BIOTECHNOLOGY, HUMAN VALUES, & THE ENGINEER
ENGINEERING 100, SECTION 500 – FALL 2017

THE INSTRUCTORS

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WELCOME to Engineering 100/UC 163, Section 500. You are enrolled in what will be a challenging (yet rewarding!) course designed to bring together students to address some basic issues facing biotechnologists today. In addition to introducing basic scientific skills, this course will explore some of the dominant trends in biotechnology, including their economic, ethical, legal, societal, and technological implications. We hope this course provides you with some insights into the rapidly expanding realms of biotechnology.

As another one of the unique opportunities of this course, you will conduct an investigative study for a real client (physician, dental practitioner, academic researcher) regarding the potential impact of molecular diagnostic technology designed to detect disease before the onset of symptoms. This will be a team project that requires you to develop new skills, engage resources, and systematically address issues. In the space of one short semester, you will begin to think, operate, and communicate as scientists and engineers.

1. THE LECTURE & DISCUSSION SECTIONS

Lecture: Monday & Wednesday, 1:00 – 2:30 p.m., 1311 EECS
Lab & Discussion Sections: Tuesday & Thursday
501 - 11:40 a.m. – 12:30 p.m., 1032 FXB, Sulewski
502 - 10:40 a.m. – 11:30 a.m., 1123 LBME, Sulewski
503 - 11:40 a.m. – 12:30 p.m., 1008 EECS, Casper
504 - 10:40 a.m. – 11:30 p.m., 1008 EECS, Casper
Labs per assignment, 1220 LBME, Sulewski

2. A DESCRIPTION OF THE COURSE

Biotechnology is a rapidly evolving field that impacts nearly every aspect of our daily lives from the food we eat to the medicine we take. The goals of this course are to familiarize ourselves with some basic biotechnological concepts, equip ourselves with a vocabulary to speak intelligibly about them, and to gain insight into the current and future impacts of biotechnology on us and our environment. Topics will cover a range of applications in genetics, systems biology, sequencing technology, and molecular imaging. This course will emphasize the role of critical thinking, teamwork, and communications in successful scientific investigation. And, finally, this semester's project, prepared in consultation with a real client, will explore the potential application of new biotechnological advances to real world medical pursuits.

2.1 THE COURSE OBJECTIVES

a. Introduce important concepts in biology
b. Introduce the broad applications of biotechnology
c. Introduce problem-solving strategies and the concept of engineering design
d. Expose students to the broad principles of ethical decision making
e. Investigate the ethical dilemmas that arise as a result of biotechnology
f. Prepare students to produce written, oral and visual engineering communication
g. Provide experiences in teamwork and team building
h. Expose students to the range of stakeholders and interests affecting biotechnological development

2.2 A FEW PERSONAL LEARNING OBJECTIVES THAT YOU MAY WISH TO TAKE AS YOUR OWN

a. Commit to a common goal
b. Become a pro-active learner
    i. Explore resources
    ii. Learn from every teammate
    iii. Empower the team
c. Facilitate productive teamwork
d. Exploit failure for success
e. Promote consensus v. agreement
f. Stretch yourself – challenge your comfort zone daily
g. Develop problem solving skills
h. Develop essential college skills
    i. Time management
    ii. Study habits
    iii. Test taking

2.3 THE PROJECT

As part of this term's project, student teams will be assigned as consultants working with various clients to investigate the feasibility and desirability of employing molecular technology for diagnostics. In addition to conceptualizing technology that could allow clinicians to genotype and/or phenotype for diseases that can benefit from pre-symptomatic detection, students will explore the implications of such technology for the medical field, practitioners, patients, and the public at large. The final project will involve a public presentation and a written report for your client.

2.4 AN ORGANIZED TEAM

In today's complex and fast-paced environment, there is little doubt that teams are often more productive than the individual acting alone. In the biotechnology industry, teamwork is essential because of the multidisciplinary nature of this field. Learning through experience what it takes to manage an effective team is critical. To that end, each student will be assigned to a project team by the second discussion section meeting. Students will be guided in the basic principles of intra-team organization, communication, and negotiation.

Teams will be required to establish a contract, hold regular meetings, maintain minutes of their meetings, and conduct peer evaluations. Assignments related to the project will be prepared and presented as a team. Each member of a team is expected to participate actively in all stages of research, analysis and presentation of findings. Each member is also expected to foster successful operation of the team

In the real-world environment of the biotech industry, teams tend to be composed of members from diverse backgrounds (both technical and non-technical). Not only must the individual be able to effectively function within such teams, the teams, in turn, must be able to function within the larger company hierarchy. To mimic this type of culture, our class will be structured as a company, Blue Genes, and each of the assigned teams will work for the Research and Development (R&D) division of the company. The instructional team for this course will represent the managerial hierarchy: co-leads are upper level management and discussion section/lab leaders are project or middle managers. You are directly responsible to the project managers for completing assigned tasks by the respective deadlines. Upper level management will check in on your progress periodically, and evaluate your written proposals and oral presentations. Beyond the in-house managers, you will be in direct contact with your assigned client.

Your project's success will depend in great part on your ability to identify all direct and indirect stakeholders as well as address their interests, needs and wants. In short, problem solving in engineering is as much a measure of an individual's and a team's ability to comprehend and effectively negotiate complex social systems as it is a measure of knowledge and creative genius.

2.5 TECHNICAL COMMUNICATION

Beyond the didactic lecture-based materials, this course will also focus on the development and communication of scientific argument. We will present the argument in 3 different formats: the informal reports, oral presentations and a formal report. We will explore the concept of engineering design, a governing structure for problem solving and communication in engineering. Then we will examine the purpose and goals of effective technical communication as well the responsibilities of the writer. In addition, we will explore problem solving strategies and the essential elements of a convincing argument. It is critical to your future success as a practicing engineering to recognize that communication must be engineered much as we engineer any device or solution.

In addition to technical communications, we will also explore the role of intra-team communications on team formation and development as well as project success. As part of this effort, teams will be required to establish a team contract, maintain minutes/logs for meetings during the first few weeks, and conduct peer evaluations.

3. THE SUBMISSION OF ASSIGNMENTS

- Most assignments, including *group meeting minutes, lab reports,* and *project reports* will be submitted electronically via Canvas and in hard copy.
- Hard copies of all *reports*, *homework assignments,* and *minutes/logs* should be submitted at the beginning of discussion section or lab on the due date.
- For any assignments submitted after discussion section, students are responsible for making sure the assignment is in the instructor's mailbox (in-box) no later than 5:00 pm. Late penalties will begin at midnight on the due date.
- Electronic copies of all assignments must be posted on Canvas no later than 11:55 pm on the due date.
- The hard copy of any submission must be identical to the electronic copy posted on Canvas. No changes may appear on the Canvas submission after a hard copy has been submitted without the prior written (e-mail is acceptable) approval of the section leader. Any discrepancy between hard copy and electronic copy may result in a grade penalty. Faculty reserves the right to penalize assignments that do not adhere to requirements.
- The first page of all reports should be on your team letterhead.

3.1 A FEW ADDITIONAL GUIDELINES FOR HOMEWORK SUBMISSIONS

- In many cases you may simply download the Word file with the homework problems, and then write your answers in the space after each problem. Just make sure you leave (or add) adequate space for your work between problems.
- You may handwrite your answers in most cases, but your answers must be legible and not crowded. If you find it cumbersome and time-consuming to write legibly, type your answers.
- You should use a ruler or other straightedge to draw graph axes unless you are using Excel.
- You must show all your work if a problem involves mathematics. If you only show the correct answer without the mathematical steps you took to get it, you will only receive partial credit. If the problem is only a mathematical one, do not write sentences in your answer.
- If a problem does not require mathematics, just use short but clear and unambiguous phrases in your answer. Never write more than you need to in order to get your point across.
- You must submit the homework in hard copy, and are strongly encouraged to submit electronically as well (scan your homework or take a clear photo and upload it).

4. THE GRADE

The letter grade for this course will be based on the raw score obtained out of 10,000 total points. There are no letter grades provided for assignments or exams. However, the spread of scores and the average for each assignment will be available. For team assignments, each member of the team will receive the grade given for the team deliverable.

A personal gradebook (in an Excel file) is available on the Files section of the course Canvas site. If you wish, keep track of your own grades by downloading it and adding to it as you accumulate your own grades. We do not post grades on Canvas.

4.1 THE ASSIGNMENTS

Your final grade will be determined based on a cumulative total of 10,000 possible points, with 6400 points coming from individual assignments and 3600 from group assignments. The following is a list of the exams and assignments that will make up your grade.

1. Four homework assignments – 250 points each
2. Four (4) lab assignments, comprising:
   a. Lab 1 Prospectus – 500 points
   b. Lab 1 Report – 750 points
   c. Lab 2 Objectives – 150 points
   d. Lab 2 Report – 1000 points
3. Midterm exam – 1250 points
4. Final exam – 1250 points
5. Team project, comprising:
   a. Written team contract and documented meeting minutes – 100 points
   b. Preliminary oral report (Oral report 1) – 500 points
   c. Preliminary written report (Written report 1) – 750 points
   d. Final oral report (Oral report 2) – 1000 points
   e. Final written report (Written report 2) – 1250 points
6. Two online peer assessments – 200 points for the first one, 100 for the second
7. One individually-written team assessment report – 100 points
8. One evaluation of your team's clinician – 100 points

Specific assignment due dates are specified on the course schedule.

Since much of your work will be prepared on computer, we strongly advise you to back up frequently as you work – i.e., maintain two separate back-ups using flash drives, portable hard drives, CDs and/or DVDs, the cloud, etc. Files can also be backed up to the network. Contact CAEN if necessary for specific instructions.

4.2 A LATE SUBMISSION?

The final grade for a submission will be reduced by 10% for each late day (any portion of a 24 hr. period after the due date). Failure to turn in a hard copy or an electronic copy on time will result in a 10% penalty per day. Make sure that any documents submitted electronically are not only attached, but also submitted.

Any misplaced hardcopies of assignments (e.g., wrong mail-box) will be subject to penalties. Keep e-mail confirmations of all submissions!!

4.3 REQUESTING A REGRADE

Request for an assignment re-grade must be submitted in a memo no later than 2 weeks from the assignment return date. Any assignment submitted for re-grade will be re-graded in its entirety, regardless of the portion disputed.

The memo requesting re-grade must be addressed to all instructors and submitted with the original assignment. The memo must:
1. refer to the location of the disputed information in the original assignment
2. detail the disputed portion of the assignment
3. explain why you believe there is an error in the grade

Points subtracted for failure to show your work in an exam or homework answer involving calculations, computations or proofs are not subject to re-grade.

4.4 FAILURE TO SUBMIT AN ASSIGNMENT, TAKE AN EXAM, OR PRESENT

Failure to submit an assignment within 10 days of the due date without prior permission from your discussion leader will result in a grade of zero. Failure to appear for an examination or participate in a presentation will also result in a grade of zero, unless officially excused by the lead instructor prior to assignment due date. This means necessary documentation must be presented for consideration well in advance of the assignment. Under limited circumstances, exceptions may be made:

- **Medical excuse.** This must be documented and signed by a physician, a guardian, or other authority who can be reached independently for verification.
- **Disabilities.** If you have any disability as defined under the Americans with Disabilities Act that might interfere with your ability to turn in assignments on time or in the form required, please contact Services for Students with Disabilities, the undergraduate advising office, and your lead instructor immediately so that arrangements can be made to accommodate you.
- **Death** in the family.
- **Extenuating circumstances** requiring your presence at home. Contact an instructor immediately and be prepared to provide verification.
- Excuse accepted by your instructor.

Note: Any situation that may result in a protracted absence from school or seriously jeopardize your ability to complete course work will be referred to the Office of the Associate Dean for Undergraduate Education for consideration.

5. THE HONOR CODE

For details regarding the University of Michigan's College of Engineering Honor Code, please go to the following URL: http://ossa.engin.umich.edu/wp-content/uploads/sites/212/2015/04/Honor-code-pamphlet-Adobe-Prof.pdf

The Honor Code is the ethical standard by which faculty and students in the College of Engineering are expected to conduct themselves. Therefore, you are expected to make yourself familiar with the Honor code and its stipulations. Bear in mind, though, that ignorance is not a legitimate defense for violating the code. Since students are expected to respect the Honor code principle that "it is dishonorable to receive credit for work which is not the result of one's own efforts….", examinations in this college are not proctored. By the same token, we trust that all individual assignments submitted by a student have indeed been prepared by that student. Working as a member of a team in this course you will be expected to co-author reports and assignments, as well as edit team deliverables. This may raise questions about cooperative efforts conflicting with the spirit of the Honor Code. To help clarify some common issues, we present the following guidelines. They are not intended as definitive interpretations. You are encouraged to discuss any doubts, questions, or situations not explicitly outlined here or in the Honor code itself.

1. Team assignments, reports or presentations must bear the names of all the co-authors. You are not at liberty to submit a co-authored work as your own in this or any other course. If you wish to turn in a co-authored work to any other course, it must be with prior written permission from all the co-authors as well as the lead instructors of both courses.
2. On individual assignments, all work submitted should be the product of your effort alone. You are encouraged to address any questions about any assignment to the teaching faculty.
3. In the case of team assignments, editing must be limited to team members and should be handled as a team. Any ideas or changes you incorporate that result from the opinion or review of another party should be acknowledged in writing (cite your source).
4. You are expected to properly credit information obtained from another source, regardless of origin. This includes referencing web sites, e-mail or other written communications, conversations, as well as conventional media sources.
5. It is not acceptable to hand in as your own any work that includes work done by any other party, published or unpublished.
6. It is not acceptable to incorporate or recreate visuals, graphs, or maps without crediting the source.
7. It is not acceptable to falsify or misrepresent methods, data, results, or conclusions.

5.1 A FAILURE TO PARTICIPATE OR CONTRIBUTE

In the past, there have been very rare cases where team-members have failed to participate in team meetings, prepare assigned material in a timely manner, or substantially contribute to the team effort. Such issues, as well as other sources of conflict, should be addressed in the team minutes/logs. You are further encouraged to enlist the aid of an instructor, if discussion with the individual(s) concerned fails to yield results. Regardless of the reasons, failure of a team member to pull his/her weight in a project or assignment should be brought as early as possible to the attention of an instructor. Amongst other things, this will help to prevent inadvertent violations of the Honor code by the other team members. We have two policies to address this kind of problem.

5.1.1 QUITTING

If a student feels that s/he is completing a disproportionately high portion of an assignment or project, then s/he has a right to quit the team at a time determined in consultation between the student and faculty. The student may receive the team grade for the completed assignment or project. The quitting student will be reassigned to a new group by the course faculty. The quitting member must document the resignation in email or hardcopy, copied to the entire team and class faculty.

5.1.2 BEING FIRED

Students are expected to participate wholly on their team for the benefit of the entire team. Students may be fired from a group by the majority vote of the remaining members. The process is as follows:

1. The team sends a gentle warning of a risk of firing in email or hardcopy to the team member in question, copied to the entire team and class faculty. The warning must specify the work required for the team member to remain on the team.
2. Three (3) calendar days elapse to allow time for compliance.
3. If the student does not comply, the team sends a statement of firing in email or hardcopy, copied to the entire team and class faculty.

Fired team members receive a zero on the current team assignment. Fired team members must actively pursue and obtain membership on another team. The entire class faculty must receive documentation from the entire new team stating that student has been hired by that team. Students that do not belong to a team do not receive a grade on the appropriate portions of the team project.

5.2 DISCIPLINARY ACTIONS

Violations of the Honor Code will be reported to the appropriate college office and referred to the Engineering Honor council. Each student involved must contact the Honor Code Committee for a hearing. Until the committee renders a decision presented to instructors in writing, all assignments in question will receive zero points.

6. PROFESSIONAL CONDUCT

In this course, you have the unique opportunity to step up to the plate and experience what it is to be a biotech professional addressing real issues that affect real people. You will be working closely with other professionals who expect of you the same professional conduct they expect from each other. However, remember, professional conduct should not be restricted to your interactions with other professionals. It should also be observed in your interactions with teammates and peers.

There are times when you will no doubt be under considerable pressure and stress for one reason or another. You may experience bouts of frustration or anger, but try to focus your attention on the issues and possible solutions rather than on venting.

Whether formal or informal, keep your interactions with others **civil**. This includes e-mail communications. Honor the rights of others, including the right to privacy. Consider that any information you transmit via unsecured pathways may be intercepted.

Use proper and respectful forms of address with clients, consultants, and other professionals. Even if you are invited to use first names, in your documented communications with clients and consultants use formal salutations incl. Dr., Prof., Ms., or Mr. Use titles in mail addresses, e.g., M.D., D.D.S., CEO. Do not use both, e.g., Dr. and M.D. with a name – verbally or in writing.

Consider the safety of your teammates when deciding on meeting times and places. Give ample notice if you have a scheduling conflict.

Do not engage in or permit others to be subjected to personal harassment, including harassment of a cultural, racial, or sexual nature.

6.1 A FEW GOOD GUIDELINES FOR YOUR INTERACTIONS WITH OTHERS IN CLASS

- Respect others' rights to hold opinions and beliefs that differ from your own.
- When you disagree, challenge or criticize the idea, not the person who spoke it.
- Listen carefully to what others are saying even when you disagree with what is being said. Comments that you make (asking for clarification, sharing critiques, expanding on a point, etc.) should reflect that you have paid attention to the speaker's comments.
- Listen respectfully. Don't interrupt or engage in private conversations while others are speaking. Use attentive, courteous body language.
- Support your statements. Use evidence and provide a rationale for your points.
- Share responsibility for including all voices in the discussion. If you have a lot to say, try to hold back a bit; if you are hesitant to speak, look for opportunities to contribute to the discussion.
- If you are offended by something or think someone else might be, speak up and don't leave it for someone else to have to respond to it.
- Recognize that we are all still learning. Be willing to change your perspective, and make space for others to do the same.
- Don't freeze people in time. Don't use a past comment to categorize someone whose perspective may have changed.

6.2. CONTACT ETIQUETTE

Your clients are very busy people, and they are volunteering their time for this course. It is imperative that you do not abuse them or disrespect them in any way.

Ask your client what form of communication they prefer: e-mail, telephone call, voice mail, or messaging. Ask how far in advance (lead time) and/or what times of day are best to leave messages. Some people have set times every day that they check messages and e-mails, others do it on the fly. Don't assume that just because you can send an e-mail quickly, your client or any other professional, will automatically respond within a few hours.

1. Inquire about and respect the contact preferences of clients, consultants & management. In fact, get in the habit of doing it with everybody!
2. Avoid sending e-mails or messages last minute (less than 24 hours on a business day).
3. Avoid waiting till the last moment to make an appointment.
4. Try to accumulate all your points for a single communiqué rather than sending an e-mail or text message as you think of another point.
5. Do not expect that your clients will be willing to meet with you after 5 p.m. or on weekends. These folks are very busy. You should adjust your schedule to be able to meet with them *at their convenience*. You may have to meet with them at 8 am (or even earlier), or in the evening (if they are "on-call" and request you come to the hospital to meet with them).

7. A SUPPORT SYSTEM

This university and the College of Engineering offer a vast array of support services. You are about to embark on one of the most difficult transitions of your academic career. At times, you may find yourself overwhelmed or isolated in a strange and demanding environment. It is important to learn to identify resources and to establish a support network to help you cope. Feel free to contact your instructors or the college counselors for undergraduates for additional help and information.

8. CANVAS

The new Canvas system takes some getting used to. Please review this short description. First, Canvas has a Home section that contains the course description. It also has an Announcements section that you should get in the habit of checking daily before class for reminders, clarifications, updates, room changes or additional meeting times. The Assignments section lists each assignment, and by clicking on the appropriate assignment, you can see all the relevant materials for that assignment, and then upload your completed assignment. Canvas also contains a Files section where we post lecture slides, instruction modules, and other resources such as links to relevant sites. (The Assignment Files folder in the Files section contains the same materials listed in the Assignments section. It is an idiosyncrasy of Canvas that it shows these kinds of files in two different places.) The course syllabus, schedule, and point breakdown are listed under Files: Course Syllabus and Schedule.

Remember, the rules of professional conduct and civility should govern the behavior of all users both online and in person.

9. OFFICE HOURS & WORKSHOPS

Each instructor will establish fixed office hours every week during which students are free to come without appointment to meet with the instructor. The office hours for each instructor will be announced in the first week of class (nominally) and posted on Canvas. If you wish to meet privately with an instructor, or if you are not able to attend office hours because of a scheduling conflict, you may schedule a separate appointment.

Formal workshops and rehearsals for oral presentations are mandatory. However, additional office hours are optional.

At several different stages in your project, you and your team will be expected to meet with your recitation instructor to review your project and obtain authorization to proceed to the next stage. Meeting times will be announced on Canvas.

10. THE (LACK OF) TEXTBOOKS

While you will be instructed to read various documents over the course of the semester, there are no required textbooks for this course. However, the following texts may be useful to you.

- Bary-Khan, Hildinger, and Hildinger, *A Practical Guide to Technical Reports and Presentations* (Pearson Custom Publishing, 2008).
- Alberts, Bray, Hopkin, Johnson, Lewis, Raff, Roberts, Walter, *Essential Cell Biology*, 4th edition (Garland Science Publishing, 2013).

11. ADDITIONAL RESOURCES

To keep current, additional references and readings from a variety of other sources, including handouts, web sites, or media union materials may be assigned. Please refer to the Resources section on our Canvas site. Any additional technical readings and materials will typically be announced the week the relevant lectures.

To get the most out of the classes, all resources should be reviewed before the respective class period.

12. THE SCHEDULE

The tentative schedule for this course follows on the next page. However, given the happenstances of life and the twists of fate to which we are subjected, some of the specific may change. Should that occur, your instructors will try their darnedest to let you know well before hand.

Date	Lecture	Date	Discussion	Deliverables
4-Sep	[No Lecture]	5-Sep	[No Discussion]	
6-Sep	Course Overview: Introduction to biotechnology and technical communication; Collect Team Info	7-Sep	Assign teams; Build GANTT charts	
11-Sep	Introduction to cell and molecular biology I	12-Sep	Foreword summary workshop *Evening biology review	
13-Sep	Informal reports	14-Sep	Lab 1 preview session	Team log 1
18-Sep	Introduction to cell and molecular biology II	19-Sep	Paragraphing and report design	
20-Sep	Biological errors; Visual aids	21-Sep	Visual aids workshop	Lab 1 Prospectus; Team log 2
25-Sep	Sequencing techniques I	26-Sep	Lab 1 501; Library workshop 502, 503; Pop beads in discussion 504	
27-Sep	Lab reports and Stylistics 1	28-Sep	Lab 1 502; library workshop 501, 504; Pop beads in discussion 503	Homework 1
2-Oct	Sequencing techniques II	3-Oct	Lab 1 503; Pop beads in discussion 501, 502	Lab 1 Report: 501
4-Oct	Stylistics 2, Oral presentations lecture	5-Oct	Lab 1 504	Lab 1 Report: 502; Team log 3
9-Oct	Expression techniques	10-Oct	Ethics workshop	Lab 1 Report: 503
11-Oct	Economic and social considerations in biotechnology	12-Oct	Environmental ethics/green engineering	Homework 2; Lab 1 Report: 504
16-Oct	[Fall Study Break, No Lecture]	17-Oct	[Fall Study Break, No Discussion]	
18-Oct	**Midterm Exam**	19-Oct	Project time	
23-Oct	Legal considerations in biotechnology	23-Oct	Oral 1; Written progress reports	
25-Oct	Oral report 1; Written progress reports	26-Oct	Oral 1; Written progress reports	Oral report 1; Written reports; Peer evals (online)
30-Oct	Diagnostic test design and expression technology overview	31-Oct	Lab 2 preview session	
1-Nov	Statistics I	2-Nov	Lab 2: Section 504	Team log 4
6-Nov	Statistics II	7-Nov	Lab 2: Section 503	
8-Nov	Receiver operating characteristic curves	9-Nov	Lab 2: Section 502	Lab 2 Objectives; Lab 2 Report: 504
13-Nov	State-of-the-art expression technologies I	14-Nov	Lab 2: Section 501	Lab 2 Report: 503
15-Nov	State-of-the-art expression technologies II	16-Nov	Project time	Lab 2 Report: 502
20-Nov	Molecular and medical imaging I	21-Nov	Project time	Lab 2 Report: 501
22-Nov	Formal reports and Stylistics 3	23-Nov	[Thanksgiving, No Discussion]	Homework 3
27-Nov	Molecular and medical imaging II	28-Nov	Project time	
29-Nov	Molecular and medical imaging III	30-Nov	Project time	Team log 5 (optional)
4-Dec	Molecular and medical imaging IV	5-Dec	Oral 2	
6-Dec	Oral report 2	7-Dec	Oral 2	
11-Dec	A philosophy of biotechnology	12-Dec	No Discussion	Homework 4; Final formal report; Peer evals (online)
15-Dec				Individual Team Assessment Report; Clinician Evaluation
21-Dec	**Final Exam: 1:30-3:30 PM**			