MATH 121–Honours Integral Calculus

Section 201 - MTWF 2-3 in Mathematics 102.

Instructor: E. Perkins
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Course webpage: http://www.math.ubc.ca/∼perkins/teaching.html
Office Hours (start Jan 7): M12-1:50 Math Annex 1207 (with Prof. Perkins)
T 11-12:30 Forest Sciences Centre (FSC) 1615 (with Adam Martens)

Text: Calculus: A Complete Course, Loose Leaf Version, 9th Ed., by Robert A. Adams
and Christopher Essex. Pearson, 2018, (text *might* be used in 226-227) **OR**
Calculus: Single Variable, 9th Ed., by R. A. Adams and C. Essex. Pearson, 2018.
Further Reading: Calculus, by Michael Spivak (any edition)

Course Outline

The course will be based on topics from chapters 5-9 of the text.
1. Integration (Ch. 5) (2.5 weeks)
2. Techniques of Integration (Ch. 6: 6.1-6.3, 6.5-6.7) (2.5 weeks)
3. Applications of Integration (Ch. 7: 7.1-7.6, 7.8-7.9) (2.5 weeks)
4. Conics, Parametric Curves and Polar Curves (topics from Sec. 8.2-8.6) (1 week)
5. Sequences, Series and Power Series (Ch. 9: 9.1-9.7, 4.10, 6.8) (3.5 weeks)

Grading Scheme
Weekly Assignments: 15
Two Tests **scheduled for Wed. Feb. 13 and Wed. March 13** : 35
Final exam: 50

Weekly homeworks will be assigned and collected on Wednesday. No lates.

About the Course
Math 121 in an honours version of Math 101, covering mostly the same topics but in greater foundational depth and with more emphasis on harder and/or theoretical exercises. Precise statements of theorems and proofs will be given. The final exam will have a significant overlap with the Math 101 exam. This will be used to normalize the final course grades in Math 121.

The prerequisite for Math 121 is a grade of 68% in Math 120, or 80% in Math 100, 102, 104, 180 or 184, or 5 in AP Calculus AB, or permission of the Undergrad Chair.

Policy on missed assignments and tests.
Students who are unable to hand in a homework due to a medical or equivalent excuse will have that hw not count towards their final grade.

Missing a test normally results in a mark of zero. Exceptions are granted only with prior consent of the instructor or due to a medical emergency. In the latter case, the instructor must be notified within two working days of the missed test and presented with a doctor's note immediately upon the students return to UBC. If an exception is granted for a missed test, the final exam will be used to make up that portion of the grade.