

<b>Course Title/Number</b>	<b>Principles of Chemistry I / CHM 211 Section 103</b>
<b>Semester/Year</b>	Fall / 2016
<b>Days/Time</b>	MWF / 11:00am – 11:50am
<b>Location</b>	473 Science Building
<b>Instructor</b>	John Rakus, Ph.D
<b>Office</b>	478 Science Building (lab: 480 Science Building)
<b>Phone</b>	304-696-6627
<b>E-Mail</b>	<a href="mailto:rakus@marshall.edu">rakus@marshall.edu</a>
<b>Office Hours</b>	MWF: 3:00pm – 5:00pm (M: in S-460; WF in S-478); walk-in (if brief) or by appointment
<b>University Policies</b>	By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy by going to <a href="http://www.marshall.edu/academic-affairs">www.marshall.edu/academic-affairs</a> and clicking on “Marshall University Policies.” Or, you can access the policies directly by going to <a href="http://www.marshall.edu/academic-affairs/policies/">www.marshall.edu/academic-affairs/policies/</a> . Academic Dishonesty/Excused Absence Policy for Undergraduates/Computing Services Acceptable Use/Inclement Weather/Dead Week/Students with Disabilities/Academic Forgiveness/Academic Probation and Suspension/Academic Rights and Responsibilities of Students/Affirmative Action/Sexual Harassment

### Course Description: From Catalog

A study of the properties of materials and their interactions with each other. Development of theories and applications of the principles of energetics, dynamics and structure. Intended primarily for science majors and pre-professional students. 3.0 credit hours. (PR: Math ACT of 23 or above, or C or better in CHM 111, or a passing grade on the chemistry placement exam; CR or PR: CHM 217)

### Required Texts, Additional Reading, and Other Materials

**Text:** Silberberg, Principles of General Chemistry, 3rd Ed. McGraw Hill.  
**Additional:** Scientific calculator. Turning Technologies clicker. Aleks account.

### Course Requirements/Due Dates

September 9, 2016 – Exam 1	August 28, 2016 – Aleks 1
September 30, 2016 – Exam 2	September 4, 2016 – Aleks 2
October 19, 2016 – Exam 3	September 11, 2016 – Aleks 3
November 9, 2016 – Exam 4	September 18, 2016 – Aleks 4
November 30, 2016 – Exam 5	September 25, 2016 – Aleks 5
	October 2, 2016 – Aleks 6
December 10, 2016 – Final Exam	October 9, 2016 – Aleks 7
	October 16, 2016 – Aleks 8
	October 23, 2016 – Aleks 9
	October 30, 2016 – Aleks 10
	November 6, 2016 – Aleks 11
	November 13, 2016 – Aleks 12
	December 4, 2016 – Aleks 13
	December 9, 2016 – Aleks 14

## Grading Policy

600 points	average of 4 best in-class exams (lowest exam dropped*)	<b>Grade Scale</b>
200 points	final exam grade (December 10, 10am, location TBA)	A: 895-1000
100 points	average of 12 best Aleks Weekly grades	B: 795-894
50 points	percentage of Aleks Pie Topics mastered by December 9	C: 695-794
50 points	based on Clicker participation	D: 595-694
<b>1000 points</b>	<b>total</b>	F: 0-594

\*lowest exam will only be dropped if you complete all five (5) exams.

<b>Course student learning outcomes</b>	<b>How students will practice each outcome in this course</b>	<b>How student achievement of each outcome will be assessed in this course</b>
Become familiar with the atomic structure of matter.	-Lecture -Online assignments -Classroom response questions -In-class example problems	-Exams -Online assignments
Develop analytical skills to solve problems presented in a chemical context.	-Lecture -Online assignments -Classroom response questions -In-class example problems	-Exams -Online assignments
Understand how energy is utilized in natural systems.	-Lecture -Online assignments -Classroom response questions -In-class example problems	-Exams -Online assignments
Describe and predict the basic chemical bonding patterns that explain the physical and chemical properties of matter.	-Lecture -Online assignments -Classroom response questions -In-class example problems	-Exams -Online assignments

## Attendance Policy

Attendance for this class is strongly encouraged but not mandatory. I will not keep attendance (beyond registration requirements) and attendance is not graded, though an accumulation of missed Clicker questions may end up harming your grade. Any excused absence approved by the Student Affairs office will be accepted but must be turned in immediately. If an exam is missed for a justified reason it is your responsibility to contact me immediately in order to arrange a makeup.

## Conduct Policy

I hold my students to the same expectations about conduct and behavior while in class that I have for myself. It is my responsibility to you to provide the best learning environment of which I am capable and, in return, I believe everyone in this classroom deserves the right to be treated with dignity and respect. I encourage questions, interaction and curiosity but I also implore you to consider your classmates' interests in class. I will not demand your unwavering attention if you do not wish to provide it, but I simply ask that you do not disrupt the learning environment in which I am trying to provide.

## Technology Policy

Cell phones, tablets and other digital devices are allowed during lecture time provided that they are kept silent and are not used in a disruptive manner. Should I feel that someone is using a device disruptively, I reserve the right to confiscate the device for the remainder of class and/or ask the student to leave. Devices are expressly forbidden during examinations and will be considered a violation of the Academic Integrity Policy.

## (Loose) Course Schedule

Week	Dates	Class Topics	Assignment	Notes
1	Aug 22 – Aug 26	Introduction, Chapter 1	Aleks assessment: Aug 25 (11:59pm)	
2	Aug 29 – Sept 2	Chapter 2	Aleks 1: Aug 28 (11:59pm)	Aug 29: W period begins
3	Sept 5 – Sept 9	Chapter 3	Aleks 2: Sept 4 (11:59pm) <b>Exam 1: Sept 9</b>	Sept 5: no class (Labor Day)
4	Sept 12 – Sept 16	Ch. 3 cont.	Aleks 3: Sept 11 (11:59pm)	
5	Sept 19 – Sept 23	Chapter 4	Aleks 4: Sept 18 (11:59pm)	
6	Sept 26 – Sept 30	Ch. 4 cont.	Aleks 5: Sept 25 (11:59pm) <b>Exam 2: Sept 30</b>	
7	Oct 3 – Oct 7	Chapter 5	Aleks 6: Oct 2 (11:59pm)	
8	Oct 10 – Oct 14	Chapter 6	Aleks 7: Oct 9 (11:59pm)	
9	Oct 17 – Oct 21	Chapter 7	Aleks 8: Oct 16 (11:59pm) <b>Exam 3: Oct 19</b>	
10	Oct 24 – Oct 28	Ch. 7 – Ch. 8	Aleks 9: Oct 23 (11:59pm)	Oct 28: W period ends
11	Oct 31 – Nov 4	Ch. 8 – Ch. 9	Aleks 10: Oct 30 (11:59pm)	
12	Nov 7 – Nov 11	Ch. 9 cont.	Aleks 11: Nov 6 (11:59pm) <b>Exam 4: Nov 9</b>	
13	Nov 14 – Nov 18	Chapter 10	Aleks 12: Nov 13 (11:59pm)	
14	Nov 21 – Nov 25	Thanksgiving Break: No Class		Aleks Open Pie will be available
15	Nov 28 – Dec 2	Ch. 10 – Ch. 11	<b>Exam 5: Nov 30</b> Aleks 13: Dec 4 (11:59pm)	
16	Dec 5 – Dec 9 <b>DEAD WEEK</b>	Ch. 11 cont.	Aleks 14: Dec 9 (11:59pm) <b>Final Exam: Dec 10 (10am-12pm)</b>	