## 2023F Biol 4011 Immunology Course Outline

| Instructor: | Dr. Wensheng Qin (Biomassb@ gmail.com) <br> Office: CB 4016, Tel: 807-343 8010 ext. 8467 |
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| Meeting Time: | $2: 30-4: 00$ PM |
| Meeting Days: | Monday \& Wednesday |
| Meeting Place: | AT1007 |
| Instructional Type: | Lecture |
| Course ID: | 147487 |
| Teaching Assistant (TA) | Dr. Janak Khatiwada (PhD Degree Student) <br> Email: jkhatiwa@lakeheadu.ca <br> Tel: 807-343 8010 ext. 7141 <br> Office: CB 3037 |

Table of Contents of the Textbook
1 Overview of the Immune System
2 Cells, Organs, and Microenvironments of the Immune System
3 Recognition and Response
4 Innate Immunity
5 The Complement System
6 The Organization and Expression of Lymphocyte Receptor Genes
7 The Major Histocompatibility Complex and Antigen Presentation
8 T-Cell Development
9 B-Cell Development
10 T-Cell Activation, Differentiation, and Memory
11 B-Cell Activation, Differentiation, and Memory
12 Effector Responses: Cell- and Antibody-Mediated Immunity
13 The Barrier Immunity: Immunology of Mucosa and Skin
14 The Adaptive Immune Response in Time and Space
15 Allergy, Hypersensitivities, and Chronic Inflammation
16 Tolerance, Autoimmunity, and Transplantation

17 Infectious Disease and Public Health
18 Immunization and Vaccines
19 Immunodeficiency Disorders
20 Cancer and the Immune System

Fall 2023 Term Courses

| First Day of Classes | Tuesday, September 5, 2023 |
| :--- | :--- |
| Final Day of Classes | Monday, December 4, 2023 |
| Final Date to Register (Add) | Monday, September 18, 2023 |
| Final Date to Withdraw (Drop) | Friday, November 3, 2023 |
| Examination Period | Thursday, Dec. 7, 2023 - Sunday, Dec. 17, 2023 (11 Days) |
| Exam Contingency Date | Monday, December 18, 2023 |
| Marks Due | Thursday, December 21 2023 |

Course Contents and Schedule

|  | Fall 2023 | Chapt <br> er | Title |
| :--- | :--- | :--- | :--- |
| Week 1 | Sept 5-10 | 1 | Overview of the Immune System |
| Week 2 | Sept 11-17 | 2 | Cells, Organs, and Microenvironments <br> of the Immune System |
| Week 3 | Sept 18-24 | Cells, Organs, and Microenvironments <br> of the Immune System |  |
| Week 4 | Sept 25-Oct 1, 2023 | 3 | Recognition and Response |
| Week 5 | Oct 2-8 | 4 | Innate Immunity |
| Fall Reading <br> Week | Oct 9-15 Fall Reading Week <br> without Class) |  |  |
| Week 6 | Oct 16-22 <br> (Oct 18 Wednesday <br> Midterm 25\%, covering <br> chapters 1-3) | 5 | The Complement System |
| Week 7 | Oct 23-29 | 20 | Cancer and the Immune System |
| Week 8 | Oct 30-Nov 5 | 20 | Cancer and the Immune System |
| Week 9 | Nov 6-12 | Special Topics 1-4 presentation and <br> discussion |  |


| Week 10 | Nov 13-19 | 8 | Special Topics 5-8 presentation and <br> discussion |
| :--- | :--- | :--- | :--- |
| Week 11 | Nov 20-26 | 9 | Special Topics 9-12 presentation and <br> discussion |
| Week 12 | Nov 27-Dec 3 | Special Topics 13-16 presentation and <br> discussion |  |
| Week 13 | Dec 4 Last Class | 10 | Flexible |

Grades: Total 100\% (Midterm exam 25\%, Final exam 35\%, PPT presentation 30\%, Class attendance $10 \%$ ).

Notes:
[1] The midterm exam (25\%) consists of multiple choices and short or long answer questions from Chapters 1-3.
[2] The final exam (35\%) consists of multiple choices and short or long answer questions from the Chapters 4-5 \& 20.
[3] The class attendance (10\%).
[4] For individual student PPT presentation (30\%): Each student selects one topic of your own choice in the field of immunology and makes high-quality PPT slides (25-30 slides for your presentation). Each student presents for 25-30 minutes and followed by 5-10 minutes of questions and answering. The slides must be emailed to both the TA Janak Khatiwada jkhatiwa@lakeheadu.ca and the instructor Biomassb@gmail.com forty-eight (48) hours before your presentation, with email subject: Your complete name (First and Last Name) followed by your complete "topic title").

Your presentation will be evaluated by all your classmates plus the teaching assistant (TA) and instructor. We use the average marks of the students, TA, and instructor evaluations. The presentation will be in alphabetical order by the students' last names (will be provided to you or as shown in an attached table. The presentation evaluation criteria form is attached below for your reference. The final student list form will be sent to you before the presentations. Submission of your evaluation marks (at the end of the class, you must submit the following form before December 8, 2023, to the TA and instructor, I will send you an updated form later).

## Presentation Evaluation Form

Evaluator's Name $\qquad$ Student Number $\qquad$

Participants - Your opinion matters to us. Using the survey instrument below, please circle one answer for each question. There is space below for additional comments. If you run out of space, please feel free to write on the back of this form. Thanks for attending.

| The presenter |  | Marks | Your <br> evaluation |
| :--- | :--- | :--- | :--- |
| 1 | Delivered the materials in a clear and structured <br> manner | Up to 3\% |  |
| 2 | Was knowledgeable about the topic and any <br> related issues | Up to 3\% |  |
| 3 | Maintained my interest during the entire <br> presentation | Up to 3\% |  |
| 4 | Answered questions effectively | Up to 3\% |  |
| 5 | Was enthusiastic about the topic | Up to 3\% |  |
| 6 | Was well organized and prepared | Up to 3\% |  |
| The <br> presentation | Was concise and informative | Up to 3\% |  |
| 7 | Contained practical examples and useful <br> techniques or knowledge that applied to current <br> work | Up to 3\% |  |
| 8 | Had effective visual aids | Up to 3\% |  |
| 9 | Provided a great deal of novel information | Up to 3\% |  |
| 10 |  | Up to <br> $30 \%$ |  |
| Total |  |  |  |


| Lakehead | Grading <br> System | Biol 4011 Grading Plan (only for your reference) | Grading <br> Scheme |
| :--- | :--- | :---: | :--- |
| A+ | $90-100$ | $\sim 20 \%$ of the Students | $20 \% \times 95=$ |
| A | $80-$ | $\sim 30 \%$ of the Students | 30.00 |
| B | 89 | $\sim 85=$ |  |
|  | $70-79$ | $\sim 30 \%$ of the Students | $30 \% \times 75=$ <br> 21.50 |
| C | $60-69$ | $\sim 10 \%$ or less of the Students with C or Fail | $10 \% \times 65=$ |
| Fail | $01-59$ | $\sim 10 \%$ or less of the Students with C or Fail | $10 \%$ X $55=$ <br> 5.50 |
|  |  | According to our department advice, a class average <br> should be around 70-75\%. Thus, we will have class <br> average no more than 78\%. If the class average is too <br> high, the marks will be reduced by percentage. | $*$ Average by <br> calculation $=$ <br> $78 \%$. |

