



BIOT*6700 Communication in Science and Business

Winter 2021

Section(s): C01

Department of Molecular and Cellular Biology

Credit Weight: 0.50

Version 1.00 - January 21, 2021

1 Course Details

1.1 Calendar Description

The goal of this course is to develop written, and oral presentation skills to effectively communicate ideas and experiments in both scientific and business contexts. Students will be asked to write and orally communicate a research proposal.

1.2 Course Description

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.

1.3 Timetable

Mondays at 1:30 PM online. Timetable is subject to change. Please see WebAdvisor for the latest information.

1.4 Final Exam

None

2 Instructional Support

2.1 Instructional Support Team

Instructor:	Ian Tetlow
Email:	itetlow@uoguelph.ca
Telephone:	+1-519-824-4120 x52735
Office:	SC1 4471

3 Learning Resources

4 Learning Outcomes

4.1 Course Learning Outcomes

By the end of this course, you should be able to:

1. 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

5 Teaching and Learning Activities

BIOT 6700: COMMUNICATION FOR SCIENCE AND BUSINESS: W 2021

Class Dates: Due to COVI-19 restrictions this course will be delivered remotely. All Classes will be on Monday and start at 1:30 PM using Microsoft Teams.

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 (on-line presentation) and written form.

Course Schedule

January 11: Week 1- General introduction and group set-up. Forms of communication; how to prepare research proposals; Guest speakers to be announced from organizations that help small business and also new entrepreneurs

January 18: Week 2- Intellectual property and proprietary information- developing an intellectual property strategy. Guest lecture.

January 25: Week 3- Short presentations and discussion on important/interesting patents

February 1: Week 4- - Visiting speakers from small businesses (OAFT and Natural Products Canada)

February 8: Week 5 – Short presentations and discussion on the future of biotechnology

February 15: Reading Week; no class

February 22: Week 6- Presentation of research proposals by individual students. Guest Lecture (Elizabeth Schantz (Knowledge Mobilization Unit University of Guelph)

March 1: Week 7- Guest Lectures Ben Dobosz (Roche, MBIOT alumni) and Mario Thomas (Precision Biomonitoring). Presentation of research proposals by individual students

March 8: Week 8- Presentation of research proposals by individual students

March 15: Week 9- Presentation of research proposals by individual students

March 22: Week 10-Presentation of research proposals by individual students

March 29: Week 11- Student groups present business cases

April 5: Week 12- Student groups present business cases

Assignments

1. On **January 11** each student will be assigned to a group for the development of the business case.
2. On **January 25**, 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 may be presented in any format (not necessarily power point presentations) and are an informal presentation. If necessary electronic 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 **February 1st**.
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 are instead a more informal presentation. 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 8th** and the paper will be due by noon Monday **February 22**.

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 15 minutes in length leaving 5 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 18.**

1. Each group will submit their written business case by 5 PM on April 9. This should be a maximum of 15 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.

6 Assessments

Assessment

First short oral presentation- 5%:

Second short oral presentation- 5%

Project Oral Presentation- 25%:

Short paper 1- 10%

Short paper 2- 10%

Written proposal- 25%;

Written business case- 20%:

7 Department of Molecular and Cellular Biology Statements

7.1 Academic Advisors

If you are concerned about any aspect of your academic program:

- Make an appointment with a program counsellor in your degree program. [B.Sc. Academic Advising](#) or [Program Counsellors](#)

7.2 Academic Support

If you are struggling to succeed academically:

- Learning Commons: There are numerous academic resources offered by the Learning Commons including, Supported Learning Groups for a variety of courses, workshops related to time management, taking multiple choice exams, and general study skills. You can also set up individualized appointments with a learning specialist. <http://www.learningcommons.uoguelph.ca/>
- Science Commons: Located in the library, the Science Commons provides support for physics, mathematic/statistics, and chemistry. Details on their hours of operations can be found at: <http://www.lib.uoguelph.ca/get-assistance/studying/chemistry-physics-help> and <http://www.lib.uoguelph.ca/get-assistance/studying/math-stats-help>

7.3 Wellness

If you are struggling with personal or health issues:

- Counselling services offers individualized appointments to help students work through personal struggles that may be impacting their academic performance. <https://www.uoguelph.ca/counselling/>
- Student Health Services is located on campus and is available to provide medical attention. <https://www.uoguelph.ca/studenthealthservices/clinic>
- For support related to stress and anxiety, besides Health Services and Counselling Services, Kathy Somers runs training workshops and one-on-one sessions related to stress management and high performance situations. <http://www.selfregulationskills.ca/>

7.4 Personal information

Personal information is collected under the authority of the University of Guelph Act (1964), and in accordance with Ontario's Freedom of Information and Protection of Privacy Act (FIPPA) <http://www.e-laws.gov.on.ca/index.html>. This information is used by University officials in order to carry out their authorized academic and administrative responsibilities and also to establish a relationship for alumni and development purposes.

For more information regarding the Collection, Use and Disclosure of Personal Information policies please see the Undergraduate Calendar.
(<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/intro/index.shtml>)

8 University Statements

8.1 Email Communication

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

8.2 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. The grounds for Academic Consideration are detailed in the Undergraduate and Graduate Calendars.

Undergraduate Calendar - Academic Consideration and Appeals

<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml>

Graduate Calendar - Grounds for Academic Consideration

<https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml>

Associate Diploma Calendar - Academic Consideration, Appeals and Petitions

<https://www.uoguelph.ca/registrar/calendars/diploma/current/index.shtml>

8.3 Drop Date

Students will have until the last day of classes to drop courses without academic penalty. The deadline to drop two-semester courses will be the last day of classes in the second semester. This applies to all students (undergraduate, graduate and diploma) except for Doctor of Veterinary Medicine and Associate Diploma in Veterinary Technology (conventional and alternative delivery) students. The regulations and procedures for course registration are available in their respective Academic Calendars.

Undergraduate Calendar - Dropping Courses

<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml>

Graduate Calendar - Registration Changes

<https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/genreg-reg-regchg.shtml>

Associate Diploma Calendar - Dropping Courses

<https://www.uoguelph.ca/registrar/calendars/diploma/current/c08/c08-drop.shtml>

8.4 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.

8.5 Accessibility

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required; however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to book their exams at least 7 days in advance and not later than the 40th Class Day.

For Guelph students, information can be found on the SAS website
<https://www.uoguelph.ca/sas>

For Ridgetown students, information can be found on the Ridgetown SAS website
<https://www.ridgetownc.com/services/accessibilityservices.cfm>

8.6 Academic Integrity

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 encourages academic integrity. 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.

Undergraduate Calendar - Academic Misconduct
<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml>

Graduate Calendar - Academic Misconduct
<https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml>

8.7 Recording of Materials

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

8.8 Resources

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

Academic Calendars
<https://www.uoguelph.ca/academics/calendars>

8.9 Disclaimer

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings and academic schedules. Any such changes will be announced via CourseLink and/or class email. All University-wide decisions will be posted on the COVID-19 website (<https://news.uoguelph.ca/2019-novel-coronavirus-information/>) and circulated by email.

8.10 Illness

The University will not normally require verification of illness (doctor's notes) for fall 2020 or winter 2021 semester courses. However, requests for Academic Consideration may still require medical documentation as appropriate.
