

INSTITUT ALAM SEKITAR DAN PEMBANGUNAN
UNIVERSITI KEBANGSAAN MALAYSIA

PRO-FORMA KURSUS SISWAZAH
(POST-GRADUATE COURSE SYLLABUS)
SEMESTER 2 SESI 2020/2021

1. Institut / Institute: Institut Alam Sekitar dan Pembangunan (LESTARI) / Institute for Environment and Development (LESTARI)	
2. Program: Siswazah / Post-Graduate	3. a. Kod Kursus / Course Code: JSXX6022 b. Bilangan Kredit / Credit hours: 2
4. Tajuk Kursus / Course Title: Sains Kelestarian Lanjutan / Advanced Sustainability Science	5. Tahap / Level: PhD LESTARI (Wajib / Compulsory); Others (Elektif / Elective)
6. Masa Kuliah / Lecture Time Hari / Day: Jumaat (Friday) Masa / Time: 10:00 am – 12:00 pm Bilik / Venue: Microsoft Teams / Zoom or Bilik Kuliah LESTARI / LESTARI Lecture Hall	
7. Penyelaras / Coordinator: Dr. A. Aldrie Amir (LESTARI) aldrie@ukm.edu.my, 03-89214153 Pengajar / Lecturers: 1. Dr. Ahmad Aldrie Amir 2. Prof. Madya Dr. Goh Choo Ta 3. Prof. Dr. Muhammad Rizal Razman 4. Dr. Sharina Abdul Halim 5. Prof. Madya Dr. Sarah Aziz	Urusetia / Secretariat: Pn. Noor Shafirah Ramli firaramli@ukm.edu.my; 03-89214149 aldrie@ukm.edu.my, 03-89214153 gohchoota@ukm.edu.my, 03-89217641 mrizal@ukm.edu.my, 03-89217650 sharinahalim@ukm.edu.my, 03-89217649 saziz@ukm.edu.my, 03-89214155

8. Objektif Kursus dan Hasil Pembelajaran / Course Objective and Outcome:

Pada akhir kursus, pelajar akan berupaya:

1. Mengasah kefahaman dan keupayaan pelajar (calon-calon Doktor Falsafah) untuk mengaplikasikan teori dan konsep kelestarian menerusi tugas yang diberikan;
2. Membangunkan keupayaan dan kemahiran pelajar untuk mengintegrasikan ilmu (multi-, inter- dan trans-displin) di dalam penyelidikan mereka.

At the end of the course, the students are expected to be able to:

1. Strengthen their (PhD candidates') understanding and ability to apply theory and concept of sustainability science into the given tasks and assignments;
2. Develop their ability and skills to apply integrative knowledge (multi-, inter- and trans-discipline) into their respective research.

9. Sinopsis Kursus / Course Synopsis:

Kursus ini akan memberi penjelasan lebih lanjut dan aplikasi konsep sains kelestarian menerusi lima topik iaitu; a) kedinamikan, perubahan dan kompleksiti ekosistem; b) governans kelestarian; c) cabaran kesihatan persekitaran; d) penglibatan pihak berkepentingan; dan e) hubungkait antara sains dan proses pembentukan dasar. Kursus ini juga menyediakan pentas wacana untuk memacukan pemikiran dan menzahirkan penghayatan sains kelestarian ke arah pembangunan lestari.







This course aims to provide in depth detail and application of sustainability science concept through five topics that is, a) ecosystem dynamics, change and complexity; b) governance for sustainability; c) environmental health; d) stakeholder participation; dan e) science and policy interphase. In this course, critical discussion is encouraged among students, as one of the platforms to direct thinking in translating manifestation of sustainability science concept towards achieving sustainable development.

10. Bahan Pengajaran / Teaching Materials:

Kuliah, slaid, artikel, buku, dan bahan audio-visual /
Lecture notes, slides, articles, books, and audio-visual aids.

11. Rujukan / References:

- Haider, L.J., Hentati-Sundberg, J., Giusti, M., Goodness, J., Hamann, M., Masterson, V.A., Meacham, M., Merrie, A., Ospina, D., Schill, C., Sinare, H., 2018. The interdisciplinary journey: early-career perspectives in sustainability science. *Sustainability Science* 13, 191-204.
- Kajikawa, Y., Saito, O., Takeuchi, K., 2017. Academic landscape of 10 years of sustainability science. *Sustainability Science* 12, 869-873.
- Thompson, B.S., 2018. Institutional challenges for corporate participation in payments for ecosystem services (PES): insights from Southeast Asia. *Sustainability Science* 13, 919-935.
- Wamsler, C., Brossmann, J., Hendersson, H., Kristjansdottir, R., McDonald, C., Scarampi, P., 2018. Mindfulness in sustainability science, practice, and teaching. *Sustainability Science* 13, 143-162.
- Yarime, M., 2017. Facilitating data-intensive approaches to innovation for sustainability: opportunities and challenges in building smart cities. *Sustainability Science* 12, 881-885.

<p>12. Kaedah Pengajaran dan Pembelajaran (Atas Talian) / (Online) Teaching and Learning Methods</p> <p>Kuliah / Lecture Pembentangan / Presentation Perbincangan / Discussions Penulisan / Writing</p>								
<p>13. Kaedah Penilaian / Evaluation Methods</p> <table border="0" style="width: 100%;"> <tr> <td>Quiz</td> <td style="text-align: right;">30%</td> </tr> <tr> <td>Assignment (Video)</td> <td style="text-align: right;">30%</td> </tr> <tr> <td>Assignment (Manuscript)</td> <td style="text-align: right;">40%</td> </tr> <tr> <td>Total</td> <td style="text-align: right;">100%</td> </tr> </table>	Quiz	30%	Assignment (Video)	30%	Assignment (Manuscript)	40%	Total	100%
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Total	100%							
<p>14. Tarikh-tarikh Penting / Important Dates</p> <p>Date and format for quizzes will be determined by respective lecturers for each topic using appropriate platforms. Deadline for the submission of final assignments (video and manuscript) = 30 July 2021.</p>								
<p>15. Jadual Pembelajaran / Course Outline:</p> <p>Sila rujuk muka surat 5 / Please refer to page 5.</p>								
<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>16. Disediakan oleh / Prepared by:</p> <div style="text-align: center;">  <hr style="width: 100%;"/> <p>Dr. A. Aldrie Amir (Penyelaras Kursus / Course Coordinator) Tarikh: __18 March 2021__</p> </div> </td> <td style="width: 50%; vertical-align: top;"> <p>Diperakukan oleh / Approved by:</p> <div style="text-align: center;">  <hr style="width: 100%;"/> <p>Prof. Dato' Dr. Mazlin Mokhtar (Pengerusi Jawatankuasa Pengajian Siswazah / Chairman of the Postgraduate Committee) Tarikh: __18 March 2021__</p> </div> </td> </tr> </table>	<p>16. Disediakan oleh / Prepared by:</p> <div style="text-align: center;">  <hr style="width: 100%;"/> <p>Dr. A. Aldrie Amir (Penyelaras Kursus / Course Coordinator) Tarikh: __18 March 2021__</p> </div>	<p>Diperakukan oleh / Approved by:</p> <div style="text-align: center;">  <hr style="width: 100%;"/> <p>Prof. Dato' Dr. Mazlin Mokhtar (Pengerusi Jawatankuasa Pengajian Siswazah / Chairman of the Postgraduate Committee) Tarikh: __18 March 2021__</p> </div>						
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SAINS KELESTARIAN LANJUTAN (JSXX6022)
ADVANCED SUSTAINABILITY SCIENCE (JSXX6022)

2nd Semester 2020/2021

Time: Fridays 10:00 am – 12:00 pm

Venue: Microsoft Teams / Zoom / LESTARI Lecture Hall

Course Outline

Week	Theme	Topic	Lecturer	Hours	Quiz	Date
1 - 17	Integrative Knowledge (Lectures and Discourses)	Ecosystem Dynamics, Change and Complexity	AAA	4	1	2 April 2021 9 April 2021
		Emerging Environmental Health Challenges	GCT	4	1	16 April 2021 23 April 2021
		Governance for Sustainability	MRR	4	1	30 April 2021 7 May 2021
		Stakeholder Participation and Sustainability	SAH	4	1	21 May 2021 28 May 2021
		Connecting Science to Policy Process	SAGA	4	1	4 June 2021 11 June 2021
		Interactive Discourse and Assignment Preparation	All	8	-	18 June 2021 25 June 2021 2 July 2021 9 July 2021
18	Scientific Communication (Oral and Writing)	Submission of Final Report / Manuscript (Video and Written Assignments)	-	-	-	30 July 2021

Notes: Mid-Semester Break = 8 May 2021 – 16 May 2021

Hari Raya Aidilfitri = 13 – 14 May 2021

AAA	Dr. A. Aldrie Amir (Course Coordinator)	aldrie@ukm.edu.my
GCT	Assoc. Prof. Dr. Goh Choo Ta	gohchoota@ukm.edu.my
MRR	Prof. Dr. Muhamad Rizal Razman	mrizal@ukm.edu.my
SAH	Dr. Sharina Abdul Halim	sharinahalim@ukm.edu.my
SAGA	Assoc. Prof. Dr. Sarah Aziz	saziz@ukm.edu.my