

Mathematics 212  
Spring, 2015, Section 2  
Wieting

## MULTIVARIABLE CALCULUS

### Basic Concepts

- (•) Fields
- (•) Operators

### Line Integrals

- (•) Independence of Path

### Integration on $\mathbf{R}^n$

- (•) Fubini's Theorem
- (•) Change of Variables

### Surface Integrals

- (•) Gauss' Theorem
- (•) Stokes' Theorem

### Volume Integrals

### Area Preserving Maps

- (•) Mollweide et al.

### Differential Forms

- (•) Stokes' Theorem Redux

### Texts

Notes, Jerry Shurman (bookstore)

### Homework

Weekly: Wednesday  $\rightarrow$  Wednesday

### Examination

End of Term: Take Home/Open Book