Syllabus
Chemistry 103 – Chemistry and Society
CRN 50212

TR 8:30 - 9:45 am, Newton Hall 204

Lecturer: Dr. Eric Helms
Office: Greene 323
Phone: 245-5927

Office Hours: TR 10 – 12, W 2 – 4
E-mail address: helms@geneseo.edu

Course Description:

This course is meant to introduce you to the science of chemistry. Since none of us live in a vacuum, scientific principles will be introduced as needed to understand chemistry in light of its political, economic, social, and international context. The vehicle for this presentation will be the environment, since we all live in it and rely on it for our very existence. When the class is finished, you should have learned more chemistry; but, more importantly, you should have a greater awareness of the world around you and be able to use the knowledge and analytical skills gained in this course to be a more conscientious consumer and citizen of the planet.

Required Texts:


Additional Sources:

The textbook has an excellent web page for your use. It can be found at the following URL:

http://www.mhhe.com/cic

Attendance:

Yes, I know that this is an 8:30 am class. Don’t forget, I have to get up for this class, too. Chemistry can be a difficult subject – one that can only be mastered through disciplined study. Additionally, occasional in-class problem sets, unannounced quizzes, and video tape worksheets may be done during the class period. This means class attendance is among the minimum requirements for success. It will be problematic to do well in this class if you do not attend the lectures faithfully. If you do not plan to attend the lectures, you might want to consider dropping the class now. You have been warned.
Homework: READ THIS

*Some homework is required.* Periodically, problems will be assigned and must be completed by the due date or a penalty of *10% per day* will be assessed. These problems are to be done *neatly on the homework sheet supplied* on the course web page. There will be 4 homework sets in all.

Mid-term Exams:

Three mid-term exams will be given during the course of the semester. *Since chemistry is a cumulative science, successful completion of each exam will require that you retain some material from earlier chapters.* They will be held during the normal class time. The exam dates are as follows:

- Feb. 15th
- March 8th
- April 5th

Students with documented disabilities may request academic accommodations and adjustments as provided within federal law. All such requests should be made by first contacting the Office of Disability Services, located in Erwin 105D. The Office of Disability Services can also be reached at 245-5112 or tbuggieh@geneseo.edu via email. Information on services and campus policies can be found at the following URL: [http://disability.geneseo.edu/](http://disability.geneseo.edu/)

Final Exam:

*The final exam will be comprehensive in its coverage of the material presented in the class.* Failure to take the final exam at the designated time will result in a grade of zero for the exam. The final exam is scheduled for:

- Friday, May 4th, 2007 from 8 am – 11 am in Newton 204

Grading Policy:

Your grade in this course will be determined by the following:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Homework</td>
<td>15%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>15%</td>
</tr>
<tr>
<td>3 Midterm exams</td>
<td>45%</td>
</tr>
<tr>
<td>Lab</td>
<td>25%</td>
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</tbody>
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Grades will be based on the weighted percentage of the total points you scored in the course. *There will be no curve.* Your letter grade will be determined as outlined below:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Score Range</th>
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<tbody>
<tr>
<td>A</td>
<td>100 – 93</td>
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<tr>
<td>A-</td>
<td>92 – 90</td>
</tr>
<tr>
<td>B+</td>
<td>89 – 87</td>
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<td>B</td>
<td>86 – 83</td>
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<tr>
<td>B-</td>
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<td>C</td>
<td>76 – 73</td>
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<tr>
<td>C-</td>
<td>72 – 70</td>
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<tr>
<td>D</td>
<td>69 – 60</td>
</tr>
<tr>
<td>E</td>
<td>59 – 0</td>
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*Assignments and exams will only be reviewed for a complete reevaluation for 2 weeks from the date it is handed back to you. Only assignments and exams originally completed in pen will be accepted for re-grades.*
Course Outline:

The following is only approximate and subject to change during the semester. In other words, if we don’t cover material before a test, it will not be on the test no matter what this schedule says. On the other hand, we may move faster than the outline suggests. This means that you should attend class on a regular basis – that way you cannot be surprised by what is on a given exam. I try to keep an eye on current events, so if something occurs that I feel is important for you to understand, we may include other topics from the text that are not on this schedule. I highly recommend reading any chapters that we don’t have the time to cover for the information they contain. It just might come in handy as you get older…

Ch. 1 The Air We Breathe  
Ch. 2 Protecting the Ozone Layer  
Ch. 3 The Chemistry of Global Warming  

EXAM 1  
February 15th, 8:30 – 9:45 am

Ch. 4 Energy, Chemistry, and Society  
Ch. 8 Energy from Electron Transfer  

EXAM 2  
March 8th, 8:30 – 9:45 am

Ch. 5 The Water We Drink  
Ch. 6 Neutralizing the Threat of Acid Rain  

EXAM 3  
April 5th, 8:30 – 9:45 am

Ch. 10 Manipulating Molecules and Designing Drugs  
No class on April 17th – Geneseo Research Day  
Ch. 11 Nutrition: Food for Thought  
Ch. 12 Genetic Engineering and the Chemistry of Heredity  

FINAL EXAM  
May 4th, 8 – 11 am