科目ナンバリング U-LAS14 20071 LE68												
授業科目 <英訳>		duction to		担当者所属 職名·氏名			学研究和	科 4	斗 特定准教授 CAMPBELL, Douglas Simon			
群	自然科:	学科目群	<u>*</u>	分野(分類)	生物等	7学(各論)				使用言語	英語	
旧群	B群	単位数	2単位	週コマ数	133	₹	授業用	形態 詰	冓義	義(対面授業科目)		
開講年度・ 開講期	2024・後期 曜時限 7			K 4	配当	配当学年全国		=	対象学		全学向	

[授業の概要・目的]

The study of life i.e. Biology or Bioscience is the study of living organisms which is divided into many specialised fields that cover their form (morphology), function (physiology), structure (anatomy), behavior, origin (evolution), distribution, and their interactions with the environment (Ecology).

"Introduction to Bioscience" will introduce students to these fields covering a wide-range of Bioscience and their importance and implications for humans.

[到達目標]

Students should be able to appreciate the diversity of Bioscience and the importance an understanding of its knowledge can have on our daily lives.

Students should be able to understand and discuss various aspects of Bioscience in English.

Students should be able to read, understand and think critically about Bioscience and how the media, such as in news reports, newspaper articles etc cover aspects of Bioscience and its relevance to our lives.

As the range of topics covered by "Bioscience" is vast and cannot all be covered during the course, students will have the opportunity for learning about areas specific to their own interests via preparation for class presentation assignments on topics they are interested in via news and journal articles covering Bioscience.

[授業計画と内容]

- 1. Course introduction, Chemistry of life
- 2. Cell structure
- 3. Genetics
- 4. Cell Reproduction and Communication
- 5. Metabolism and Cellular Respiration
- 6. Animal Form and Function
- 7. Mid-term exam / The Nervous system 1
- 8. The Nervous system 2
- 9. Biological Rhythms
- 10. Viruses
- 11. Plant Biology
- 12. Biotechnology and Genomics
- 13. Ecology
- 14. Evolution
- 15. Final Exam
- 16. Feedback

Introduction to Biosciences-E2(2)

[履修要件]

Students should have a general interest and curiosity about the study of life. As this is an introductory course no prior experience is necessary.

[成績評価の方法・観点]

Class presentation assignments 20%.

Midterm exam, 20%.

Final examination 60%.

The exact balance will be determined by the number of presentation assignments, which may be counted in place of a midterm exam.

[教科書]

OpenStax Biology 2e freely available to download at the URL below.

"Essential Cell Biology" 5th edition (2019) by Alberts et al., W.W. Norton and Company, New York ISBN 9780393679533 may be useful for the Cell Biology aspects of the course though it is not essential to buy the book if you do not already have it.

[参考書等]

(参考書)

Openstaax Biology available online.

(関連URL)

https://openstax.org/details/books/biology-2e

[授業外学修(予習・復習)等]

Review from the textbook, previous lecture material and preparation of assignments to be presented in class.

[その他(オフィスアワー等)]

The contents of the syllabus are a guide to the content of the course, the exact content may change. Input from students is very welcome to suggest aspects Bioscience to cover in the course.

I am always happy to discuss with prospective students via email and meet with prior appointment.