Syllabus for CHE 150B – Introduction to Chemistry

Spring 2016 3 Credit Hours BSC304E: TR 10-11.15am

Instructor: Professor Sarah A. Winget Learning Assistant: Joanna Risby

Office: Room 301E, Bullock Science Center Office: Science Learning Center, Room G-25, Campbell

Email: swinget@agnesscott.edu Email: jrisby@agnesscott.edu

Office Hrs: Mon 10.30-11.30am, Thu 1-2pm Office Hrs: http://www.agnesscott.edu/rcms/

Course Description: This course delves into the world of atoms and molecules in order to study the structure of matter and the changes it undergoes. The course will provide an introduction to the field of chemistry. Topics include atomic and molecular structure, stoichiometry, acids and bases, enthalpy, and equilibrium.

Pre or Corequisite: No pre-requisites. You are required to take the accompanying lab course Che 150L.

Course Goals: 1.) To obtain a basic knowledge of fundamental chemistry topics. 2.) To be able to apply the basic chemical principles learned to new chemical problems. 3.) To learn how knowledge and skills learned in chemistry can be applied to real world problems. 4.) To build skills in solving problems.

Relevance to the departmental and college curriculum: After completing this course and the associated CHE150 L course, you may proceed to chemistry courses in the chemistry sub-disciplines: CHE220+L (inorganic and physical chemistry), and/or CHE240+L (organic chemistry), and/or CHE230 (analytical chemistry). CHE150+L can be used to satisfy the natural science distributional requirement under the 2014-15 catalog –OR– general education requirement entitled SUMMIT IN STEM if you are a first year student. CHE150+L are also required for the following majors and programs of study: Chemistry, Biochemistry and Molecular Biology, Biology, Neuroscience, dual-degree engineering, dual-degree nursing, and any pre-health tracks.

Required Course Materials:

- 1. Textbook (hardcopy or ebook): Burdge, J. and J. Overby. Chemistry: Atoms First, Second Edition. New York, NY:McGraw Hill, 2014. (Note: This book may be purchased as a hard copy, but please note that this book is also included as an e-book when you buy the Connect Plus materials listed below and so you do not need the hard copy).
- **2.** McGraw Hill's online Homework with e-book: Connect Plus/LearnSmart. (Note: If you purchase the hardcopy textbook in the ASC bookstore, these online materials are automatically included).

Moodle (http://courses.agnesscott.edu/): Moodle is a web-based course management system that will be used in this course as well as the lab (Chem 150L). The syllabus, grades, in-class powerpoints, quiz keys, study guides, etc. will be posted for your access.

Resource Center for Math and Science (RCMS) (http://www.agnesscott.edu/rcms/): The RCMS has a Science Learning Center (SLC) in Campbell G-25 and operating hours will be posted on the RCMS website and on posters around campus. During these hours student Learning Assistants (LAs) will be available.

Course Requirements:

3 Exams (20% each)	60%
Comprehensive Final Exam (25% New/75% Comprehensive)	20%
Quiz Average (with 2 lowest grades dropped)	7.5%
On-Line Homework Assignments	7.5%
Weekly Workshop Attendance (or weekly one-on-one work with a learning assistant)	5%

Absolute Grading Scale:

Α	93-100	B-	80-82	D+	67-69
A-	90-92	C+	77-79	D	63-66
B+	87-89	С	73-76	D-	60-62
В	83-86	C-	70-72	F	0-59

Note: if you have completed all exam/quizzes/homeworks, you may substitute your final exam score for your lowest-scored exam. Additional Note: Student grades will not be curved

Exams: Three exams will be given during the semester, and a comprehensive self-scheduled exam will be given during final exam week. Exams will be taken in the classroom and will be closed-book and with no notes. Please remember to bring your calculators to exams and quizzes.

Make-up Exams: Attendance for quizzes and exams are mandatory. There will be no makeup quizzes or exams. If you know you are going to miss a quiz or exam due to (i) matters relating to death of an immediate family member, or (ii) observance of religious holidays or (iii) participation in events or activities sponsored by the college, please notify the instructor as soon as possible; you will be allowed to take the quiz or exam early. If you suddenly find you miss a quiz, it will count as one of the two quiz scores that will automatically be dropped. If you need to miss an exam because you have become seriously ill or injured or you experience an emergency, you should notify the office of the Dean of Students (x6391) of your situation as soon as possible and ask them to notify me of your circumstances. I will then work with the Dean's office to discover the best course of action for your personal circumstances.

Quizzes: There will be a short (15 min) quiz given in class on most Tuesdays (except exam days). The quizzes are intended to give you a regular check on your comprehension of the material rather than to cause stress, so the lowest two quiz scores will automatically be dropped. There will therefore be no make-up quizzes as you may miss two quizzes for any reason and receive no penalty.

Attendance in Class: Attendance is highly recommended, but not required, for all scheduled class times.

Attendance in weekly evening workshops: It is highly advisable that some of your out-of-class study time be spent attending workshops facilitated by our course LA, so you are required as part of this class to attend a one hour evening workshop each week. You may choose between the Sunday evening workshop and the Monday evening workshop (both are held 8-9pm). Please remember to sign in to the workshop to receive credit for attending. If for some reason you cannot attend a workshop on a given week you may work one-on-one with a Learning Assistant in the SLC for an hour that week. Please remember to sign in to the SLC to receive credit for attending.

Homework Assignments: Homework problems will be assigned through Connect Plus/LearnSmart, and problems will be due on most Tuesdays by the start of class. You will be given an unlimited number of attempts to answer each homework question correctly. I strongly encourage you to work on your homework assignments in the Science Learning Center (SLC) in Campbell G-25, and to work on problems with your classmates. However, to comply with the honor code, you should only submit work that reflects your personal understanding. No late homeworks will be accepted.

Workload Statement: This is a 3-credit class that meets "3 hours" per week. To succeed in this course, you should also expect to study 5-6 hours per week outside of class (this does not include the hours you spend on the associated CHE150L lab course).

Appointments: Appointments may be made with Professor Winget and the Learning Assistants by email.

Course Evaluation: Near the end of the semester you will be notified by email, and provided with a link to follow, to complete course evaluations online outside of class. You are expected to complete the them as your feedback is extremely valuable to Dr. Winget, the department, and the administration. Of particular importance are constructive comments that help Dr. Winget improve the course.

Accommodations: Agnes Scott College seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in this class, please contact Kelly Deasy in the Office of Academic Advising (X6150) to make or complete the registration process. Once registered, please contact Dr. Winget by email in order to make an appointment to discuss the specific accommodations needed for this course.

This course adheres to the principles of diversity and inclusion integral to the Agnes Scott community. We respect people from all backgrounds and affirm people's decisions about gender expression and identity. Please feel free to correct D. Winget if your preferred name or gender pronoun are different from that listed on the class roster.

For the safety of the entire community, any incidence of or information about sexual misconduct must be reported immediately to Title IX Coordinator Karen Gilbert (kgilbert@agnesscott.edu)