Course Syllabus
Introductory Chemistry 1405 73426

Math, Natural Science & Sports Sciences Learning Center
Division Office: P-330 Phone: 972-273-3500
Hours: Vary by semester so check the posted hours.

This course syllabus is intended as a set of guidelines. NLC and your instructor reserve the right to make modifications as necessary to promote the best education possible within prevailing conditions. If you have questions please check for the answer in ecampus or this Syllabus before you send me an email.

Instructor Information

<table>
<thead>
<tr>
<th>Instructor:</th>
<th>Cynthia Simmons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email:</td>
<td><a href="mailto:csimmons@dccc.edu">csimmons@dccc.edu</a></td>
</tr>
<tr>
<td>Office Phone:</td>
<td>972 860 3915 (best to email me)</td>
</tr>
<tr>
<td>Office:</td>
<td>A369 (Main Campus)</td>
</tr>
<tr>
<td>Office hours:</td>
<td>Please refer to ecampus for current semester</td>
</tr>
</tbody>
</table>

Course Information

**Course title:** Introductory Chemistry 1405
**Credit hours:** 4 credit hours
**Class meeting time:** Lecture online MTWRFSU, Lab at home MTWRFSU
**Course description:** This course is for non-science majors. Fundamental concepts are presented in lecture and laboratory including the periodic table, atomic structure, chemical bonding, reactions, stoichiometry, states of matter, properties of metals, nonmetals and compounds, chemical nomenclature, acid-base theory, oxidation-reduction and solutions. Descriptive chemistry is emphasized.

**Course prerequisites:** Developmental Mathematics 0305 or Developmental Mathematics 0310 or Developmental Mathematics 0098 or Developmental Mathematics 0099 or the equivalent.
Developmental Reading 0093 or English as a Second Language (ESOL) 0044 or have met the Texas Success Initiative (TSI) standard in Reading.

Online Delivery Mode

*Note:* Online courses are not easier or less work than courses on campus. In fact, expect to put in more time since you will be figuring out many things on your own, especially in the lab.

Online courses at Dallas County Community College are delivered via Blackboard and use Softchalk learning modules (the “Topics.”)
The online section of this class is essentially the same as the onsite section. Some of the advantages of taking it online are the scheduling flexibility and the absence of a commute. However, these advantages are countered by major disadvantages, including not having the face to face contact with the instructor to get questions answered immediately and not having difficult concepts explained in person. Instead, the online student needs to rely on their own ability to gain understanding of the material through reading the textbook and doing the assignments on their own.

The online section of this course is only for students with excellent time management and organizational skills. It is only for students who are able to take responsibility for their learning process. They must take it upon themselves to ensure that they complete assignments on schedule and more importantly, that they understand the course content. It goes without saying that the online student needs convenient internet access and comfort with the computer interface.

The questions that normally come up during face-to-face lectures will be accommodated by the discussion forums and email. So the online student needs to be able to articulate, in writing, any questions that they may have so that they can submit them via email. An advantage to this method is that students will be required to articulate their questions in written form which will force them to think through the material in a more careful and thoughtful manner than would be required of them in a classroom situation.

Since the online student must perform labs at home there is an additional expense of procuring the lab equipment and chemicals. Online students may not come to campus to perform labs, there is not space or personnel available to accommodate online students in the campus chemistry labs.

You should consider your individual skills and specific situation to decide if the online option is for you.

Required Textbooks and Materials

- **Textbook:** “Chemistry: An Introduction to General, Organic, and Biological Chemistry,” 12th edition by Timberlake. Prentice Hall
- **Homework System:** Pearson’s Modified Mastering (titled “MyLab & Mastering” on the website.)

There are many options for buying the text and homework system. They can be bundled together in a “Value Pack” which includes both the text and the website access code, or they can be purchased separately. You may also buy the homework directly from the website (see under Homework button in ecampus)

The following are ISBNs for the different options.


*If you choose to use an earlier edition of the text let me know.*

- **Lab**—Online students must purchase lab supplies. Because you have chosen to take this class online you are incurring additional expenses since you must perform the lab at home. You must buy your own equipment and chemicals as outlined in Appendix B of this Syllabus.
- **Scientific calculator** – these can be purchased anywhere for as little as $10. Make sure the calculator you use can do log functions and exponents.
- **Access to ecampus** – our class website contains many documents and information such as grades and due dates for exams and labs.

**CHEM 1405 Course Learning Outcomes**

1. Perform calculations related to topics included in Chemistry 1405.
   a. Be able to express, interpret, and utilize relationships between variables
   b. Solve problems using complete, thorough setups with metric and SI units, significant figures, and dimensional analysis.
2. Describe the fundamental particles of matter; relate basic laws and theories to their behavior, utilize a systematic method of naming compounds and polyatomic ions.
3. Write and balance different types of chemical equations, and perform stoichiometric calculations including calculations with empirical formulas, limiting reactants, percent yield and molarity.
4. Define energy and heats of reactions, and perform related calculations. Recognize the environmental issues related to energy.
5. Recognize the correlation between electronic structure and the organization of the periodic table. Be able account for periodic trends.
6. Determine the relationship between pressure, volume, moles, and temperature of gases and perform related calculations. Describe the characteristics and behavior of gases, liquids and solids and the intermolecular forces that are involved with these states of matter.
7. Investigate the quantum mechanical model of the atom, write and interpret quantum numbers for the electrons in an atom. Write electronic configurations and show the correlation to chemical properties.
8. Differentiate between ionic and molecular compounds, and write Lewis structures. Utilize the VSEPR theory to predict the shapes and polarities of molecules from the Lewis structures.
9. Define radioactivity, write nuclear reactions, and perform related calculations with half-lives. Recognize the environmental and medical impact of nuclear radiation.
10. Define solution, and explain colligative properties and the process of osmosis. Describe the factors affecting solubility and perform calculations with concentration of solutions.
11. Describe dynamic equilibrium and apply Le Chatelier’s principle. Describe the factors affecting reaction rates.

There is an additional more detailed Learning Objectives document in ecampus (under the Chapter Contents button) you should print out and refer to. This document is a complete list of everything covered in the course chapter by chapter.

**Course Outline (Calendar)**

Please refer to the appropriate button in ecampus for due dates for the

- Exams
- Labs
- Homework

The following is a suggested check list for the sequence of steps to follow:

1. Read the Chapter in the Textbook.
2. Work through the “Topics” under the Chapter folders in ecampus. (10% of grade.)
3. Log onto MyLab and Mastering website and do the homework problems assigned by the due date listed in the website under the "Assignments" tab (10% of grade.)
4. Complete the scheduled Lab work and submit the report by the due date (25% of grade.)
5. Refer to the Learning Objectives found in the Chapter Contents button. Make sure you have mastered these objectives before taking the exam. I suggest printing these out so that as you study you can refer to them. These Learning Objectives will help you be well prepared for the exams.
6. Go to your testing center and take the exam by the due date. (55% of grade.)

Means of Assessment of Course Learning Outcomes

The Course Learning Outcomes are assessed through departmental exams, quizzes, homework assignments, and lab reports.

Evaluation Procedures

<table>
<thead>
<tr>
<th>Topic</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topics</td>
<td>10%</td>
</tr>
<tr>
<td>Homework</td>
<td>10%</td>
</tr>
<tr>
<td>Lab</td>
<td>25%</td>
</tr>
<tr>
<td>Five Exams</td>
<td>55%</td>
</tr>
</tbody>
</table>

Topic Points – 10%
Topic points come from the completed self-check activities for each “topic” found in eCampus. The Topics are found under the “Chapter Contents/Topics” button. You may work the topics as many times as you like as these will help prepare you for the exams. Your score will be the average of all the times you submit the activities. Try to answer all questions including the blue text poppers before looking to see the answers.

Be sure your pop up blocker is turned off in order to see the activities. The recommended browsers for use with eCampus are Firefox.

Instructions for performing the self-check activities in the topics:

- Go to the chapter topic you wish to study under the “Chapter Content/Topics” button.
- Study and review as much as you need. Scroll over the blue words for additional information. Redo the topic as many times as you wish, but your score will be an average of all attempts. Reopen the topics to use them to study but do not submit your score unless you wish to do so.

HOMEWORK – 10%
Problems are assigned and graded. The “Homework” button in ecampus has details on how to register and enroll in My Lab and Mastering, and the Course ID for the current semester.
Students are **strongly** encouraged to complete the assignments in preparation for the tests. Homework due dates will be shown in the website. **Late homework is worth 50% so do the homework on time. The homework assignments will stay available until the time of the final for studying or completion of late assignments. Homework is closed after the final. Homework completed after the final will NOT be given any credit.**

Once you have completed the homework and the due date has passed, you can still review or rework them in preparation for the exams. Often the problem will provide different numbers when you rework them.

Your homework grades are posted on the Homework web site. Your final homework average for the course will be posted in eCampus at the end of the semester. **There is no late homework accepted at the end of the semester. All homework must be completed before you take the last exam. No credit is given for homework after the final due date.**

**Labs – 25%**

*Note: Students cannot pass this course with a failing lab grade.*

Experiments conducted in campus laboratories are recognized as wet lab experiences. According to the American Chemical Society virtual or simulated labs are not an acceptable substitute for a wet lab experience (ACS Public Policy Statement). This online course uses a “wet” lab experience with actual chemicals and equipment. Because you have chosen to take this class online you are incurring additional expenses since you must procure the chemicals and equipment to perform the lab at home. You must buy your own equipment and chemicals as outlined in Appendix B of this Syllabus. **This online course is the same as our on campus course and will require just as much if not more effort to achieve success. It will require time and effort to say on schedule.**

Lab experiments are due throughout the semester. These experiments will help to reinforce some of the concepts and theories that are studied. Every effort has been made to correlate the lab schedule to topics in the lecture schedule. However, due to the unique scheduling of each semester, these may not coincide exactly. This is not a problem as each lab is self-contained, meaning you can read the lab and understand everything that you need to in order to perform the lab. (In fact there is some pedagogy which claims that students learn concepts better when they are first introduced in the lab.)

Students will follow the experimental procedure outlined in the lab experiment document. All observations, data, and calculations (show work for full credit) should be typed on the Lab Report Sheet. The Report sheet is to be downloaded from the assignment file in the lab folder in eCampus and then uploaded back into eCampus for grading.

The lab grade will be the simple average of all the grades in lab. The lab schedule is at the end of the Syllabus. The lab reports are to be uploaded into eCampus by **11:30 pm on the specified due dates.** The lab reports that you use are the reports that you will download from the Lab folders under the “Labs” button in ecampus. Late labs will be accepted but they will drop by ten points for each day the reports are late. Labs will be graded within one week of their due date.
Lab Manual and Materials
- Lab schedule – under the “Labs” button in ecampus
- Safety Training information - under the “Labs” button in ecampus
- Lab Manual – under the “Labs” button in ecampus. Each lab folder has the Lab which is a word document that introduces and outlines the experimental procedure. You do not have to buy a lab manual for this course – yay!
- Equipment and Chemicals – Refer to Appendix B of Syllabus to procure your lab materials.

Safety Training
Safety training will occur at the beginning of the semester. This is required by law. Safety Training consists of reading the documents in ecampus under the Labs Button. Students must take the Safety Agreement “test” in ecampus or their labs will not be graded.

Lab Grading
This will consist of the experiment grades and the safety training grades. Students may find ONE lab partner through the discussion board or by emailing the class. Each lab partner is expected to write their own report. Your data will be the same as your partner’s but you must put any answers to questions and the conclusion in your own words. If you and your partner have the same answers this is plagiarism.
Do not falsify any data as this is plagiarism.
The following are guidelines for what is considered ACADEMIC DISHONESTY on Lab Reports. (See “Institutional Policies” section below.)

- **No falsification of data.** Do not “fudge” or “tweak” in any way in order to improve your results.
- **Do your own work.** No sharing of data, that is, you may not copy data from someone else or give someone else your data.
- **No plagiarism.** Students must submit their own independent Lab Reports and cannot use someone else’s report as your own. If you work with a partner your data may be the same as your partners but you must answer questions, perform calculations, and write the conclusions on your own. Use your own words.

If the instructor suspects any dishonesty on the part of the students, those students will receive a zero on the lab report.
Second cheating offenses may result in failure of the class.

Exams – 55%
Students who live close to the Dallas County Area must take the exam at a DCCCD college or in a supervised testing situation at a testing site mutually agreed upon. If the student does not specify which testing center is preferred they will be assigned the North Lake College testing center. There is a survey in ecampus under the “Start Here” button.
to indicate your testing center preference. You must answer this so that I know where you are testing.

Students who live out of the Dallas County area may arrange for a proctor using the proctor nomination form found in the Dallas Colleges Online website. Submit the form by the second day of class and email a copy to your instructor. Please write legibly. **Proctors need to be a full time employee of one of the verified institutions listed. The form does not need to be notarized if you are using a testing center at a college or university.**

The five exams will be multiple choice and will be taken on the computer at the testing center you choose, or in a proctored testing environment. Each exam must be taken by the due date specified in ecampus. You will log on to eCampus and click on the “Exams” button and select the exam. You may take the exam once the testing center has put in the password. Exam scores will appear immediately upon completion of the exam.

The testing center will provide a copy of the periodic table and scratch paper. You will need to bring a pen or pencil and your scientific calculator to the testing center along with your picture ID. You may use your own programmable calculator if you agree to have the memory cleared before and after the exam. Some testing centers will provide a calculator. For more information click the link to the DCCCD Testing Centers. DO NOT take any testing materials with you when you leave the Testing Center. This includes the test, answers, charts, scratch paper. **To do so constitutes Academic Dishonesty.**

Be sure to check the hours of your testing center particularly if there are changes due to holiday hours, and arrive in plenty of time to take the exam. Do not wait until the last minute since there are long lines, particularly on Saturdays.

DO NOT take any testing materials with you when you leave the Testing Center. This includes the test, answers, charts, scratch paper. These items will be attached to your test. **To do so constitutes Academic Dishonesty.**

Students are not allowed to leave the Testing Center during a test. If you choose to leave, you may not return to complete the test. If you need special accommodations you must submit requests to the Disability Services Office in person (A414) or by phone at 972-273-3165. Visit Office of Disability Services at NLC for more information.

**Exams must be taken by the scheduled deadline.** Any student who misses a test deadline with an excused absence can only earn a maximum of 70% of the total points. Exams will be cumulative; however, they will focus on more recent material. **MAKE-UPS:** For a missed exam with an excused absence during the testing dates, a make-up exam must be taken as soon as possible at the discretion of the instructor. You will not be allowed under any circumstances to take more than 2 tests during the last week of the semester. Excused absences will only be offered for one of the following reasons: illness, death in family, official University business, or documented emergency.
There will also be some formulas and additional info provided on the exam itself. Refer to the document under the Exams button to see what will be provided so you will know what formulas or information you do need to know that are not provided. You will need to bring a pen or pencil and your scientific calculator to the testing center along with your government or school issued photo identification. You do not need a programmable calculator. You may use your own programmable calculator (TI 83/84 plus) if you agree to have the memory cleared before and after the exam. The testing center can provide a calculator during your exam if you need it. Fill out the Test Request Form upon arrival at the testing center. Bring a quarter for the coin return lockers if desired. Do not bring personal items such as bags, cell phones or pagers into the testing area. Do not bring children to the testing center.

Know the following information when you request your test:
- Instructor’s name
- Subject, course number, and section number (ex: CHEM 1411 7111)
- Exam number (1st, 2nd, 3rd, etc.)
- Exam deadline

As you study, be sure to refer to the Learning Objectives for each chapter. These Learning Objectives will help you prepare for the exams.

**Grading Scale**

<table>
<thead>
<tr>
<th>Grades distribution:</th>
<th>Final Grade scale:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Five Exams</td>
<td>A = 90-100</td>
</tr>
<tr>
<td>Quizzes in ecampus</td>
<td>B = 80-89</td>
</tr>
<tr>
<td>Online Homework</td>
<td>C = 70-79</td>
</tr>
<tr>
<td>Lab (average must be &gt;59)</td>
<td>D = 60-69</td>
</tr>
<tr>
<td></td>
<td>F = 0-59</td>
</tr>
</tbody>
</table>

To calculate your grade at any time use the formula below. This formula is the same one that I use. Do not ask me to calculate your grade since you can do it as well as me.

Final% = Exam Avg x 0.55 + Topics Avg x 0.10 + Homework Avg x 0.10 + Lab Avg x 0.25

Please **do not beg** for grades; you earn them.

Please **do not ask for extra credit**. We already have extra credit in the homework as well as bonus questions on each exam. The best way to improve your grade is to work on the homework and topics. This will help those averages as well as prepare you better for the exams.

**Discipline/ Course/ Department/Policies**

**Financial Aid Certification of Attendance:**

You must attend and participate in your on-campus or online course(s) in order to receive federal financial aid. Your instructor is required by law to validate your attendance in your on-campus or online course in order for you to receive financial aid. You must participate in an academic related activity pertaining to the course such as but not limited to the following examples:
initiating contact with your instructor to ask a question about the academic subject studied in the course;
• submitting an academic assignment;
• taking an exam;
• completing an interactive tutorial;
• participating in computer-assisted instruction;
• attending a study group that is assigned by the instructor;
• or participating in an online discussion about academic matters relating to the course.

In an online class, simply logging in is not sufficient by itself to demonstrate academic attendance. You must demonstrate that you are participating in your online class and are engaged in an academically related activity such as in the examples described above.

Attendance
Since this is an online class most of the work will be done remotely via Blackboard and an online homework system. Students are expected to log in almost daily. You must log in by the “certification day” (10th class day during a normal length semester, 5th class day during a 5 week summer semester) in order to receive financial aid.

Discussion Board
Discussion Board is where you can post any questions you may have concerning the material, labs, or homework. I invite students to use the Discussion Board to introduce themselves to the class and me. The Discussion Board is NOT required but I encourage you to use it to connect with the other students in the class. Online learning can be very isolated and it is quite helpful to ask questions of general interest. Often I will post questions from students on the discussion board. Please look here first before emailing me a question. The answer may be already posted on the Discussion Board.
Give the location of your problem such as in Chapter 1, topic of density. Please post the questions on the discussion board rather than emailing the instructor. All students can benefit from the question as well as the answer. You are encouraged to communicate with the other students about the course material. If you have a question, check the discussion board as it may have already been answered there.

Email
Email is the best way to communicate with the instructor. You must include course and section number in the subject line. For example: CHEM 1405 71427. Please see that your correct email address is on eCampus. Please allow a 24hr turnaround time to me to answer emails. I reserve the right to not answer emails on Sundays.

Science Learning Center
The Science Learning Center

The Science Learning Center provides student services in the following subjects (majors and non majors): Biology, Botany, Microbiology, Anatomy and Physiology, Chemistry, Geology, Physics, Nutrition and Ecology.

The center is located in P-333 & P-334 and offers various resources all of which are free to the students. The SLC features tutors, software, videos, CDROM’s, internet, models,
places to study quietly, places for group work, and other materials to assist in science classes. In order to access resources of the SLC a North Lake College ID Card is required. The subject specific schedule of tutors is updated every semester and is located at the front of the SLC.

When students attend SLC we ask that they sign in and out. This data helps us keep the center stocked, running, and most of all, free of charge!

**Hours of operation:**
Spring/Fall semester: M - R 9 am to 7 pm, F & Sa 9 am – 3 pm  
Maymester and Wintermester: M – R 2 pm – 6 pm  
Summer I & II: M – R 2 pm – 7 pm

**Contact information**
Center Phone: 972-273-3273  
Coordinator: Amanda Turley

or go to [North Lake College Tutorial Services](#)
Appendix A Schedules

Exam and Chapter Schedule
Chem 1405 online

Last day to withdraw can be found on NLC website under “Catalogues and Schedules”
Click on the “Academic Calendar” link

<table>
<thead>
<tr>
<th>Exam</th>
<th>Chapters</th>
<th>Due Date*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,2,3</td>
<td>July 18</td>
</tr>
<tr>
<td>2</td>
<td>4,5</td>
<td>24</td>
</tr>
<tr>
<td>3</td>
<td>6.7.1-7.2</td>
<td>31</td>
</tr>
<tr>
<td>4</td>
<td>7.3-7.8,8</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>9,10</td>
<td>10</td>
</tr>
<tr>
<td>6</td>
<td>1-10</td>
<td>10</td>
</tr>
</tbody>
</table>

(Optional Final)

*Please refer to ecampus for deadline updates. The due dates may be postponed due to unforeseen circumstances.

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Lecture Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chemistry</td>
</tr>
<tr>
<td>2</td>
<td>Chemistry and Measurement</td>
</tr>
<tr>
<td>3</td>
<td>Matter and Energy</td>
</tr>
<tr>
<td>4</td>
<td>Atoms and Elements</td>
</tr>
<tr>
<td>5</td>
<td>Nuclear Chemistry</td>
</tr>
<tr>
<td>6</td>
<td>Ionic and Molecular Compounds</td>
</tr>
<tr>
<td>7</td>
<td>Chemical Quantities and Reactions</td>
</tr>
<tr>
<td>8</td>
<td>Gases</td>
</tr>
<tr>
<td>9</td>
<td>Solutions</td>
</tr>
<tr>
<td>10</td>
<td>Acids and Bases</td>
</tr>
</tbody>
</table>
# Laboratory Schedule

**Intro CHEMISTRY I**

**CHEM 1405**

<table>
<thead>
<tr>
<th>Date</th>
<th>Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 11</td>
<td>Lab Introduction – read Syllabus and documents under Labs Button in ecampus, procure lab materials immediately</td>
</tr>
<tr>
<td>12</td>
<td>“</td>
</tr>
<tr>
<td>13</td>
<td>Safety Training – read documents in ecampus</td>
</tr>
<tr>
<td>14</td>
<td>Safety Quiz and Agreement in ecampus</td>
</tr>
<tr>
<td>18</td>
<td>Measurement and Significant Figures</td>
</tr>
<tr>
<td>20</td>
<td>Calorimetry and Specific Heat</td>
</tr>
<tr>
<td>22</td>
<td>Separation of a Mixture</td>
</tr>
<tr>
<td>24</td>
<td>Naming Chemical Compounds</td>
</tr>
<tr>
<td>27</td>
<td>Chemical Reactions and Equations</td>
</tr>
<tr>
<td>31</td>
<td>Stoichiometry of a precipitation reaction</td>
</tr>
<tr>
<td>Aug 2</td>
<td>Reaction Rates and Equilibrium</td>
</tr>
<tr>
<td>4</td>
<td>Gas Laws</td>
</tr>
<tr>
<td>7</td>
<td>Colligative Properties</td>
</tr>
<tr>
<td>9</td>
<td>pH and Titration</td>
</tr>
<tr>
<td>10</td>
<td>course survey</td>
</tr>
</tbody>
</table>

*Please refer to ecampus for deadline updates. The due dates will occasionally be postponed due to unforeseen circumstances.*
Appendix B: CHEM 1405 online Lab Materials

Below is a list of supplies needed for your CHEM 1405 online lab. Order the first two items as soon as possible from the websites listed. These supplies cannot be bought from the bookstore, Home Depot, Wal-Mart or any other store I know of. They are chemicals and must be shipped ground so order today.

You may choose to work with ONE partner which will reduce the expense of your lab as well as make the lab more fun. One set of supplies is sufficient per lab group of two. If you work with a partner please be aware that you are required to submit your own original lab report. Your data and your partner’s data will be the same but you must answer any questions in your own words, otherwise it is plagiarism. Please inform me of who your partner is. (See Academic Dishonesty above.)

1. **Order North Lake College Chemistry 1405 Kit, SK-NLC1405**: ~$80 from the following website: [Home Training Tools website](#). Kit details are at the end of this Appendix B.

2. **Order the Balance**: ~$8 from the following website: [Amazon-balance](#)

3. **Procure the “NLC Supplemental Lab Kit”** - In addition to the above equipment, you need an additional “Supplemental Kit” which NLC will provide. *NLC is the only place you can get this supplemental kit.* In order to receive the NLC kit do one of the following:
   - Come to North Lake at your convenience and pick up a kit outside my office.
   - Mail a SASE (self-addressed stamped envelope) with two postage stamps to
     
     Cynthia Simmons/Lanny Kurniawan  
     Chem 1405  
     North Lake College  
     5001 N. MacArthur Blvd.  
     Irving, TX 75038

This additional kit will contain:
   1. **Metal cylinder** – approximately ¼ inch diameter by 1 inch length.
   2. **unknown liquid** for density determination
   3. **shrinky dink rectangle**
   4. **Ziploc bag** containing 2g unknown mixture sample (sand, salt, iron)
   5. **2 filter papers**
   6. **plastic weigh boat**
The NLC supplemental lab kit contents fit into a sandwich baggie and can be mailed in a normal sized envelope.

![Figure 1NLC Supplemental Kit](image)

4. **Procure the following materials** – This is a list of materials that are also needed to perform these labs. The chemicals and materials on this list are available at grocery stores, drug stores, hardware stores, etc. You very likely already have many of these in your home and kitchen.

- Ruler
- magnet -refrigerator is fine
- hot pads
- cookie sheet
- distilled water
- styrofoam cups
- coffee mug
- clock/timer
- sink or large pot for water bath
- ice
- graph paper
- vinegar
- sugar
- table salt (NaCl)
- baking soda (sodium bicarbonate, NaHCO$_3$)
- magnesium sulfate (Epsom salts, MgSO$_4$·7H$_2$O)
- vegetable oil
- celery stalk
- toothpick
- red cabbage
- lemon juice

At the end of the semester please consider donating any left-over supplies or chemicals that you no longer need or want. We will put them to good use.
*Kit Contents*

- 250 & 600 ml glass beakers
- 250 ml Erlenmeyer flask
- wickless alcohol lamp and stand (you’ll need to provide denatured alcohol as fuel)
- 10 ml polypropylene graduated cylinder
- 100 ml polypropylene graduated cylinder
- 4 Test tubes, large 16x150 mm
tube stand
test tube clamp
12” thermometer
Funnel, plastic, 65 mm dia.
tubing pinch clamp
Tube, 2 pack, 5 mm glass, 3” long
Tubing, 4.8 mm vinyl, 2' long
Rubber stopper, #6.5, 2-hole
- Rubber stopper, #0, 1-hole
- pH papers
- Pipet (medicine dropper)
- Stirring rod, glass, 6’ long
- hydrochloric acid, 30 mL
- NaOH, 30g
- magnesium ribbon, 60 cm
copper II sulfate, CuSO4, 30g
- copper II chloride, CuCl2, 30g
- iron III chloride, FeCl3, 30g
- phenolphthalein solution, 30mL
- ammonium nitrate, NH4NO3, 30g
- Zinc, metal electrode, 4”
- Copper metal electrode, 4”
Appendix C: Institutional Policies

ACADEMIC DISHONESTY
The Student Code of Conduct prohibits academic dishonesty and prescribes penalties for violations. According to this code, which is printed in the college catalog, “academic dishonesty”, includes (but is not limited to) cheating, fabrication, facilitating academic dishonesty, plagiarism, and collusion.

1) The Vice-President of Academic & Student Affairs may initiate disciplinary proceedings against a student accused of academic dishonesty.
2) Academic dishonesty includes, but is not limited to, cheating on a test, plagiarism and collusion.
3) Cheating on a test includes:
   a) Copying from another student’s test paper;
   b) Using, during a test, materials not authorized by the person giving the test;
   c) Collaborating with another student during a test without permission to do so.
   d) Knowingly using, buying, selling, stealing, transporting, or soliciting in whole or part the contents of an un-administered test.
   e) Substituting for another student, or permitting another student to substitute for you to take a test; and
   f) Bribing another person to obtain an un-administered test or information about an un-administered test.
4) “Plagiarism” means the appropriation of another’s work (ideas and/or words) and the unacknowledged incorporation of that work in one’s written work offered for credit. Quotes not identified as quotes constitute a form of plagiarism even if the borrowed ideas are documented.
5) “Collusion” means an unauthorized collaboration with another person in preparing written work offered for credit.

Academic dishonesty may result in the following sanctions, including, but not limited to:
1. A grade of zero or a lowered grade on the assignment or course.
2. A reprimand.
3. Suspension from the college.

NOTIFICATION OF ABSENCE DUE TO RELIGIOUS HOLY DAY(S)
Students who will be absent from class for the observance of a religious holiday must notify the instructor in advance. Please refer to the Student Obligations section of the college catalog for more explanation. You are required to complete any assignments or take any examinations missed as a result of the absence within the time frame specified by your instructor.

DCCCD OIE Faculty Syllabi Statement- FALL 2016
The Office of Institutional Equity, in coordination with DCCCD colleges, has the primary responsibility for reviewing, updating and implementing compliance policies and procedures. The Institutional Equity and Compliance Officer and the Office of Institutional Equity will ensure compliance with College District policies, federal and state laws related to sexual assault, Title IX, Title II (Americans with Disabilities Act) and the Military Veterans Full Employment Act to support diversity and inclusion.

Students with Disabilities:
If you are a student with a disability and/or special needs, or if you think you may have a disability, please contact the college Disability Services Office (DSO). Please note that all communication with DSO is confidential. If you are eligible for accommodations, please provide or request that the DSO send your accommodation letter to me as soon as possible (students are encouraged to contact DSO at the beginning of the semester). For more information regarding the College Disability Services Office, please visit the Student Services website: dcccd.edu/DSO Offices or contact DCCCD Office of Institutional Equity at (214) 378-1633.

North Lake College Disability Services Office: A414, 972-273-3165
A Note on Harassment, Discrimination and Sexual Misconduct
We are committed to assure all community members learn and work in a welcoming and inclusive environment. Title VII, Title IX and DCCCD policy prohibit harassment, discrimination and sexual misconduct. If you encounter harassment, sexual misconduct (sexual harassment, sexual assault, stalking, relationship violence, stalking), retaliation or discrimination based on race, color, religion, age, national origin, disability, sex, sexual orientation, gender identity,
and/or gender expression, please contact your College Title IX Coordinator or the Office of Institutional Equity. We treat this information with the greatest degree of confidentiality possible while also ensuring student welfare and college safety.

We are concerned about the well-being and development of our students, and are available to discuss any concerns. There are both confidential and non-confidential resources and reporting options available to you. If students wish to keep the information confidential, please contact the college Counseling or Student Health Services. As required by DCCCD policy, incidents of discrimination and/or sexual misconduct shared with faculty will be reported to the College Title IX Coordinator or District Title IX Coordinator. The Title IX Coordinator will contact the student and determine if further investigation is needed. For more information about policies, resources or reporting options, please contact your college Title IX Coordinator or visit www.dcccd.edu/titleIX.

North Lake College Title IX Coordinator: Rosemary Meredith(acting), TitleIX-NLC@dcccd.edu, 972-860-3992
District Title IX Coordinator: Office of Institutional Equity, LaShawn Grant, TitleIX-District@dcccd.edu

REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT

The Office of Institutional Equity, in coordination with DCCCD colleges, has the primary responsibility for reviewing, updating and implementing compliance policies and procedures. The Institutional Equity and Compliance Officer and the Office of Institutional Equity will ensure compliance with College District policies, federal and state laws related to sexual assault, Title IX, Title II (Americans with Disabilities Act) and the Military Veterans Full Employment Act to support diversity and inclusion.

Students with Disabilities: If you are a student with a disability and/or special needs, or if you think you may have a disability, please contact the college Disability Services Office (DSO). Please note that all communication with DSO is confidential. If you are eligible for accommodations, please provide or request that the DSO send your accommodation letter to me as soon as possible (students are encouraged to contact DSO at the beginning of the semester). For more information regarding the College Disability Services Office, please visit the Student Services website: dcccd.edu/DSO Offices or contact DCCCD Office of Institutional Equity at (214) 378-1633.

North Lake College Disability Services Office: A414, 972-273-3165

A Note on Harassment, Discrimination and Sexual Misconduct

We are committed to assure all community members learn and work in a welcoming and inclusive environment. Title VII, Title IX and DCCCD policy prohibit harassment, discrimination and sexual misconduct. If you encounter harassment, sexual misconduct (sexual harassment, sexual assault, stalking, relationship violence, stalking), retaliation or discrimination based on race, color, religion, age, national origin, disability, sex, sexual orientation, gender identity, and/or gender expression, please contact your College Title IX Coordinator or the Office of Institutional Equity. We treat this information with the greatest degree of confidentiality possible while also ensuring student welfare and college safety.

We are concerned about the well-being and development of our students, and are available to discuss any concerns. There are both confidential and non-confidential resources and reporting options available to you. If students wish to keep the information confidential, please contact the college Counseling or Student Health Services. As required by DCCCD policy, incidents of discrimination and/or sexual misconduct shared with faculty will be reported to the College Title IX Coordinator or District Title IX Coordinator. The Title IX Coordinator will contact the student and determine if further investigation is needed. For more information about policies, resources or reporting options, please contact your college Title IX Coordinator or visit www.dcccd.edu/titleIX.

North Lake College Title IX Coordinator: Rosemary Meredith(acting), TitleIX-NLC@dcccd.edu, 972-860-3992
District Title IX Coordinator: Office of Institutional Equity, LaShawn Grant, TitleIX-District@dcccd.edu, 214-378-1633

DROP POLICY

If you are unable to complete this course, you must officially withdraw by the date stated on the academic calendar. Withdrawing is a formal procedure which you must initiate; your instructor cannot do it for you. There are important additional factors which are affected by withdrawals. See the categories below for additional information. It is strongly encouraged that a student speaks with the instructor before withdrawing. If a student stops attending class and does not officially withdraw, that student will receive a performance grade based on work completed and missed. For more details concerning withdrawals go online to Dropping or Withdrawing from Classes.

All Dallas County Community Colleges charge a higher tuition rate to students registering the third time for a course. This rule applies to the majority of credit and Continuing Education / Workforce Training courses. Developmental Studies and some other courses are not charged a higher tuition rate. Third attempts include courses taken at any DCCCD college since the fall 2002 semester. For further information, go online to Third Attempt at DCCCD.
**ADMINISTRATIVE WITHDRAWAL**

Students with valid extenuating circumstances may be eligible for an administrative withdrawal by the Dean of the Division in which the course or courses are taught. An administrative withdrawal will not be awarded to students who simply fail to withdraw prior to the last day to receive a “W.” The request for an administrative withdrawal must be made in writing to the Dean of the Division with any supporting documentation attached. This must occur before the last official day of the semester.

**FINANCIAL AID STATEMENT**

Students who are receiving any form of financial aid should check with the Financial Aid Office prior to withdrawing from classes. Withdrawals may affect your eligibility to receive further aid and could cause you to be in a position of repayment for the current semester. Students who fail to attend or participate are also subject to this policy.

To apply for financial aid in the DCCCD, students must complete FAFSA (Free Application for Federal Student Aid) on the web at [FAFSA](http://www.fafsa.ed.gov).

Your instructor is required by law to validate/certify your attendance in your on-campus or online course(s) in order for you to receive financial aid. To meet the attendance requirement, you must attend and participate in your on-campus or online course(s) prior to the course certification date and continue beyond the course withdrawal date. You must participate in an academic related activity pertaining to the course such as but not limited to the following examples: initiating contact with your instructor to ask a question about the academic subject studied in the course; submitting an academic assignment; taking an exam; completing an interactive tutorial; participating in computer-assisted instruction; attending a study group that is assigned by the instructor; or participating in an online discussion about academic matters relating to the course. *In an online class, simply logging in is not sufficient by itself to demonstrate academic attendance.* You must demonstrate that you are participating in your online class and are engaged in an academically related activity such as in the examples described above.

**STOP BEFORE YOU DROP**

For students who enrolled in college level courses for the first time in the fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop. You may drop no more than 6 courses during your entire undergraduate career unless the drop qualifies as an exception. Your campus counseling/advising center will give you more information on the allowable exceptions. Remember that once you have accumulated 6 non-exempt drops, you cannot drop any other courses with a “W”. Therefore, please exercise caution when dropping courses in any Texas public institution of higher learning, including all seven of the Dallas County Community Colleges. For more information, you may access: [eConnect Facts About Dropping Classes](http://www.dcccd.edu/).

**COUNSELING SERVICES**

Counseling services for personal issues are provided to all students currently enrolled at North Lake College at NO CHARGE. These services are provided by or supervised by licensed professionals who are bound by confidentiality (within ethical parameters). With the assistance of a counselor, students are able to identify, understand, resolve issues and develop appropriate skills.

To make an appointment call 972-273-3333 or go to A 311.

**The Academic Success Center (ASC)**

The Academic Success Center (ASC) is designed to provide assistance to students in the following areas:

Labs for students enrolled in foreign language, Developmental Reading, and ESOL courses. One-on-one tutoring is available.

- The Writing Center can help students clarify writing tasks, understand instructors’ requirements, develop and organize papers, explore revision options, detect grammar and punctuation errors, and properly use and document sources. Rather than merely editing or "fixing" papers, tutors focus on helping students develop
and improve their writing skills. To schedule a tutoring appointment go to the ASC homepage on the North Lake website, http://bit.ly/NLC-ASCHomepage Find the “Writing Center” heading, click Appointments

- The Online Writing Lab (OWL) allows students to submit papers to our writing tutors electronically and get feedback within 24-48 hours. The OWL can be accessed by going to the ASC homepage on the North Lake website, http://bit.ly/NLC-ASCHomepage Find “The Online Writing Lab” heading, click “SUBMIT PAPER HERE!”

For more information, come by A-332 or call 972-273-3089.

**State-Outcomes Core Curriculum**

As part of the core, this course contributes to the development of six basic Program Level Outcomes. These Outcomes are essential to the learning process in any discipline and are defined by the Texas Higher Education Coordinating Board.

This course reinforces Program Level Outcome 1 with written and visual communications, Program Level Outcome 2, 3, and 4.

**Program-Level Outcome 1: Communication Skills** - to include effective development, interpretation and expression of ideas through written, oral and visual communication

1. **Written:** Process and produce effective written communication adapted to audience, purpose, and time constraints.
2. **Oral:** Produce effective oral communication adapted to audience, purpose, and time constraints.
3. **Visual:** Effectively interpret visual images or produce effective visual images.
4. **Listening:** Comprehend, and analyze oral information.

**Program-Level Outcome 2: Critical Thinking Skills** - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information

**Program-Level Outcome 3: Empirical and Quantitative Skills** - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions

**Program-Level Outcome 4: Teamwork** - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal

**Program-Level Outcome 5: Personal Responsibility** - to include the ability to connect choices, actions and consequences to ethical decision-making

**Program-Level Outcome 6: Social Responsibility** - to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities

**Learning Activities, Outcomes, and Assessment**

The following table shows how the Course Outcomes reflect the State Outcomes and are incorporated and assessed in this course.

<table>
<thead>
<tr>
<th>CHEM 1405</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Students will determine the correct number of significant figures in an image of a metric ruler with 70% proficiency on departmental exams.</td>
</tr>
<tr>
<td>2. Students will predict the relative atomic sizes of two elements based on their position in the Periodic Table at 75% proficiency on departmental exams.</td>
</tr>
<tr>
<td>3. Students will use specific heat to calculate heat loss or gain, temperature change, or mass of a sample at 70% proficiency on departmental exams.</td>
</tr>
</tbody>
</table>