

## Greetings & Welcome to Chem 108 Introductory Chemistry

<http://chemconnections.org/general/chem108/>



Dr. Ron Rusay  
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Office Hours (PS 235): MW 10:00 – 11:00; Tuesday, Thursday,  
Friday by appointment, daily e-mail replies usually within 24 hours.  
Class: MW 11:10-12:35 (PS 277)  
Discussion/Lab:  
12:45-3:55 M (PS 221) sec. 2341  
12:45-3:55 W (PS 221) sec. 2343

## Chem 108

<http://chemconnections.org/general/chem108/108syll18f.html>



- Please sign the roster next to your name on the clipboard that is circulating.
- If you are not listed, or here to add Chem 108, clearly print your name, DVC id & e-mail address on the last page, and next to your name indicate the lab section you wish to add: **M (2341)** or **W (2343)**, or **both (M/W)** if you are flexible.
- Class size is limited to 28 max due to lab safety.** Anyone on the roster who is absent today will be placed last on the roster after the wait listed and new sign-ins. **28 lab drawers** will be assigned in lab to the first 28 on the completed list after today's class. **Add codes will be provided at the end of the first lab.**
- Pick up a hard copy of the course syllabus on leaving class today as needed.

## CONNECTIONS Chemistry, STEM & Applications

Why am I enrolling in CHEM 108?

- It is a required course that is needed to meet my higher education goals. I have to take it.
- Chemistry is very easy to me and I need the 4 credit A to boost my GPA.
- I am very interested in science and chemistry.
- I'm not sure.

Show of hands; (i-clickers to be used in future class meetings.)



## CONNECTIONS

### Requirements Met by DVC Chemistry Courses

	Chem 106 Chemistry for Non-Science Majors	Chem 107 Integrated Inorg/ Org/Biol. Chem.	Chem 108 Introductory Chem.	Chem 109 Intro. to Org & Biochem.	Chem 120 Gen. Chem. I	Chem 121 Gen. Chem. II
Chemistry courses that fulfill GE science requirements						
DVC GE	X		X	X	X	X
GETC	X		X	X	X	X
CSU-GE	X	X	X	X	X	X
Chemistry courses that fulfill AS degree requirements						
Natural Science AS	X	X	X	X	X	X
Health Education AS			X			
Kinesiology AS*						
Sports Med/Asst Training AS		X	X	X	X	
Chemistry courses that fulfill AS degree requirements (CHE REQUIRED)						
Allied Health AS		X	X	X	X	
Life Science AS		X		X	X	
Science Science AS			X		X	
Chemistry courses that ARE REQUIRED to earn AS degrees						
Dental Hygiene AS			X	X		
Civil Eng AS					X	
ElectComp Eng AS						X
Mech Eng AS					X	
Geology AS					X	X
Nurs. Therapy AS		X	X			

Chem 106 and 107 (degrees Chemistry I & II) are required for transfer to some majors but are not currently part of any DVC degree program.



## CONNECTIONS Chemistry, STEM & Applications

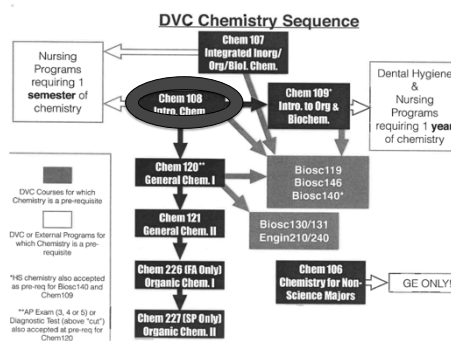
My plan after completing Chem 108 is to:

- take *General Chemistry*: (If @ DVC: Chem 120)
- take *Integrated Inorganic, Organic, and Biological Chemistry*: (If @ DVC: Chem 107)
- take *Introduction to Organic and Biochemistry*: (If @ DVC: Chem 109).
- NOT** take other chemistry courses after Chem 108.

Show of hands; (i-clickers to be used in future class meetings.)



## CONNECTIONS



## Chem 108: Class/ Lab

<http://chemconnections.org/general/chem108/108syl18f.html>



Please read carefully, after today's class.

## Chem 108

<http://chemconnections.org/general/chem108/108syl18f.html>

Resources: **(REQUIRED/MUST HAVE)**

1. Chem 108 Lab Manual (Available in the DVC Bookstore: \$17.95)
2. Webassign: Class Key, dvc 5951 9531, provides access to all of the Webassign resources through your account, which includes An Introduction to Chemistry e-book with associated questions and supporting resources (\$41.00) DVC \$56.70 (?) (Hard copies of An Introduction to Chemistry, Atoms First ISBN978-0-9778105 can be purchased @ \$74.45.)
3. i-clicker: The older version is acceptable, as well as the newer .2 and i-clicker+ versions (\$5.00-\$40.00 on-line & DVC); i-clicker Reef Access Card for smartphone (\$16.20) DVC Bookstore
4. Personal e-mail account. (DVC/CCCCD "Insite" account not recommended, but ok.)
5. Notebook: 3 ring recommended
6. Access to the Internet (Can be limited, such as only on the DVC Campus or at free WiFi hotspots)
7. Lab safety glasses with side shields or goggles on sale by DVC Chem Club



## CONNECTIONS

I personally have or have easy (24/7) access to:

- A. a smart phone
- B. a personal computer
- C. the Internet
- D. a printer

*If you DO NOT: have or have access to B.), C.), or D.), they are available on the DVC campus. Please make an appointment to meet with Dr. R. as soon as possible to get more information and work out a plan to conveniently use them.*



Show of hands; (i-clickers to be used in future class meetings.)

## Chem 108

<http://chemconnections.org/general/chem108/108assign.html>

Resources:

Reading /  
Active Vocabulary/  
Guiding  
Questions /  
Simulations &  
Molecular  
Modeling



## Libretext aka ChemWiki

<https://chem.libretexts.org>



## Chem 108

<http://chemconnections.org/general/chem108/108syl18f.html>

Grading:

1. i-clicker questions/in-class participation + answers to on-line Guiding Questions + on-line simulations /quizzes are valued at 15% of the TOTAL grade.
2. Webassign completed work is valued at 15% of the TOTAL grade.
3. Laboratory experiments, activities, pre- & post-lab questions, worksheets and simulations are valued at 25% of the TOTAL grade.
4. 3 exams, each comprising 15% of the TOTAL grade.

## Chem 108

<http://chemconnections.org/general/chem108/108sy118f.html>

Exam Dates: 10/1, 11/5, 12/12. [Cell phones will not be allowed during exams and quizzes.]

Final letter grades will be assigned based on an overall average in the following ranges: 87-100 A; 75-86 B; 60-74 C; 50-59 D; <50 F, using normalized class averages.

NOTE: The DVC Code of Conduct will be strictly enforced. Cheating and plagiarism are unacceptable and will unconditionally result in a failing grade SEE: DVC Academic College Policies

## Chem 108: Beginning of a Journey

<http://chemconnections.org/general/chem108/calendar-108-f18.html>



Follow the Hearing/Viewing-Reading-Doing links in the calendar to lead you on your path.

## Chem 108

Refer to the course calendar page TODAY & frequently. The current week's calendar is set the beginning of the week, and is then static. Plan by week.

*Execute day-by-day. Meet all due dates!!*

1. Before coming to each class/lab meeting: **Hear/Read, View & Do** the scheduled activity links: **Videos, Powerpoint Class Slides, Notes, Worksheets, Simulations, etc.**
2. **Answer all on-line Guiding Questions.**
3. Review and consider logical answers & **explanations for the embedded Powerpoint i-clicker questions**, then refer to the correct answers which are presented in class. Bring any questions for discussion to the class meetings.
4. **Complete WEBASSIGN Homework, all lab assignments, activities & worksheets.**
5. Individually and collaboratively use all available resources to develop a sufficient level of **mastery of the class/lab vocabulary, problems and topics to understand the chemistry / science and be able to explain concepts clearly to someone else.**

## Hearing/Viewing: Guiding Questions Measurements & Relative Scale

<http://chemconnections.org/general/chem108/Powers%20of%20Ten-Guide.html>



From the calendar links, submit responses on-line; graded weekly.

## WebAssign Homework

<https://www.webassign.net/v4cgi/selfenroll/classkey.html>

Class Key: dvc 5951 9531

[http://chemconnections.org/general/chem108/Student\\_Quick\\_Start\\_Guide\\_SE.pdf](http://chemconnections.org/general/chem108/Student_Quick_Start_Guide_SE.pdf)

Question Details

Enter each number in scientific notation.

4560 m =   $\times 10^{\text{$  m

20300 g =   $\times 10^{\text{$  g

0.0036 mL =   $\times 10^{\text{$  mL

55000 cm =   $\times 10^{\text{$  cm

0.000075 kg =   $\times 10^{\text{$  kg

Convert the following to regular or standard notation.

$2.71 \times 10^{11}$  g =  g

$1.0 \times 10^{-4}$  mL =  mL

$3.455 \times 10^3$  kg =  kg

$8 \times 10^2$  cm =  cm

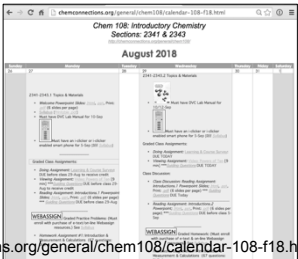
## Reading: Powerpoint Slides Embedded i-clicker Questions



Read Powerpoint slides before class (can be printed), consider embedded questions; answers will be provided in class. One of these questions will be asked @ the start of the following class. **Only answers submitted with a personal, registered i-clicker or smart phone will receive credit.** These slides & questions will be the basis for a significant part of exams.

**FOR QUALITY EDUCATION PLAN AHEAD**

: Refer to Calendar's Next & Future Classes/Labs

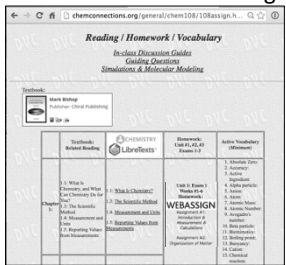


<http://chemconnections.org/general/chem108/calendar-108-f18.html>

The calendar is dynamic and has the class plan for the period through Exam-1. Beyond the current week it is tentative, but very useful for planning.

**FOR QUALITY EDUCATION PLAN AHEAD**

: Also Refer to Resources Page



<http://chemconnections.org/general/chem108/108assign.html>

The Resources page includes links related to assignments and textbook and Libretext reading.