

科目ナンバリング		U-LAS14 20021 LE68									
授業科目名 <英訳>		Conservation Biology-E2 Conservation Biology-E2				担当者所属 職名・氏名		野生動物研究センター 准教授 Andrew MacIntosh			
群	自然科学科目群			分野(分類)	生物学(各論)			使用言語	英語		
旧群	B群	単位数	2単位	週コマ数	1コマ	授業形態	講義(対面授業科目)				
開講年度・ 開講期	2024・後期		曜時限	月3		配当学年	全回生	対象学生	理系向		
【授業の概要・目的】											
<p>With the onrushing of human development at the expense of the Earth's natural resources, we have now entered a new geological epoch: the ' Anthropocene '. The human footprint on the Earth has never been greater and it is said that the world's biodiversity is now in the midst of a ' sixth mass extinction '. This is where the relatively new science of conservation biology comes in. In this course, students learn about threats to biodiversity, loss of ecosystem services, extinction, and the importance of conserving nature, from individual species to entire ecosystems. All the while keeping in mind the great power that science has to be a guiding force in conservation decision-making.</p>											
【到達目標】											
<p>In this course, students will learn to:</p> <ul style="list-style-type: none"> - appreciate and measure life's biodiversity at all its levels, from genetic diversity to species diversity to ecosystem diversity - assess how human activities contribute to biodiversity loss and what can be done to prevent it - weigh the costs and benefits of exploiting natural resources while considering social, economic, political and ecological factors simultaneously - appreciate the importance of nature and natural reserves from various perspectives from ecosystem functions to human health and well-being - consider and engage in the design of conservation strategies to reduce threats to biodiversity - understand the role of science and evidence in conservation decision-making 											
【授業計画と内容】											
<p>The course material is structured into four units, as described below. Each topic within these units will occupy approximately one class session.</p> <p>Unit 1 - introducing conservation biology</p> <ol style="list-style-type: none"> 1. what is conservation biology 2. biodiversity: what is it and how is measured 3. ecosystem services: the value of biodiversity 4. the biodiversity crisis and biological extinctions <p>Unit 2 - threats to biodiversity</p> <ol style="list-style-type: none"> 5. habitat loss, degradation and fragmentation 6. over-harvesting and human use of natural products 7. invasive species 8. climate change <p>Unit 3 - conservation strategies and action</p> <ol style="list-style-type: none"> 9. endangered species protection 10. protected and unprotected conservation areas 											
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Conservation Biology-E2(2)

- 11. sustainable development
- 12. public outreach and education

Unit 4 - the future of conservation

- 13. conservation perspectives and priorities
- 14. student project presentations

【履修要件】

特になし

【成績評価の方法・観点】

course participation - 10% (attendance 5% and discussion 5%)
student projects - 30% (report 15% and presentation 15%)
midterm exam - 30% (first half of course, written test)
final exam - 30% (second half of course, written test)

【教科書】

授業中に指示する

【参考書等】

(参考書)

Richard B. Primack and Anna A. Sher 『An Introduction to Conservation Biology』 (Sinauer Associates, Inc. 2016) ISBN:9781605354736 (Recommended, not required. Material in textbook enhances learning.)
Sodhi N, Ehrlich PR 『Conservation Biology for All』 (Oxford University Press, 2010) ISBN: 9780199554232 (Recommended, not required. Material in textbook enhances learning. Free e-Book!)

【授業外学修 (予習・復習) 等】

This course will use Kyoto University's online Learning Management System (LMS) Panda. Please get familiar with the system before starting the course. There will be additional online content in Panda during the course, including additional videos (YouTube) and readings (Panda) and ongoing asynchronous discussion in the forums (Panda). For the course project, students are expected to conduct research or survey the literature and write a report, and/or design and report on their own small conservation project, as well as produce a presentation from this project to be given in the final class. Peer review may be used to support student writing, so students should be prepare to review a small number of reports from other students in the class.

【その他 (オフィスアワー等) 】

There are no office hours for this course, but the instructor is always open to communicating digitally in whatever medium works best; email, online meetings (Zoom), the discussion forums in Panda, etc. Appointments can be made before/after class as well, if needed.