

Qin Biol 4650/APBI 4650 Course Outline 2017F

Biology 4650: Issues in Biotechnology (Credit Weight: 0.5)
Cross-List: Applied Bio-Molecular Science APBI 4650.

Offering: 3-0; or 3-0.

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Office Hours: Mondays 1:00-2:00 PM or by appointment

Meetings: 3 Hours/Week

Time: Mondays and Wednesdays 11:30 AM-13:00 PM

Location: ATAC 2020

Final Day for registration: September 18, 2017, Final Day for withdrawal: November 3, 2017

Textbook: <<Introduction to Biotechnology>> by William J. Thieman and Michael A. Palladino (Third Edition of Pearson Canada) [Strongly encouraged to buy the textbook but not required].

Course Goals: (1) Understand the historical, technical, and societal context of biotechnology. (2) Familiarize with the wide range of technologies and applications. (3) Understand controversial biotechnology issues and how they are viewed by different societal stakeholders.

Description: Current technical and ethical issues in biotechnology will be lectured and discussed in the class. The course will mainly consist of [1] Instructor's lectures, [2] Guest speaker's lectures when available, [3] Instructor-assigned literature reading for class discussion (The literature will be sent to the class after the final date for registering this course (September 18, 2017) but before the Fall Reading Week (October 10-13, 2017) starts (October 10, 2017).

First Day of Classes	Tuesday September 5, 2017
Final Day of Classes	Monday December 4, 2017
Final Date to Register (Add)	Monday September 18, 2017
Thanksgiving Day	Monday October 9, 2017
Fall Reading Week (6 th Week)	October 10-13, 2017
Final Date for Withdrawal (Drop)	Friday November 3, 2017
Examination Period	December 7 - 17, 2017 (11 Days)
Exam Contingency Date	Monday December 18, 2017
Marks Due	Friday December 22, 2017

Chapter 1: The Biotechnology Century and Its Workforce (0.5 week)
 Chapter 2: An Introduction to Genes and Genomes (0.5 week)
 Chapter 3: Recombinant DNA Technology and Genomics (1 week)
 Chapter 4: Proteins as Products (1 week)
 Chapter 5: Microbial Biotechnology (1 week)
 October 4, 2017 Wednesday in the 5th Week: Mid-term Exam (40%, Chapters 1-5)
 October 9, 2017 Monday: Thanksgiving Day (no class)
 October 10-13, 2017 Tuesday-Friday (Fall Reading Week, 6th Week)
 Chapter 6: Plant Biotechnology (1 week)
 Chapter 7: Animal Biotechnology (1 week)
 Chapter 8: DNA Fingerprinting and Forensic Analysis (1 week)
 Chapter 10: Aquatic Biotechnology (1 week)
 Chapter 11: Medical Biotechnology (1 week)
 *Chapter 9: Bioremediation (1.5 weeks, self-study, not to be examined)
 *Chapter 12: Biotechnology Regulations (Self-study, not to be examined)
 *Chapter 13: Ethics and Biotechnology (Self-study, not to be examined)
 November 20 for students presentations and discussions
 November 22 for students presentations and discussions
 November 27 for students presentations and discussions
 November 29 for students presentations and discussions
 Final Exam (40%, Chapters 6-8, 10-11)

Grading Scheme: (The lecturing PowerPoint slides do not cover all the information for exams, so intensive reading and understanding of the lectured book chapters are very necessary).

1. Mid-term exam [October 4, 2017: 40%, Chapter 1-5, five chapters]: The midterm exam may include (1) Fill in the blank questions, (2) Multiple choice questions, (3) True/False questions, (4) Essay questions, etc. TA will help administer and mark the exam. Duration is 90 minutes, after 90 minutes your exam will not be counted. The exam will be held in our classroom or a bigger classroom (to be determined later and will email you). If you have any concerns about the marking, please contact me or TA.
2. Final exam (40%, Chapter 6-8, 10-11) [40%]. The final exam may include (1) Fill in the blank questions, (2) Multiple choice questions, (3) True/False questions, (4) Essay questions, etc. Duration is 90 minutes.
3. Class participation [10%]: It includes your participation in class discussion and/or a few pop quizzes.
4. Five minutes individual presentation [10%]: Each student selects his/her own topic and give 5 minutes presentation (no PPT slides are required but you can use up to 5 slides). The whole class will evaluate the presenters and we will use the average marks for the presenter (the presenter does not evaluate himself/herself). The presentation will be in alphabetical order by the last names, as shown below. We have 40 students in the class.

BIOL-4650-	Date	Name
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FA Presentation Order		
1	November 20	Albadri, Feras A
2	November 20	Ali, Abdulati A
3	November 20	Aljafri, Adnan Y
4	November 20	Bernier, Aliya
5	November 20	Bhullar, Harleen K
6	November 20	Bradica, Matthew
7	November 20	Craig, Aaron
8	November 20	Davidson, Melissa M
9	November 20	Demchuk, Halle
10	November 20	Erickson, Victoria K
11	November 22	Fabiano, Nicholas T
12	November 22	Farough, Annie L
13	November 22	Gosselin, Scott D
14	November 22	Grochowski, Nicole M
15	November 22	Kessie, Tracy
16	November 22	Knight, Vincent
17	November 22	Knudsen, Alexandra H
18	November 22	Lahtinen, Lilja E
19	November 22	Lamb, Krista J
20	November 22	Le, Duy M
21	November 27	Leblanc, Christian S
22	November 27	Little, Brian
23	November 27	Makuto, Nyasha A
24	November 27	Mayor, Jenna L
25	November 27	Moore, Maxwell J
26	November 27	Nichols, Alexa N
27	November 27	Otterman, Helen

28	November 27	Paul, Rosie
29	November 27	Pucci, Katelyn M
30	November 27	Rogers, Abigail C
31	November 29	Rowan, Keera S
32	November 29	Ruberto, Julia A
33	November 29	Schrobilgen, Nicolas A
34	November 29	Spivak, Kirsten J
35	November 29	Takalo, Montana R
36	November 29	Zamojski, Sydney A
APBI-4650- FA Presentation Order	Date	Name
37	November 29	Adesanya, Emmanuel M
38	November 29	Anthes, Christina M
39	November 29	Kabillawat, Chayanit
40	November 29	Picken, Paige C

4. Bonus points: Students will be randomly offered to sign class attendance sheet for some classes. Each signature will be counted as 1 bonus point, each bonus point can value more or less than 1% adding to the final grade. It depends on the class average marks from the exams and class participation.

Notes: If you miss any examination (mid-term exam or final exam), we strictly follow the university regulations below of “Missed Examinations Due to Illness or Other Extenuating Circumstances”. If you are permitted to write your missed exam, an alternative test paper (Test B) may be made. Test B will be different in questions and/or format from the test questions for the class (Test A). You should email TA and copy the email to me at wsteaching@gmail.com for arranging your alternative exam.

Missed Examinations Due to Illness or Other Extenuating Circumstances

Occasionally, students encounter circumstances beyond their control where they may not be able to write an examination for reasons such as serious illness or death of an immediate family member.

In cases where a student misses an examination (including mid-term exam and/or final exam) due to an incapacitating illness, the student must have the “Certificate of Illness or Incapacitation” completed by a Medical Professional and submit the completed form to Enrolment Services no later than three (3) working days after the date of the original final examination. The “Certificate of Illness or Incapacitation” must be dated as seen by the Medical Professional no later than one (1) working day after the examination.

In other exceptional circumstances, official supporting documentation must be provided (e.g. copy of a death certificate or letter from the funeral home).

Accommodation shall be granted only when the documentation indicates that the onset, duration and severity of the illness or other circumstances are such that the student could not have reasonably been expected to complete the examination on the scheduled date.

Upon receipt of the “Certificate of Illness or Incapacitation” or other supporting documentation, Enrolment Services will notify the Instructor who will arrange for the student to write the missed examination. The final grade will be submitted to Enrolment Services as soon as possible after the rescheduled examination has been written.

Students will not be given another opportunity to write the examination if it is missed a second time. In some cases, when extraordinary circumstances beyond a student’s control prevent him/her from completing the rescheduled examination, a student may be eligible to petition Enrolment Services to explain the circumstances.