

BIOTECHNOLOGY AND ITS SOCIAL IMPACT

Syllabus – Fall, 2008

- Sept 01 Introduction
03 Biotechnology and society: History and issues **(Ch. 1)**
08 Basics of molecular biology **(Ch. 2)**
10 Basics of molecular biology
15 Basics of molecular biology
17 Tools of genetic engineering **(Ch. 3)**
22 Tools of genetic engineering
24 Agricultural biotechnology **(Ch. 6 & 7)**
29 Agricultural biotechnology – methods and products
Group topic for class presentations due
- Oct 01 Agricultural biotechnology – debate/discussion
06 Applications of ag biotechnology: class presentations
08 Applications of ag biotechnology: class presentations
13 Ethical analyses, discussion of agricultural biotech issues **(Ch. 13)**
15 **EXAM**
- 19-25 **Fall Break**
- 27 Human genome project – description **(Ch. 11)**
29 Human genome project activities **PAPER TOPIC DUE**
- Nov 03 Intro. to genetic testing – “Children by Design” **(Ch. 11)**
05 Genetic testing: science and begin discussion
10 Genetic testing: case studies of genetic counseling
12 Gene therapy: science and begin discussion **(Ch. 11)**
Term paper thesis statement and arguments due
17 Germ-line gene therapy
19 In vitro fertilization and human cloning: science and discuss
frozen embryos **(Ch. 11)**
24 In vitro fertilization and human cloning: discuss societal implications
26 DNA fingerprinting - video **(Ch. 8)** **TERM PAPER DUE**
- Dec 01 DNA fingerprinting: science – start lab
03 DNA fingerprinting: finish lab
08 Patenting life: law and discussion **(Ch. 12)**
10 Evaluations
18 **FINAL EXAM – 2:00 PM (Exam day and time are not negotiable!)**