



INSTITUT ALAM SEKITAR DAN PEMBANGUNAN
UNIVERSITI KEBANGSAAN MALAYSIA

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

1. Institut: Institut Alam Sekitar dan Pembangunan (LESTARI) / Institute of Environment and Development (LESTARI)	
2. Program Pengajian: SISWAZAH/POST-GRADUATE	3. a. Kod Kursus/Course Code: JSXX6012 b. Bilangan Kredit/ Credit hours: 2
4. Tajuk Kursus: Sains Kelestarian/Sustainability Science	5. Tahap Kursus: Institut/Institute (Wajib/Compulsory); Elektif/Elective (other Institute or Faculty/Institut atau Fakulti lain)
6. Masa Kuliah/Lecture Time Hari/Day: Selasa (Tuesday) Masa/Time: 10.00am-12.00pm	Bilik/ Venue: Bilik Kuliah LESTARI
7. Penyelaras / Coordinator : Dr. Sharina Abdul Halim; Tel: 03-89217649 Email: sharinahalim@ukm.edu.my Hari/Masa Untuk Pertemuan: Pertemuan Melalui Temujanji/ Meeting by Appointment Pengajar/Lecturers: 1. Prof. Dr. Sharifah Zarina Syed Zakaria 2. Prof. Madya Dr. Saiful Arif Abdullah 3. Prof. Madya Dr. Lee Khai Ern 4. Dr. Rospidah Ghazali 5. Dr. Tanot Unjah 6. Dr. Sharina Abdul Halim	Staff-in-charge in LESTARI: Pn. Noor Shafirah Ramli Tel: 03-89214149 E-mel: firaramli@ukm.edu.my E-MEL & TEL: szarina@ukm.edu.my 03-89217644 saiful@ukm.edu.my , 03-89214144 khaiernlee@ukm.edu.my , 03-89217645 rospidah@ukm.edu.my 03-89214162 tanot-u@ukm.edu.my 03-89214717 sharinahalim@ukm.edu.my , 03-89217649

8. Objektif Kursus dan Hasil Pembelajaran:

Pada akhir kursus, pelajar akan –

1. Berupaya memahami konsep pembangunan lestari dan asas penting yang menyokong pembentukan konsep tersebut.
2. Mahir membezakan antara isu dasar alam sekitar dan kelestarian.
3. Berupaya menilai pelbagai pendekatan ke arah kelestarian.
4. Mampu menganalisa struktur, sistem dan proses untuk governans kelestarian.
5. Berupaya mengguna dan mengembeling konsep, pendekatan, kaedah dan alat untuk merekabentuk analisa bagi melaksanakan kelestarian sumber dan proses.
6. Mahir menggembelingkan kaedah konvensional sains dan sains sosial dengan kaedah integrasi kelestarian.

At the end of the course, the students are expected to –

1. *Be able to understand the concepts of sustainable development and the important fundamental that supports the formation of these concepts*
2. *Skilled in differentiating between the basic issues on environment and sustainability.*
3. *Be able to assess various approaches towards sustainability.*
4. *Be capable of analysing the structure, system and process for the governance of sustainability.*
5. *Be able to use and combine concepts, approaches, methods and tools to design the analysis to implement resource and process sustainability.*
6. *Skilled in combining the conventional methods of both hard sciences and social sciences with sustainability integration methods.*

9. Sinopsis kandungan kursus (seperti dalam buku panduan dan tambahan) / Course Synopsis:

Konsep kelestarian kini dipertimbangkan sebagai salah satu komponen utama agenda pembangunan kesejahteraan manusia dari aspek ekonomi, sosial dan alam sekitar. Kursus ini akan memberi pengertian asas tentang gagasan pembangunan lestari menerusi lima perkara asas iaitu a) evolusi sejarah pembangunan lestari dan persoalan utama yang mendasari konsep ini, b) aspek hubung kait antara alam semula jadi dan masyarakat (aktiviti) dengan transformasi masyarakat yang berorientasi kelestarian sebagai fokus utama, c) permasalahan sumber dalam proses kelestarian serta kaedah-kaedah mengolah pembangunan lestari d) pendekatan integrasi dan penggabungan ilmu untuk memahami sains kelestarian, dan e) kajian kes berorientasikan praktis dalam menterjemahkan keempat-empat perkara asas ke dalam rekayasa penyelidikan masing-masing.

Sustainability concept is currently considered as one of the main components in human development from the economic, social and environmental aspects. This course provides basic understanding on sustainable development through five main pillars a) a historical evolution of sustainable development and the main question that guides the concept, b) an interlink between environment and community with the primary focus of transforming community into a sustainable society, c) issues with resource utilisation in the process towards sustainability and to devise methods to be undertaken in achieving sustainable development, d) integration approaches and knowledge assimilation in understanding sustainability science, and e) a study on practice-oriented cases in applying the four pillars into individual researches.

10. Bahan Pengajaran/Peralatan:

Powerpoint Kuliah, bahan *audio-visual* dan Pakej Bacaan/ Lecture Notes/ Powerpoint, audio-visual aids and Reading materials

11. Bahan Rujukan / Reference Material:

- Fukuda-Parr, S. 2016. From the Millenium Development Goals to the Sustainable Development Goals: Shift in Purpose, concept and politics of global goal setting for development. *Gender & Development*, 24(1): 43-52.
- Hezri, Adnan A. 2016. *The Sustainability Shift. Refashioning Malaysia's Future*. Penang: Areca Books.
- Kliskey, A., Alessa, L., Griffith, D., Olsen, S., Williams, P., Matsaw, S....& Dengler, S. (2021). Transforming sustainability science for practice: a social-ecological systems framework for training sustainability professionals. *Sustainability Science*, 16(1): 283-294.
- Magis, K. 2020. Community Resilience: An Indicator of Social Sustainability. *Society & Natural Resources*. 23(5): 401-416.
- Pojman, L.P., Pojman, P., & McShane, K. 2017. *Environmental ethics: readings in theory and application*. Boston: Cengage Learning.
- Kattumuri, R. 2018. Sustaining natural resources in a changing environment:evidence, policy and impact. *Contemporary Social Science*, 13(1): 1-16.
- Sultan Nazrin Shah. 2019. *Striving for Inclusive Development: From Pangkor to a Modern Malaysian State*. Oxford University Press.
- Swain, R.B. & Yang-Wallentin, F. 2020. Achieving sustainable development goals: predicaments and strategies. *International Journal of Sustainable Development & World Ecology*. 27(2): 96-106.

12. Kaedah Pengajaran/Pembelajaran (kuliah, tutoran, kerja kumpulan, kerja lapangan dan lain-lain)/ Teaching/Learning Methods:

Kuliah Atas Talian/ Online Lecture
Penulisan/ Writing
Pembentangan/Presentation

13. Kaedah Penilaian /Evaluation Methods

Participation	10%
Quiz	40%
Written Assignment	30%
Assignment Presentation	20%

14. Tarikh-tarikh penting (tentatif)/ Important Dates:*

Due date for the submission of assignment- 13th July 2021

Due date for assignment presentation- 27th July 2021
Quizzes date will be fixed by the respective lectures

15. Jadual pembelajaran/Course Outline: Sila rujuk kepada ms. 5. please refer to page 5.

16. Disediakan oleh:



Dr. Sharina Abdul Halim
(Course Coordinator)

Tarikh: 15 Mac 2021

Diperakukan oleh:



Prof. Dato' ChM Dr. Mazlin bin Mokhtar
(Chair, Post Graduate Committee)

Tarikh: 24 Mac 2021

SUSTAINABILITY SCIENCE (JSXX6012)

Semester 2 2020/2021

Time: Tuesday 10.00 a.m-12.00noon

Venue: Online Microsoft Teams

Week	Topics	Lecturer	Notes
25 March	Course Briefing		
1 30 March	TOPIC 1 Introduction to Sustainable Development: History, Concept and Knowledge Dimension	SAA	Choose and select the assignment topic by week 2
2 6 April			
3 13 April	TOPIC 2 The Structure and Development of Sustainability Science as a Discipline	SAA	
4 20 April			
5 27 April	TOPIC 3 Methodology and Research Design for Sustainability Science	LKE	Meeting the topic advisor at least for the 1 st time no later than week 5
6 4 May			
Mid Semester & Hari Raya Aidilfitri 8 May ~ 16 May 2021			
7 18 May	TOPIC 4 Environmental Ethics and Value	SZSZ	
8 25 May	TOPIC 4 Environmental Ethics and Value	SZSZ	
9 1 June	TOPIC 5 Society and Sustainability	SAH	
10 8 June			
11 15 June	TOPIC 6 Economic Development and Sustainability	RBG	Meeting the topic advisor at least for the 2 nd time no later than week 13
12 22 June			
13 29 June	TOPIC 7 Sustainable Natural Resources Management	TU	
14 6 July			
15 13 July	Assignment Submission	ALL	Examination week 12 July ~ 30 July
16 27 July	Assignment Presentation	ALL	

SZSZ	-	Prof. Dr. Sharifah Zarina Syed Zakaria
SAA	-	Prof. Madya Dr. Saiful Arif Abdullah
LKE	-	Prof. Madya Dr. Lee Khai Ern
RBG	-	Dr. Rospidah Ghazali
TU	-	Dr. Tanot Unjah
SAH	-	Dr. Sharina Abdul Halim (Course Coordinator)