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Chemistry 100-001 Introduction to Chemistry Spring 2015

Philip Rabe

Parkland College, prabe@parkland.edu

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CHE 100-001 Introduction to Chemistry Course Syllabus Spring 2015

Instructor: Philip Rabe **Office:** L262
Phone: (847) 231-2116 (google voice to my cell, can receive texts) **Mailbox:** L120
Email: PRabe@cobra.parkland.edu (I prefer you email me through Cobra)
Office Hours: (feel free to also email to set up an appointment outside these times)
Tues. 4:45-5:45; Wed. 10-11

Lecture:	M 9-10:50 am (when not in lab - see schedule)	Room TBA
	W/F 9-9:50 am	Room P-104
Lab:	M 9-10:50 am (when in lab - see schedule)	Room L-125

Welcome to CHE 100 at Parkland College! CHE 100 is designed for people with little or no high school chemistry, those who had chemistry long ago, and/or those who tried struggled in CHE 101 and want a better understanding before going onto CHE 101. This course will prepare you for continued studies in the sciences as well as help you apply chemical concepts to the world around you. Chemistry impacts your everyday life. I will do my best to help you succeed, but success will require consistent, hard work on your part. It is like learning another language – it needs practice! See objectives on Cobra for specific topics in the class.

College Mission: The mission of Parkland College is to engage the community in learning.

Course Objectives: Please see the Course Objectives listed in your course packet and on Cobra.

Pre-requisite: MAT 071, MAT 081, MAT 095, or recent high school algebra with a grade of C or higher. *This prerequisite is very important.*

How to Succeed in CHE 100:

Be on time to class, prepare for class ahead of time, read the text, work with your group, do the homework, keep up with the material, take good notes, and **ask questions in class or out** (of instructor, classmate, or peer tutors D120). If you have any questions or concerns, do not hesitate to contact me. Making mistakes and learning from them *before* the quizzes and final exam is important.

Required Materials:

1. **Text:** Introductory Chemistry, 5th edition, Custom for Parkland College, by Nivaldo J. Tro (MasteringChemistry access code included), ISBN: 1269737619 or Introductory Chemistry, 5th edition, by Nivaldo J. Tro (but Mastering Chemistry needs to be purchased separately), ISBN-032191029X. (Publisher: Pearson). Or if you like to read off the computer screen there is an e-book version too. Bring this text to class daily – we'll refer to problems and sections of the book in class.
2. **Course Packet:** This is a packet of "POGIL" materials that we will be going through during the semester. You must have it for class. Have your instructor check that you've bought the correct packet before you open it. The **Laboratory Manual** is found at the back of this course packet. You'll probably want to put this in a **binder**.
3. **Laboratory Notebook:** A bound laboratory notebook with duplicate sheets is also available in the Parkland College Bookstore. This is where you'll record your data in lab.
4. **Safety Goggles:** Students must purchase their own laboratory safety goggles, available in the bookstore. If you already have your own, they **MUST** offer complete protection of the side of your eyes. (Look for the markings "Z87" stamped on the goggles.) Lab safety *glasses* are **NOT** acceptable. This is part of your lab participation grade.
5. **Scientific Calculator:** Any simple scientific calculator is sufficient as long as it is capable of scientific notation. A graphing calculator is not necessary and not allowed on quizzes and exams. You are responsible for understanding how to use your calculator. Bring your calculator to every class

session, including quizzes and exams. You will not be allowed to use graphing calculators on exams or in the testing center.

6. **i-Clicker:** These are available at the bookstore, used and/or online. You can re-sell them at the end of the semester or keep them if other classes use them (i.e. Che 101 uses them and some bio classes do too). Instead of buying a clicker, you can purchase clicker access for your phone, tablet or laptop for \$10 a semester. Talk to your instructor to decide what the best option is. See www.iclickergo.com and "Create a New Account" but just do the 14-day free trial first. Don't open your iclicker until your instructor has verified you are definitely using it.
7. **Quarter** for the testing center lockers. Cell phones, inter coats & excess materials are not allowed in the TC.

Cobra & Cobra e-mail:

Cobra is a great asset, containing student versions of PowerPoint discussions, pre-quizzes, general information, your grades, and much more. I expect you to check Cobra at least every other day. Please e-mail me only through Cobra.

Methods of Evaluation: How do I earn the points I need?

Quizzes & Exams (~55%)		
200 pts	Quizzes	Quizzes (25 pts. each x highest 8 out of 9 poss.)
150 pts.	Midterm Exam	
200 pts	Cumulative Final Exam	
Homework & Participation (~23%)		
60 pts.	Clicker pts/Lecture part.	4 pts./week x highest 15 out of 16
32 pts.	Quiz prep	Pre-quizzes =4 pts. each x highest 8 out of 9 count
72 pts.	Mastering Chemistry HW	MC HW=8pts each x highest 9 out of 10 possible
55 pts	Reading Comprehension	Choose the reading guides or the quiz on Cobra. =5 pts. each x highest 11 out of 12 possible
7 pts.	Misc.	Practice quiz; visit your instructor in office hours; Syllabus signed; email to instructor; Intro MC
Labs (~22%)		
224 pts	Prelabs & Lab reports	Intro Lab (20 pts.) (if you miss this mandatory safety intro you cannot complete future labs and thus you fail the course) Prelabs (8 pts. each x 7) Lab reports (20 pts. each x 7) 6 "Your World with Chemistry" activities can be done in case of a missed lab since no labs are dropped) Miss more than 2 labs in course = F
Total Course Points		
1000 pts	Total	All scores are reported as points in the grade book.

Grading Scale:

I want an A so I need to earn a minimum of 900 pts (90.%) and can't miss more than 2 labs.

I want a B so I need to earn a minimum of 800 pts (80.%) and can't miss more than 2 labs.

I want a C so I need to earn a minimum of 700 pts (70.%) and can't miss more than 2 labs.

I want a D so I need to earn a minimum of 600 pts (60.%) and can't miss more than 2 labs.

If you earn less than 60.% of 2000 pts (less than 600 pts) or miss more than 2 labs, then you might consider talking with a counselor about withdrawing before the student withdrawal date. (See Withdrawals below)

No make-ups & No late work.

Time Expectation:

For every in class hour you can expect to put at least 2-3 times that into the course outside of class. 4 hours per week in class * 3 = 8-12 hours outside of class per week. This may vary from week to week, concept to concept, and student to student.

Academic Honesty:

Anyone found to be cheating or committing plagiarism on an assignment, quiz, lab report or exam will receive a ZERO for that assignment and the incident will be reported. The instructor reserves the right to give a **zero for all previous assignments in that category** and require an alternate assignment for future assignments in that category. Cheating includes getting or providing answers from or to another student during before, or after an exam, lab, etc., copying answers to assignments from the Internet or other students' assignments (from this or previous semesters) plagiarism and/or improper clicker use. There may be random iClicker serial number checks during the semester. If you are found with a clicker other than the one you originally registered, all other previous clicker grades will become zeroes. The complete policy on academic honesty may be found in the Student Policy and Procedures Manual – please review this policy in the Student Manual. An atmosphere of mutual respect between and among teachers and students is expected in this class. More on Academic Honesty can be found at <http://www.parkland.edu/studentpolicy/honesty>

Quizzes: 25 points each (9 possible, lowest 1 dropped)

Quizzes will be administered in the Natural Sciences Testing Center (L-161) on specified dates and will typically take 20-25 minutes, but there is no time limit on the quizzes other than the hours of the Testing Center. Since you will have 2 days to take a quiz, **no makeup quizzes will be given.** *Don't delay in taking the quiz. TC hours are 9-4 M-T but only 9-3 Fri.* Write neatly. If I can't find or read it I can't grade it.

Midterm & Final Exams: 150 points & 200 points (none dropped)

The final exam will include all the material that is covered in the semester. Every student is required to take the final exam at the scheduled time. **No make-ups without valid documentation** - you will receive a 0 if absent without a documented excuse.

Attendance & Clickers: 4 points/week (16 possible, lowest 1 dropped)

Attendance will be taken daily with clicker review questions. The activities we participate in during class will contribute to your course grade. Our mutual goal is your success in this course. *Inadequate attendance has been a leading cause of class failure.* The attendance policy in this course is in keeping with the policy stated in the Parkland College Catalog that says: “Regular and prompt attendance is expected at all classes. Regular attendance and consistent study habits are considered necessary for academic success in college. Faculty members have prerogative of lowering grades for excessive absence.” **Clicker points** will be allocated to in-class clicker questions. If you forget your clicker, you cannot make these points up. However, 1 week will be “dropped” and not count against you. These points may be assigned at any time during a class period or during the week and will typically be a review on the previous class period's work. Keep your clicker because you may use it in future classes at Parkland. See the note on the bottom of page 1 about using your phone/tablet/computer instead of buying a clicker. Note: Your instructor may substitute “Learning Catalytics” instead depending upon the wireless capability of the class.

Mastering Chemistry (MC): 8 points each (10 possible, lowest 1 dropped)

This is a **required** online homework component associated with each module of the course. Each module has problems that are graded on a mastery basis. You will receive credit when you complete the problem correctly. However, you may attempt each problem multiple times, with only small deductions for wrong attempts and hints. After each attempt, the program will let you know if you did the problem correctly or not, and provide hints on how to solve these types of problems. As with any computer program there may be some glitches, in order to compensate for this I have included extra points. Every module may a couple additional points *to compensate for computer glitches/extra credit*) by doing the “Adaptive Learning” assignments. Once you have set up your MC account you will be able to access it from any computer with internet access. I recommend working through the MC problems as we cover the corresponding content in class (a few problems everyday).

Reading Comprehension: 5 points each (12 possible, lowest 1 dropped)

Often time students complain: "You made us buy the book and we never used it." This is NOT the case in Chemistry. Since class time is very limited, we will hit the highlights in class, but you will need to supplement your understanding using the textbook. In order to encourage reading *for comprehension*, you can complete either the reading guide (posted in Cobra) as you read the chapter **or** a reading comprehension quiz in Cobra. The quiz is graded on accuracy but the reading guide is graded on completion.

Pre-quizzes: 4 points each (9 possible, lowest 1 dropped)

The highest submission score counts. Submit the PQ **before you take the quiz**. You can repeat the PQ as much as you'd like and your highest score will count.

Lab participation (including prelab & goggles): 8 points each (7 possible, none dropped)

You will be required to perform lab work and to write reports of your lab work. Participation in each lab is worth 8 points. **In order to do the lab you must** be dressed appropriately (pants, belly covered, closed toed shoes, & safety goggles), arrive *on time*, have read the lab (you will be questioned about the lab before entering), have your *pre-lab* in your lab notebook fully prepared-(purpose, safety, procedure and data tables written in lab notebook). Then for full points, you'll work with your partner in lab and clean up afterwards.

Chemistry is a laboratory science. As such, the lab aspect is very important so, students who miss more than 2 labs will receive an F for the course. If you fail to attend the Mandatory Safety Introduction Lab then you will not be able to participate in Che 100 labs. Thus, if you do not attend the safety training, you cannot complete labs and will ultimately receive an F. Also, since the lab supports the classroom concepts, anything in lab could be quizzed over.

Lab reports: 20 points each (8 possible, none dropped)

Use extra lab time to work with your partner to complete the report. If you do not finish them in class, they will be due the Monday following lab at the beginning of class. If you miss a lab, you may ask about making up 1 of them doing Your World with Chemistry activities online.

Food/Drinks: No food or drink will be allowed in the lab.

Drops/Withdrawals:

On Census Day, I am required to assess your attendance. If you have not attended regularly to that point, you will be withdrawn with no refund of tuition or fees. After the Census Day, you *may* be withdrawn at midterm (**Jan. 19, 2015**) if you stop attending for several weeks prior. I will send you an email notifying you. *After midterm*, if you want to withdraw from the course, **you** are ultimately responsible for your own withdrawal. Withdrawal from a course must be done by the student prior to 5 PM on the last day to withdraw (**May 1, 2015**). **If you quit attending this course or miss more than 2 labs and do not withdraw, you will automatically receive an F.**

Cell Phones & Pagers:

Please be courteous! Parkland's Public Safety is requesting that everyone set their phones to vibrate as part of the new mass notification system, IRIS. Cell phones are not to be used as calculators for quizzes or exams. The safety of your cell phones & pagers is greatly reduced in the lab setting so leave them in the locker.

Disability Services:

Students with approved accommodations through the Office of Disability Services are expected to meet privately with instructors to discuss accommodations listed on their Disability Services ID card. (e.g. extended time on exams, notes, etc.) This personal introduction officially marks the beginning of your accommodations for the semester. Instructors should be allowed to view your Disability Services ID card and note approved accommodations.

Reader/Scribe and Extended Time Testing Accommodations are not accessible in the classroom. Students should work with Disability Services staff to schedule tests/quizzes with accommodations.

Call Disability Services at 353-2338 or visit us in X 148.

Tentative Schedule for Che 100-001 Spring 2015
(See Cobra Calendar and Announcements for changes)

<u>Date of Mon.</u>	<u>Mon. (TBA)</u>	<u>Tue</u>	<u>Wed. (P104)</u>	<u>Thurs. (no class)</u>	<u>Fri. (P104)</u>
1/12/15	Intro (in L125)		Practice Quiz in TC (L161) starts	Practice Quiz in TC & other intro assigns due 4pm	Ch. 1 Reading due.
1/19/15	<i>No class - MLK Day</i>				Ch. 3 Reading due.
1/26/15	<i>Intro Lab/safety (no pre-lab due)(in L125)</i>		MC due 9:00am QUIZ Ch. 1&3 starts	QUIZ Ch. 1&3 ends 4pm	Ch. 4 Reading due.
2/2/15	Lab 2: Exploring Ionic & Covalent Compounds (pre-lab due)		MC due 9:00am QUIZ CH. 4 starts	QUIZ CH. 4 ends 4pm	
2/9/15	Lab 2 due Lecture				Ch. 5 Reading due.
2/16/15	Lab 3: The Neutralizers (pre-lab due)		MC due 9:00am QUIZ CH. 5 starts	QUIZ CH. 5 ends 4pm	
2/23/15	Lab 3 due Lecture				Ch. 2 Reading due. [Next week is weird, plan ahead!]
3/2/15	Lab 1: Measurement (pre-lab due)		MC due 9:00am QUIZ CH. 2 in class	MIDTERM EXAM in class	
3/9/15	Lab 1 due Class in L244				Ch. 6 Reading due.
3/16/15	Class in L244		MC due 9:00am QUIZ CH. 6 starts	QUIZ CH. 6 ends 4pm	
3/23/15	<i>Spring Break - No Class</i>				
3/30/15	Lab 4: Chemical Reactions (pre-lab due) Ch. 7 Reading due.		MC due 9:00am QUIZ CH. 7 starts	QUIZ CH. 7 ends 4pm	
4/6/15	Lab 4 due Class in L244				Ch. 8 Reading due.
4/13/15	Lab 5: Stoichiometry (pre-lab due)		MC due 9:00am QUIZ CH. 8 starts	QUIZ CH. 8 ends 4pm	Ch. 9 Reading due.
4/20/15	Lab 5 due Ch. 10 Reading due. Class in L244		MC due 9:00am QUIZ CH. 9 & 10 starts	QUIZ CH. 9 & 10 ends 4pm	
4/27/15	Lab 6: Concentration of Fat in Potato Chips (pre-lab due)				Ch. 13 Reading due.
5/3/15	Lab 6 due Lab 7: Titration/Antacid (pre-lab due)		MC due 9:00am QUIZ Ch. 13 ONE DAY only	Ch. 14 Reading due.	Lab 7 due MC due 11:55pm No Class: Final Exams start
5/10/15	FINAL EXAM Schedule: 001: Wed. 8-10				

