

## Economics 4808

**Web:** <http://spot.colorado.edu/~mertens>

**Office Hours:** Tues. 10:50-12:15, 3:20-5; Thurs. 10:50-12:15; Friday afternoons by appointment

### **Course Description**

Econ 4808 is a course that will improve your math skills and will introduce you to how mathematical tools are applied in economic analysis. The ability to apply mathematics is crucial for economic analysis. Thus, this course is essential for anyone who wants to pursue graduate work in economics or a career in economic analysis.

The course covers the mathematics and economic applications of equilibrium, slopes and derivatives, differentials, optimization (maximizing profit and utility, and minimizing cost), constrained optimization (e.g., maximizing utility subject to the budget constraint) and integration. Applications

Prerequisites  
Principles of Economics

\_\_\_\_\_ (Econ 2010 and Econ 2020, or Econ 1000) are prerequisites, and so are Econ 1078 (Mathematical Tools for Economists 1) and Econ 1088 (Mathematical Tools for Economists 2), or the equivalent. One or more semesters of Calculus would suffice for Econ 1078 and 1088. This course and Intermediate Micro Theory are complements. It is



**Incompletes, Extra Credit, etc.**

I adhere strictly to the University guidelines on Incompletes (“An IF is given only when students, *beyond their control*, have been unable to complete course requirements. A substantial amount of work must have been *satisfactorily completed* before approval for such a grade is completed.”). Bad grades, unsatisfactory performance, too many credit hours, work conflicts, etc. are not reasons for an incomplete.

*Grading Scale:*

<b>Your Score</b>	<b>Grade</b>
92% to 100%	A
90% to 91%	A-
88% to 89%	B+
82% to 87%	B
80% to 81%	B-
78% to 79%	C+
72% to 77%	C
70% to 71%	C-
68% to 69%	D+

*Code of Behavior*

Students and faculty each have responsibility for maintaining an appropriate learning environment.