



CUMMING SCHOOL OF MEDICINE  
GRADUATE COURSE OUTLINE

<b>COURSE TITLE: Inflammation</b>			
<b>Course</b>	MDSC 639.04		
<b>Pre/Co-Requisites</b>	CMMB 527 -- undergraduate Immunology or equivalent		
<b>Faculty</b>	Cumming School of Medicine, Graduate Science Education		
<b>Instructor Name(s)</b>	Kamala Patel	<b>Email</b>	kpatel@ucalgary.ca
<b>Office Location</b>	HRIC 4AA22	<b>Office Hours</b>	On call
<b>Instructor Email Policy</b>	None		
<b>Telephone No.</b>	403-220-2746		
<b>TA Name</b>	NA	<b>Email</b>	NA
<b>Class Term, Days</b>	Winter 2020, T TH		
<b>Class Times</b>	9:30-10:50 am		
<b>Class Location</b>	HSC O1503		

<b>COURSE INFORMATION/DESCRIPTION OF THE COURSE</b>
This is an advanced immunology course that examines the fundamental principles of and current topics in leukocyte trafficking, acute inflammation and immunity to infections.
<b>LEARNING RESOURCES/REQUIRED READING</b>
TBD

<b>COURSE OBJECTIVES/LEARNING OUTCOMES</b>
To provide the students with a working knowledge of the cellular players and fundamental mechanisms involved in inflammation and associated pathologies. This course will integrate basic textbook knowledge and clinical disease to generate a comprehensive understanding of inflammation.

<b>CUT POINTS FOR GRADES</b>
This course adheres to the grading system outlined in the University of Calgary, Faculty of Graduate Studies Calendar. Grades of A+ and A are not distinguished in the calculation of GPAs. Percentage/letter grade conversion used for this course is as follows

Grade	Grade Point Value	Percentage Conversion	Graduate Description
A+	4.00	95-100	Outstanding
A	4.00	90-94	Excellent – superior performance showing comprehensive understanding of the subject matter
A-	3.70	85-89	Very Good Performance
B+	3.30	77-84	Good Performance
B	3.00	72-76	Satisfactory Performance
B-	2.70	68-71	Minimum Pass for Students in the Faculty of Graduate Studies
C+	2.30	63-67	All grades below ‘B-’ are indicative of failure at the graduate level and cannot be counted toward Faculty of Graduate Studies course requirements

**Assessment Components:** The University policy on grading related matters is outlined in the [2019-2020 Calendar](#).

Assessment Methods	Description	Weight %	Due Date <u>and</u> Time
Critique – Block 1	Written critiques will be evaluated on background information presented, an accurate and well-thought out critique of the material and how the field has changed since the publication of the assigned manuscript.	15	See outline – critiques are due by noon one week after the in class discussions held on the specified dates
In class discussion - Block 1	For class participation: students will be expected present and lead discussions focused on ideas they developed in their written critiques. i.e. present your critique and participate in the ensuing discussion	5	See outline – in class discussions are held on the specified dates
Exam Block 1	In class exam	15	Feb 6, 2020
Exam Block 2	In class exam	30	Mar 12, 2020
Oral presentations – Block 3	Student presentations will be evaluated on the quality of the presentation (clarity, pace, use of AV material), background information, critique of the	10	See outline for specific dates

	experiments/arguments presented in the paper and discussion of how the manuscript has changed our understanding of a topic (or what has happened in that field since the publication)		
Critiques – Block 3	Written critiques will be evaluated on background information presented, an accurate and well-thought out critique of the material and how the field has changed since the publication of the assigned manuscript.	20	See outline – critiques are due by noon one week after the in class discussions held on the specified dates
In class discussion - Block 3	For class participation: students will be expected present and lead discussions focused on ideas they developed in their written critiques. i.e. present your critique and participate in the ensuing discussion	5	See outline – in class discussions are held on the specified dates

ASSESSMENT AND EVALUATION INFORMATION
<p><b>ATTENDANCE AND PARTICIPATION EXPECTATIONS:</b> Full attendance unless otherwise arranged with instructor or in cases of health related issues.</p> <p><b>GUIDELINES FOR SUBMITTING ASSIGNMENTS:</b> Specific details above and provided in the syllabus</p> <p><b>FINAL EXAMINATIONS:</b> None</p> <p><b>EXPECTATIONS FOR WRITING:</b> Written assignments are to conform to university standards</p> <p><b>LATE AND/OR MISSING ASSIGNMENTS:</b> Late assignments will not be accepted without prior written permission from the course coordinator.</p>

Is a passing grade on a particular component essential to pass the course as a whole? No



**Course Timetable:**

<b>Date</b>		<b>Session</b>	<b>Presentation</b>	<b>Lecturer</b>
14th Jan	Tues	1	Course introduction and overview	K. Patel
<b><i>BLOCK 1: CELL RECRUITMENT</i></b>				
16th Jan	Thurs	2	Leukocyte recruitment	K. Patel
21st Jan	Tues	3	Chemokines and lipid mediators	K. Patel
23rd Jan	Thurs	4	Methods in inflammation	K. Patel/Bas
28th Jan	Tues	5	Paper analysis I	K. Patel
30th Jan	Thurs	6	Paper analysis II	K. Patel
4th Feb	Tues	7	Paper analysis III	K. Patel
6th Feb	Thurs	8	In class exam #1	K. Patel
<b><i>BLOCK 2: ACUTE AND CHRONIC INFLAMMATION</i></b>				
11th Feb	Tues	9	Myeloid cells and the inflammatory response Pt I	P. Kubes
13th Feb	Thurs	10	Myeloid cells and the inflammatory response Pt II	P. Kubes
18th Feb	Tues	Spring break -no class		
20th Feb	Thurs	Spring break - no class		
25th Feb	Tues	11	Mast cells	TBD P.
27th Feb	Thurs	12	Liver inflammation	Kubes/Moritz
03-Mar	Tues	13	Sepsis	B. Yipp
5th Mar	Thurs	14	Inflammation in the tumour environment	D. Mahoney
10th Mar	Tues	15	Microbiome in inflammation	M. Geuking
12th Mar	Thurs	16	In class exam #2	
<b><i>BLOCK 3: IMMUNITY TO INFECTIONS</i></b>				
17th Mar	Tues	17	Innate immunity to viruses	J. Corcoran
19th Mar	Thurs	18	Student presentations I	J. Corcoran
24th Mar	Tues	19	Innate immunity to bacteria	B. Yipp
26th Mar	Thurs	20	Student presentations II	B. Yipp
31st Mar	Tues	21	T cell differentiation and regulation in response to pathogens	M. Geuking
2nd Apr	Thurs	22	Student presentations III	M. Geuking
7th Apr	Tues	23	Immunology of vaccines	C. Jenne
9th Apr	Thurs	24	Student presentations IV	C. Jenne
14 <sup>th</sup> Apr	Tues	25	Open	Open



## INTERNET AND ELECTRONIC COMMUNICATION DEVICE INFORMATION

Cell phones must be turned off in class unless otherwise arranged with the instructor.

The use of laptop and mobile devices is acceptable when used in a manner appropriate to the course and classroom activities. Students are to refrain from accessing websites that may be distracting for fellow learners (e.g. personal emails, Facebook, YouTube). Students are responsible for being aware of the University's Internet and email use policy, which can be found at

<https://www.ucalgary.ca/policies/files/policies/electronic-communicationspolicy.pdf>.

## MEDIA AND RECORDING IN LEARNING ENVIRONMENTS

### **Media recording for lesson capture**

The instructor may use media recordings to capture the delivery of a lecture. These recordings are intended to be used for lecture capture only and will not be used for any other purpose. Although the recording device will be fixed on the Instructor, in the event that incidental student participation is recorded, the instructor will ensure that any identifiable content (video or audio) is masked, or will seek consent to include the identifiable student content to making the content available on University approved platforms.

### **Media recording for assessment of student learning**

The instructor may use media recordings as part of the assessment of students. This may include but is not limited to classroom discussions, presentations, clinical practice, or skills testing that occur during the course. These recordings will be used for student assessment purposes only and will not be shared or used for any other purpose.

### **Media recording for self-assessment of teaching practices**

The instructor may use media recordings as a tool for self-assessment of their teaching practices. Although the recording device will be fixed on the instructor, it is possible that student participation in the course may be inadvertently captured. These recordings will be used for instructor self-assessment only and will not be used for any other purpose.

### **Student Recording of Lectures**

Audio or video recording of lectures is prohibited except where explicit permission has been received from the instructor.

## UNIVERSITY OF CALGARY POLICIES AND SUPPORTS

### **ACADEMIC ACCOMMODATIONS**

Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services; SAS will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities, visit



[www.ucalgary.ca/access/](http://www.ucalgary.ca/access/). Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their Instructor. The full policy on Student Accommodations is available at <http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf>

### **IMPORTANT INFORMATION**

Any research in which students are invited to participate will be explained in class and approved by the appropriate University Research Ethics Board

### **INSTRUCTOR INTELLECTUAL PROPERTY**

Course materials created by professor(s) (including course outlines, presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the professor(s). These materials may NOT be reproduced, redistributed or copied without the explicit consent of the professor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing

### **COPYRIGHT LEGISLATION**

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright ([www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright.pdf](http://www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright.pdf)) and requirements of the copyright act (<https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html>) to ensure they are aware of the consequences of unauthorised sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy

### **ACADEMIC INTEGRITY**

The Cumming School of Medicine expects intellectual honesty from its students. Course participants should be aware of University policies relating to Principles of Conduct, Plagiarism and Academic Integrity. These are found in the printed Faculty of Graduate Studies Calendar, or online under Academic Regulations in the Faculty of Graduate Studies Calendar, available at [Faculty of Graduate Studies Academic Regulations](#)

### **ACADEMIC MISCONDUCT**

For information on academic misconduct and its consequences, please see the University of Calgary Calendar at <http://www.ucalgary.ca/pubs/calendar/current/k.html>

### **EMERGENCY EVACUATION AND ASSEMBLY POINTS**

Assembly points for emergencies have been identified across campus. The primary assembly points for South Campus (Health Science Centre (HSC); Health & Research Innovation Centre (HRIC); Heritage Medical Research Building (HMRB) and Teaching, Research and Wellness (TRW)) are:

- HSC and HMRB: HRIC Atrium (alternate assembly point is Parking Lot 6)
- HRIC: HMRB Atrium (alternate assembly point is Parking Lot 6)
- TRW: McCaig Tower (alternate assembly point is HMRB – Atrium)

### **APPEALS**



If there is a concern with the course, academic matter or a grade, first communicate with the instructor. If these concerns cannot be resolved, students can proceed with an academic appeal, as per Section N of the Faculty of Graduate Studies Calendar. Students must follow the official process and should contact the Student Ombuds Office (<http://www.ucalgary.ca/provost/students/ombuds>) for assistance with this and with any other academic concerns, including academic and non-academic misconduct

### **THE FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY (FOIP) ACT**

This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIP) and students should identify themselves on written assignments (exams and term work.) by their name and ID number on the front page and ID on each subsequent page. Assignments given by you to your course instructor will remain confidential unless otherwise stated before submission. The assignment cannot be returned to anyone else without your expressed permission to the instructor. Grades will be made available on an individual basis and students will not have access to other students' grades without expressed consent. Similarly, any information about yourself that you share with your course instructor will not be given to anyone else without your permission

### **WELLNESS AND MENTAL HEALTH RESOURCES**

The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the excellent mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre), <https://www.ucalgary.ca/wellnesscentre/services/mental-health-services> and the Campus Mental Health Strategy website <https://www.ucalgary.ca/mentalhealth/>

### **SUPPORTS FOR STUDENT LEARNING, SUCCESS, AND SAFETY**

**Student Ombudsman:** The Student Ombuds' Office supports and provides a safe, neutral space for students. For more information, please visit [www.ucalgary.ca/ombuds/](http://www.ucalgary.ca/ombuds/) or email [ombuds@ucalgary.ca](mailto:ombuds@ucalgary.ca)

**Student Union:** The SU Vice-President Academic can be reached at (403) 220-3911 or [suvpaca@ucalgary.ca](mailto:suvpaca@ucalgary.ca); Information about the SU, including elected Faculty Representatives can be found here: <https://www.su.ucalgary.ca>

**Graduate Student's Association:** The GSA Vice-President Academic can be reached at (403) 220- 5997 or [gsa.vpa@ucalgary.ca](mailto:gsa.vpa@ucalgary.ca); Information about the GSA can be found here: <https://gsa.ucalgary.ca>

### **SAFEWALK**

Campus security will escort individuals, day or night, anywhere on campus (including McMahon Stadium, Health Sciences Centre, Student Family Housing, the Alberta Children's Hospital and the University LRT station). Call 403-220-5333 or visit <http://www.ucalgary.ca/security/safewalk>. Use any campus phone, emergency phone or the yellow phone located at most parking lot pay booths. Please ensure your personal safety by taking advantage of this service.