



Online Ethics Center
FOR ENGINEERING AND SCIENCE

Genomics, Ethics and Society Course

Description

This course consists of 8 units. Units 1-7 each last approximately 2 weeks.

Abstract

[The first Unit \(1\)](#) provides an *introduction* to genomic science, ethics, and policy.

Units 2 through 7 deal with specific ethical issues raised by genomics in the context of:

2. [synthetic biology and microorganisms](#),
3. [genetics and crops](#),
4. [genetic modification of domestic animals](#),
5. [genetics and conservation](#),
6. [human genetic therapies and human enhancement](#), and
7. [privacy and genetic information](#).

Units 2-7 are organized into a consistent unit structure:

- Navigation and essential question;
- Background;
- Selected Issues In Depth;
- Readings;
- Discussion;
- Case Analysis;
- Additional Resources;

- Unit Evaluation Survey

Unit 8 contains the final case study. This is the concluding piece of assessment for the course.

Also included are some notes for instructors who may wish to use this course or parts of it.

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Use of Materials on the OEC

Resource Type

Educational Activity Description

Topics

Animal Use

Communicating Science and Engineering

Confidentiality

Controversies

Cultural Awareness and Sensitivity

Data Management

Diversity

Dual Use Research

Embryo Research

Emerging Technologies

Environmental Justice

Governance

Human Enhancement
Human Rights
Human Subjects Research
Privacy and Surveillance
Public and Community Engagement
Public Health and Safety
Public Well-being
Responsible Innovation
Risk
Safety
Security
Social Justice
Social Responsibility
Sustainability

Discipline(s)

Genetics and Genomics
Life and Environmental Sciences