

**MATHEMATICS & STATISTICS DEPARTMENT**  
**MAT 365-001 Vector Calculus**  
**FALL 2014**  
**(Draft, to be updated)**

**Instructor:** Dr. XIN LU

**Office:** BR 214

**Tel. No.:** 962-3673

**E-mail:** [lux@uncw.edu](mailto:lux@uncw.edu)

**Web Page:** <http://people.uncw.edu/lux>

**Office Hours:** 11:00AM-12:00 PM and 1:00PM – 2:00PM, T/Th or by appointment.  
Students are always welcome to drop by my office.

**Room:** BR 208

**Class Time:** 2:00PM-3:15 PM, T/Th

### **COURSE INFORMATION**

**Course Catalog Description:**

Prerequisite: [MAT 261](#) and [MAT 335](#) . A thorough study of differential and integral calculus of vector-valued functions of a vector variable. Jacobians, inverse and implicit function theorems, change of variables in multiple integrals; theorems of Green, Gauss, and Stokes; applications

**TEXT:** **Advanced Calculus of Several Variables** by C. H. Edwards Jr  
(Dover Publications, ISBN – 10:0486683362 )

**Coverage:** Chapter 1 Euclidean Space and Linear Mappings.  
Chapter 2 Multivariable Differential Calculus.  
Chapter 3 Successive Approximations and Implicit Functions  
Chapter 4 Multiple Integrals.  
Chapter 5 Differential Forms and Stokes' Theorem.

### **TESTS AND GRADING**

**Major Test Days:** TEST 1: October 2, Thursday;  
TEST 2: November 20, Thursday;

**Final Exam:** December 11, Thursday, 3:00PM – 6:00PM

## GRADED WORK:

Tests	100 points each
Quizzes/Homework/Online	100 points
Comprehensive Final Exam	150 points
Total:	450 points

## GRADING SCALE:

90% ≤ **A-** < 92%;    92% ≤ **A** ≤ 100%;  
80% ≤ **B-** < 82%;    82% ≤ **B** < 87%;    87% ≤ **B+** < 90%;  
70% ≤ **C** < 77%;    77% ≤ **C+** < 80%;  
60% ≤ **D** < 67%;    67% ≤ **D+** < 70%;    **F**: under 60%.

## POLICIES

- 1. Make-up Policy:**
  - No late homework papers for grading.
  - No make-up test will be given unless illness or emergency. Instructor must be notified in advance or on the test day. Make-up test will be given on the earliest available date.
- 2. Attendance Policy:** Attendance is expected unless extreme circumstances. A student who has three or less may have changes for some extra credits.
- 3. Academic Honor Code and Seahawk Respect Compact:** Please refer to Section V in your student handbook and Dean of Students' website (<http://www.uncw.edu/stuaff/doso/>) about Academic Honor Code for the definition and procedures about academic dishonesty offenses. The Seahawk Respect Compact (<http://www.uncw.edu/diversity/src.html>) expresses the core values essential to an open, respectful learning and working environment.
- 4. Disability:** UNCW Disability Services supplies information about disability law, documentation procedures and accommodations that can be found at <http://www.uncw.edu/stuaff/disability/>. To obtain accommodations the student should first contact Disability Services and present their documentation to the coordinator for review and verification.
- 5. Religious Observance Policy**

In accordance with NC SL 2010-211, you are entitled to two excused absences for religious observances **per academic year**. You must inform me in writing the first week of class if you will be missing any classes due to religious observance and using one of the two permissible absences for the academic year. In addition, please inform the Registrar the first week of class who will then confirm your intentions to miss class with the impacted course instructors. Any absence for religious purposes will be considered

unexcused unless you submit the request in writing the first week to either me or the Registrar.

**6. The UNCW Statement on Diversity in the University Community**

As an institution of higher learning, the University of North Carolina Wilmington represents a rich diversity of human beings among its faculty, staff, and students and is committed to maintaining a campus environment that values that diversity. Accordingly, the university supports policies, curricula, and co-curricular activities that encourage understanding of and appreciation for all members of its community and will not tolerate any harassment or disrespect for persons because of race, gender, age, color, national origin, ethnicity, creed, religion, disability, sexual orientation, political affiliation, marital status, or relationship to other university constituents.

**7. Zero Tolerance Policy**

UNCW practices a zero tolerance policy for violence and harassment of any kind. For emergencies contact UNCW CARE at 962-2273; Campus Police at 962-3184; or Wilmington Police at 911. For University or community resources visit: <http://www.uncw.edu/safe-relate/campusResources.htm>. Violence prevention information and resources available at <http://www.uncw.edu/safe%2Drelate/>. We will focus several class discussions on the importance of reducing violence and increasing tolerance in schools and at UNCW.

**8. Cell Phones, PDAs, Laptops**

Please silence your cell phone and do not make calls, access applications or text during class. If you have a personal, urgent matter for which you need to be on call, please let me know in advance. In addition, please do not have active any PDAs or laptops/netbooks/iPads open and active unless the activity warrants. We will use these devices in selected activities and they are permissible then.

**EMERGENCY HOTLINE:** If the university is officially closed, the hours of closing will be announced on the emergency hotline (910-962-3991 or toll-free 888-657-5751) and published on @UNCW.

**IMPORTANT DATES**

August 20, Wednesday	Classes begin
August 27, Wednesday	Last day for registration/Last day to drop (without a grade) or add a class for Summer II. Registration closes at 11:59 pm.
September 1, Monday	Labor Day Holiday – NO CLASSES
October 8, Wednesday	Last day to withdraw with a W – undergraduate students

October 13 -14	Fall Break – NO CLASSES
November 26 - 28	Thanksgiving; NO CLASSES
December 3, Wednesday	Last Day of Classes
<b>December 11, Thursday</b>	<b>Final Exam 3:00pm – 6:00 p.m.</b>

### **THE UNIVERSITY LEARNING CENTER**

**Location:** DePaolo Hall, first floor, office #1056

**Phone:** 910.962.7857

**Web:** <http://www.uncw.edu/ulc/>

**The Math Lab**

<http://www.uncw.edu/ulc/math/lab.html>

<http://www.uncw.edu/ulc/appointmentinstructions.html>

**Please keep this syllabus for future reference.**