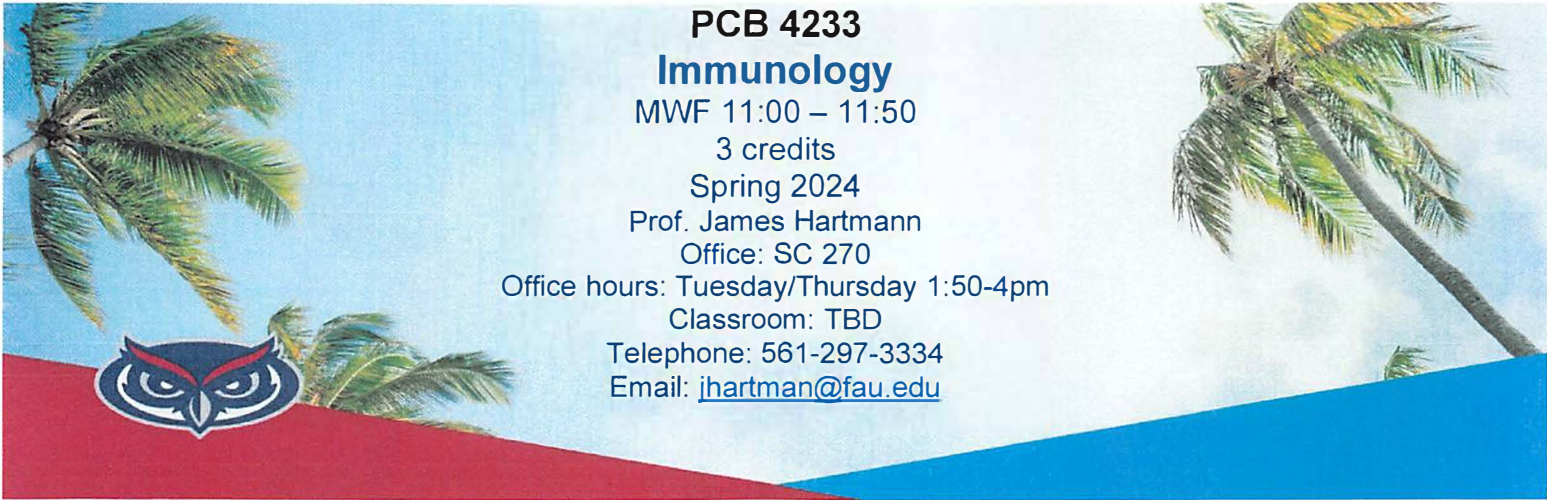
 FLORIDA ATLANTIC UNIVERSITY	COURSE CHANGE REQUEST Undergraduate Programs	UUPC Approval <u>9/11/2023</u> UFS Approval _____ SCNS Submittal _____ Confirmed _____ Banner Posted _____ Catalog _____
	Department Biological Science College Charles E. Schmidt College of Science	
Current Course Prefix and Number PCB 4233	Current Course Title Immunology	
<i>Syllabus must be attached for ANY changes to current course details. See <u>Template</u>. Please consult and list departments that may be affected by the changes; attach documentation.</i>		
Change title to: Change prefix From: To: Change course number From: To: Change credits* From: To: Change grading From: To: Change WAC/Gordon Rule status** Add <input type="checkbox"/> Remove <input type="checkbox"/> Change General Education Requirements*** Add <input type="checkbox"/> Remove <input type="checkbox"/> <small>*See <u>Definition of a Credit Hour</u>.</small> <small>**WAC/Gordon Rule criteria must be indicated in syllabus and approval attached to this form. See <u>WAC Guidelines</u>.</small> <small>***GE criteria must be indicated in syllabus and approval attached to this form. See <u>Intellectual Foundations Guidelines</u>.</small>	Change description to: Change prerequisites/minimum grades to: Remove BCH 3033 Change corequisites to: Change registration controls to: Please list existing and new pre/corequisites, specify AND or OR and include minimum passing grade (default is D-).	
Effective Term/Year for Changes: Spring 2024	Terminate course? Effective Term/Year for Termination:	
Faculty Contact/Email/Phone James Hartmann 561-297-3334-jhartman@fau.edu		
Approved by Department Chair <u>Sarah L. Milton</u> College Curriculum Chair <u>[Signature]</u> College Dean <u>[Signature]</u> UUPC Chair <u>Korey Sorge</u> Undergraduate Studies Dean <u>Dan Moorhoff</u> UFS President _____ Provost _____	Date <u>8-22-23</u> <u>8/31/23</u> <u>8/31/2023</u> <u>9/11/2023</u> <u>9/11/2023</u> _____ _____	

Email this form and syllabus to mjenning@fau.edu seven business days before the UUPC meeting.



PCB 4233

Immunology

MWF 11:00 – 11:50

3 credits

Spring 2024

Prof. James Hartmann

Office: SC 270

Office hours: Tuesday/Thursday 1:50-4pm

Classroom: TBD

Telephone: 561-297-3334

Email: jhartman@fau.edu

TA name	TBD
Office	TBD
Office hours	TBD
Telephone	TBD
Email	xxxxxx@fau.edu

Course Description

The tissues, cells and biochemical components of the immune system, and the role of immune responses in the diagnosis and prevention of disease.

Instructional Method

In-Person. There is no remote option for this course.

Prerequisites: MCB 3020, MCB 3020L

Corequisites: None

Course Objectives/Student Learning Outcomes

- a. To introduce the student to the molecular and cellular mechanisms by which the host recognizes and responds to its non-self environment.
- b. To learn how to analyze experiments in the field of Immunology.
- c. To discover practical applications of immunology and the cutting edge of this field.
- d. To learn how to question the status quo in science.
- e. To learn about the many opportunities for employment in Immunology and success stories in this discipline.

Course Evaluation Method

- a) 3 exams are each worth 100 points for a total of: 300 exam points.
- b) **Additional points for quizzes:** are dependent upon number of quizzes: typically there are 5 announced quizzes, 10 points each to yield:
- c) total of 350 points per semester. Fewer or more quizzes will be averaged as part of the total points.

Course Grading Scale

Grade Minimum Percentage average

A 94 or higher

A- 90-93

B+ 87-89

B 84-86

B- 80-83

C+ 77-79

C 74-76

C- 70-73

D+ 67-69

D 64-66

D- 60-63

F 59 or less

The final grade is derived from the final percentage of points on:

Exams, and quizzes Usually, each of the exams is curved. After each exam you will have an average calculated.

If you are **having difficulties of any nature** that is affecting your performance, **please discuss these with myself** or with your advisor **BEFORE AN EXAM**. Sometimes it is better to withdraw from the university rather than adversely impact your academic record.

PS. No one will leave the exam for any purpose, including a bursting bladder- unless you bring a medical excuse.

There will be a **5 point penalty** on the exam for:

1. Not putting your last name first as indicated on the form
2. Forgetting your Z number or not putting it in the proper place on the exam under examination.
3. Not writing the exam number in roman numerals at the top

of your answer scantron: For example: Exam III- write it at the top of the scantron.

Note: If you do poorly (low D or F) on the first exam, good idea to drop prior to receiving an F in the course as it is extremely difficult to pull up that grade. I realize that difficulties with work, family, health etc may necessitate dropping the class. More than 97% of students scoring below 50% on any exam earned a D or F in most university courses.

Policy on Makeup Tests, Late Work, and Incompletes (if applicable)

Missed an exam? You will need a signed medical excuse or similar documentation of *Participation in University approved activities* – athletics etc. in order to take a makeup exam.

Make up exams are allowed for religious observance reasons.

An incomplete grade is reserved for students who are passing the course but cannot complete the course due to exceptional circumstances- death, severe protracted illness, accident etc

The sequence and/or specific dates listed herein for the lecture/exams are subject to change depending on the pace of coverage. It is your responsibility as student to attend classes and ascertain any changes in lecture/exam scheduling.

Questions asked in class either by students or myself may appear on the exams.

Syllabus and Class Notes for Immunology are SUBJECT TO CHANGE!

Note that grades of Incomplete (“I”) are reserved for students who are passing a course but have not completed all the required work because of exceptional circumstances.

Classroom Etiquette Policy

University policy on the use of electronic devices states: “In order to enhance and maintain a productive atmosphere for education, personal communication devices, such as cellular telephones are to be disabled in class sessions. Recording devices may be used and placed on the front desk or lecture podium.

Students are encouraged to participate in classroom discussions, bring research articles to my attention and challenge any material presented or discussed.

Policy on the Recording of Lectures (optional)

Because of a new Florida Statute in 2021, the following model language is suggested for inclusion in course syllabi, at the discretion of individual faculty:

Students enrolled in this course may record video or audio of class lectures for their own personal educational use. A class lecture is defined as a formal or methodical oral presentation as

part of a university course intended to present information or teach students about a particular subject. Recording class activities other than class lectures, including but not limited to student presentations (whether individually or as part of a group), class discussion (except when incidental to and incorporated within a class lecture), labs, clinical presentations such as patient history, academic exercises involving student participation, test or examination administrations, field trips, and private conversations between students in the class or between a student and the lecturer, is prohibited. Recordings may not be used as a substitute for class participation or class attendance and may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements may constitute a violation of the University's Student Code of Conduct and/or the Code of Academic Integrity.

Attendance Policy

Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance. Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

Counseling and Psychological Services (CAPS) Center

Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to <http://www.fau.edu/counseling/>

Disability Policy

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at www.fau.edu/sas/.

Code of Academic Integrity

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student

enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see [University Regulation 4.001](#).

Required Texts/Readings

Kuby Immunology 2018. Eighth edition W.H. Freeman, Pub

Or if absolutely necessary for financial reasons, an older less expensive version is:

Kuby Immunology, 2013 Seventh edition W.H. Freeman, Pub. Available from Chegg.com, Amazon.com online or at campus and local bookstores

Text website: www.whfreeman.com/immunology8e

New/Used Textbooks available at:

Booksmart Boca Raton- across Glades road south of campus.

From online sources: newegg.com, textbooksrus.com, ecampus.com about \$65 or less if you search.

Rental for one semester: \$34 at textbookrevolution.org- site run by students for rental texts.

Audiotutorial (not required): Rapidlearningcenter.com \$99.

"Immunology Visually in 24 hours" RL-207-S. not required.

Other Excellent Texts:

1. Exploring Immunology Concepts and Evidence by MacPherson, G and J. Austyn. 2012.

2. Primer to the Immune Response by Mak, T and M.E. Saunders. 2011.

You Must purchase: i-clicker remote for taking



quizzes-no credit given without an i-clicker.

iclickers are available used online. You must bring one registered to class on August 28 for first quiz and bring to all class periods.

Course Philosophy and Expectations

This course is taught with emphasis on cellular and molecular interactions. The course is taught using material and figures taken from the textbook. All lecture notes are available on canvas, but the field changes so rapidly that lectures are often updated during the semester. The course introduces many

new terms and some very difficult concepts. Many students have great difficulties learning how to think about cellular and molecular interactions and integrate the material.

While studying you should ask:

1. Why is this concept important?
2. How does this material relate to what else I have learned?
3. Do I know the meaning of all the terms/experiments used in introducing and describing this concept?

Expectations for the course:

- a. Learn about the various types, function and interrelationships of the innate and adaptive immune cells.
- b. Discover how Immunologists analyze the functions of and communication methods utilized by immune cells.
- c. Become familiar with information literacy, especially the use of the search engine pubmed.gov for authoritative articles in Immunology.
- d. Gain an understanding of the role played by Immunologists in diagnosis, prevention and therapy of illness.

Course Topical Outline

Subject to change

Tentative Schedule	Topics	Assigned Readings	Exam Dates
Week 1	Overview of the Immune System	Module 1 Pages 1-28	
Week 2	Cells, Organs and Microenvironments of the Immune System	Module 1 pages 31-67	
Week 3	Innate Immunity	Module 1 Pages 69-111 Pages 113-162	
Week 4	The Complement System Organization and Expression of Lymphocyte Receptor genes	Module 1- Pages 165-202 Pages 205-245	
Week 5	Exam 1-		TBD
Week 6	The Major Histocompatibility Complex & antigen Presentation	Module 2 Chapter 7	
Week 7	T-Cell Development	Module 2-Chapter 8	
Week 8	B-Cell Development	Module 2 -Chapter 9	
Week 9	T-Cell activation, Differentiation, and Memory	Module 2-Chapter 10	
Week 10	B-Cell Activation, Differentiation, and Memory	Module 2 Chapter 11	
Week 11	Effector Responses: Cell and Antibody-Mediated Immunity Barrier Immunity: Immunology of Mucosa and Skin	Module 2 Chapter 12 and Chapter 13	
Week 12	Exam		TBD
Week 13	Allergy, Hypersensitivities and Chronic Inflammation Tolerance, Autoimmunity, and Transportation	Module 2 Chapter 15 Chapter 16	
Week 14	Infectious Diseases and Vaccines Immunodeficiency Diseases	Module 2 Chapter 17 Chapter 18	
Week 15	Cancer and the Immune Systems Experimental methods	Module 2 Chapter 19 Chapter 20	
Final Exams	TBD		TBD