MATH 370B Section S17N80 Topology Jan – Apr 2017



Time & Location: Mon, Wed & Fri 9:30-10:30 (location to be announced)

Instructor: Glen Pugh glen.pugh@viu.ca (This is <u>by far</u> the best way to reach me!) Bldg 359 Rm 201 (250)753-3245 ext. 2752

Office Hours: Mon & Wed 11:30-1:00, Fri 12:30-1:30, or by appointment.

webpage: http://web.viu.ca/pughg/Spring2017/math370BS17N80

Prerequisite: 12 credits of MATH courses numbered 200 or above.

Text: *Essential Topology* by Martin D. Crossley. This book is available for download from the library as an eBook in pdf format.

Course Outline: This course is an introduction to general topology, the field of mathematics concerned with the properties of spaces under continuous mappings. Fundamental concepts covered will include metric spaces, topological spaces, continuity, compactness, connectedness, Hausdorff spaces, homeomorphisms, Cantor sets and an introduction to manifolds.

Topics from the text include

- 1. Continuity
- 2. Topological Spaces
- 3. Connectivity and Compactness
- 4. Homeomorphisms, Product and Quotient Spaces
- 5. Homotopy
- 6. Algebraic Topology

Homework Approximately ten problem sets will be assigned and collected for grading. These problem sets are worth 70% of your final grade.

Collaborative problem solving on homework assignments is permitted (encouraged even!), however your handed-in solutions must be written up independently. Evidence of plagiarism on an assignment will result in a zero grade or other measures (see **Academic Misconduct** below).

Final Exam: There will be a comprehensive final exam in April worth 30% of your grade. The exam period is Apr 18-27 2017. Travel plans should not be made until the final exam schedule is released, which is at least one month before exams begin. In no event will the final exam be rescheduled to accommodate travel plans.

Grading Summary:	Homework: Final Exam:	70% 30%					
Grading Scale:	90-100% A+ 85-89% A 80-84% A-	72-75%	B+ B B-	64-67% 60-63% 55-59%	C	50-54% 0-49%	D F

Academic Incidents of cheating or other academic misconduct carry severe consequences and will be dealt with seriously. Refer to VIU Policy 99.01 and Procedure 99.01.001.