$\mathbf{Math}~\mathbf{3B}$ - Course Outline, 2008 Spring Quarter.

LECTURES: TR, 9:30 AM - 10:45 AM, NH 1006.

INSTRUCTOR: Pawel Gladki.

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OFFICE HOURS: **TR**, **11:00 AM** - **12:30 PM** If you want to see your instructor in his office, you are encouraged to make an appointment: see him before or after class, call his office or send him an e-mail.

TEXTBOOK: Robert Smith, Roland Minton, Calculus. Early transcendental functions, 3rd Edition, McGraw Hill, New York 2007 James Stewart, Calculus. Early Transcedentals Single Variable, 6th Edition, Brooks/Cole, Belmont 2007.

LECTURES AND DISCUSSIONS: The TR 8:00 AM - 9:15 AM period will be devoted to lectures on new material. In addition to the lecture period, there are discussion sessions **that constitute for an important part of this class**. Attendance in discussion sessions on Wednesdays is mandatory; your participation in the sessions will be graded by your TA, and will contribute to your final grade – there will be short quizzes during discussions, your TA might also keep a record of your attendance.

EVALUATION: 16 assignments, counting for a total of 20% of your mark, 2 midterms, each counting for 20% of your mark for a total of 40%, and final examination counting for 40% of your mark. There will be no curving of your grades, <u>however</u> your participation in discussions will earn you up to an additional 20% towards your final grade – thus, theoretically, you may score as high as 120%, and even if you completely fail one of the midterms, you might still get an A. Everybody who gets more than 100% will have an A+ as a final grade.

EXAMINATIONS: Two quizzes will take place on April 22nd and May 13th. Durations of each test will be 75 minutes. The final examination will take place on June 10th at 8 AM in NH 1006. Duration of the final will be 3 hours.

The material to be covered on each midterm will include everything you will have learned in math since Grade 1 up to and including our last meeting before each test. In particular, if we meet on Thursday, and we have a midterm scheduled on Tuesday, that means that the midterm will also cover whatever we learn on that Thursday, even if the deadline for submitting an assignment covering the same material is due to a later date. The final exam will be cumulative.

No calculators will be allowed either on midterms or on final. Also, both the midterms and the final are closed book exams <u>however</u> you will be allowed to use a "cheat sheet" of the size half a page, where you can write whatever you want on both sides – but <u>only</u> on your final. Other than that please be advised that cheating on an examination is considered a serious offence and can be met with disciplinary actions, including suspension or repulsion. All examinations will be "show all work" tests. There will be no make up exams. Students who miss either one of the midterm exams for legitimate reasons will have the value of that examination transferred to the final examination thereby increasing the value of the final examination accordingly. HOMEWORK: Problems will be assigned through the WebWork, approximately 20-30 per each meeting, and collected every day class meets. Due to the size of the class no paper solutions, as well as no late homeworks will be accepted. <u>No exceptions!</u>

Course calendar:

- Apr. 1: Antiderivatives.
- Apr. 3: Areas and Distances.
- Apr. 8: The Definite Integral.
- Apr. 10: The Fundamental Theorem of Calculus.
- Apr. 15: Indefinite Integrals and the Net Change Theorem.
- Apr. 17: The Substitution Rule
- **Apr. 22:** Midterm 1.
- Apr. 24: Areas between Curves.
- Apr. 29: Volumes.
- May 1: Volumes by Cylindrical Shells.
- May 6: Work.
- May 8: Average Value of a Function.
- May 13: Midterm 2.
- May 15: Integration by Parts.
- May 20: Integration of Rational Functions by Partial Fractions.
- May 22: Improper Integrals.
- May 27: Arc Length.
- May 29: Area of a Surface of Revolution.
- Jun. 3: Review.
- Jun. 5: Review.