**MATH 2204 – Intro to Multivariable Calculus – Fall 2015**

CRN 89447: 8:00 am - 8:50 am MWF in McBryde Hall 329

**Instructor:** Bartleby Ordonez  
**Phone:** 231-8280  
**Office:** 556 McBryde Hall  
**E-mail:** bartod@vt.edu  
**Office Hours:**  
- MWF: 10:10 am - 11:10 pm, TR: 3:30-5:00pm  
- Other hours by appointment

**Text:** *Calculus: Early Transcendentals, 8th Edition*, by James Stewart (with WebAssign code). More information about the textbook (previous edition, WebAssign, prices, etc) can be found in the course homepage [https://www.math.vt.edu/courses/math2204/](https://www.math.vt.edu/courses/math2204/)

**Course Content:** Vector geometry, surfaces and graphs, multivariable functions, differential and integral multivariable calculus of real-valued functions, optimization, and vector functions. Most of chapters 12-15.

**Course Goals:** Multivariable Calculus extends single variable differential calculus and single variable integral calculus to higher dimensions. The transition from single variable calculus to multivariable calculus is not as simple as it may seem; you will find that multi-variable functions, in some cases, will yield ‘counter-intuitive’ results. The goal of Multivariable Calculus is to provide you with the tools you need to handle problems with several parameters and functions of several variables and to apply your knowledge of their behavior.

**Prerequisite:** The prerequisite for this class is Math 1226. If you have credit for Math 1206, you should take Math 2224, not Math 2204.

**Important:** Students enrolled in this course are expected to know topics covered in Math 1225 & Math 1226. This includes, but is not limited to, evaluating limits (indefinite forms), differentiation (product, quotient, chain rule, etc.), evaluating definite and indefinite integrals. Students should also have a strong understanding of algebra and trigonometry without using a calculator.

**Grading:** The number grade will be based upon three tests (each contributing 20%); the comprehensive final exam (20%), written homework (12%) and online homework (8%). The course grade will be assigned as follows: 90% will guarantee an A-, 80% a B-, 70% a C-, and a 60% a D-. A plus or a minus will be assigned at my discretion.

**Common-time Final Exam:** Wednesday, Dec 16: 7pm-9pm. The final exam is a required class meeting that will not be rescheduled for discretionary reasons, including conflicts with work schedules and with classes and exams at other colleges.

**Tests: (Tentative Dates)**

- Test1: Mon, Sep 28,  
- Test2: Wed, Oct 28,  
- Test3: Wed, Dec 2  
All the tests will be given from 7pm-9pm.  
Conflicts with the above dates should be notified to me by the end of the first week of class.

**Written Homework:** From the list of problems I will post every week in the Assignments folder in Scholar, only selected problems will be graded. These problems will not be known to students
in advance. Except for problems selected for grading, homework will not be marked. **Submitted work is expected to be a neat and coherent exposition; excessively sloppy and/or illegible work will be returned without grading and credit.**

**Online Homework (WebAssign):** WebAssign homework will be assigned regularly. You will be allowed 3 attempts for each free response question and 2 attempts for each multiple-choice question. The attempts count per question part not for the whole assignment. To review how to use the system there is a Getting Started homework assignment that is due Friday, August 28. For this assignment only you will be allowed unlimited submissions per question. Check the course homepage for more information about WebAssign.

**Advice:** Start each homework assignment as soon as it is posted on Scholar because it could take several hours to complete it and you could need help with some problems. Study your lecture notes before you do the homework. To prepare for exams, rework all the assigned homework problems as well as all the examples from class lectures; recreate the steps shown in class. Know definitions and concepts presented in the lectures.

**Honor System:** The Virginia Tech Honor System will be strictly enforced. Exams must be solely the individual’s work. You can discuss the homework problems with others; however, your solutions and answers should be product of your own understanding of the problems. **Accessing homework solutions from any source (friend, on-line listing, fraternity file, etc.) is forbidden and considered a serious violation to the VT Honor Code.**

**Make-up Policy:** Make-up tests will not be given. For an excused absence from a test, your final exam grade will substitute for that test grade. To avoid a zero grade you must provide documentation, from the appropriate university office, that shows that you had a valid reason. Late work will not be accepted. (Exceptions to the late-work policy may be made for individuals in the event of serious illness or personal emergency at the instructor’s discretion; contact the instructor immediately if such a situation arises. Exceptions generally will be made only if the instructor is notified about any emergency prior to the due date of any affected graded work.)

**Attendance:** Attendance will be taken and records will be sent to the Math Department. Attendance has no impact on grades. However, statistics show that there is a correlation between students who miss class and students who fail the course. You are responsible for all announcements made in class, posted on Scholar and the course webpage.

**General Policy:** The above policy statement represents criteria under which a student can demand to be evaluated. Changes will be made if, in my judgment, the interest of learning and fairness dictate such change. Unexcused absences and/or poor homework record will adversely affect chances for extra consideration.

**Web Information:**

- **Course Contract and Personal Homepage:** The information on this course contract, as well as other information, is available on my home page at [www.math.vt.edu/people/bartod](http://www.math.vt.edu/people/bartod)
- **2224 Course website:** More information for all Math 2204 classes is available at [http://www.math.vt.edu/courses/math2204/](http://www.math.vt.edu/courses/math2204/)
- **WebAssign:** [https://webassign.net/](https://webassign.net/)

**Special Needs Students:** Any student with special needs or circumstances should feel free to meet with me during office hours or to schedule an appointment early in the semester.
Caution: If you are not on the class roll that comes out after the last “add” date, immediately check your schedule at a terminal or at the registrar’s office and start attending the proper section. For no foreseeable reason (computer and registrar personnel mistakes included) will you be allowed to stay in the wrong section or to drop the section for which you are actually enrolled. By simply attending a section, you will not be placed on its roll.

CLASSROOM COURTESY: All students are entitled to learn in an environment free from any distraction or disruptions. Respect your classmates and your instructor. Use of impolite or offensive language will be not tolerated in the classroom. I expect you to arrive to class on time and stay until class is dismissed. If for some unusual reason you know you will need to leave early, please notify me before class begins, sit as close to the exit as possible, and leave quietly. Talking to classmates during class, aside from group assignments, is disruptive to those around you. If you engage in such a behavior, I can and may ask you to leave. Reading magazines and newspapers or using headphones while class is in session is inappropriate. ALL CELL PHONES MUST BE SILENCED UPON ENTERING THE CLASSROOM. NO TEXTING DURING CLASS TIME. Laptops may distract your classmates sitting behind you, so if you want to use your laptop in class, you may consider sitting on the last row of the classroom.