## Chemistry 1721 / 1821

# **Syllabus**

# Spring 2012

Instructors	In	str	uc	to	rs
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:	Dr. Susan E. Bates	s-bates@onu.edu	ME 264	772-2341	www2.onu.edu/~s-bates
	Dr. Nicole Dickson	n-dickson.1@onu.edu	ME 246A	772-2258	webct-new.onu.edu
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	Dr. Bradley M. Wile	b-wile@onu.edu	ME 265	772-2986	webct-new.onu.edu

# Texts and Materials:

General Chemistry, Ebbing and Gammon, 9th ed., Houghton-Mifflin (2009)

Introductory Chemistry Laboratory Manual 2011-12, ONU (2011)

Darling model kit, grid-lined lab notebook, and non-programmable scientific calculator some individual instructors may also require an audience response device ("clicker")

### Course Plan:

Chapter	Homework Problems
11. States of Matter; Liquids and	37, 39, 49-93 (odd), 99, 105, 113, 117, 121
Solids	
12. Solutions	39, 41, 43, 49 – 73 (odd), 79, 81, 89, 93, 95, 107
13. Rates of Reaction	33, 39, 45, 49-63 (odd), 67, 71, 75, 77, 79, 83, 85, 93, 99, 101, 105, 113, 121, 123, 125
14. Chemical Equilibrium	31, 35, 37, 41, 43, 49-61 (odd), 65, 69 – 77 (odd), 91, 101, 111
15. Acids and Bases	29 – 35 (odd), 41, 47, 53, 57, 67 – 99 (odd)
16. Acid-Base Equilibrium	35, 37, 41, 49, 53, 55, 59, 63, 67 – 75 (odd), 83, 85, 87, 91, 99, 105, 107, 113, 117, 121, 125
17. Solubility and Complex-Ion Equilibrium	27, 31, 33, 37, 41, 45, 51, 69, 75, 83, 95, 97
18. Thermodynamics and Equilibrium	33, 37 – 47 (odd), 55, 63 – 69 (odd), 73, 77, 83 – 91 (odd), 101
19. Electrochemistry	43, 47, 55, 61 – 73 (odd), 79, 81, 85, 87, 93, 95, 107, 113, 115, 121, 139
20. Nuclear Chemistry	To Be Announced by Instructor

## **Assignments:**

Prepare for each class and lab by reading ahead. Prepare for quizzes and exams by completing all assigned homework problems; these will not be collected, but you are expected to seek help from your instructor when you have difficulty. Plan to read and do chemistry homework daily. Expect to learn and apply concepts rather than simply memorizing.

### **Testing:**

Each instructor will designate one meeting period a week for review and quizzes. Hour exams will be administered on Thursday evenings at 7 PM (see dates below). A student may be excused from a scheduled exam time due to serious illness, emergency, or conflict with an authorized ONU function *if the instructor is notified in advance*; exams must then be completed within the next three days. Per departmental policy, exams will never be administered early. Exam room assignments will be announced in class. All exams are cumulative. Unless otherwise noted by your instructor, your class will not meet on the remaining Thursday evening periods.

## Grading:

<u>Activity</u>	% of Total	<u>Letter</u>	% Range
7 of 9 Quizzes	20 %	A	89 - 100 %
Exam 1 (2/9/12)	15 %	В	79 - 88 %
Exam 2 (3/22/12)	15 %	С	65 - 78 %
Exam 3 (4/26/12)	15 %	D	50 - 64 %
Laboratory	10 %	F	< 50 %
Class Participation	5 %		
Final Exam (TBA)	<u>20 %</u>		
Total	100%		

### Attendance:

Attend lectures and labs regularly and be on time; frequent absences will bring down a borderline performance. *No make-up quizzes will be administered for any reason*, so a missed quiz will be one of those dropped. However, if a student misses two or more regular quizzes, (s)he may earn replacement credit for one quiz score by completing a common, comprehensive replacement test during the last week of classes.

A lab may only be made up during the same week; you must arrange this with another lab instructor. A missed lab will earn a score of 0, and more than three unexcused absences from the lab will result in a failing grade for the course. In case of serious illness, emergency, or conflict with an *authorized University function*, please contact your instructor as soon as the conflict is known.

## **Integrity:**

Students in this course are expected to adhere strictly to the ONU Student Code of Academic Conduct (see ONU Student Handbook).