MMG451 Section 2 – Introduction to Immunology- Fall 2017

Class Meetings
Tuesdays and Thursdays from 2:40 pm to 4:00 pm in 136 Akers Hall

Course Description
The overall goal of this course is to help you (the student) learn how to think like an immunologist. In this class, we will discuss basic immunology concepts as they apply to data presented in primary research articles. We will be using a combination of learning tools including textbooks, in class activities, the internet, team based learning (yes, you will actually meet other students in this course and work with them!), quizzes, and exams. In the end, I hope you will be able to explain HOW the immune system functions (including WHAT changes can occur in leukocytes and WHY the changes occur) and also be able to explain HOW immune responses are measured.

Course Objectives
In this course, a variety of concepts will be covered using various learning activities. Students will be assessed on their ability to:
- Discuss the concepts orally and in written format
- Diagram the concepts
- Use drawings to portray the concepts
- Graph the concepts
- Identify techniques/measurements used in research that relate to the concepts

Instructor
Dr. Kirstin Parkin
Phone: (517) 884-5322
E-mail: parkinkr@msu.edu
Office: 4192 Biomedical Physical Science (BPS)
Office Hours: Tu: 9:00-10:00 am, W: 12:45-1:45 pm

GTA
Ahrom Kim (kimahrom@msu.edu)
Office Hours: TBD

ULA
Madison Diamond (diamon47@msu.edu)

Student Responsibility
Study at the university level places a premium on self-motivation and the responsibility for learning falls increasingly on you, the student, as you advance through your program. Ultimately, the commitment and the dedication to learn must come from you. If you accept this responsibility, you will be provided an educational opportunity that can benefit you, and the society in which you live, regardless of your career path.
**Attendance and Absences**

Each day during class, you will have the opportunity to earn points. It is your responsibility to have a functional electronic device (laptop, cell phone, etc.) to run TopHat software during Thursday class quizzes. Missing class for ANY reason counts as an absence. This includes religious commitments, other MSU activities, and illness. Your lowest quiz score and two lowest in-class activity scores will be dropped. This means you can be absent from one quiz (Thursday class) and two in-class activities (non-exam days) without penalty. Additional absences, for ANY reason, will count as a 0 for that quiz and/or in-class activity and will become part of your final score. You should only contact the Dr. Parkin regarding absences if severe illness or extenuating circumstances prevent you from attending class for two or more weeks or cause you to miss an exam.

Some material presented in class is **NOT** in the textbook and some of this material will be tested on the examinations. You **are still responsible to learn the material presented in class, even if you were absent**. Therefore, reviewing the material posted online, forming a study group with fellow students or finding a reliable classmate to exchange class notes with is an encouraged action for success in this course.

There will be no make-up exams given without a University-approved excuse. See [https://msu.edu/unit/ombud/classroom-policies](https://msu.edu/unit/ombud/classroom-policies) for details on what constitutes a University-approved absence and for information on the documentation needed for approval of grief and health absences. For circumstance that can be anticipated in advance, you must contact Dr. Parkin more than one week prior to the exam to determine if you are eligible for alternate exam arrangements. If you miss an exam due to unexpected grief absence or significant illness, you must contact Dr. Parkin within 24 hours of the exam. If you miss an exam without an approved excuse, you will receive a zero for that exam. Everyone must take the final exam.

**Required Course Materials**

**Textbook**

You will need access to *The Immune System* 4th edition by Peter Parham either as an e-book or paperback (ISBN: 978-0-8153-4466-7). Used copies of the textbook are acceptable. The assigned readings are based on the 4th edition and thus, the 3rd edition can not be used as a substitute. The textbook, both paperback and e-book, is available for purchase or rent through the MSU Bookstore or through online sources.

**Carbonless notebook for making copies of in-class activities**

During each non-exam class period, students will be provided with a paper copy of an in-class activity. Students are required to turn in the work completed on the activity prior to Dr. Parkin’s review of the activity. If students wish to keep their original work (which is recommended), students can turn in a copy of the activity made using a carbonless notebook (which students may already have from previous lab courses). The copies will be graded and will not be returned unless specifically requested by a student.

**TopHat**

Top Hat is an in-class response system that we will be using each Thursday for in-class quizzes. This is a software that performs a similar function to iclickers, only with more options and less hassle. To create an account, go to [tophat.com](http://tophat.com) and “sign up“ using the **join code: 626381**.

There are three different price packages to choose from varying from one semester, to one year or lifetime use. Other faculty on campus are using this system, so if you have already purchased the TopHat software for another class, you can use that account to register for our class and do not need to buy additional software (unless your account has
Exams

D2L, Announcements, and Electronic Communications
We will make announcements either in class or by D2L e-mail. If you miss a class, be sure to consult with your classmates about announcements. Course materials including homework assignments, D2L quizzes, and grades will be posted on D2L. We will also use the D2L mail system to send course announcements so you should be sure that this system is connected to your e-mail account or that you check the D2L mail system regularly. Questions regarding the course administration (exam grades, absences, etc.) should be sent from your MSU e-mail directly to Dr. Parkin. Questions regarding specific class content should be posted in the corresponding D2L discussion forum. Either Dr. Parkin or Ahrom Kim will be happy to answer questions on any topic during our office hours.

Assessments

D2L Quizzes
To assess student understanding and completion of assigned readings and learning objectives, quizzes will be posted on the course D2L and will be due at 11:59 p.m. the night before the corresponding class (Monday and Wednesday nights). Students will be given two attempts to complete the quiz, and 60 minutes/attempt. The highest score of the two attempts will be used for determining final grades. After completing the quiz, students will be notified of their score. Answers for quiz questions will be available for viewing by noon on the day of class. Each D2L online quiz is worth 2 points. There are no make-up quizzes. The lowest 2 D2L quiz scores will be dropped from the final grade calculations.

In-class activities
Each class meeting, except exam days, will include in-class activities. These will be provided on paper copies at the beginning of class. Students are expected to work with their teams to complete the activities during the first 50 minutes of class. To receive credit (0.5 or 1 point/class), students must turn in the original paper or a carbon copy prior to review of the activities. The lowest 2 in-class activity scores will be dropped when determining final grades. In-class activities turned in after the review of the activity has begun, for ANY reason, will be counted as late and will receive a score of zero “0”.

Top Hat Quizzes
Each Thursday, except exam days, class will begin with a 10 minute individual Top Hat quiz. Students are expected to work quietly and individually on the individual TopHat quiz. The individual TopHat quiz will be followed by a second 10-minute team quiz. Students are expected to work with their team on the team TopHat quiz, while still entering their answers independently. Each TopHat quiz is worth a total of 1 point. The lowest individual TopHat quiz score and lowest team TopHat quiz score will be dropped when determining final grades.

Exams
Exams are individual efforts and you should neither give nor receive help during exams. We will not answer questions during the exams. If you feel a question is ambiguous or has an error, space will be provided on the front of the exam for you to explain your answer to and interpretation of the question. Even if you submit an explanation/interpretation, you must still enter your best answer at the appropriate place on the answer sheet. This policy avoids heterogeneous or
misleading verbal answers to questions that results from the large number of proctors involved. **You must present a picture ID to hand in your completed exam.**

**Midterm Exams**
There will be three midterm exams in this course given during regular class periods. Exams will consist of free response questions including graphing, drawing, and short written answers. Each topic in this course builds on previous topics so in this sense, each exam in the course is cumulative. However, each midterm exam will only explicitly cover the material in the classes meeting between exams.

**Final Exam**
The final exam is a comprehensive exam will consist of a midterm exam covering new material and a comprehensive question covering concepts from previous exams. A study guide for the comprehensive question will be provided.

**Grades**
The total points possible for the course are 564 points. The final grades are determined using the four exam scores, the highest 22 D2L quiz, in-class activities, and the highest 18 TopHat quiz scores. All scores are posted on D2L. It is the student’s responsibility to keep track of his/her scores.

**Final grades are assigned based on the following total scores:**

\[
\begin{align*}
4.0 &= 564 - 517 \\
3.5 &= 516 - 479 \\
3.0 &= 478 - 451 \\
2.5 &= 450 - 422 \\
2.0 &= 421 - 383 \\
1.5 &= 382 - 366 \\
1.0 &= 365 - 326 \\
0.0 &= \leq 326
\end{align*}
\]

<table>
<thead>
<tr>
<th>Assessment Type</th>
<th>points</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams 1</td>
<td>100</td>
<td>9/21</td>
</tr>
<tr>
<td>Exams 2</td>
<td>120</td>
<td>10/19</td>
</tr>
<tr>
<td>Exams 3</td>
<td>120</td>
<td>11/16</td>
</tr>
<tr>
<td>Final Exam</td>
<td>140</td>
<td>12/14</td>
</tr>
<tr>
<td>D2L Quiz</td>
<td>44</td>
<td>Drop 2 lowest scores.</td>
</tr>
<tr>
<td>In-class activity</td>
<td>22</td>
<td>Drop 2 lowest scores.</td>
</tr>
<tr>
<td>Top Hat Individual Quiz</td>
<td>9</td>
<td>Drop 1 lowest scores.</td>
</tr>
<tr>
<td>Top Hat Group Quiz</td>
<td>9</td>
<td>Drop 1 lowest scores.</td>
</tr>
</tbody>
</table>

**Academic Integrity/Cheating Policy**
According to the MSU policy on the integrity of scholarship and grades, "The principles of truth and honesty are fundamental to the educational process and the academic integrity of the University". Every student should be familiar with this policy ([https://www.msu.edu/unit/ombud/academic-integrity/index.html](https://www.msu.edu/unit/ombud/academic-integrity/index.html)). All students have a right to expect fair and honest evaluation of their work. Cheating undermines this expectation and will not be tolerated. You are expected to work with classmates on in-class activities. Copying another student’s homework and sharing answers during quizzes or exams is cheating. Any student found by the instructors to be cheating will receive a failing grade for the exam or other graded work and reported to the Dean. The instructor may, at their discretion, decide to give a failing
grade for the course in severe, repeat, or egregious cases of academic dishonesty. Please hold yourself, and your classmates, to the highest ethical standards in this regard!

**Accommodations for Persons with Disabilities**

Michigan State University is committed to providing equal opportunity for participation in all programs, services and activities. Requests for accommodations by persons with disabilities may be made by contacting the Resource Center for Persons with Disabilities at 517-884-RCPD or on the web at [www.rcpd.msu.edu](http://www.rcpd.msu.edu). Once your eligibility for an accommodation has been determined, you will be issued a verified individual services accommodation (“VISA”) form. Please present this form to Dr. Parkin at the start of the term or at least two weeks prior to the first accommodation date. Requests received after this date may not be honored.

**Use of media derived from class**

As members of a learning community, students are expected to respect the intellectual property of course instructors and other students. All course materials presented to students are the copyrighted property of the course instructor and are subject to the following conditions of use:

1. Students may record lectures or any other classroom activities and use the recordings only for their own study.
2. Students may not share the recordings with other students enrolled in the class.
3. Students may not post the recordings or other course materials online or distribute them to anyone not enrolled in the class without the advance written permission of the course instructor and, if applicable, any students whose voice or image is included in the recordings.
4. Any student violating the conditions described above may face academic disciplinary sanctions.

**Educational Research Project**

This class will be part of educational research conducted by Dr. Parkin and Ahrom Kim. Students’ work will be stored and analyzed in a de-identified form. Two Sections’ points are distributed differently for research purposes. If you have any questions please contact GTA, Ahrom Kim.