

CUMMING SCHOOL OF MEDICINE GRADUATE COURSE OUTLINE

COURSE TITLE: MDGE 605 Regulatory Affairs						
Course	MDGE 605 Regulatory Affairs					
Pre/Co-Requisites	 Admission to the Master of Biomedical Technology program, OR, If not in the program, as a graduate student of the University of Calgary with permission from the following: Supervisor of the graduate student Director of the Master of Biomedical Technology Program Associate Dean, Graduate Studies Education, Cumming School of Medicine 					
Faculty	Cumming School of Medicine, Graduate Science Education					
Instructor Name(s)	Dr. Alexander (Sandy) Dubyk, BSC(Pharm), ACPR, PharmD, MBA, CHE	Email	amdubyk@ucalgary.ca			
Office Location	Offsite	Office Hours	By Appointment			
Instructor Email Policy	nstructor Email Policy					
Telephone No.	403-831-8885					
TA Name, if applicable	None	Email				
Class Term, Days	FALL 2020					
Class Times	Per schedule in outline					
Class Location	CC Theatre					

This course is offered in a face-to-face format. When unable to participate live and in person due to the time difference or unforeseen circumstances, inform the instructor in advance and propose and implement an alternative participation activity.

COURSE INFORMATION/DESCRIPTION OF THE COURSE

This is both a didactic and experience-based course examining the regulatory requirements of the leading regulatory bodies globally. The emphasis will be on regulations applied by Health Canada (Canada), the Food and Drug Administration (United States) and the European Medicines Agency (European Union). Through readings, discussions, workshops, case studies, and quizzes, students will gain an understanding of the regulatory requirements necessary for health product and device development.

LEARNING RESOURCES/REQUIRED READING

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Students will use the resources available as users of the University of Calgary library system and the grey literature. Additional reference material may be assigned through the course.

COURSE OBJECTIVES/LEARNING OUTCOMES

- To provide a general understanding of the key regulations necessary for biopharmaceutical and medical device manufacturing
- To provide the tools and references necessary to guide the students for an application to the regulatory agencies
- To engage the students through experiential learning and situational knowledge of non-compliance in regulatory affairs

CUT POINTS FOR GRADES

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	
А	4.00	85-94	Excellent – superior performance showing comprehensive understanding of the subject matter	
A-	3.70	80-84	Very Good Performance	
B+	3.30	75-79	Good Performance	
В	3.00	70-74	Satisfactory Performance	
B-	2.70	65-69	Minimum Pass for Students in the Faculty of Graduate Studies	
C+	2.30	55-64	All grades below 'B-" are indicative of failure at the graduate level and cannot be counted toward Faculty of Graduate Studies course requirements	
С	2.00	50-54		

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Assessment Components: The University policy on grading related matters is outlined in the $\underline{2019-2020}$ Calendar.

Assessment Methods	Description	Weight %	Due Date <u>and</u> Time	
Quizzes	Individual - Open Book. Administered at the beginning of each lecture addressing key points of knowledge from the assigned readings. They will be approximately 5 minutes in length. The instructor may, on occasion, substitute a group activity in lieu of a quiz and will notify the class accordingly.	20	TBD	
Case study	Team - Groups of 3-4 individuals will be evaluated on a case or issue in regulatory requirements. Topics will be chosen by the students, reviewed with the instructor, and presented. A rubric will be used to evaluate the presentations.	25	November 16, 2020 @ 12h00	
Regulatory submission	resubmission Team/Individual assignment - Teams will choose a 'product-in-development' and navigate its regulatory path to approval; Individual assignment would be an opinion paper on a current regulatory issue		December 4, 2020 @ 12h00	
Field trip Consult	Class visit to be discussed in class	15	December 9, 2020 @ 12h00	

ASSESSMENT AND EVALUATION INFORMATION

ATTENDANCE AND PARTICIPATION EXPECTATIONS: Students are expected to act professionally

GUIDELINES FOR SUBMITTING ASSIGNMENTS: Due at the start of the class, submitted electronically to amdubyk@ucalgary.ca

FINAL EXAMINATIONS: None

EXPECTATIONS FOR WRITING: Students are expected to follow University rules and write in an academic or business manner

business manner

LATE AND/OR MISSING ASSIGNMENTS: 10% penalty with additional 10% per 24 hours unless discussed in

advance with the Instructor

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

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	COURSE TIMETABLE			
Course Schedule Date	Topic & Reading	Instructor	Assignments/Due Dates & Times	
Monday October 26, 2020, 13h00 – 15h50	Introduction & Regulatory Affairs; ISO, SOPs	A Dubyk	Readings, Quiz	
Monday November 2, 2020, 13h00 – 15h50	cGLP, LIMS, cGMP	A Dubyk	Readings, Quiz, Case topic, Team topic	
Monday November 16, 2020, 13h00 – 15h50	Medical Device Filing, Drug Submission	A Dubyk	Quiz, Case presentations	
Monday November 23, 2020, 13h00 – 15h50 Advertising Requirements		A Dubyk	Quiz	
Friday, December 4, 2020, 14h00 – 15h40	Field Trip Consult	A Dubyk	Team Assignment due Dec 4, 2020 @ 12h 00 Field Trip Consult due Dec 9, 2020 @ 12h00	

Conduct During Lectures

The classroom should be respected as a safe place to share ideas without judgement - a community in which we can all learn from one another. Students are expected to frame their comments and questions to lecturers in respectful and appropriate language, always maintaining sensitivity towards the topic. Students, employees, and academic staff are also expected to demonstrate behaviour in class that promotes and maintains a positive and productive learning environment.

As members of the University community, students, employees and academic staff are expected to demonstrate conduct that is consistent with the University of Calgary Calendar, the Code of Conduct and Non-Academic Misconduct policy and procedures, which can be found at https://www.ucalgary.ca/policies/forms/title.

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

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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/. 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

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

COPYRIGHT

It is the responsibility of students and professors to ensure that materials they post or distribute to others comply with the Copyright Act and the University's Fair Dealing Guidance for Students (library.ucalgary.ca/files/library/guidance_for_students.pdf). Further information for students is available on the Copyright Office web page (https://library.ucalgary.ca/copyright)

A NOTE REGARDING INSTRUCTOR INTELLECTUAL PROPERTY

Generally speaking, 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

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

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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/">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/ or email ombuds@ucalgary.ca

Student Union: The SU Vice-President Academic can be reached at (403) 220-3911 or 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; 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.

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