SUST 1000 Course Syllabus (Section 1)

**Course title**  
SUST 1000 – Introduction to Sustainability [3 credits]

**Time:**  
Tuesday 9:00AM – 11:50AM

**Venue:**  
Zoom meeting (link via Canvas)

**Instructor:**  
Prof. Arthur LAU (pslau@ust.hk, Room 4361)

**Office Hours:**  
Appointment by e-mail

**Teaching Associate:**  
Christine SO (egchristine@ust.hk, Room 4355)

**Course Description**

This course provides students with a holistic, interdisciplinary, evidence-based understanding of the challenge of ensuring the sustainability of humanity on a planet with limited natural and social capacities. The course introduces frameworks, approaches and key trade-offs underpinning efforts to deal with existing and emerging global issues, and considers how these problems relate to our own lifestyles.

**Intended Learning Outcomes (ILOs)**

After completing this course, students will:

1. Have a holistic appreciation of the issues relating to sustainability, including the role played by science, engineering, business, social science and the humanities in understanding these issues
2. Be able to review and evaluate sustainability issues from multiple perspectives
3. Be able to communicate balanced, evidence-based views of the issues and possible solutions
4. Be equipped with approaches and frameworks for action that can contribute to sustainable futures
5. Be able to take a considered view of their own lifestyle choices and potential to contribute to sustainability as professionals and community leaders

**Pedagogy**

This is a **blended learning course**. The main readings are provided on Canvas. Students are expected to review these online materials **prior** to each class (approx. 1 hr reading time). Additional (optional) resources are provided for further study. Actual in-class time will involve a review of the reading materials and class activities linked directly to the topics covered online.
Schedule

The course is delivered in two parts.

- **Part A** (Lecture 1 to 6) – the main features of the challenge of sustainability will be covered, including the principal impacts of human activity on the global environment and the options for managing these challenges. Students’ understanding of the issues covered in Part A will be tested in a mid-term exam.

- **Part B** (Lecture 7 to 13) – possible and preferred futures for human thriving within planetary boundaries will be explored.

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<th>Lecture</th>
<th>Date</th>
<th>Topic</th>
<th>Assessment</th>
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<td>25/02/20</td>
<td>Introduction</td>
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<td>2</td>
<td>03/03/20</td>
<td>Anthropogenic (human) impact on natural systems</td>
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<td>3</td>
<td>10/03/20</td>
<td>Planetary boundaries and Earth systems</td>
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<td>4</td>
<td>17/03/20</td>
<td>Human thriving within planetary boundaries</td>
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<td>24/03/20</td>
<td>Policy approaches for sustainability</td>
<td>Form project groups</td>
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<td>6</td>
<td>31/03/20</td>
<td>Sustainable development and sustainable communities</td>
<td>Group project worksheet #1</td>
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<td>Energy futures</td>
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<td>8</td>
<td>14/04/20</td>
<td>Futures for fresh water</td>
<td>Midterm exam 10:00 – 12:00 18 April, 2020 Group project worksheet #3</td>
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<td>21/04/20</td>
<td>Design for a circular economy</td>
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<td>28/04/20</td>
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<td>Futures thinking</td>
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<td>25/05/20</td>
<td>Reflection paper due 11:59PM 25 May 2020</td>
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Assessment

Mid-term Exam (35%)

A mid-term exam, common to all sections, covering Part A (Lecture 1-6) of the course will be scheduled on 18 April, 2020, Saturday, 10:00am – 12:00pm (venue to be confirmed). This is a 2 hours exam.

Group project (40%)

Students will work in groups and produce a video with a duration of no more than 10 minutes as a presentation of your group project. The video will present the key sustainability challenges and possible solutions for a selected region. Additional details will be made available in the coming weeks.

- Lecture 5 – finalize formation on project groups
- Lectures 6, 7, 8, 9 - part of the class will be set aside for groups to work on aspects of their project. This work will include review of assigned resources and completion of a brief worksheet. This activity accounts for 15pt of the group project grade. The best three out of four deliverables will count.
- Lecture 12 – Your video will be played in class for questions and feedbacks from your peers. This will account for 15pt of the group project grade.
- 10pt of the grade will be for peer review

Reflection paper (15%)

There will be one short (800-word) written assignment, due at the end of the Term to provide you with an opportunity to demonstrate your overall understanding of the issues covered in the course. Please look carefully at the rubric that sets out how the assignment will be evaluated. More details will be posted to the Assignment tab on the course Canvas site.

The assignment should be typed and submitted through Canvas, on time (11:59PM Mon 25 May 2020). For every day that the assignment is submitted late, 1 mark will be deducted.

Class attendance and participation (10%)

The course includes many in-class activities and discussions to facilitate students’ learning. Class participation is therefore essential not only to promote your own learning, but contribute significantly to the learning experiences of others in the class.

To encourage engagement in class activities, 10% of the grade will be given for attendance and in-class participations (proactive in discussions and activities, interactions with instructors, TAs and peers, etc). All students are encouraged to earn the full 10% for their contributions.

Attendance is hence an important prerequisite of your participation. If you foresee that you may not attend for several classes, you are strongly advised to reconsider taking the course later so that your learning experiences in the course won’t be jeopardized.