CHM 3400 Summer C, 2022

### PHYSICAL CHEMISTRY: PRINCIPLES AND APPLICATIONS IN BIOLOGICAL SCIENCES

INSTRUCTOR: Dr. Kathryn R. Williams, <a href="mailto:krw@chem.ufl.edu">krw@chem.ufl.edu</a>

**OFFICE HOURS:** Monday, after class, CLB 220

**TEACHING ASSISTANTS:** Nicholas Terrel, <u>nterrel@chem.ufl.edu</u>

Zachary Pasternak, pasternak@ufl.edu

**TEXT:** Tinoco, Ignacio Jr; Sauer, Kenneth; Wang, James; Puglisi, Joseph; Harbison, Gerard; Rovnuak, David. *Physical Chemistry: Principles and Applications in Biological Sciences*; 5th Ed; Pearson:

Boston, 2014.

**LECTURES:** MWF, 8:00-9:05.

**OBJECTIVES:** CHM 3400 is a one-term course in physical chemistry intended for majors in the biochemistry track and for other majors not requiring the two-semester physical chemistry sequence. Prerequisites include organic chemistry, two semesters of physics, and two semesters of calculus. The course teaches principles of physical chemistry, biologically relevant applications, and problem solving.

#### **GRADING:**

Exams (4 at 100 points each)

Homework (8 at 25 points each)

Total

400 points

200 points

600 points

**GRADING SCALE:** A = 540-600; A— = 525-539; B+ = 500-524; B = 499-480; B—= 479-450; C+ = 449-425; C = 424-380; C— =379-340; D = 339-300; E < 300

**EXAMS and HOMEWORK:** All exams (75 minutes) will be held 8:00-9:15 AM on the designated day. Students may bring one 8.5"-11" handwritten sheet with any desired information. Only nonprogrammable calculators allowed. Make-up exams will be granted only at Dr. Williams' discretion and only for documented and legitimate reasons. Requests for make-ups must be presented to Dr. Williams within 24 hours of the exam. Exams will **NOT** be cumulative. Homework assignments (end-of-chapter problems) will be posted in Canvas Files. Assigned problems must be submitted no later than 8:00 AM on the specified date.

## **ATTENDANCE:**

Attendance is required (1 pt deduction for each unexcused absence). Exams will include material presented in class as well as in the assigned problems.

### STUDENTS WITH DISABILITIES:

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation.

#### **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 instructor or TAs in this class.

# **LECTURE SCHEDULE:**

Week 1, May 9-13: Chapter 2; HW 1 due Friday, May 13, at 8:00 AM

Week 2, May 16-20: Chapter 3; HW 2 due Friday, May 20, at 8:00 AM

Week 3, May 23-27: Chapter 4; Exam 1, Friday, May 27

Week 4, May 30-June 1-3: Chapter 4; HW 3 due Friday, June 3, at 8:00 AM

Week 5, June 6-10: Chapters 4 and 5; HW 4 due Friday, June 10, at 8:00 AM

Week 6, June 13-17: Chapter 5; Exam 2, Friday, June 17

Break Week, June 20-24

Week 7, June 27- July 1: Chapters 6 and 7; HW 5 due Friday, July 1, at 8:00 AM

Week 8, July 4 6-8: Chapter 7; HW 6 due Friday, July 8, at 8:00 AM

Week 9, July 11-15: Chapter 8; Exam 3, Friday, July 15

Week 10, July 18-22: Chapter 9; HW 7 due Friday, July 22, at 8:00 AM

Week 11, July 25-29: Chapter 10; HW 8 due Friday, July 29, at 8:00 AM

Week 12, August 1-5: Chapter 12; Exam 4, Friday, August 5