are invited to the student presentations and are welcome to stay to watch other presentations. Partners are welcome to contact the PACE office at any time if they require assistance during the project.

WORKING WITH ENVS304 STUDENTS

The students can apply the skills they have developed working with climate data to support policy development and critically analyse data for the purpose of understanding impact issues associated with climate change. ENVS304 students have strong oral and written communication skills.

“Working with PACE and their students on our many joint projects has been highly successful and deeply satisfying in every respect. The MEC looks forward to continuing to offer exciting and beneficial projects to Macquarie University’s engaged and enthusiastic students.”

JUDY REIZES, FOUNDING DIRECTOR
MANLY ENVIRONMENT CENTRE (MEC)

“The student was hard working, confident and a welcome addition to our team. I would be happy to recommend the student to any prospective employer”

- OFFICE OF ENVIRONMENT AND HERITAGE

“Keen group of students eager to participate. My business derived a lot of value from this program.”

-EIC ACTIVITIES

“The student was very diligent and interviewed people in a professional and competent manner. The report the student co-authored was of an excellent standard.”

- KU-RING-GAI COUNCIL

“The student did an excellent job and made a valuable contribution to the project which will be presented in New Zealand at a conference.”

- BODEKER SCIENTIFIC
**PARTNER REQUIREMENTS**
- Partners must provide a host supervisor who can commit to regular communication with the student(s) allocated to the activity.
- We ask partners to avoid submitting a critical business activity.
- All partners complete an online activity statement about the project. The activity statement formalises the placement and also requests information regarding Work Health and Safety information on laboratory work fieldwork and/or the office environment.
- Partners do not have to host their student(s) at their office as students can work on research activities on campus. However, students appreciate the opportunity to visit partner locations and gain an in depth appreciation of the working environment.
- Students can apply for travel grants to assist with the cost associated with travelling to regional remote and international partners.
- Partners will be required to complete a short questionnaire at the end of the placement about the student’s performance.

**EXAMPLES OF PAST ACTIVITIES**

**WEATHER/FORECASTING**
- Weatherzone - Created weather charts and forecasts for Australia while checking the accuracy of each region's weather icons.
- Todoroski Air Sciences - Assisted with data collection on air quality to be used in air quality models and write client reports.

**ENVIRONMENT/MANAGEMENT**
- Manly Environment Centre - Contributed to research projects such as ‘understanding the social and monetary impacts weather systems have on the community’.
- Ku-ring-gai Council - Assisted councils on analysing over 20 years of data recording the water temperature around Manly, assisted with creating projections and impacts of the trends for the Manly area and community.
- Office of Environment and Heritage - Looked at issues such as ‘the impact of climate change on NSW Alpine Regions and to local communities’.
- Energy Industries Council - Reviewed climate data to predict construction days lost due to climate variables around Australia.
- Bodeker Scientific - Contributed to developing a global numerical weather prediction and climate model for Mars.

**OPPORTUNITIES AT THE UNIVERSITY**
- MQ Department of Environment Sciences - this activity involved the collection of vegetation samples and analysing them for total mercury content.
- Macquarie University Research - Combined different data sets related to the universities Climate Science programs while improving their research methods.

*In 2017 PACE received the Australian Financial Review Higher Education Award for Employability. This prestigious award recognises higher education initiatives which have demonstrably improved student employment outcomes.*