UNIVERSITI TEKNOLOGI MARA

SPP651: INTRODUCTION TO ASTRONOMY AND MODERN PHYSICS

Course Name (English)	INTRODUCTION TO ASTRONOMY AND MODERN PHYSICS APPROVED
Course Code	SPP651
MQF Credit	3
Course Description	The purpose of this course is to provide educators especially for primary school teacher with basic concept of astronomy and space exploration and also the basic concepts of radioactive. Major areas to be covered in Astronomy include the Universe, Exploring the Solar System, Galaxies, the Sun, the Moon, the Stars and The planets. For minor area, basic concepts of radioactivity will be discussed in the last chapter. The focus of the course will be on developing conceptual understanding, discussion and activity based learning. Students will be given an opportunity to explain, analyze, or summarize their acquired skills through self-test at the end of the chapters. Several teaching technique is emphasized for the primary teachers to be confident whenever teaching something related to astronomy and modern physic. Greater emphasis will be placed on interpretation and understanding of concepts rather than calculation.
Transferable Skills	students will learn the basic concept of astronomy and space exploration and also the basic concepts of radioactive.
Teaching Methodologies	Lectures, Blended Learning, Tutorial, Discussion
CLO	CLO1 1. Define the universe and solar system CLO2 2. Identify the types of galaxies CLO3 3. Discuss birth and death of stars CLO4 4. Describe the phenomena occurs at sun's atmosphere CLO5 5. Identify and describe properties of the sun, moon and stars CLO6 6. Identify and describe properties of each planets CLO7 7. Define radioactivity and calculate half-life time for substance
Pre-Requisite Courses	No course recommendations

Topics
1. Chapter 1.The Universe 1.1) n/a
2. Chapter 2: Exploring the Solar System: The Sun, Moon, Stars and Earth 2.1) n/a
3. Chapter 3: Galaxies 3.1) n/a
4. Chapter 4: The Planets 4.1) n/a
5. Chapter 5: Radioactivity 5.1) n/a

Assessment Breakdown	%
Continuous Assessment	60.00%
Final Assessment	40.00%

Details of Continuous Assessment

Assessment Type	Assessment Description	% of Total Mark	CLO
Discussion	n/a	10%	CLO1 , CLO2 , CLO3 , CLO4 , CLO5 , CLO6 , CLO7
Online Quiz	n/a	10%	CLO1 , CLO2 , CLO3 , CLO4 , CLO5 , CLO6 , CLO7
Quiz	n/a	10%	CLO1 , CLO2 , CLO3
Test	n/a	30%	CLO1 , CLO2 , CLO3 , CLO4 , CLO5 , CLO6 , CLO7

Reading List	**Reference Book Resources**	• **Dinah L. Moché 2014, *Astronomy*, Turner Publishing Company [ISBN: 9781620459904]**
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	