

Distance Medical General Chemistry I Syllabus DPPP-340

Course description

This is a one-semester course with a laboratory designed for individuals with a baccalaureate degree who need first semester general chemistry as a prerequisite to apply for admission to health professions' programs. These may include graduate programs in medicine, veterinary medicine, dental medicine, nursing, physical therapy, and physician assistant.

Prerequisite(s): College level introductory algebra or similar work.

Instructor and Contact Information

Instructor: Rebecca J. Rowe, Ph.D.

Email: rrowe@une.edu

Phone: 207-581-1173

Office hours: Monday – Friday 11:00 am – 1:00 pm. Please feel free to call me during office hours. If I am not able to answer the phone, please leave a short message that includes your name and phone number. I will return your call as soon as I can. The best way to contact me is to use the email system built into the course. I check my course email several times during the day; therefore, this mode of communication will in you getting a faster response to your questions or concerns.

Technical Advisor: Eric Kuntz

Email (M-F): ekuntz@une.edu

Weekends: COMDistance@une.edu

Phone: 207-602-2689

Course Goals

To give the student interested in the health professions an introduction to general chemistry emphasizing the concepts that will be important for and provide the basis for the subjects the student will encounter in his/her future studies. These subjects include components of matter, atomic theory, stoichiometry, chemical reactions and bonding, thermochemistry, gases, quantum theory, electron configuration, models of bonding, theories of covalent bonding, shapes of molecules, intermolecular forces of liquids, and solids.

Required Text and Laboratory Lab Paq:

The cost of the textbooks is included in the laboratory fee. Textbooks will be mailed to the student after registration in the course.

Textbook:

Chemistry, The Molecular Nature of Matter and Change

Martin S. Silberberg

McGraw - Hill

5th edition/ 2009

Student Study Guide to accompany Chemistry, The Molecular Nature of Matter and Change

Martin S. Silberberg

McGraw - Hill

5th edition/ 2009

Laboratory Information:

The cost of the Lab Paq *is not included* in the laboratory fee and must be purchased by the student directly from the supplier, Hands-On Labs Inc. The website address is www.labpaq.com. Please purchase the Lab Paq-1 (CK-1), which will contain all the experiments you will need for this course. The cost of the Lab Paq is \$199.00 (June, 2011 prices) plus shipping and handling. This Lab Paq includes lab manual, goggles, basic supplies and chemical

needed to perform 10 experiments that will accompany this course.

You should plan on ordering your Lab Paq once you have registered for the course. Do not start any experiments until you read the instructions within the individual course modules. We will use as many of the experiments as are relevant to the course materials. Ten of the eleven experiments will be assigned within the modules. One module will also assign an optional experiment that you can perform. The concepts covered in the optional experiments will not be on the laboratory quiz.

Please do not order the LabPaq until you are certain that you will stick with the course. If you decide to return your LabPaq you will have to pay for the return shipping charge plus a restocking fee.

Course Details:

"Learning general chemistry is similar to learning to play a sport or a musical instrument. The more you practice, the more proficient you will become."

R. Rowe, 2006

Online Medical General Chemistry I is divided up into 14 modules that follow the first 12 chapters of the textbook. Each module contains a reading assignment, a slide presentation with audio, a homework assignment and a quiz. Complete the reading and slide presentation first and then do the problems. When you feel that you understand the material, take the quiz.

Assigned Homework Problems:

Each module contains assigned homework problems taken from the end of the chapter problems. Detailed solutions to all assigned homework problems can be found in the solution manual within each module. The homework problems will not be collected nor graded. It is strongly suggested that you work as many of the assigned problems as necessary for you to have a solid

understanding of the concepts presented in the module. The best way to prepare for a quiz or an exam in chemistry is to work and rework end of the chapter problems. You may work more problems than are assigned if you feel you need more work.

Laboratory Assignments:

Most of the modules include a laboratory assignment. The laboratory assignments for each module are listed at the end of the syllabus. Follow the instructions contained within each module and from the lab manual (can be found on the CD that came with the Lab Paq) to complete the laboratory assignment. You will perform all laboratory assignments in a non-laboratory setting, such as your kitchen. There will be ten laboratory assignments distributed throughout the course. Once you have completed the experiment, take the laboratory quiz before moving on to the next module.

Module Quizzes:

All module quizzes are open book and open notes and are not timed. Although the quizzes are open book and open notes, you need to study the material and work the problems in order to do well on the quizzes. The quizzes will be taken online through the course Blackboard site. Doing well on the quizzes will help prepare you for the timed-proctored final exam.

Final Exam:

The final will be a timed-proctored exam. The final exam consists of 100 multiple choice questions and you can have up to four hours to complete the exam. There are three different ways you can arrange to take your final exam.

Exam Procedures

Students can either take their final proctored exam online using Proctor U or at the campus of the University of New England.

Online Exams

For further instructions on taking online exams visit, [Online Learning's Proctor U](#) site.

The University of New England has contracted with [ProctorU.com](#) to provide students in DPPP340 the most convenient, at home, on line exam proctoring system. This system provides a simple, no cost to the student, secure, on line proctor for all of your exams. This system allows the student to take all of the exams at home and on their own schedule. Please see system requirements to ensure you have the necessary computer setup to use ProctorU. Upon enrollment into DPPP340, students will register with ProctorU and establish a login name and password. This will give you access to all of ProctorU's services. When ready, students will schedule their exams with ProctorU **one week** prior to taking that exam. Upon the exam day and hour, students will log in to proctor U and click on "exams". Following the procedures outlined at ProctorU's web site, the student will log in to Blackboard, open the appropriate exam and the proctor will then allow student access to that exam.

Tech Requirements:

- PC: Windows XP, Windows Vista or Windows 7 with 256 MB of RAM or higher
- Mac: Mac OS10 or higher
- A web cam with 640x480 video pixel resolution
- Headphones or working speakers connected to the computer
- A microphone connected to the computer (we recommend having a web cam that has a built in microphone)

- A high speed internet connection (minimum 768 Kbps/128 Kbps)
- A web browser with Adobe Flash Player installed. (Google Chrome recommended for ProctorU website)
- Authority to allow remote access to your computer and screen by one of our proctors

You will need to register with Proctor U to take the exam at least 1 week prior to when you would like to schedule the exam.

Written Proctored Exam

Students may take the exam at the University of New England College of Osteopathic Medicine's Campus. The exam is offered the first Saturday of every month. If the first Saturday of the month is a holiday, the exam will take place on the second Saturday of the month.

Students wishing to take a paper version of the exam close to home with an approved proctor can do so with the permission of the instructor. Please contact us for information at comdistance@une.edu or (207) 602-2494.

Grading

The student will receive a letter grade for this course. Your final grade will be calculated from the following assignments:

- 14 module quizzes, each worth 15 points
- 10 module lab quizzes, each worth 10 points.
- 1 final exam worth 100 points.

The course grade will be determined as follows:

Laboratory assignments 25%

Module Quizzes 15%
Final Exam 60%

If you are only taking the lecture portion of this course, your grade will be determined as follows:

Module Quizzes 30%
Final Exam 70%

The letter grades translate to the following numerical grades:

| | |
|---------------|---------------|
| A = 94-100% | C+ = 77-79.9% |
| A- = 90-93.9% | C = 73-76.9% |
| B+ = 87-89.9% | C- = 70-72.9% |
| B = 83-86.9% | D = 60-69.9% |
| B- = 80-82.9% | F = <60% |

The module and lab quizzes are graded immediately. The final exam should not be taken until all the other assignments are completed. If you take your final exam with a proctor, it can take up to two weeks from the time you take your exam until it arrives at UNE and is then mailed to me, before it will be graded. Please take this into account when scheduling your final exam. Final exams take online with Proctor U will be graded immediately.

Course Length and Extensions:

A schedule of lectures and lab assignments is attached to this syllabus. This is, however a self-paced course and you can complete the course in less time. If more time is needed, please contact Dr. Rowe for an extension. (See below)

1. Courses in the CDE program are equivalent to one semester courses designed to be completed in 16 weeks
2. Many students are nontraditional students who have elected on on-line course for its flexibility. Therefore students may

complete the course in less than 16 weeks or they may take as long as 8 months.

3. Enrollment in the course will begin on the day that the payment is processed
4. Students for whom a grade has not been posted for course by 32 weeks (8 months) will be flagged by the administrative staff. An e-mail will be sent to the instructor asking him/her to contact the student and determine what the best option is for the student based upon the student's needs.

Students with Learning Disabilities

Any student with a documented disability needing academic adjustments or accommodations is requested to speak with the professor prior to or during the first week of class. All discussions will remain confidential. All students with a documented disability will need to provide all necessary documentation before special accommodations will be granted. Accommodations will be granted for the final exam only since module and lab quizzes are not timed.

Withdrawal from the Course and Refunds

Enrollment in the course begins the day the payment is processed. Students may withdraw from the course during the first 28 days after date of enrollment. In this case a "Withdraw (W)" will be entered on the official transcript. The withdrawal date will be the date that written notice of the withdrawal such as email, fax or letter is received by the University of New England; *verbal notification is not sufficient*. During this 28 day withdraw period, a percentage of the student's tuition, but *not* the registration or laboratory fees, will be refunded according to the following schedule: 100% of tuition refunded for withdrawal within 14 calendar days; 66% of tuition refunded for withdrawal from 15 to 21 calendar days; 33% of tuition refunded for withdrawal from 22 to 28 calendar days. No refund will be made after 29 calendar days.

After the 28-day withdrawal period, students may still withdraw from the course at any time they wish before taking the final exam. In this instance, either a “Withdraw Pass (WP)” or a “Withdraw Fail (WF)” will be entered on the student’s transcript depending on the student’s academic standing, based on the quiz grades taken up to the time the student withdraws. Again, the University of New England must be notified in writing of the withdrawal.

Notification that the course materials have been received, and all requests for withdrawal, should be directed to:

All requests for withdrawals should be directed to:

Ms. Angela Morse
Biomedical Sciences Department
COM Distance Education
University of New England
11 Hills Beach Road
Biddeford ME 04005
Phone: (207)-602-2494
Fax: (207)-602-5931
amorse@une.edu

Transcripts:

Due to the Family Privacy Act, the student may only request official transcripts. This may be done online by going to the University of New England Registrar [website](#) and following the directions on the page. The URL is: <http://www.une.edu/registrar/upload/transcript.pdf>. Fill in and sign the request and either mail or fax it to the University Campus address on the form.

Medical General Chemistry I – DPPP-340 Lecture and Lab Schedule

This course is designed to be completed in a 16-week period, just like an on-campus General Chemistry I course. This breaks down to one module per week and two weeks to study for and take the final exam. One week in this online course is equivalent to 3-50 minute lectures in a traditional classroom setting. The general rule of studying for science courses is to spend 3 hours studying for every one hour that you are in class. Therefore, the suggested study time for each module is 9 hours above and beyond the time it takes to listen to the lecture. Please refer to the schedule below for the suggested schedule of lectures and the accompanying laboratory exercises. Students may complete the course in less than 16 weeks. If you need more than 16 weeks to complete this course, please contact Dr. Rebecca Rowe at rrowe@une.edu or 207-581-1173.

| Week | Module | Title | Textbook Chapter | Laboratory Assignment |
|------|--------|--------------------------------|------------------|--|
| 1 | 1 | Keys to the Study of Chemistry | 1 | Laboratory Techniques & Measurements and Observations of |

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|----|-----|---|----|---|
| | | | | Chemical Change |
| 2 | 2A | The Components of Matter | 2 | Physical & Chemical Change |
| 3 | 2B | The Components of Matter | 2 | Separation of a Mixture of Solids |
| 4 | 3 | Stoichiometry of Formulas and Equations | 3 | Stoichiometry of a Precipitation Reaction |
| 5 | 4 | Three Major Classes of Chemical Reactions | 4 | Ionic Reactions |
| 6 | 5 | Gases and the Kinetic Molecular Theory | 5 | Properties of Gases |
| 7 | 6 | Thermochemistry: Energy Flow and Chemical Change | 6 | Caloric Content of Food |
| 8 | 7 | Quantum Theory and Atomic Structure | 7 | Identification of Metallic Ions |
| 9 | 8 | Electron Configuration and Chemical Periodicity | 8 | NA |
| 10 | 9 | Models of Chemical Bonding | 9 | NA |
| 11 | 10 | The Shapes of Molecules | 10 | NA |
| 12 | 11 | Theories of Covalent Bonding | 11 | NA |
| 13 | 12A | Intermolecular Forces: Liquids, Solids, and Phase Changes | 12 | Determination of Water Hardness |
| 14 | 12B | Intermolecular Forces: Liquids, Solids, and Phase | 12 | NA |

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| | | Changes | | |
| 15- 16 | | Review for and take final exam | | |