

**Humboldt State University
Mathematics Department
Math 499: Matrix Lie Groups**

Fall Semester, 2016

Instructor: Dr. Peter Goetz
Office Location: BSS 358
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Office Hours: Monday: 11:00 - 12:00
Tuesday: 2:00 - 3:00
Wednesday: 9:00 - 10:00
Thursday: 11:00 - 12:00
Friday: 9:00 - 10:00

Class Days/Time: TuTh from 12:00 - 12:50 PM
Classroom: BSS 358
Prerequisites: Instructor approval

Course Description

Matrix Lie groups. The format of the course is one-on-one tutorial. A minimum grade of C- is required for this course to count toward the mathematics major.

Course Goals and Student Learning Outcomes

Course learning outcomes:

- 1) To obtain a knowledge base in the subject of Lie Groups.

Program learning outcomes:

It is expected that each mathematics graduate will be able to:

- 1) Reason mathematically and statistically.
- 2) Solve complex problems using mathematics and statistics.
- 3) Communicate mathematical and statistical ideas.
- 4) Evaluate mathematical and statistical work.

- 5) Demonstrate mathematical knowledge commensurate with national norms.

HSU learning outcomes:

HSU graduates will have demonstrated:

- 1) Effective communication through written and oral modes.
- 2) Competence in a major area of study.

Required Texts/Course Website

Textbook:

Naïve Lie Theory, John Stillwell

ISBN-13: 9780387782157

Course Website:

Course announcements and links to course handouts, homework assignments, solutions to exams and other material will be posted at

<http://users.humboldt.edu/pgoetz/math499Lie.html>

Course Expectations

It is expected that a student in this course will arrive prepared for the one-on-one tutorial sessions by having done the required readings and exercises. The student should be prepared to demonstrate his understanding either orally or by written communication.

Assignments and Grading Policy

The student's grade will be based on the instructor's weekly assessment of the student's understanding of the material by way of discussion of assigned readings and exercises.

University Policies

The following link provides HSU policies on: academic honesty, attendance and disruptive behavior, complaints against faculty, staff, or administrators, student code of conduct, and animals in classrooms or laboratories. It also has procedures for dropping or adding a class, **please note that September 5, 2016 is the deadline to Add or Drop courses without a serious and compelling reason for the Fall 2016 semester**, and campus emergencies. Finally there is information regarding counseling and psychological services, the student disabilities resource center, financial aid, and academic and career advising.

<http://www2.humboldt.edu/academicprograms/syllabus-addendum-campus-resources-policies>