CHEM 275-200

**Classroom:** Math 112, and lab  
**Class Times:** 2:00—5:00 TR  
**Instructor:** Bidisha Sengupta, Ph.D.  
**Office:** Math 112  
**Email:** bidisha.sengupta@sfasu.edu  
**Office Hours:** M (3.00-4.00 PM); T (11.30-12.30 PM); R (2.00-3.00 PM); F (10-11 AM)  
**Phone:** (936)-468-2485  
**Other time by appointment (email me to make appointment)**  
**Recitation:** Friday 2-5 PM

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**Course Syllabus:** CHE 275—200  
**Spectroscopy of Biomolecules—Fall 2019**

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**IT IS STRONGLY RECOMMENDED THAT YOU READ AND UNDERSTAND THE POLICIES OUTLINED IN THIS SYLLABUS. IF YOU SHOULD HAVE QUESTIONS ABOUT ANYTHING CONTAINED HEREIN, PLEASE CONTACT ME AS SOON AS POSSIBLE!**

**Course Description:**  
Introduction to spectroscopy, electromagnetic radiation, electronic and vibrational states, Kasha’s principle, Jablonski diagram, fluorescence, phosphorescence, introduction to biomolecules.

**Text and Materials:**  
**PRINCIPLES OF FLUORESCENCE SPECTROSCOPY**  
Lakowicz, Joseph R.

**Course Outline:**  
Lecture 1: Spectroscopy  
Lecture 2: Principles of a spectrometer  
Lecture 3: Fluorescence, phosphorescence, singlet and triplet state  
Lecture 4: Basic intro to Biomolecules  
Computational and experimental studies will follow.

**Testing:**  
Laboratory note books with updated works, meticulousness, sincerity and seriousness will be reflected in the grading. Follow these steps while writing your experiments.  
1) Title,  
2) Objective  
3) Outline of procedure (Step-wise)  
4) Diagram of apparatus  
5) Tabulated form of all measured data  
6) Observations  
7) Discussion of results  
8) Conclusions  

**Course Grade:**
Letter Grade from Numerical Average  
A ≥ 90.00, B ≥ 80.00-89, C ≥ 70.00-79, D ≥ 60.00-69, F < 60.00

CLASS POLICY

Attendance Policy: Attendance is mandatory for the research sessions. If you have excessive unexcused absences (five) you might be asked to withdraw from the class with grade of WF.

Classroom Behavior:  
Pagers, cell phones, or other electronic devices must be turned off while students are in research sessions.

GRADING POLICY:

<table>
<thead>
<tr>
<th>Grading Activity</th>
<th>Date</th>
<th>Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1, submission of review paper 1</td>
<td>Sep. 20</td>
<td>Math 112</td>
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<tr>
<td>Exam 2, written exam on lectures</td>
<td>Oct. 16</td>
<td>Math 112</td>
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<tr>
<td>Exam 3, data</td>
<td>Nov. 13</td>
<td>Math 112</td>
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<tr>
<td>Exam 4, draft (writing a thesis on the research)</td>
<td>Dec. 04</td>
<td>Math 112</td>
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<tr>
<td>Final Exam, writing a thesis on the research</td>
<td>Dec 10</td>
<td>Math 112</td>
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ACADEMIC INTEGRITY (A-9.1):

Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

Definition of Academic Dishonesty

Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.
Please read the complete policy at [http://www.sfasu.edu/policies/academic_integrity.asp](http://www.sfasu.edu/policies/academic_integrity.asp)

Any student found cheating will be subject to the penalties as stated in the Student Code of Conduct handbook; including but not limited to a score of zero on exam, expulsion from the class or expulsion from the University.

**WITHHELD GRADES SEMESTER GRADES POLICY (A-54):**
Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

The circumstances precipitating the request must have occurred after the last day in which a student could withdraw from a course. Students requesting a WH must be passing the course with a minimum projected grade of C.

**STUDENTS WITH DISABILITIES:**
To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to [http://www.sfasu.edu/disabilityservices/](http://www.sfasu.edu/disabilityservices/).

**LAB/CLASSROOM BEHAVIOR POLICY:**

**Acceptable Student Behavior:** Lab/Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.

**CLASSROOM BEHAVIOR EXPECTATIONS:**

- Come to class prepared (spend at least 2 hours working problems and reviewing previous material before each class period) and be on time and in your seat.
Absences may be assigned to anyone that disrupts class, sleeps in class, or consistently comes in late or leaves early. Read Attendance Policy Section for how this can affect grades.

- Bring a **NON-programmable**, scientific calculator. Cell phones and programmable calculators may NOT be used on quizzes or exams.
- Turn off and put away cell phones; **NO** text messaging during class. Anyone caught using a cell phone during class will have an absence assigned to them.
- Be courteous and respectful of other students, SI leader, and instructor.
- Learn your section number and your row number. Place row number on all items turned in.
- Significant figures are required on all answers given on quizzes, assignments and exams.
- No make up quizzes will be given if a student comes in late and misses the quiz.
- Students who violate these rules will be asked to leave. Repeat offenders will be subject to disciplinary action in accordance with University policies as described in the Code of Student Conduct.
- You are NOT ALLOWED to use laptops, tablets, or iPads to take notes in class.

**TIPS TO BE SUCCESSFUL**
Read, understand and interpret the research papers well. Get help from your mentor.

**JUSTIFICATION FOR HOURS**
This course is for 1 credits and spans 15 weeks. The course contains extensive content requiring students to prepare by completing the assigned weekly reading, homework, online content, research, review etc. Students have significant weekly reading and homework assignments involving critical thinking and quantitative reasoning. Students are tested over the material via several exams during the semester including a comprehensive final exam. These activities average at a minimum 6 hours of work each week to prepare outside of time spent engaging with the content.
Statement of Acknowledgement

PRINT LEGIBLY

I have read and understood the policies outlined in the course syllabus. I agree to abide by and follow the policies. I have been advised that if I do not agree to follow the policies outlined in the course syllabus, I should withdraw from the course.

___________________________________________________                              _______________________
                     Signature                              Date

PRINT NAME

READ the syllabus thoroughly. Print this page, sign and return by September 3, 2019