

Biology 194: Human Immune System
Syllabus and Course Information
Spring 2002

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Biology 194 Web Page:

<http://www.ivygreen.ctc.edu/kmarr>

Office Hours:

Mondays and Wednesdays:

9:30-10:00, 11:30-12:00 & 2:30-3:00 in STC-17

Fridays:

9 - 10 and 11 -12 in STC-17 or STA-66

And by appointment!

The Course

Through a variety of instructional methods we will learn about the functioning of the human immune system. Topics discussed include....

- Fighting cancer
- AIDS
- Allergy
- Infection
- Autoimmune diseases
- Multiple sclerosis
- Rheumatoid arthritis
- The promise of new therapies
- Will humans or microbes win?
- Tolerating grafts and organ transplants
- The potential threat of xenotransplants

A strong attempt will be made to show the relevance of these topics to your life and to help you to learn on your own once you leave this class. A variety of instructional methods will be used: traditional lecture, group work/discussions, and individual as well as group presentations. In groups of two or three, students will select an immune system topic of interest to research in depth and then present it to the class later in the quarter.

Prerequisites

- None, but good communication skills, good study habits, a curious/active mind and an interest in biology are strong assets

Course Materials (available in the GRCC bookstore)

- Required texts:
 - How the Immune System Works* by Lauren Sompayrac
 - At War within—the Double-Edged Sword of Immunity* by William C. Clark
- Floppy disk formatted for a PC
- 3 ringed notebook for handouts, notes, etc.
- Optional: small pocket stapler for stapling assignments in class

Course Requirements

- Daily attendance (Class meets MW: 1 – 2:30 p.m. in STD-32)
- In-class participation
- One Exam
- Homework Portfolio
- Group presentation of an immune system topic of interest

Students subject to provisions of Americans with Disabilities Act

If you believe you qualify for course adaptations or special accommodations under the Americans with Disabilities Act, it is your responsibility to contact the Disability Support Services Coordinator in the Lindbloom Student Center and provide the appropriate documentation. If you have already documented a disability or other condition that would qualify you for special accommodations, or if you have emergency medical information or special needs I should know about, please notify me during the first week of class. You can reach me by phone at (253) 833-9111, extension 4204. Or, you can schedule an office appointment to meet me in the STA Office Building, office number STA-66 during my posted office hours or at another mutually determined time. If this location is not convenient for you, we will schedule an alternative place for the meeting. If you use an alternative medium for communicating, let me know well in advance of the meeting (at least one-week) so that appropriate accommodations can be arranged.

Professional Conduct

Your instructor will work hard to make this a course from which you can learn much and develop important skills. Suggestions are welcome from you at anytime about things you think could be done to improve the course. In return, we ask that you arrive to class on time and stay until class is over without making unnecessary noise that could distract your classmates. In short, we promise to respect you as students and as individuals, and ask that you return that respect to your instructor and to your classmates.

We want you to learn and to do well in the course, but academic dishonesty will not be tolerated. If you find yourself in trouble or if you are aware of academic dishonesty occurring, please talk to the instructor. Personal crises do happen. If you are having difficulties that are interfering with your ability to do well in the class, please tell the instructor as soon as possible. We may be able to refer you to someone for help or to make special arrangements if the need is real and if you have done your best to deal with the situation in a timely manner.

- **Academic Honesty**—Students are expected to produce original work. The use of another person's ideas, data, graphics, or text may be used with permission from the original sources and the original source given credit. Any unauthorized use of another person's intellectual work is cheating (copying on exams, copying work/assignments, falsification of data or calculations, etc.). Cheating will not be tolerated and can result in failure of this course and a letter sent to the Dean. WAC 132J-125-200
- **Inappropriate conduct**— will be addressed verbally as a first warning. The second offense will be addressed in writing to the student and the Dean. The third offense may result in permanent removal from class. WAC 132J-125-210
- **Anti-discrimination**—Discriminatory/derogatory language or actions regarding race, gender, ethnic/cultural background, sexual orientation, and physical/mental abilities will not be tolerated.
- **Safety**
 1. Notify the instructor immediately when injury occurs.
 2. Immediately discuss with the instructor any situation that you feel may be dangerous or cause you discomfort.
 3. Use proper, safe techniques regarding personal safety.
 4. Use equipment for its intended purpose only, as instructed by the instructor.
 5. While enthusiastic participation is encouraged, the class will remain an academic environment in which learning can take place.

Grading Policy

Grades are determined according to the following table based on a percentage of total points possible:

Percent	Grade	Percent	Grade	Percent	Grade	Percent	Grade	Percent	Grade
95-100	4.0	88	3.3	81	2.6	74	1.9	67	1.2
94	3.9	87	3.2	80	2.5	73	1.8	66	1.1
93	3.8	86	3.1	79	2.4	72	1.7	65	1.0
92	3.7	85	3.0	78	2.3	71	1.6	64	0.9
91	3.6	84	2.9	77	2.2	70	1.5	63	0.7
90	3.5	83	2.8	76	2.1	69	1.4	62	0.6
89	3.4	82	2.7	75	2.0	68	1.3	< 62	0.0

Note:

- Students that earn less than 62%, or who stop coming to class without officially withdrawing according to GRCC policy, will receive a grade of 0.0 ***This grade will be included in college GPA calculations.***
- **Keep track of your grades!!!!** It is strongly recommended that you keep track of all of your grades throughout the quarter on the grade record sheet found towards the end of this packet. There are two excellent reasons to do this:
 - If you keep track of your grades on individual assignments, you can calculate your class grade at any point in the quarter.
 - Instructors have been known to make record keeping mistakes. Protect yourself by keeping good records.

Pass/No Credit Grade Option

Students may elect to be evaluated on a "Pass" or "Non-Credit" basis rather than by decimal grades by filing a petition with the registrar no later than the end of the 5th week of the quarter. For students who qualify, the registrar will convert the decimal grade submitted by the instructor either to credit (P) or to no credit (NC). Any student who does not inform the registrar by the deadline may not choose the P/NC option.

Factors that influence your Grade

	Points Possible (approximate)	% of Grade (approximate)
Midterm Exam	100	33 %
Portfolio	50	17 %
Class attendance and quizzes	50	17 %
Group project/presentation	100	33 %

Total Points (approximate) = 300

Midterm Exam

- One exam covering your reading and the class discussions on the human immune system will be given **during the 8th week of the quarter**. Missing the exam will result in a score of zero. **No make-up exam will be given.** The exam will consist of objective and short-answer questions and will cover material from all aspects of the course, including lectures, homework, seminars and your readings. Your homework assignments and lecture notes will help you concentrate on the reading material that we think is particularly important. The exam will be designed to probe deep understanding of the concepts and principles involved, and an ability to apply these concepts to novel situations rather than a memorization of detail.
- The exam score is not "curved"—making it possible for everyone in the class to earn a high grade. Moreover, the exam includes several extra credit questions allowing for the possibility of a score greater than 100%.

Portfolio

Student attendance and participation is critical for a seminar/discussion type of class to be successful. Moreover, being prepared for class discussions is vital. Several case studies and other questions based on the course readings will be discussed as a class and in groups during the quarter. Students will be asked to be prepared to discuss these questions and case studies, *before* coming to class. To this end, written homework assignments will be given throughout the quarter.

- A Portfolio is file folder containing a collection of **“Stamped Assignments”** that you complete during the quarter. Your portfolio will be collected just before the start of the midterm exam. “Stamped Assignments” consist of homework assignments (see below), and assignments completed in class.
- Your instructor will only stamp an assignment when it is due and shows a conscientious effort to be completed (i.e. questions are answered fully, work is neat, pages are in the correct order, and a professional effort is evident)
- **If you are not in class, late, or absent, your assignment will not get stamped.** **However**—Contact the instructor *ahead of due dates* if you are unable to attend class due to poor health or other emergency circumstances.

Portfolio Grades

It is anticipated that most members of the class will do conscientious and professional work—hence it is anticipated that most of the portfolios will earn a full score of 50 points.

50 points: a professional and conscientious effort is evident

- No assignments are missing and all (or all but one) of the assignments have stamps.
- Assignments are present in the file folder in the correct order.
- All assignments are complete—work is high quality all questions are answered fully and corrections have been made for all questions that were incomplete or incorrect when the assignment was first stamped.
- Work is neat, pages are in the correct order, each assignment’s pages are stapled together, and the full name of the student and the title of the assignment are clearly indicated at the top of each assignment.

Portfolio Grades (continued)

Penalty points

Points will be deducted from your portfolio score if the work is lacking in some aspect or a professional/conscientious effort is not evident: more than one assignment lacks a stamp, work is superficial and/or incomplete, assignments are missing, corrections have not been made, work is sloppy, assignments are not in the correct order, work is not stapled, work lacks a title or name, assignments are not in a file folder, etc.

Bonus Points

Up to 10 bonus points per portfolio may be awarded for exceptional work: questions are answered in great depth and creatively. In short, the work is of the highest caliber.

Attendance and Quizzes

- Daily attendance will be taken. All students will start out with 20 points. 5 points will be deducted for each absence and 2 points will be deducted every time one is late for class. Each student will be allowed one “free absence” and one “free tardy.”
- Come to class ready to learn and participate in class discussions. To reward those that are prepared, “mini-quizzes” may be given at any time. Your lowest miniquiz score will be dropped.

Group Project / Presentation

Each of you will work with a group on a research project related to the human immune system. You will choose your topic early in the quarter and work on the project during the entire term. The project consists of three parts:

- Acquisition of reference material (an individual grade) which will be evaluated on the quality of the references
- Summary/progress report (group grade)
- Group presentation (group grade)

Each group will make their presentation during the last week of the quarter. Late presentations will not be accepted. Failure to participate in the poster presentation will adversely affect your poster grade (50% penalty).

Late Work Policy (Does **not** apply to stamped assignments and group presentation)

Turn your work in on time! Late work will be penalized as follows: 10% off per day late—maximum 4 days late. No credit if more than four days late. Assignments due on a Wednesday that are turned in on the following Monday will not be accepted as they will be more than 4 days late. ***An assignment is late if it is due at the start of class and it is not turned in at that time, or if an assignment is due at the end of class and the assignment is not turned in at that time.*** Look under “portfolio,” above, for the late work policy for stamped assignments.

Guidelines for Class Participation

Sometimes people think that class attendance and participation merely involves coming to class, taking notes, and perhaps participating occasionally in class discussions. However, true participation is much more than this. You can evaluate your level of participation by using the following guidelines.

1. Participation (25%)

Do	Don't
<ul style="list-style-type: none"> • Complete homework and reading before class • Have necessary materials (textbook, paper, pencils, assignments stapled and ready to turn in, etc. • Sit in front or middle of class • Arrive early after having reviewed notes and reading from the previous class session 	<ul style="list-style-type: none"> • Do homework during class • Arrive late and disrupt the class by asking what's happening • Have to borrow materials from classmates

2. Behavior (50%)

Do	Don't
<ul style="list-style-type: none"> • Pay attention and focus on the day's lesson • Volunteer answers • Ask questions appropriately • Maintain a balance of speaking and listening during discussions and group activity • Make constructive comments • Help make a friendly learning atmosphere in class 	<ul style="list-style-type: none"> • Talk when others are answering or talking • Shout out answers without being called on • Take the discussion off the main topic • Attack others verbally • Sleep in class anytime • Do homework for other classes • Dominate discussions • Engage in "horseplay"

3. Body Language (25%)

Do	Don't
<ul style="list-style-type: none"> • Look at the speaker during lecture/discussion • Nod or shake your head to show understanding/agreement • Use facial expressions to show understanding/agreement 	<ul style="list-style-type: none"> • Repeatedly look at the clock • Slouch or sprawl in your seat • Put your head down on your desk

4. Evaluate *your* level of Participation by filling in the table below

<i>Always</i>	<i>Usually</i>	<i>Often</i>	<i>Sometimes</i>	<i>Seldom</i>
4.0	3.0	2.0	1.0	0.0

Preparation (25%)	Decimal Grade = () x .25 = _____
Behavior (50%)	Decimal Grade = () x .50 = _____
Body language (25%)	Decimal Grade = () x .25 = _____

Your Total = _____

Campus-Wide Learning Outcomes addressed in Biology 194

Written Communication

1. Student demonstrates involvement with the material by expressing a clear sense of purpose, unity and focus in his/her writing.
2. Student demonstrates clear organization of his/her thoughts in written form.
3. Student demonstrates well-organized and logical writing with correct grammar and spelling.
4. Student's writing illustrates the connections between concepts developed in the course and topic specific applications.
5. References are reported in standard format.
 - These outcomes are demonstrated by 1) portfolio, 2) short and long writing assignments.

Quantitative Reasoning

1. Student demonstrates problem-solving abilities in individual assignments and in assignments which involve working in groups of variable size.
2. Student translates real-world data into symbolic representations, extracting and interpreting data from symbolic representations of real-world data.
 - These outcomes are demonstrated by 1) case study analysis, 2) lecture/discussion, 3) seminars.

Responsibility

1. Student demonstrates knowledge of and a willingness to accept stated/agreed upon expectations, policies, behavior, and procedures.
2. Student demonstrates preparedness for class discussion of assigned readings.
3. Student demonstrates an ability to understand and respond respectfully to perspectives offered by other students.
4. Student shares knowledge and opinions with others in general class discussions.
 - These outcome are demonstrated by 1) pre-class clearance documents (stamped assignments), 2) active and meaningful participation in lecture/discussions, 3) handing in assignments in a timely fashion, 4) attitudes and behaviors in the class which will be reflected in the overall class grade.

Critical Thinking

1. Student recognizes and uses essential components of effective reasoning to evaluate information and to improve the quality of his/her own thinking.
2. Student provides reasons for the conclusions they reach and assess the relevance and adequacy of those reasons.
3. Student demonstrates active listening and close reading skills.
4. Student connects past learning with current topics.
 - These outcomes are demonstrated by: 1) active and meaningful participation in seminars, 2) portfolio, 3) case study analysis, 4) class and group discussions, 5) short and long writing assignment.

Aesthetic Awareness

1. Student demonstrates the ability to produce work that is neat in appearance.
 - This outcome is demonstrated by: 1) portfolio, 2) short and long writing assignments

The Road to Success—Some Tips

- If you need extra help in this class (or any other class!), take advantage of the instructor's office hours and the help center.
- Many students benefit greatly by being involved in a study group consisting of other members of this class...exchange phone numbers A.S.A.P. with a few people in this class.
- Be intellectually active in class: participate actively in class discussions and ask questions.
- Read the material and attempt homework assignments *before* the material is covered in class. Jot down any questions you have on the material and be sure to get clarifications during class time, with your study group, and/or during office hours.
- Review your class notes and the relevant material in your textbook *immediately* after class or as soon as possible.
- **Study daily:** Develop a study plan in which you will study **daily**. Just as one cannot train for a marathon by training sporadically for several hours at a time, one can't study sporadically for long periods of time and expect to learn with retention. Regular study sessions of one-hour duration or less are more effective than massive cram sessions.
- Isolate yourself from distractions while studying.
- Study efficiently: Don't waste too much time on a tough problem or concept. Go on to the next problem and come back to the real stumpers later. Get help as needed from your fellow classmates and from your instructor. Often it's only a few small details that may keep you from understanding something— what seems like a major stumbling block might in reality be something minor!
- Keep a positive attitude, work hard, and have confidence in yourself!
- Have a great quarter!