

# MA 153 Advanced Multivariable Calculus

## Section B3, C3, or D3 Thayer Hall Room 332

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**Instructor:** Major Silas R. Bowman, Thayer Hall 239B,  
Phone: 845-938-8135, Email: silas.bowman@usma.edu

**Office Hours or AI:** By appointment in Thayer Hall 239B;

**Textbook:** James Stewart, Calculus, Early Transcendentals, [sixth edition].  
Dan Clegg and Barbara Frank, Student Solutions Manual, [sixth edition].  
Selwyn Hollis, CalcLabs with Mathematica, [sixth edition].

**Math Software:** Mathematica 6.0

### Web Sites:

Major Bowman's Web Site: <http://www.dean.usma.edu/departments/math/people/bowman/>  
USMA MA153 Web Site: <http://www.dean.usma.edu/departments/math/courses/ma153/>

**Course Outline:** MA 153 Calendar is located on the MA153 Web Site.

**Teaching "Command" Philosophy:** I welcome you to what, I hope, will be the most fun math class that you have ever taken. We will work together to tackle all of the lesson objectives in an open, collegial environment. Of the close to 1,300 cadets in the class of 2012 only 190 were chosen to take this class. I am honored to work with you. I strive to make this learning experience as enjoyable and as understandable as possible for EVERYONE. Teaching is the best way to learn a concept, you will help me learn each concept better than I knew it before. My goal is that WE will come away from this course as critical thinkers that are able to tackle difficult, unfamiliar problems using mathematical methods that WE will discuss throughout the semester.

### Ground Rules:

1. Items to bring to class every day
  - (a) Textbook
  - (b) Laptop
2. Drinks
  - (a) Water allowed in any spill-proof water bottle.
  - (b) Other beverages must be in Dean approved mug only
3. Food - No Food or Gum
4. Bathroom - Just go, don't distract others if possible

5. Answering Questions - If a VIP visits the room raise your right hand if you know the answer or raise your left hand if you don't.
6. Class Preparation
  - (a) Come to class having completed the reading assignment and the DO problems listed in the course guide
  - (b) Read in two phases:
    - i. Initial Scan - highlight formulas
    - ii. Second Read - try to understand concepts or examples
7. Assignment and Project Deadlines
  - (a) Timely submission of academic requirements is a duty. All assignments will be turned-in during class. Late submissions, without prior approval, require academic penalty.
  - (b) If extenuating circumstances prevent you from submitting the assignment on time, I may extend the submission deadline. In such cases, if the extended deadline is met, the submission is not late.
8. Graded quizzes may be given weekly, depending on how many we take I will drop some of the lowest scores.
9. Homework
  - (a) Graded homework will be collected as listed in the MA 153 course schedule and consist of the **bold and underlined** homework problems on the course syllabus. These problems are required, out of class work.
  - (b) All required out of class work constitutes homework as defined in the Deans Documentation of Written Work (DWW). You will prepare and submit homework in accordance with the Deans DWW. The course standard for MA153 is the Council of Science Editors or CSE (formerly the CBE). Refer to the Deans DWW for further information on utilizing that style for documentation.
10. Problem Solving Labs - Usually will include small experiments or involved board problems. We will have guest lecturers for some PSLs these will be held during Dean's Hour.
11. **Bonus Point Opportunities**
  - (a) Cadets who bring in an application of that days topic that is not listed in the book or course guide will be eligible for bonus points, positive spot reports, or an additional low quiz drop. Cadets will vote on the relevance and quality of the application. I will be the final vote. Cadet should include a video, computer application, or physical model and be able to defend their application.
  - (b) Attendance of Math Forums
12. **Grading:**
  - (a) **Course Point Breakdown:** The point breakdown is listed in the MA 153 Course Wide Syllabus.