

CHEM 101 (section 5162 & 4752) Spring 2015 General Chemistry I Lecture

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class time: sect 5162 T,R 8:30-9:45 am; sect 4752 T,R 9:55–11:10 am in LSF L 301 (R=Thursday)

office hours: 3:35 to 5:00 pm T,R*; 4:20 to 5:00 pm W, 9:45 to 9:55 am T,R, 11:10 to 11:30 am T,R & other times by appointment. (Please email me to make an appointment. If you need me, I will always find the time to meet with you.) I will also usually be available most days before and after my lecture and lab either in LSF 301 or LSF 304 or MSB 318. I am almost always in my office during normal business hours from 9 am to 4 or 5 pm M through F. I am usually not in my office during lunch time because I usually go to the cafeteria. (I do not wish to informally meet with my students so do not follow me to lunch to ask me office hour type questions.) I have a log sheet on my office door so you can tell if I have left for the day. If I am somewhere else other than my office, I always leave a note saying where I am and when I will be back so you can follow me. * **If there is a seminar or faculty meeting (activity hour), I may temporarily move the office hour for that week to a different time.**

For the Lecture you will need: (a) **Textbook**, Chemistry, a Molecular Approach (3rd edition) by Nivaldo Tro You will also need the (b) **access code** for Mastering Chemistry online tutorial and homework program. (You get **points for doing the homework** so if you do not have the access code, you may lose out on some points this semester.) You should be sure to log into the “Mastering” Homework website with your access code to get your homework points **Course ID: HAHNS15** (for online homework) (c) **scientific calculator:** To perform calculations in this course, you will need an inexpensive “scientific calculator”. It does not need to be elaborate but should be able to express numbers in scientific notation (e.g. 6.02×10^{23}) and must have log (and ln) functions. You can buy such a calculator for around \$5 to \$10.00 at the local discount store. You will be able to use your calculator on all exams. You will **not** be allowed to use a cell phone as a calculator on quizzes & exams.

Quizzes and exams (& answer keys) will be posted online at <http://JulietHahn.com> after you take the quizzes and exams. I will also post the answer key for quizzes and exams immediately after you take the quizzes and exams in the display case outside of LSF L301. **(I do not allow students to take the same exam or quiz which I gave everyone else at a later time. You can tell because I will post the answer key almost immediately after the quiz or exam.)** Please download the blank form of the quiz & work through the quiz to study for the exam. Please download the blank form of the exam & work through the exams to study for the final exam. You will **never ever** see the same question given on a quiz also on an exam. (The idea is to **understand** the questions on the quizzes & exams.)

In fact if you go to the <http://JulietHahn.com> website now, you will be able to download all of my exams and quizzes for General Chemistry I (Fall 2012, Fall 2013, Spring 2014, Fall 2014) and General Chemistry II (Spring 2013 & Summer I 2013). It is probably a good idea to download all of the old exams from General Chemistry I from Fall 2014 to get an idea of what kind of quizzes, exams and final exam I give. It is a lot of pages because there are 4 versions of each quiz, exam and final exam because there are 2 versions for each section’s exams. You may want to just download and look at it just because of the number of pages (which is why I do not print and hand out the exams to the class ~ 40 pages per exam)

For the Lab you will need: (a) **Textbook**, Francis Marion University **General Chemistry 101 Laboratory Manual** (the latest revision edited by T.W. Ragsdale) and (b) **safety goggles both** available at McNair Science 307 **lab notebook with rip out pages** available at the University bookstore. (Consult your

individual lab instructor about your lab instructor's requirements.) (My sections of the lab do not use the lab notebook from the bookstore but do require the **Lab Manual** and the **safety goggles**.)

Chemistry 101 is a 4 credit class. Your lecture grade makes up 75% of the class grade and your lab grade is counted as 25% of the class grade. I will include your final lab grade (which I will get from your lab professor) as 25% of the Chemistry 101 lecture grade. I am also teaching:

CHEM 101 lab section **4755 T 12:45 to 3:35 pm (LSF 304/MSB 318)**,
 section **4756 W 1:30 to 4:20 pm (LSF304/MSB 318)**,
 section **5163 R 12:45 to 3:35 pm (LSF304/MSB 318)**.

NOTE: By department policy, if you do not complete (or do not turn in any work) for **3** of the approximately 10 labs this semester, you will **earn an F** on the entire class. If you earn an F in the lab and your lab teacher submits an F for your lab grade, I will have no choice but to assign an F for the lecture as well.

Grading: Grading will be based on a percentage of 820 total points

3 exams (100 pts per exam, ~1/3MC, ~1/3SA, ~1/3LA**)	300 pts
final exam (cumulative ~1/3MC, ~1/3 SA, ~1/3 LA**)	200 pts
7 quizzes (drop 2 quizzes, 20 pts each quiz, SA & LA**)	100 pts
Mastering Chemistry online homework all added together	20 pts
lab grade	200 pts
extra credit attendance points	15 pts

(If you sign in to 90% of the class period, you will get 15 pts. If you do not hardcopy sign in, you will not get these points. Exception: if you provide a letter from your employer stating that you have a full time job which conflicts with some lectures and I approve alternative sign in for attendance, you may still be able to earn these points.)

Total points 820 pts

The grading scale will be the standard grading scale. 90 % & above A, 80 % & above B, etc. The letter grade will never be curved to give a lower letter grade than the standard (i.e. 80% will not be considered to be a C). I do sometimes stretch the lower limits (below C) to your advantage.

Some Useful Information: Chemistry is not some far away, antiseptic, horrible, technological monstrosity of the 21st century and chemicals are not some maiming, toxic substance from which we all have to keep a distance. Modern society would not be possible without chemistry. Chemistry gives us all pharmaceuticals, all synthetic materials (polyester, nylon, plastics, teflon, styrofoam, perfumes, rubber, nutrasweet), batteries, the ink in your pen, liquid crystals in your LCD watches & in your flat panel TVs. Chemicals also makes up the bodies of all living organisms. Everything that you eat are chemicals. Chemicals are everywhere!

Chemistry 101 is the first semester of a two semester sequence of General Chemistry lecture. We will cover about half the chapters in the text this semester. Do not get too cocky from having done well in your high school science classes to think that you will do well on this course by just being smart. Do not think that just because the class's name says "...Chemistry" that the class automatically will be too boring, too scary, too hard, too much like your high school chemistry class for you to enjoy and do well. Think to yourself: **[I think I'll really work on this course and maybe I'll actually (gasp #1) get an A on the class and/or (gasp #2) enjoy the class.]** Choose whichever gasp you like better :) Just keep in mind that **no matter how smart you are**, you will not do well on this course without a **lot of hard work**. In fact just by trying, you can pull yourself up half a letter grade. Conversely if you do not try you will lower your final letter grade by almost half a letter. [don't show up to class (lose 15 pts), don't do homework (lose 20

pts), – total 35 / 810 pts = over 4.3 % pts, ex:76% (C+) vs 80% (B) final percentage points with “**attempt points**”.] I do not adjust final grades up if you are close to the borderline because I feel that you are a good student (or because I like you). **You can pull yourself** up to a higher grade from the borderline by doing all the “**attempt points**” which are all documented by hardcopy evidence.

The grade that you earn in this class will be directly related to how much time you spend preparing for the class. **The biggest secret to doing well in this course is to keep up with the lecture material.** The biggest mistakes that students make which results in a bad grade in the course are: **1)** not attending the lecture **2)** not keeping up with the lecture material and attempting to cram the night before every exam **3)** thinking that just understanding the lecture material means that you will do well on the course – you have to actually work at least the problems on the quizzes immediately prior to the exam, the example worked problems from the lecture and for a better grade the homework problems. When I say you have to work the problem, I mean that you have to do the problem including the final plugging in of the numbers into your calculator to obtain the final correct answer. **Just looking at the worked problem and sort of understanding it does not count as having done the problem.** If you make one of these three common mistakes, you will not learn anything. (You will also get a bad grade on this course.) General Chemistry is going to be a lot of work. **(If General Chemistry is not a lot of work, then you may be doing something wrong and your grades may reflect this.)**

The following is my suggestion for what you should do to study for this class. If you have no time, do the things listed first by no time. If you have more time and want a better grade, do the things listed by lots of time. (**no time**: attend class, **study the 2 quizzes given immediately before the exam**, study lecture notes, rework the example problems in the lecture, do assigned homework problems, read the book **:lots of time**) **Class attendance is very important to doing well on this course. Not coming to class and not taking the quizzes and exams are the surest way to get an F on the class.** (even without the attendance EC)

Please come to class the lecture between the quiz and the exams. We will review the quizzes and make sure that everyone understands everything on the quizzes before the exam. However you should not simply memorize the quiz because I will **not** give the same questions on the exams as appeared on the quiz. The idea is **to understand** the quiz before the exam not to simply memorize everything in sight.

For Missed Exams, Quizzes, Final Exam: (VERY IMPORTANT)

There will be no makeup exams, quizzes or final exam without a documented excused absence. **There is no make up exam and no make up quiz.** If you miss the **final exam with documentation**, I will give you an incomplete and give you a **make up final exam** which is very different from the final exam which I gave everyone else. I **NEVER** GIVE THE **SAME QUIZ OR EXAM** AFTER I GIVE THE QUIZ OR EXAM TO THE CLASS.

1. **Exam:**

a. **no documentation excuse:** For **one and only one exam** (with no documented excuse), I will replace your missing exam grade with your final exam grade. After the first undocumented excuse, you will earn a zero for any subsequent undocumented missed exam. (ie If you miss one exam with a no documentation excuse, I will replace your missing exam with your final exam grade. If you miss a 2nd exam with no documentation excuse, you will earn a zero on that exam, etc.) **If you miss none of the exams, I will replace your lowest one (and only one) exam grade by the final exam.** (This assumes that one of your exams was a lower % grade than the final exam.)

b. **documentation excuse:** If you have **documentation** for a missed exam, I will replace your missing exam with either your own average for your other exams (prorated for difficulty) or your own final exam grade (whichever is higher).

2. Quiz:

- a. **no documentation excuse**: You will earn a zero for a missed quiz but you get to drop 2 zeros with no documentation. If you miss no quizzes then you will get to drop your 2 lowest grade quizzes instead.
- b. **documentation excuse**: If you have documentation for a missed quiz, I will average your own quizzes and prorate the difficulty of the quiz and plug in for your missing quiz.

3 **Final Exam**: Because of the importance of the cumulative final exam, if you miss the final exam without documentation, you will **earn a zero for the final exam**. If you miss the final exam with documentation acceptable to me, I will give you an **incomplete** (because of the grading deadline) until I have time to give you a makeup final exam. The makeup final exam will be totally different from the final exam which I gave the rest of the class.

Under no circumstances do I ever give the same quiz, exam or final exam for any missed quiz, exam or final exam. There is absolutely **no strategic advantage to not taking a quiz, exam or final** together with the rest of the class. I usually post the hard copy of the answer keys for all quizzes and exams (in the glass cases outside LSF L301) almost immediately after the class has taken the quiz or exam. It takes me at least 2 to 3 days to write a new and different exam or final exam.

An averaged grade to plug in (for an excused absence) is derived by the following equation. For example if you have a documented excuse for missing Quiz II, your plug in Quiz II grade will be calculated as follows:

$$(\text{missing Quiz II grade}) / (\text{class Quiz II average}) = (\text{your average all quizzes}) / (\text{class average all quizzes})$$

Please provide me a hard copy of your documentation for my files ASAP. Even if you gave a hardcopy of the documentation to some other office, you must give me a copy for my files because excuses are not shared between offices. **Examples of valid excuses** include: medical grounds, death in the immediate family, documented weather related transportation problems and university business. You must have hardcopy documentation such as a doctor's signed note on letterhead, newspaper article for funeral listing your name or a letter from a professor stating that you worked on behalf of the university on the given date. Examples of working on behalf of the university could be that you were a part of an official university sports team or that you represented the University at a conference. **Examples that are not valid excuses** include: personal problems, going away for the weekend, intramural sports, etc. (In general acceptable excuses for absences for missed exams will be much more rigorous than acceptable excuses for absences with no missed work.) You will be allowed to drop two lowest quiz grades and one lowest hour exam grade will be replaced by the final exam grade with no documentation. You will not be allowed to drop the final exam. You can also provide documentation to ensure that you get the attendance extra credit.

Please take quizzes and exams in your own section unless I give you prior permission. I make up the number of exams and quizzes for the expected number of students and I may not have enough quizzes or exams for you to take the quiz or exam if you come to the wrong section. **I also reserve the right to refuse to let you take the quiz or exam in the wrong section even if I have enough quizzes or exams.** (If you come to class the day of the exam for the 9:55 am – 11:10 am class at 11:10 am, I will not let you take the exam. This would be a missed exam. If you come at 11:00 am, you will be able to take the exam only until 11:10 am.) If you have a good reason for missing an exam or quiz, please ask me rather than just assuming that it is not an acceptable excuse. I am a reasonable person.

The exams will cover the materials discussed in class. Unless specifically mentioned, exams will not cover materials in the textbook that were not discussed in the class. However it is strongly recommended that you read the text. Exams and the final exam will have almost identical format. Quizzes will be mostly short answer and long answer. ****An exam will be a mixture of multiple choice (MC), short answer/fill in the blank (SA) with two long answer (LA) questions per exam****. A long answer question is a question which will have a half page to a full page blank for which you will have to show your work for solving some sort of word problem. You may be asked to write a few sentences to explain something for the long answer question. Exams will be similar to the quizzes however you will never get an identical question on an exam which you got on a quiz.

When you get back your graded quizzes and exam you will also get an answer key with a list of points for common mistakes. Check your graded exam/quiz against the answer sheet. **Keep in mind that I am grading ~ 120 six to ten page exams (with partial credit) by myself and I am a human being so you are supposed to check for human error. (Help me by checking for human error.)** You will get to keep your exams & quizzes to study so that you learn from your mistakes. You will get partial credit for LA (& some SA) questions. If there are any mistakes on the graded exams any requests for regrades **must** be made during the class in which the exam or quiz is returned in writing. Once you leave the class, any requests for regrades will **not** be honored.

Pay attention in class and follow the syllabus. I am the only one who is deciding on how these particular sections of this class will be run. There are **multiple sections of the General Chemistry I Lectures** and **each section** is run by a **different professor** with **different rules and syllabi**. Rules for one of the other sections of the lecture do not apply to this section. Example 1: If your friend (or even the Chemistry tutor) in professor X's Gen Chem I class says that they do not need to do the online homework, this is probably correct for your friend (& the tutor is probably thinking of professor X's class). However in my section if you do not do the online homework, you will lose 20 of the 820 points or the equivalent of 20 points on one of the exams (i.e. One exam grade of 70 pts could become 90 pts if you do the homework but will remain 70 if you do not do the homework.). Example 2: Let's say that all of your friends tell you that if you miss an exam, you will get the **class** average on the exam. Or your friend says that all of the classes use the same exam so you can take the exam in another professor's class. The syllabus and I did not say this. So you need to ask me or refer to the section of this syllabus on missed exams & quizzes. You will note that without an excuse **one missed exam is replaced by the final exam grade**. If you get a 65 % on your final exam, you will have a 65% on your missing exam and 65% on the final exam (300 of 810 total points). Without an excuse a second missed exam is replaced by a **zero**. If the one missed exam is an acceptable (to Dr. Hahn) excused absence, you will get your own average prorated for the degree of difficulty of the missing exam.) or the final exam grade whichever is the higher grade.

I personally make up all of the exams & I personally grade all of the exams. I never let undergraduate or graduate students, staff or other faculty help me grade the exam – not even to add up the final points. Because there is partial credit, this policy ensures consistency in grading.

Absences: If you miss a class, it is your responsibility to obtain the lecture notes and any class assignment given out during the classes you missed. I will not redo the lecture individually for any person who missed a class or give out my lecture notes for the missed classes. **Missing a class during which I give an assignment (such as a change in exam date) does not excuse you from the assignment. It is your responsibility to contact classmates or me either before your missed class period or as soon after missing the class as possible.** [I will post document camera notes at <http://JulietHahn.com>.]

Students with Disabilities: Students who have special conditions as addressed by the Americans with Disabilities Act should notify the professor of the course immediately. **Academic Dishonesty:** Academic

dishonesty in any form will not be tolerated. University regulations on academic honesty will be strictly enforced throughout this course. **Drop Date:** The last date to drop this class without academic penalty (W) is 2/12 R. Last day to withdraw from the class is 4/10 F **Cell Phones and Electronic Devices:** Please turn off cell phones and electronic devices before entering the classroom. Use of cell phones is strongly discouraged in the classroom. You may **not** use your cell phone as a calculator during an exam or quiz. **Pre-requisite (or co-requisite):** MATH 111 (You must have credit for or be currently enrolled in this math class.) **Co-requisite:** CHEM 101 L (You must be enrolled in the lab class at the same time as the lecture.)

Schedule of Reading Assignments: Please plan ahead. Here is your entire semester schedule. We will spend about 2 to 3 class lecture periods per chapter and will cover each chapter consecutively until the end of the semester. We will cover Chapter 1 to Chapter 10 (skipping Chapter 6). This reading assignment schedule is not chiseled in stone and may change during the semester. (**Exam & Quiz dates are chiseled in stone.**) I suggest that you skim the chapter before the material is covered in class and actually read (in detail) the sections covered in class after the material has been gone over in class. (skim = read introduction, conclusion, flip through book noting the major examples, figures and section headings in the chapter) I cannot cover every detail in the textbook if I need to cover all the needed chapters, so I skip around. (This is why you should read after I go over the material in class.) You will receive homework problems (assigned using the Mastering Chemistry online tutorial and homework program that accompanies your textbook). **Exams (E) will take up an entire class period. Quizzes (Q) will be given in the last 15 minutes of class.**

<u>dates</u>	<u>chapters</u>
1/13T, 1/15R, 1/20T(QI)	1
1/22R, 1/27T(QII)	2
1/29R, (2/3T Exam I), 2/5R, 2/10T	3
2/3T	Exam I
2/12R(QIII), 2/17T, 2/19R, 2/24T(QIV)	4
2/26R, (3/3T Exam II), 3/5R, 3/10T	5
3/3T	Exam II
3/12R(QV), 3/24T	7
3/26R, 3/31T(QVI), 4/2R	8
4/7T	Exam III
4/9R, 4/14T	9
4/16R, 4/21T(QVII)	10
4/23R	review

Final Exam **8:30 am class** - 4/30R 8:30 to 10:30 am **9:55 am class**- 4/30R 3 to 5:00 pm

Holidays: **MLK Day Holiday** 1/19M, **Spring Break** 3/16M to 3/20F

Academic Schedule: **Last Day to Withdraw without Penalty** .. 2/12R, **Last Day to Withdraw** .. 4/10F,
Class Ends .. 4/27M, **Reading Day** ... 4/28T
final grades due for seniors 5/4M noon **final grades due all student** 5/6W noon

One final point, my objective is to teach General Chemistry to everyone in this class. I want you all to do well because you are my students. If you have any difficulties, please come to see me before your difficulties cause irreparable damage. I may be able to advise you on how to best study for this class so that you spend your time for the best effect. Do not just stop trying without coming to see me first.

Suggestion: Go to <http://JulietHahn.com> to download my earlier General Chemistry I Exams & Quizzes to get a preview of what types of exams and quizzes I give.

Dear Student: In this course you will be using MasteringChemistry™, an online tutorial and homework program that accompanies your textbook. (“Mastering” is worth 5 of 810 pts, equivalent to **half a grade better on one exam**. You **do need to get the correct answer to get points** for doing the “Mastering”. “Introduction” chapter in the “mastering” does not count but is supposed to help you learn how to navigate the “Mastering”.)

What You Need:

- ✓ **A valid email address**
- ✓ **A student access code** (Comes in the Student Access Kit that may have been packaged with your new textbook or is available separately in your school’s bookstore. Otherwise, you can purchase access online at www.masteringchemistry.com.)
- ✓ **The ZIP code for your school: 29502**
- ✓ **A Course ID: HAHNS15** (use FMU ID for ID #)

Register

- Go to www.masteringchemistry.com and click **New Students** under Register.
- To register using the Student Access Code inside the MasteringChemistry Student Access Kit, select **Yes, I have an access code**. Click **Continue**.

–OR– **Purchase access online:** Select **No, I need to purchase access online now**. Select your textbook and whether you want to include access to the eBook (if available), and click **Continue**. Follow the on-screen instructions to purchase access using a credit card. The purchase path includes registration, but the process may differ slightly from the steps printed here.

- **License Agreement and Privacy Policy:** Click **I Accept** to indicate that you have read and agree to the license agreement and privacy policy.
- Select the appropriate option under “Do you have a Pearson Education account?” and supply the requested information. Upon completion, the **Confirmation & Summary** page confirms your registration. This information will also be emailed to you for your records. You can either click **Log In Now** or return to www.masteringchemistry.com later.

Log In (<http://www.youtube.com/watch?v=BCWgNu-kxi0&list=PLRpRY65o3rxaYHYB9UC-rOeB1yaU93wz&index=2> = there is a youtube video on how to register for “Mastering”,)

- Go to www.masteringchemistry.com.
- Enter your Login Name and Password and click **Log In**.

Enroll in Your Instructor’s Course and/or Access the Self-Study Area

Upon first login, you’ll be prompted to do one or more of the following:

- Enter your instructor’s MasteringChemistry Course ID.
- Select your text, if available, and **Go to Study Area** for access to self-study material.
- Enter a Student ID. Your instructor *may* request that you enter a special Student ID for this course. If so, be sure to enter this information EXACTLY as instructed.

Click **Save** and **OK**.

Congratulations! You have completed registration and have enrolled in your instructor’s MasteringChemistry course. To access your course from now on, simply go to www.masteringchemistry.com, enter your Login Name and Password, and click **Log In**. If your instructor has created assignments, you can access them by clicking on the **Assignments** button. Otherwise, click on **Study Area** to access self-study material.

Support

Access Customer Support at www.masteringchemistry.com/support, where you will find:

- *****System Requirements*****
- Answers to Frequently Asked Questions
- Additional contact information for Customer Support, including Live Chat

Syllabus Agreement Form, Information Sheet & PIN number selection

I have read and understand the policies stated in the syllabus for Dr. Hahn's CHEM 101 Lecture class for the Spring semester of 2015. All questions have been answered to my satisfaction. By signing this sheet I agree to abide by the policies stated therein.

Your signature _____ Dr. Hahn CHEM 101 Lecture Spring 2015

Print your name: _____ Date submitted: _____

***** Information Sheet

contact phone # _____ contact email address _____

major _____ year (please circle one) fresh, sophomore, junior, senior, other

if other please explain _____ last chemistry course taken (course name) _____

when (year, semester) _____ where (here, other) _____ cumulative GPA _____

grade received on last chemistry course _____

other science courses taking currently (give course name) _____

Are you doing research? (yes, no) If so with whom? _____

Why are you taking this class? _____

hobbies: _____

Feel free to tell me anything else you would like me to know about you: _____

***** PIN Selection

I _____ (sign name) give Dr. Hahn permission to

post my grades by using the PIN # _____ for the Spring 2015 semester for CHEM 101

(General Chemistry I Lecture) I may opt out of having my grades posted (Do not use your SS#,

student ID # or FMU pin # to ensure the security of your posted grades.) I also [(do) or (do not)] (circle

one) give Dr. Hahn permission to return my actual exam in a self serve fashion in folders

(return inside your manila folder in the hanging file folder by first letter of last name)