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生物学特講 I (人間を中心にした生物学、地球の生命の近未来) Topics in Biology I (

科目番号: G11 3111 単位数: 1単位 標準履修年次: 2·3年

実施学期 曜時限: 第2学期 火曜日 4時限

担当教官: ワイスバード

第2学期 (Lecturer: Richard Weisburd)

### 授業概要 (Course description):

Biology has traditionally been a science of describing how life functions today, and how it came to be this way (evolution). Now human activities are transforming the environment in ways that affect organisms and ecosystems profoundly. This course examines how the Earth is being changed and how those changes will affect living things, including humans, now and into the future.

#### 授業内容(Syllabus):

- (1) Biological feedback in global cycles and homeostasis
- (2) Air pollution impacts Climate warming, depletion of stratospheric ozone, tropospheric ozone increases, and acid deposition.
- (3) Population trends, agriculture, and food sufficiency
- (4) Biodiversity resources and loss quiz
- (5) Protected areas and conservation biology
- (6) Fisheries resources, exploitation, and management quiz
- (7) Environmental impacts of individuals and societies
- (8) Student presentations
- (9) Earth system international research programs
- (10) International environmental treaties and conventions
- (11) Final exam

#### 前提科目・履修上の注意事項():

单位取得条件、成績評価基準 (Basis for grading): Grading based on attendance (20%), quizzes (25%), presentation (25%), and final exam (30%)

指定教科書 (Required text): To be decided. Readings will be distributed.

## 参考書·文献(Optional texts):

オフィスアワー (Off ice hours): Seibutsu Norin Gakke B614, Tuesday 14:00-15:00; Wednesday 10:30-11:20; and by appointment. Tel: 853-4654, weisburd@biol.tsukuba.ac.jp

# 備考(受講学生に望むこと)(etc.):