CHM 3120
Syllabus
Introduction to Analytical Chemistry
Summer 2019

Instructor: Dr. Alex Jacobs, Leigh 202A (office is inside the lab)
jacobsa@chem.ufl.edu Phone: 352-392-0528
Office Hours: When I am in my office, I am available (if you are unsure, email me)
If the door to Leigh 202 is open, you can come in

Graduate TA:

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Lectures: M/W/F Period 1 (8-9:15), LEI 207

Recommended textbook: Quantitative Chemical Analysis, 9th edition, Daniel C Harris, Freeman, 2016

Course Objectives
In this course, you will be introduced to the basics of analytical chemistry and how analytical techniques are used to make quantitative measurements. Lectures will emphasize both classical and modern techniques, with a greater focus on modern methods and recent developments. Statistical analysis and interpretation of data will also be covered. Some topics of quantitative analysis will be covered as well.

Grades
Grades will be determined by a point distribution:

Exams (100 pts each 3 total)	300 pts
Final Exam (100 pts)	100 pts
Total	400 pts

Grades in this course will be on a straight scale as shown below. A curve may be applied at the end of the term if the professor deems it necessary.

Letter Grade	Percentage	Letter Grade	Percentage	Letter Grade	Percentage
A	≥93	B-	≥80	D+	≥67
A-	≥90	C+	≥77	D	≥64
B+	≥87	C	≥73	E	<60
B	≥83	C-	≥70		

Exams:
In class exams will be given throughout the semester, 3 regular exams and 1 final. Exams will be multiple choice questions. You will be allowed to use calculators on the exam (Graphing calculators must be memory wiped before the exam).

Grading:
If you believe there was an error in grading, please see myself or the TA within 1 week of having the exam returned to you. We do our best to ensure that the grading is fair for all students.

Attendance:
You should plan to attend all lectures. Powerpoint lectures may not contain 100% of the information provided in class. If you must be absent due to sporting events, family matters, religious obligations, etc. please let me know as soon as possible. If you are sick, please stay home and rest up. Inform me by email of your impending absence and if possible, provide a note from a doctor or medical professional when you return. Make up exams will only be given if appropriate documentation is provided. If you are going to be late, please enter the classroom quietly.

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Classroom Accommodations:
Students needing classroom accommodations must first register with the Dean of Students office. The DSO will provide documentation to the student who must then provide this documentation to me when requesting the accommodation.

Canvas:
All lectures, grades, practice exams and other files will be posted to Canvas. Lecture powerpoints will be posted under “Files”

Academic Honesty:

The Honor Code (http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructors or TAs in this class.

Tentative Schedule

Date	Topic	Lab	Chapter(s)
5/13	Introduction, Course Overview	Lab 1	0 and 1
5/15	Units and Chemical Measurements		1
5/17	Tools		2
5/20	Errors and Sigfigs	Lab 2	3
5/22	Sigfigs Continued		4
5/24	Statistics		4
5/27	No Class		
5/29	Statistics		4
5/31	Quality Assurance and Calibrations		5
6/3	Review	Lab 2 cont.	
6/5	Exam 1		(Chapters 0-5)
6/7	Introduction to Spectroscopy		18
6/10	Introduction to Spectroscopy	Lab 3	18
6/12	Fundamentals of Spectroscopy		18
6/14	Spectroscopic Instrumentation		20
6/17	Spectroscopic Instrumentation	Lab 3 Cont	20
6/19	Atomic Spectroscopy		21
6/21	Atomic Spectroscopy		21
6/24	No Class-Summer Break		
6/26	No Class-Summer Break		
6/28	No Class-Summer Break		
7/1	Applications of Spectroscopy	Lab 4	19
7/3	Exam 2		(Chapters 18-21)
7/5	Fundamentals of Electrochemistry		14
7/8	Fundamentals of Electrochemistry	Lab 4 cont.	14
7/10	Electrodes and Potentiometry		15
7/12	Electrodes and Potentiometry		15
7/15	Cyclic Voltammetry	Lab 5	17
7/17	Cyclic Voltammetry		17
7/19	Applications of Electrochemistry		
7/22	Review	Lab 6	
7/24	Exam 3		(Chapters 14-17)
7/26	Separations		23
7/29	Liquid Chromatography	Lab 7	25
7/31	Liquid Chromatography		25
8/2	Gas Chromatography		25
8/5	Mass Spectrometry		22
8/7	Mass Spectrometry		22
8/9	Final		(Chapters (22-25)