

BIOT 6700: COMMUNICATION FOR SCIENCE AND BUSINESS

Class Dates: All Classes will be on Tuesday and start at 9:30 AM in Room 3317 in the Science Complex Unless Otherwise Noted

This course has two main components. In the first, the students will work with the supervisor of their research project to put together a written proposal of their proposed research project and also give an oral presentation on this. The second aspect is to learn about business communication for the commercialization of the science. Students will be expected to work in groups effectively to develop business cases and to communicate these both in verbal and written form.

Course Schedule

January 10: Week 1- Forms of communication; how to prepare research proposals; Jessica Bowes, Bioenterprise their role, the companies they help and mentorship on preparing business cases; Melanie Lang- Director of CBaSE in the College of Business and Economics on how to prepare a business case; divide into groups

January 17: Week 2- Intellectual property and proprietary information- developing an intellectual property strategy

January 24: Week 3- Short presentations and discussion on important/interesting patents

January 31: Week 4- - Phil Whiting, CEO of Mirexus Biotech and Mike McLean Director Research PlantForm

February 7: Week 5 – Short presentations and discussion on the future of biotechnology

February 14: Week 6- Government regulations and how these affect business and research strategy; Dr. Mike McLean PlantForm on issues around biosimilars for human health; other presenters are to be announced

February 28, March 7 and March 14: Week 7-9- Presentation of research proposals by individual students

March 21: Week 10- Jim Brandle: CEO Vineland Research and Innovation Center; group work on business case presentations

March 28 and April 4: Weeks 11-12- Student groups present business cases

Assignments

1. On January 10 each student will be assigned to a group for the development of the business case.
2. On January 24, students will give a 5-minute presentation (8-10 minutes with discussion) on an important/interesting patent which can be but does not have to be in the student project area; one student from each group will lead the discussion for the presentations from those in their group. These are not power point presentations and will be done from within the group. If necessary handouts can be used for key descriptions/diagrams. Each student will submit a maximum 2-page double-spaced 12-point font description of the patent, why it is important/interesting and how it might prove useful. Please note that it is acceptable and preferable that the papers can be given to their fellow student peers for comment and improvement prior to submission. The paper will be due by noon Monday January 30.
3. Future of Biotechnology assignment: Each student will choose one possible use for biotechnology that they find of interest. Each will present a 5-minute presentation (8-10 minutes with discussion) on this with one member from each group facilitating discussion. These are not power point presentations and will be done from within the group. If necessary handouts can be used for key descriptions/diagrams. Each student will submit a maximum of 2-page double-spaced 12-point font description of this area and why they find it of interest. Please note that it is acceptable and preferable that the papers can be given to their fellow student peers for comment and improvement prior to submission. Also note that detailed research is not required for this assignment- a simple google search will do. The presentation will be on February 7 and the paper will be due by noon Monday February 13.
4. In weeks 7-9 of the class students will give a more formal presentation of their research project. Each presentation should be a maximum of 20 minutes in length leaving 10 minutes for discussion. Students who have not yet facilitated discussion for earlier presentations will do so for these. The format of the presentation will be dependent on the project but should certainly include a discussion about what are the goals and what are the expected outcomes as well as giving sufficient background for the project. The students should certainly consult their advisors extensively for the development of this as well as the written proposal as noted below.
5. Students will write a research proposal for their project. This will be a maximum of 10 pages double spaced not including references or figures. The form of the proposal can be variable depending on the project in question. However, it should certainly include an executive summary at the beginning, a set of goals and what the hoped for results will be. The student is strongly encouraged to consult extensively with their advisor for this. This proposal will be due at noon on March 20.
6. Each group will choose one of the research topics from an individual in the group and make a maximum 45-minute presentation with 20 minutes for discussion of their business case in weeks 11-12. By January 24, each group should meet with Dr. Rothstein to describe their choice and their plans for developing this

topic. Each student must take part in the presentation. Depending on the project the topics covered will vary considerably: for example it might be about starting a company around a particular technology or a project that would help an existing company or some other proposed actions. The types of topics that might be included will be covered in the first week of class.

7. Each group will submit their written business case by 5 PM on April 11. This should be a maximum of 25 pages double-spaced including references. As noted above the format and the topics covered will vary. Details about what types of topics should be included will be covered in the first week of class.

Assessment

First short oral presentation- 5%:

Second short oral presentation- 5%

Project Oral Presentation- 20%:

Business Case Group Presentation- 15%:

Short paper 1- 5%

Short paper 2- 5%

Written proposal- 25%;

Written business case- 20%:

Learning Outcomes

By the end of the course, successful students will:

1. Demonstrate advanced critical analysis of current research literature through the preparation of a research proposal
2. Develop and present a persuasive business case for the commercialization of their work.
3. Understand the global context of their work from the perspective of scientific understanding and business opportunity

4. Communicate clearly and persuasively, their proposals and conclusions, in both written and oral form

5. Demonstrate an understanding of the high standards of professional and ethical behavior required to be successful in promoting new technologies

University Policies

When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. See the graduate calendar for information on regulations and procedures for Academic Consideration: <http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml>

Accessibility

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact the Centre for Students with Disabilities as soon as possible.

For more information, contact CSD at 519-824-4120 ext. 56208 or email <mailto:csd@uoguelph.ca> or see the website: <http://www.csd.uoguelph.ca/csd/>

Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar:
<http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml>

E-mail Communication

As per university regulations, all students are required to check their <uoguelph.ca> e-mail account regularly. E-mail is the official route of communication between the University and its students.

Drop Date

The last date to drop one-semester courses, without academic penalty, is the 40th class day. To confirm the actual date, please see the schedule of dates in the Graduate Calendar.

Copies of out-of-class assignments

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

Recording of Materials

Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

Resources

The Academic Calendars are the source of information about the University of Guelph's procedures, policies and regulations which apply to undergraduate, graduate and diploma programs:

<http://www.uoguelph.ca/registrar/calendars/index.cfm?index>