GEOS1110

The Habitable Planet

Session 1, Weekday attendance, North Ryde 2020

Department of Earth and Environmental Sciences

Contents

General Information

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Credit points
10

Prerequisites

Corequisites

Co-badged status

Unit description
The Earth is a dynamic system that has evolved into a habitable planet. This unit will explore the origins and workings of the solid earth, the surface oceans and land masses, and the biosphere, and investigates how climate change is making this planet more and more uninhabitable. You will gain an understanding of the Earth's internal structure and tectonic processes (earthquakes, volcanism and plate movements), landforms, surface processes and the role of the biosphere. Models for the genesis of life are considered and patterns of evolution and extinction are traced through fossils and other evidence. The role of the atmospheric system and climate change are integrated with surface and interior processes, and interactions (for example, between landscape and climate, atmosphere and life, plate movements and landforms) are examined to develop a unified model of the global system. The unit culminates in considering the role of natural hazards in Earth's habitability, and by introducing the concept of the Anthropocene as a way of thinking about Earth's future and the future of humans. This is a unit recommended for all environmental scientists, geologists, geographers, biologists and others seeking an integrated view of Planet Earth.

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

Learning Outcomes

On successful completion of this unit, you will be able to:

ULO1: Apply knowledge of how our planet works and how its major components interact, to evaluate Earth and its processes, and draw meaningful conclusions about them

ULO2: Demonstrate and evaluate a wide range of scientific methods and apply these in the use and synthesis of available information on scientific problems

ULO3: Demonstrate critical thinking in your reading and interpretation of the literature, and in drawing original inferences from scientific papers.

ULO4: Apply Earth and environmental knowledge to environmental issues, and develop means of synthesising and presenting data in a creative way

ULO5: Display independent, team and communication skills, and active engagement in the learning process

Assessment Tasks

Coronavirus (COVID-19) Update

Assessment details are no longer provided here as a result of changes due to the Coronavirus (COVID-19) pandemic.

Students should consult iLearn for revised unit information.

Find out more about the Coronavirus (COVID-19) and potential impacts on staff and students

General Assessment Information

General Assessment Information

Assessment Criteria

Assessment at Macquarie University is standards-based, as outlined in the Assessment Policy. This means that your work will be assessed against clear criteria, and these criteria will be made available when the assessment tasks are released to you on iLearn.

Submission of Assessments

Your two major assignments must be submitted online through Turnitin. Links for the submission of each assignment will be available on iLearn. Your quizzes are to be completed on iLearn, and your exam must be sat in person during the formal examination period. The due dates for all assessment tasks are not negotiable. If you have commitments that will significantly impact your study during the session then you must plan for this in advance as part of an effective individual study plan and you may need to contact the unit convenor for advice.

Hurdle Requirement

A hurdle requirement is an activity for which a minimum level of performance or participation is a condition of passing the unit (see the Assessment Policy). ***In this unit, the hurdle requirement is that each student attends and satisfactorily completes ten (10) out of the thirteen (13) practical classes offered***, ***and also completes ten (10) out of the thirteen (13) weekly quizzes***. For internal students this means attending and fully completing your scheduled classes and quizzes each week. For external students, the hurdle is the same but your practical classes will be held during two on-campus sessions and online. Failure to meet the hurdle requirement will result in failure of the unit.

Marking of Assessments

Your two major assignments will be marked through Turnitin and feedback will be noted on the assignment. ***Do not*** submit your assignments via email or in hard copy. Your grades will be returned using the Grades Report on iLearn. Grades from your quizzes and the exam will also be made available on iLearn.

Due to the large number of students in the unit (>250), we aim to return your assignments with feedback within three to four weeks of the date that you submit your assignment, and before your next assignment is due. We appreciate your patience and will advise you through iLearn when your marked assignments and feedback are available for viewing.

Penalties for Late Assessments

The penalty for late submission of assessments in this unit is ***ten percent (10 %) of the***

assessment value per day, calculated from the due time and date. This means that if the assignment is worth a total of 30 marks (or 30 % of the unit) you will lose 3 marks for each day late. This is a hefty penalty designed to make you aware of the importance of organising yourself around assessment due dates. The penalty will be applied over weekdays and weekends unless you have been granted an extension by the lecturer responsible for the assignment prior to the due date.

Extensions for Assessments

To obtain an extension for an assessment task, you will need to follow the formal process as outlined in the Special Consideration Policy, and you must provide appropriate supporting documentation (e.g. medical certificate - see advice for Special Consideration requests). The final decision regarding the granting of an extension and/or a late penalty lies with the unit convenor/lecturer responsible for the assignment. Permission for extension must be sought ***well before the due date*** unless this is absolutely impossible. Let us know of problems in advance or as soon as possible, not after the event: we are likely to be much more sympathetic and flexible in our requirements if you follow this advice.

Exams

Details of exam conditions and timetables can be found at the Exams and Results portal. It is very important to note that the final exam period includes weekdays and weekends and all students (including international exchange students) are expected to present themselves for the exam at the time and place designated in the exam timetable. The timetable will be available in Draft form approximately eight weeks before the commencement of the exams and in Final form four weeks before the commencement of exams.

For unavoidable disruptions during exams, you should apply for Special Consideration as soon as possible. If a Supplementary Examination is granted as a result of the Special Consideration process, the exam time will be scheduled ***after the conclusion of the official examination period*** and you will receive an individual notification one week prior to the exam with the exact date and time of the Supplementary Examination. Note that ***it is Macquarie University policy not to set early examinations*** - all students are expected to ensure that they are available until the final day of the official examination period. You are required to download your room and seat number from the exam website before the exam.

Delivery and Resources

Coronavirus (COVID-19) Update

Any references to on-campus delivery below may no longer be relevant due to COVID-19.

Please check here for updated delivery information: https://ask.mq.edu.au/account/pub/display/unit_status

LECTURES

- There are two 1 hour lectures each week. These are on Wednesday 10am, and

Thursday, 3pm, location and time timetabled. You need to attend both, but they will also be live streamed through Echo 360.

- Both lectures each week will also be recorded by Echo 360 for iLecture (links from iLearn). We strongly suggest that you use this as a revision aid, our experience is that internal students benefit greatly from attendance at the live lectures.

PRACTICALS

- There is a one 2 hour practical each week. Practicals are in E5A 250. There are 6 possible practical classes. The timetable for the classes can be found on the University web site at: http://www.timetables.mq.edu.au/
- It is compulsory that all students participate in all the practicals, you will be given a weekly participation pass. Failure to participate in less than 10/13 practicals will result in a fail grade. Read practical notes prior to weekly practical; attend all practicals and participate.
- **Practicals and lectures start in Week 1** (week starting 24th Feb), please come along, it is important to start straight away!
- You may not change practical classes once session 1 begins unless you have **email permission** from the unit convenor.
- It is an assessment requirement of this unit that all students attend practical classes. The practicals are assessed by an at home multiple choice quiz every week. If you have a valid reason for missing a practical (medical or personal with some documentation) then you will need to attend another practical later in the week or attend the missed practical in the on-campus session.

READING

- Read from the textbook and other sources listed in this unit guide and also research your own sources using the library databases. If you do not know how to do this please attend the library tour or training classes

ASSESSMENTS

- Two assessments are required (see Assessment tasks in handout) the workload for these is likely to vary from week to week, with some weeks being more than the average of the overall workload for these and some being less - overall 48 hrs. The method of submission also varies for some of these assessments - make sure you read the submission instructions carefully in: *Assessments: submission and grading*

QUIZZES AND TESTS

- A weekly True/False and assessed practical quizze to be completed at home (online) each week - requires at least 1 hour a week

EXAM

- Private study for the final exam will vary from week to week, with some weeks being more than the average of the overall workload for these and some being less - overall 7 hrs

TECHNOLOGIES USED AND REQUIRED

GEOS1110: ILEARN and ILECTURE (ECHO 360)

The iLearn web page for this unit can be accessed from here: http://ilearn.mq.edu.au

A link in here leads you to the iLecture content for Geos1110.

Accessing the Web Site: Usernames and passwords

Usernames

Your iLearn username will be your standard Macquarie **Student OneID Number** (an 8-digit number found on your Campus Card).

Open University Australia students will find your **Student OneID Number** in the Confirmation of Enrolment letter included with your Macquarie study package.

Passwords

You will use your OneID password for your iLearn online units.

When you have finished using the web site you must **log out**, or **exit** or **quit** your browser. To log out of iLearn, click the 'logout' link near the top right of the screen. If you don't log out, or exit or quit your browser, other people can continue to use your account which means they can use your mail, discussions and other course tools.

iLearn Communication Tools

The unit iLearn page includes three messaging tools, the Announcements tool, the Discussions forum and the Dialogue tool. In the Announcements Forum, the teaching staff will make unit-wide announcements. These will mostly concern administrative matters (Please note: Students cannot post in this forum). All participants are subscribed to this forum and will automatically receive email notification of these important announcements. The Discussions forum is used for messages that either everyone enrolled or selected groups in an online unit can read. Students and lecturers can post and reply to these messages. The Dialogue tool is used for private messages between you, your lecturer and students in a unit. It is suggested that you check for new discussion and mail messages at least once a week.

Required and recommended texts and/or materials

· The prescribed textbook for the unit is:

GEOS1110: The Planet Earth - compiled by Dr Kira Westaway - Pearson

This textbook has been specially compiled by Pearson publishers for this unit and may be purchased from them as either an ebook or as a hard copy. The ebook version is available from Pearson printing via this link: https://www.pearson.com.au/9780655702382. The Co-op Bookshop will stock the hard copy, together with the GEOS1110 Practical Manual. It is essential that you purchase these before or during the first week of session.

It is also essential that you spend some time becoming familiar with the textbook - the index, glossary and layout, at the beginning of the unit. It covers most of the aspects we shall be studying, some in greater detail than is required. Thus, you should read the sections which are related to the lecture and practical material covered each week. You need to use your own initiative to pick out the appropriate parts, and hopefully you will find it of interest to read "around" these parts as well.

· The prescribed unit material is the:

GEOS1110 Practical Manual.

It may be purchased from the Co-op Bookshop. It is essential that you purchase this **before or during** the first week of session.

· You should find the following recommended textbooks helpful for reference. They should provide useful supportive material to the lectures and practicals, and supplement the prescribed textbook. Most or all of them should be available in the "Reserve" section of the Library.

Christopherson R. W. 2005. *Geosystems: An Introduction to Physical Geography* (5th edition). Pearson Prentice Hall, Upper Saddle River.

Cowen R. 2005. *History of Life* (4th edition). Blackwell Scientific Publications, Boston.

Cox C. B. & Moore P. D. 2005. *Biogeography: An Ecological and Evolutionary Approach* (7th edition). Blackwell Science, Malden, Ma.

Grotzinger J. P. & Press F. 2007. *Understanding Earth* (5th edition). W. H. Freeman, New York.

Hamblin W. K. & Christiansen E. H. 2004. *Earth's Dynamic Systems* (10th edition). Prentice Hall, Pearson Education, Upper Saddle River.

Monroe J. S. & Wicander R. 2005. *Physical Geology: Exploring the Earth* (5th edition). Brooks/ Cole-Thomson Learning, Pacific Grove.

Montgomery C.W. 1993. *Physical Geology* (3rd edition). Wm. C. Brown, Dubuque.

Open University. 1989. *Ocean Chemistry and Deep-Sea Sediments*. Pergamon Press, Oxford.

Parry M., Canziani O., Palutikof J., van der Linden P. & Hanson C. eds. 2007. *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press, Cambridge.

Prothero D. R. 2004. *Bringing Fossils to Life. An Introduction to Paleobiology* (2nd edition). McGraw-Hill, Boston.

Skinner B.J., Porter S.C., Botkin D.B., 1999.*The Blue Planet: an introduction to earth system science*. J. Wiley, New York

Skinner B. J., Porter S. C. & Park J. 2004. *Dynamic Earth: An Introduction to Physical Geology* (5th edition). Wiley, Hoboken.

Solomon S., Qin D., Manning M., Marquis M., Averyt K., Tignor M. M. B., Miller Jr H. L. & Chen Z. eds. 2007. *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press, Cambridge.

Sturman A. P. & Tapper N. J. 2006. *The Weather and Climate of Australia and New Zealand* (2nd edition). Oxford University Press, Melbourne.

Tarbuck E. J. & Lutgens F. K. 2005. *Earth: An Introduction to Physical Geology* (8th edition). Pearson/Prentice Hall, Upper Saddle River.

Taylor P. D. ed. 2004. *Extinctions in the History of Life*. Cambridge University Press, Cambridge, U.K.; New York.

The Library

Because of the large number of students enrolled in this unit, the facilities and materials of the Library will be fully extended. For your own sake and for others please do not leave your use of these facilities until the last minute. The Library is open for very liberal hours (day, evening and weekends) so there should be plenty of opportunity to find materials. When borrowing books, please return them quickly so that others also have access to them. It is extremely important that you become an efficient library user. Find out quickly how it works and organise your time properly. Do not assume you know how to use the Library and do not be embarrassed about asking. Library tours and Library staff are freely available for your consultation.

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- Academic Appeals Policy
- Academic Integrity Policy
- Academic Progression Policy
- Assessment Policy
- Fitness to Practice Procedure
- Grade Appeal Policy
- Complaint Management Procedure for Students and Members of the Public
- Special Consideration Policy *(**Note:** The Special Consideration Policy is effective from 4 December 2017 and replaces the Disruption to Studies Policy.)*

Students seeking more policy resources can visit the Student Policy Gateway (https://students.mq.edu.au/support/study/student-policy-gateway). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

If you would like to see all the policies relevant to Learning and Teaching visit Policy Central (https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central).

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/study/getting-started/student-conduct

Results

Results published on platform other than eStudent, (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in eStudent. For more information visit ask.mq.edu.au or if you are a Global MBA student contact globalmba.support@mq.edu.au

Student Support

Macquarie University provides a range of support services for students. For details, visit http://students.mq.edu.au/support/

Learning Skills

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to help you improve your marks and take control of your study.

- Getting help with your assignment
- Workshops
- StudyWise
- Academic Integrity Module

The Library provides online and face to face support to help you find and use relevant information resources.

- Subject and Research Guides
- Ask a Librarian

Student Services and Support

Students with a disability are encouraged to contact the Disability Service who can provide appropriate help with any issues that arise during their studies.

Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

If you are a Global MBA student contact globalmba.support@mq.edu.au

IT Help

For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the Acceptable Use of IT Resources Policy. The policy applies to all who connect to the MQ network including students.