

<<Last Updated:2023/02/14>>

## Course Schedule Information

Course Code	88A068
Semester	Fall and Winter Term
Day and Period	Thu3
Course Name (Japanese)	アジア太平洋地域の気候変動 — 科学と解決策
Room	Online
Course Name	Climate Change in Asia Pacific — Science and Solutions
Capacity	0
Course Numbering Code	88INES9U105
Required/Optional	【木曜・3限】 ※授業時間は、13:00~14:30 Online/オンライン授業
Credits	2.0
Student Year	1,2,3,4,5,6
Field	
Instructor	BARRETT BRENDAN FRANCIS DOMINIC
Course of Media Class	Applicable (Undergraduate students can include up to 60 credits in media class course as requirements for graduation.)

※About Course of Media Class

"Course of Media Class" are classes in which more than half of the classes are held in places other than classrooms by making advanced use of various media.

Undergraduate students can include up to 60 credits in media class course as requirements for graduation.

Even if this is not the case, we may hold classes using the media.

## Detailed Syllabus Information

Course Subtitle	Climate Change in Asia Pacific — Science and Solutions
Language of the Course	English
Type of Class	Lecture Subject
Course Objective	In 2022, the UN Secretary General, António Guterres, described the latest report from the Intergovernmental Panel on Climate Change (IPCC) as "code red for humanity." This suggests that the world is facing a climate emergency and that urgent measures are required to reduce greenhouse gas emissions and to adapt to the potential impacts of climate change. In this course students will examine the causes and science behind climate change, with a particular focus on the impacts in the Asia Pacific region. Working with experts from a network of partner universities in the region, students will also explore potential solutions in terms of effective measures to deal with sea level rise, coral reef conservation, transition to renewable energy, promotion of low carbon economic and urban development, and so on. This multi-disciplinary, videoconference enabled (using Zoom) collaborative course, provides a unique opportunity for students to interact with their peers, scientists, and experts from across the Asia Pacific and to engage in conversations on how we can collectively respond to the climate crisis.
Learning Goals	The learning objectives for this course involve exploring the impacts and responses to climate change in the context of the Asia/Pacific region. As a result of this class, students will develop competencies in: <ul style="list-style-type: none"> <li>• current and expected climate change impacts;</li> <li>• understanding of a wide array of short, medium and long-term climate change adaptation measures;</li> <li>• understanding of greenhouse gas reduction strategies from a multi-country and regional perspective.</li> <li>• ability to identify some major social and economic challenges facing the Asia Pacific region in the context of climate change.</li> </ul>

	<ul style="list-style-type: none"> <li>• understanding of system-wide and individual approaches to making a low carbon transition.</li> <li>• and critically analyse popular science communication in a variety of real-world settings.</li> </ul>
<b>Requirement / Prerequisite</b>	This course requires that the students have good English communication skills (no need for English language test scores). Students are welcomed to take this course to improve their English skills and as such students from diverse fields of studies are encouraged to take the course. There are no restrictions.
<b>Class Plan</b>	<p>Session 1: Course Introduction - Climate Science and Expected Impacts</p> <p>Session 2: Student Breakout Session - Measuring Carbon Footprints</p> <p>Session 3: Climate Change and Food Security</p> <p>Session 4: Climate Change, Sea Level Rise, and Coral Reefs</p> <p>Session 5: Australian Bushfires of 2019/2020</p> <p>Session 6: Carbon Neutral Hawaii by 2045</p> <p>Session 7: Renewable Energy in Samoa</p> <p>Session 8: Student Breakout Session - 1.5C Lifestyles</p> <p>Session 9: Net Zero Carbon and 100% Renewable Japan</p> <p>Session 10: Student presentations (Pecha Kucha)</p> <p>Session 11: Accelerating Decarbonization</p> <p>Session 12: CDP and Recent Global Trends on Climate Change</p> <p>Session 13: Challenges and opportunities towards China's carbon neutrality</p> <p>Session 14: Eco-Tourism and SDGs</p> <p>Session 15: Energy Security in Europe and Japan</p>
<b>Independent Study Outside of Class</b>	
<b>Textbooks</b>	
<b>Reference</b>	A recommended reading list will be provided at the start of the course.
<b>Grading Policy</b>	<p>The grading policy is as follows:</p> <p>Class Participation - 10% (Attendance &amp; Contribution to Cross-Institution Collaboration)</p> <p>Individual Carbon Transitioning Discussion 20%</p> <p>1.5C lifestyles Discussion 20%</p> <p>Pecha Kucha Presentation 30%</p> <p>Report 20%</p>
<b>Attendance and Student Conduct Policy*</b>	This course requires class participation and engaged discussion. As this year's course will be held entirely virtually and students are expected to attend all sessions, unless there are special circumstances in which case students should inform the course coordinator in advance.
<b>Other Remarks</b>	There are five assignments for this course. These include (1) class participation and engagement. There are several online breakout sessions where students are expected to engage in discussion with their peers. (2) Students will measure their carbon footprints and share this information in a breakout session. They will write a brief reflection report on the outcome of their discussions. (3) Students will review a report on 1.5C lifestyles and share their views in a breakout session, followed by the completion of a reflection report. (4) Students will make a presentation about a climate related topic and (5) students will prepare a short report about their research topic.
<b>Special Note</b>	This class was an early pioneer of synchronous distance learning. In the period from 2003 to 2021 over 1,500 students have successfully completed the course. With the COVID-19 pandemic the course moved to an entirely virtual mode of delivery. The course is designed to encourage extensive interaction between the students from the participating universities through the use of break-out sessions.
<b>Office Hour</b>	

<b>Keywords</b>	
<b>Messages to Prospective Students</b>	Please note that classes will run from 13.00 to 14.30 (not the normal class time of 13.30 to 15.00 for Osaka University) in order to allow participation of students from our partner universities in the United States, Samoa and Japan.
<b>Course conducted by instructors with practical experience</b>	Co-instructors of this course include: Makena Coffman, Professor, Urban And Regional Planning, University of Hawaii Faainu Latu, Head of the Science Department, National University of Samoa Hiroshi Ohta, Professor, School of International Liberal Studies, Waseda University Felipe Sandoval, Assistant Professor, Faculty of Medicine, University of Tsukuba

## Instructor(s)

<b>Instructor Name</b>	<b>Name (hiragana)</b>	<b>Affiliation, Title, Course</b>	<b>Office</b>	<b>Extension</b>	<b>E-mail</b>
Brendan FD Barrett	ブレンダン・FD・バレット	Centre for Global Initiatives, Professor			brendan.barrett@cscd.osaka-u.ac.jp

### Cautions for Students

※出欠席及び受講に関するルール：令和5年度以降のシラバス項目 / \*Attendance and Student Conduct Policy: field available from FY2023