CHEMISTRY 5160
Special Topics in Anal Chem
Course Syllabus - Fall, 2016
Sec 001; MW 11:30 – 12:45 a.m.  SLSRC 2430

Professor Shaorong Liu
SLSRC 1190 (Office)
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Office Hours: Thu 16:30-17:30 p.m.; or by appointment.

Textbook (used as a reference only): Materials to be distributed.

Topics to be discussed (tentative):  
This course will include three parts. Part I. Fundamental principle of capillary electrophoresis. In this part, I will cover primarily electroosmotic mobility, electrophoretic mobility, capillary zone electrophoresis, micellar electrokinetic chromatography, capillary isotachophoresis, capillary isoelectric focusing, capillary gel electrophoresis, etc. Part II. Instrumentation/detectors associated with capillary electrophoresis. In this part, I will cover mainly laser-induced fluorescence detector, UV/Vis absorption detector, MS detector, and electrochemical detectors. Part III. Applications. In this part, I will cover capillary electrophoresis for DNA and protein analysis. Two experiments will be included; one for DNA separation and the other for protein separation.

This course will be preceded with a lot of professor-student interactions. Every student will be assigned a special topic and the student will give a presentation to all other students on that topic. There will be a Q&A session after each presentation, and I will serve as a discussion leader in this session.

Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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<tr>
<td>Mid-term Examination</td>
<td>200</td>
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<tr>
<td>Final Examination</td>
<td>300</td>
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<tr>
<td>Two experimental Reports</td>
<td>100 (50 points each)</td>
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<tr>
<td>Term paper (writing part)</td>
<td>100</td>
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Term paper (presentation part) 100 points

Grading Scale:

A  720-800
B  640-719
C  560-639
D  480-559
F  <480

Prerequisites:

Prerequisite: Chem 5100 and Chem 5120.

Other Policies:

UNIVERSITY POLICY REGARDING REASONABLE ACCOMMODATION

The University of Oklahoma is committed to providing reasonable accommodation for all students with disabilities. Students with disabilities who require accommodations in this course should speak with the instructor as early in the semester as possible in order to ensure full participation and facilitate your educational opportunities. Students with disabilities must be registered with the Office of Disability Services prior to receiving accommodations in this course. The Office of Disability Services is located in Goddard Health Center, Suite 166, phone 405/325-3852 or TDD only 405/325-4173.

UNIVERSITY POLICY REGARDING CODES OF BEHAVIOR

Each student should acquaint her or his self with the University's codes, policies, and procedures involving academic misconduct, grievances, sexual and ethnic harassment, and discrimination based on physical handicap.

Students engaging in academic misconduct (including cheating, plagiarism, and any other action that may improperly affect evaluation) will be subject to sanctions in accordance with the Norman Campus Academic Misconduct Code. Grade sanctions could range from a zero for the specific assignment to an "F" for the course. University sanctions can be severe, i.e., expulsion from the University.

CHEATING: Academic dishonesty will not be tolerated in this course. Cheating in any form will be treated according to the rules enumerated in the student handbook. It is your responsibility to be familiar with these rules.
POLICY REGARDING CONTENT OF SYLLABUS

The instructor reserves the right to change any items contained in this syllabus. These changes include, but are not limited to, course content, scheduled dates, and fraction(s) of final grade assigned to individual components of the course.