

# MATH 151

# CALCULUS I

SPRING, 2006

## 4 credits

### COURSE INFORMATION:

LECTURES:        Sections 501/502    MWF 1:00-2:05    MP 104  
                     Sections 601/602    MWF 2:30-3:35    MP 104

DISCUSSION:    501 Mon. 11-11:50    MP 010  
                     502 Wed. 11-11:50    MP 010  
                     601 Mon. 1-1:50        MP 010  
                     602 Wed. 1-1:50        MP 010

Teaching Assistants –

INSTRUCTOR: Mrs. Bonny Tighe  
OFFICE HOURS: M W F 3:45 – 5:30 pm  
PHONE: MESSAGES 410-455-2425

OFFICE 425 MP Building

E-MAIL ADDRESS: [tighe@umbc.edu](mailto:tighe@umbc.edu)

TEXT: CALCULUS. By Stewart, Fifth Edition, Brooks/Cole Publishing, 2003

TESTING AND GRADING: The usual 90-80-70-60 % grading system will be used in this course. Time spent outside of class on this course will be between 12 and 15 hours per week - MINIMUM!

### POSSIBLE POINTS ARE AS FOLLOWS:

Best 10 homeworks @ 10 pts each	=	100 points (13%)
Best 8 quizzes @ 25 pts each	=	200 points (27%)
3 Hour Exams @ 100 pts each	=	300 points (40%)
1 Final Exam @ 150 points	=	150 points (20%)
TOTAL	=	<b>750 possible points</b>

**THERE WILL BE NO MAKE-UP QUIZZES!** Homework will be due at the beginning of lecture on each class where there is a quiz or exam given. The sections collected will be the same as on the quiz or exam. **NO LATE HOMEWORK WILL BE ACCEPTED** Make-up exams will be given at my discretion and provided I have been notified prior to the scheduled time of the exam that you will be unable to attend. Documentation will be required. Leave messages at 455-2425 in my office or an email at [tighe@math.umbc.edu](mailto:tighe@math.umbc.edu).

No calculators will be required during this course. They may be used only for homework.

By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC's scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong. Academic misconduct could result in disciplinary action that may include, but is not limited to suspension or dismissal. To read the full Student Academic Conduct Policy, consult the UMBC Student Handbook, the Faculty Handbook, or the UMBC Policies section of the UMBC Directory.

## MATH 151

## SYLLABUS

SPRING, 2006

1	1/30 2/1 2/3	Algebra review 1.3 Tangents and Velocities 2.1, 2.2 Limits 2.3
2	2/6 2/8 2/10	Precise definition 2.4 Continuity 2.5 Tangents and velocities 2.6 <b>QUIZ 1 on 2.1-2.4</b>
3	2/13 2/15 2/17	Derivatives 3.1, 3.2 Formulas 3.3 Applications of Rates of Change 3.4 <b>QUIZ 2 on 2.5-3.1</b>
4	2/20 2/22 2/24	Trig derivatives 3.5 Chain Rule 3.6 <b>QUIZ 3 on 3.3-3.5</b>
5	2/27 3/1 3/3	Implicit and Higher Derivatives 3.7, 3.8 Related Rates 3.9 <b><u>EXAM I on 2.1-3.8</u></b>
6	3/6 3/8 3/10	Linear Approximations 3.10 Maximums and Minimums 4.1 <b>QUIZ 4 on 3.9-3.10</b>
7	3/13 3/15 3/17	Mean Value Theorem 4.2 Derivatives and curves 4.3 Limits at infinity 4.4 <b>QUIZ 5 on 4.1-4.3</b>
8	3/20-24	SPRING BREAK
9	3/27 3/29 3/31	Curve Sketching 4.5 Optimization 4.7 <b>QUIZ 6 on 4.4-4.5</b>
10	4/3 4/5 4/7	Newton's Method 4.9 Antidifferentiation 4.10 <b><u>EXAM II on 3.9-4.9</u></b>
11	4/10 4/12 4/14	Area and Distance 5.1 Definite Integral 5.2 <b>QUIZ 7 on 4.10-5.1</b>
12	4/17 4/19 4/21	Fundamental Theorem of Calculus 5.3 Indefinite Integrals 5.4 <b>QUIZ 8 on 5.2-5.4</b>
13	4/24 4/26 4/28	Substitution Rule 5.5 Area between curves 6.1 <b>QUIZ 9 on 5.5-6.1</b>
14	5/1 5/3 5/5	Volume/ Washer Method 6.2 Review <b><u>EXAM III on 4.10-6.2</u></b>
15	5/8 5/10 5/12	Volumes Cylindrical Shells 6.3 Average Value 6.5 <b>QUIZ 10 on 5.5-9.2</b>
16	5/15	LAST DAY OF CLASSES –REVIEW

FINAL EXAM