Course Title : Blue Planet
Course Code : CLD9027
Recommended Study Year* : Any
No. of Credits/Term : 3
Mode of Tuition : Sectional
Class Contact Hours : Two 1.5-hour sections per week
Category : Science, Technology and Society Cluster
Discipline* : (if applicable)
Prerequisite(s) : Nil
Co-requisite(s) : Nil
Exclusion(s) : Nil
Exemption Requirement(s) : Nil

Brief Course Description :
This course provides students a basic understanding of the Earth and its four main components: the atmosphere, hydrosphere, lithosphere and biosphere. The course comprises a series of 3-hour lecture and discussion sessions. Field trips and/or museum visits will be arranged during week 5 to week 8. The lecture will begin with the introduction of the Earth System and the Earth. Topics include: Weather, Climate, EI Nino, Global Warming; Groundwater Contamination, Eutrophication, Coastal System; Earth's Origin, Plate Tectonics, Volcanism, Earthquakes; Ecosystems, Evolution and Extinction. In addition, Human Interactions with the Earth will also be examined. Other learning activities include movie appreciation, case studies, media reviews, field trips, museum visits and group discussions.

Aims :
This course aims to provide students a basic understanding of the Earth and to obtain an understanding of the future of our planet. This course is also designed to enhance the students' awareness about the human impact on the Earth. After this course, students are supposed to develop the skill of "Think Big", i.e., think both in big time scale and in big space scale, just like geologists do.

Learning Outcomes# :
Upon completion of this course, students will be able to:
- Define and discuss the Earth System and their dynamic interactive processes
- Describe the Earth System processes in natural field environments
- Evaluate how natural and anthropogenic processes and activities can shape our planet
- Apply skills of "Think Big" and critical thinking in their academic and personal life

Indicative Content :
- Introduction to the Earth System and the Earth
- Topics of Atmosphere include: Weather, Climate, Green House Effect, Ozone, EI Nino, Global Warming
- Topics of Hydrosphere include: Surface- and Groundwater, Oceans and Water Cycle, Groundwater Contamination, Eutrophication, Coastal System
- Topics of Lithosphere include: Earth's Origin, Minerals and Rocks, Plate Tectonics, Volcanism, Earthquakes, Surface Processes
- Topics of Biosphere include: Ecosystems, Evolution and Extinction, Biomes
- Evolution of the Dynamic Earth System
- Human Interactions with the Earth

Teaching Method :
Three hours of lecture and group discussion sessions involving movie appreciation, case studies, media reviews, field trips, museum visits and group discussions.

Measurement of Learning Outcomes[#]:

Assessment Method	Class participation	Assignments	Mid-term quiz
Define the Earth System and their dynamic interactive processes	X	X	X
Describe the Earth System processes in natural field environments	X	X	
Evaluate how natural and anthropogenic processes and activities can shape our planet	X	X	X
Apply skills of "Think Big" and critical thinking in their academic and personal life	X	X	X

Assessment :
Class participation 15%
Assignments 50%
Mid-term quiz 35%

Required/Essential Readings:
Skinner B.J and Murck B.W, *The Blue Planet: an introduction to earth system science*, 3rd edition, Hoboken, NJ : Wiley, 2011
Murphy, B, Nance D, Brown P, (Philip E) and Dunning J, *Earth Science Today,* Pacific Grove, Calif.: Brooks/Cole, 1999

Recommended/Supplementary Readings:
Additional readings and scientific papers will be uploaded on Moodle in due course.

Important Notes

1. Students are expected to spend a total of 9 hours (i.e. 3 hours of class contact and 6 hours of personal study) per week to achieve the course learning outcomes.
2. Students shall be aware of the University regulations about dishonest practice in course work, tests and examinations, and the possible consequences as stipulated in the Regulations Governing University Examinations (http://www.ln.edu.hk/reg/docs/arue.pdf). In particular, plagiarism, being a kind of dishonest practice, is "the presentation of another person's work without proper acknowledgement of the source, including exact phrases, or summarised ideas, or even footnotes/citations, whether protected by copyright or not, as the student's own work". Students are required to strictly follow university regulations governing academic integrity and honesty. Plagiarism (unattributed copying) will be heavily penalized and may attract zero mark and disciplinary action.
3. Students are required to submit writing assignment(s) using Turnitin.
4. To enhance students' understanding of plagiarism, a mini-course "Online Tutorial on Plagiarism Awareness" is available on https://pla.ln.edu.hk/.

Assessment Rubrics

Class Participation

Criteria	**Excellent (A, A-)**	**Good (B+, B, B-)**	**Fair (C+,C,C-)**	**Poor (D+, D, F)**
Class participation (50%)	Participates regularly and enthusiastically	Participates now and then	Participates only when asked by the instructor	Participation is nil or almost nil
Expression (50%)	Expression of ideas or opinions is consistently factually accurate, logical and clear	Expression of ideas or opinions is generally factually accurate, logical and clear. Lapses were rare and minor in nature	Expression of ideas or opinions is generally factually accurate, logical and clear, but with a number of minor lapses	Ideas or opinions are not expressed logically, and are characterized by significant factual inaccuracies and lack of clarity

Assignment

	Excellent (A, A-)	**Good (B+, B, B-)**	**Fair (C+, C, C-)**	**Poor (D+, D, F)**
Completeness (10%)	Completes the entire assignment Follows instructions completely	Completes most of the assignment Follows most of the instructions	Completes some of the assignment Follows some of the instructions	Does not address the assignment Does not follow instructions
Context (30%)	Demonstrates excellent understanding of context and audience	Demonstrates good understanding of context and audience	Demonstrates some understanding of context and audience	Does not demonstrate understanding of context and audience
Organization and Content (30%)	Includes excellent detail and full analysis of subject Organized in a thoughtful and effective manner	Includes good detail and analysis of subject Good organization	Includes fair detail and analysis of subject Fair organization, but some ideas could be expanded	Poor detail and analysis of subject Poor organization, ineffective in delivery
Communication (30%)	Uses excellent language that effectively conveys the message Contains minimal errors	Uses good language that conveys the message Contains a few errors	Uses fair language to convey the message Contains some errors	Fails to use clear language Contains excessive errors

Mid-term quiz

	Excellent (A, A-)	**Good (B+, B, B-)**	**Fair (C+, C, C-)**	**Poor (D+, D, F)**
Completeness (10%)	Answers the entire question Follows instructions completely	Answers most of the question Follows most of the instructions	Does not answer the question completely Does not follow instructions completely	Does not answer the question Does not follow instructions
Organization (30%)	Answer organized in a thoughtful and effective manner	Answer mostly organized and effective	Answer disorganized and/or ineffective in some places	Answer completely disorganized and ineffective
Content (30%)	Information accurate Correct amount of detail	Information has a minimal mistakes Good amount of detail	Information has some mistakes Fair amount of detail	Information has many mistakes Poor amount of detail
Communication (30%)	Excellent communication using writing/diagrams	Good communication using writing/diagrams	Fair communication using writing/diagrams	Poor communication using writing/diagrams