科目ナンバリング										
授業科目 <英訳>		Introduction to General Astronomy-E2 Introduction to General Astronomy-E2					T属 理学研究科 講師 LEE, Shiu Hang			
群	自然科学科目群			分野(分類)	地球	科学(基	礎)		使用言語	英語
旧群	B群	単位数	2単位	週コマ数	1コ	1コマ :		形態 講義(対面授業科目)		
開講年度・開講期			曜時限水	7 K4		配当	配当学年 全回生		対象学	生全学向

[授業の概要・目的]

The quest to understand our origins, the origins of the universe is probably one of the oldest of human kind. In this course the latest advances in our knowledge of the universe are learned in plain language. The spatial and temporal scales of the universe and the key components (planets, stars, and galaxies, and their structures) are described in detail, and the basic techniques and logic employed in astronomical science are discussed.

[到達目標]

To obtain an overview understanding of the universe currently obtained by humankind, and to learn the basics of astronomical observations and theories employed in discoveries about the cosmos. Through the above, students will cultivate in themselves an scientific attitude which can be applied in their daily life and future career.

[授業計画と内容]

The following topics will be introduced (but not necessarily in this order):

- 1. Overview of modern astronomy and astrophysics
- 2. Planets, moons and other objects in the Solar System
- 3. Formation of planetary systems
- 4. Observation of exo-planets
- 5. Our Sun
- 5. Stars
- 6. Stellar evolution (low-mass stars and massive stars)
- 7. Supernova explosions
- 8. Neutron stars and pulsars
- 9. Blackholes and general relativity
- 10. Active galaxies
- 11. Gamma-ray bursts

Each item above will be covered in 1 to 1.5 lectures, except stellar evolution which will be covered in 2 lectures.

[履修要件]

特になし

[成績評価の方法・観点]

Evaluation based on:

- 1) Weekly online homework (due every Tuesday), and
- 2) Class attendance (taken after registration period)

Introduction to General Astronomy-E2(2)
授業中に指示する
[参考書等]
(参考書)
Freedman, Geller and Kaufmann Universe (W. H. Freeman) ISBN:1319042384 (Not necessarily the 10th edition)
(関連URL)
https://sites.google.com/view/kus-astro101e(Lecture notes, homework and announcements can be found here)
[授業外学修(予習・復習)等]
Read the lecture notes, online materials and reference book
[その他(オフィスアワー等)]
Students are encouraged to ask questions during the lectures, and are welcome to contact the professor by email outside of class hours.