

COURSE INFORMATION SHEET

WINTER 2008

- Course:** PURE MATHEMATICS 607 -- Topology II
Lecture/Time: Lecture 1 / T 9:00 – 10:15 and R 11:00 – 12:15
Instructor: Kristine Bauer
Office/Phone/Email: MS 578 / 220-7675 / kristine@math.ucalgary.ca
- Prerequisites:** Pure Mathematics 505 or consent of the division.
NOTE: The Faculty of Science policy on pre- and co-requisite checking is outlined in the current University Calendar (see www.ucalgary.ca/pubs/calendar) *Faculty of Science, section 5C*. **It is the students' responsibility to ensure that they have the pre- and co-requisites for the course, and if they do not they will be withdrawn from the course without notice.**
- Fee policy:** After the last day to drop/add courses, there will be no refund of tuition fees if a student withdraws from a course, courses or the session.
- Academic Accommodations:** It is the student's responsibility to request academic accommodations. A student with a documented disability who may require academic accommodation must register with the Disability Resource Centre to be eligible for formal academic accommodation. DRC registered students are required to discuss their needs with the instructor no later than fourteen (14) days after the start of this course.
- The University policy on grading and related matters** is described in the current University Calendar, *Academic Standings*. In determining the overall grade in the course, the following weights will be used:

<i>Assignments</i>	[5]	40%
<i>Midterm Test (Take Home)</i>		20%
<i>Final Exam (Take Home)</i>		40%

A passing grade on any particular component of the course is essential to passing the course as a whole. The final exam will be due on Friday, April 25. Students are not permitted to discuss the midterm and final exams until after the exams have been collected by the instructor.
- Missed Components of Term Work.** The regulations of the Faculty of Science pertaining to this matter are outlined in the current University Calendar, *Faculty of Science, section 6A*. It is the student's responsibility to familiarize herself/himself with these regulations.
- Academic misconduct** (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the current University Calendar. See: <http://www.ucalgary.ca/honesty/>
- Dates and times of class exercises held outside of class hours (evening tests, Saturday laboratory examinations, weekend field trips, etc.):**
****THERE WILL BE NO OUT-OF-CLASS-TIME ACTIVITY.****

REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME ACTIVITY. If you have a conflict with this out of class time activity, please inform your instructor at least one week in advance of the activity so that other arrangements may be made for you.

9. Textbook: Allen Hatcher, *Algebraic Topology*.
10. Course website: registered students will have access to the appropriate page using www.blackboard.ucalgary.ca
Also see www.math.ucalgary.ca (click on "Course Listings") for information about this and all other math classes.
11. Expectations: Students are allowed and in fact encouraged to work together to complete the five written assignments. HOWEVER, students are expected to produce their own written solutions independently. Students are NOT permitted to discuss take-home exams with anyone; failure to comply with this rule will be considered academic misconduct.

Date	Topics	Deadlines
January 14-18	Review: Topological Spaces, quotient spaces, cell complexes (Chapter 0).	
January 21-25	Chapter 0: Maps of spaces and cell complexes, deformation retracts, homotopy.	
January 28 – Feb. 1	Categories of topological spaces and groups.	Assignment 1 due Feb. 1 in class
February 4 – 8	Products and coproducts. (Free) products of groups.	
February 11 – 15	Chapter 0: The homotopy extension property.	Assignment 2 due Feb. 15 in class
February 18 – 22		Reading week – no lectures.
February 25 – 29	Chapter 1: Fundamental group.	
March 3 – 7	Chapter 1: Fundamental group of S^1 and functors.	Take-home exam due March 3 in class
March 10 – 14	Chapter 1: Van Kampen's Theorem.	Assignment 3 due March 14 in class
March 17 – 21	Pushouts, Pullbacks, limits, colimits.	No lectures Friday, 3/21.
March 24 – 28	Chapter 1: Covering spaces.	
March 31 – April 4	Chapter 1: $K(G, 1)$.	Assignment 4 due April 4 in class
April 7 – April 11	Additional topics.	
April 14 – April 18	Additional topics.	Assignment 5 due April 18 in class
April 21 - 30	Final Exam period	Take-home final due April 25