CHEMISTRY 111
Course # 20298/20299

Spring 2017
INSTRUCTOR: JEFF BRADBURY

I the undersigned, have received and read the
Chemistry 111 Lecture and Laboratory Syllabus and Information

Signature: _____

Printed Name: _____

Date: _____

CHEMISTRY 111 – Spring 2017
Course #20298/20299
Instructor: JEFF BRADBURY

Lecture: **T TH** 12:30-2:00 in S-215
Lab: **T TH** 8:00-11:00 in S-224
Office Hours: **M,T,TH** 2-3
Office: S-211 Office Phone: 562.860.2451 x 2690
E-Mail: jbradbury@cerritos.edu
Website: www.cerritos.edu/jbradbury
School Address: 11110 Alondra Blvd. Norwalk, CA 90650

Prerequisites: A grade of "C" or better in Chemistry 110, Elementary Chemistry. No exceptions to these prerequisites will be allowed.

Recommendation: It is strongly recommended that the preceding prerequisite be completed within four years prior to the date of enrollment in CHEM 111

REQUIRED MATERIALS:

1. Chemistry, A Molecular Approach, 4th Edition, by Nivaldo J. Tro
   including: Mastering Chemistry with Pearson eText Student Access Kit
2. Scientific Calculator
3. Safety in the Chemistry Laboratory by Cerritos Chemistry Dept. (Online)
4. Safety goggles with splash protection in compliance with ANSI 287.1-1989 as required by California State Law (see laboratory ground rules)
5. Lab Apron (see laboratory ground rules)

LEARNING OUTCOMES:

1. Apply knowledge of microscopic (molecular) interactions to explain or predict macroscopic properties.
2. Apply critical thinking strategies in solving algorithmic and conceptual problems in chemistry. Incorporate chemical principles to explain lab results and vice versa.
3. Apply laboratory skills to perform chemical analysis including collection of data, computations, and statistical analysis of the results.
4. Use effective written communication of chemical information.
5. Make effective use of current technology to collect and analyze data

LECTURE OUTLINES AND WORKSHEETS:

1. All lecture notes and worksheets are posted on line http://web.cerritos.edu/jbradbury . Download and print all lecture notes and worksheets. Bring the lecture notes to class with you.
2. Your lecture professor will announce quizzes and scheduled tests.
3. All chapters assigned in the schedule are from the textbook, Chemistry: A Molecular Approach, TRO 4rd edition
4. **Attendance:** It will be expected that you attend regularly. **Be on time!** If you have been or intend to be absent for legitimate reasons, inform the instructor. Roll will be taken at the beginning of the hour. If you are late to class, you will not be accounted for in the roll sheet and will be marked absent. You may be dropped from the class if you are considered absent for three class meetings or more.

HOMEWORK:

ONLINE HOMEWORK:

1. Online homework is required for this class. I will drop 2 online homework assignments: The 1st homework assignment will be dropped during the first 8 weeks and the 2nd will be dropped during the last 8 weeks of the semester. Late homework will not be accepted however you will still have access to the homework the entire semester for review and practice.
2. Buy the text with the online access code or go online and buy the online access code.
3. Access online homework at: www.masteringchem.com/

WORKSHEETS:

Worksheet Sets and worksheet answer keys are found on my website. These sets of worksheet problems are the more challenging problems will not be collected. It is your responsibility to do all problems assigned and check all set-ups and answers (See my website!). Similar problems will be found on exams.

END OF THE CHAPTER TEXTBOOK PROBLEMS:

See the following lecture schedule for assigned problems at the end of each chapter. Answers are in the back of the textbook. These problems will not be collected. Similar problems may be found on exams.

METHODS OF EVALUATION:

- Hour Exams: Four exams, each worth 100 points. The lowest exam score will be dropped. All exams will be closed book/closed notes. All books and papers must be out of sight. Complete setups must be given in order to receive credit. (I.e. no credit for answers alone.) No Make-up quizzes will be given.
- In Class Quizzes: In Class Quizzes are worth 20 pts. Each. 2 Quizzes will be dropped. *No Make-up quizzes will be given.*
- Online homework: Online homework is required for this class. I will drop 2 online homework assignments during the course of the semester. Late online homework will not be accepted. Two online assignments will be dropped (see above). There are no makeup online homework assignments.
- Errors in grading: You have 1 week after the return of your exams or quizzes to see me to correct any grading errors.
- Lecture Grade Distribution

Activity	**Points**
Exams	300
Quizzes	100
Final Exam	150
Online Homework	75

- GRADING SCALE:

PERCENTAGE	GRADE
90 and above	A
80-89	B
70-79	C
55-69	D
54 and below	F

- COURSE GRADE DISTRIBUTION: LECTURE = 67% & LABORATORY = 33%
  To achieve a "C" or greater for Chem. 111 you must obtain an overall grade of 70% and:
  1. Pass the lecture portion 2. Pass the laboratory portion 3. Pass the lecture final

A Failing Score (With an "F" 54% and below) in Lecture, Laboratory or the Lecture Final will result in a course grade no higher than a "D"

Withdrawals:

If you find it necessary to drop the course, you must follow the steps outlined below in order to receive a "W" grade. DO NOT JUST STOP ATTENDING CLASS.

1. Come in and discuss the situation with the instructor.
2. Use "My Cerritos" or Fill out the official withdrawal form in the ADMISSIONS OFFICE. **April 21, 2017** is the last day to withdraw, but a "W" will appear on your transcript. ***Note: The last steps are mandatory in order to receive a "W"***

Accessibility: It is the college's policy to provide, on an individual basis, reasonable accommodations to student who have disabilities that may affect their ability to participate in course activities or meet course requirements. Students with disabilities are encouraged to come to my office hour or talk to me after class to discuss your individual needs for accommodations. If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructors and the Disabled Student Programs and Services at (562) 860-2451 ext. 2335, as early as possible in the term.

First Week Attendance: You must attend both lecture and lab the first week of the semester. (1st and 2nd day of the semester) unless excused by the instructor. **If you have any unexcused absences during the first week, you will be dropped from the course.** It is your responsibility to contact the instructor to be excused.

Attendance/Performance: Past experience has shown that students must attend lecture to achieve a good course grade. It is your responsibility to regularly attend lecture and laboratory. The instructor may drop you if you fail to attend 3 class sessions. (One hour past two class sessions, actually)

Absence: Students are responsible for ALL work, announcements, handouts and material missed during an absence.
Assistance during an absence: Contact me by phone or e-mail so that I can keep you informed of class work including announcements of due dates of lab work, handouts, quiz/exam dates.

Laboratory: You must attend your assigned lab time. Make-up labs can be authorized by your lab instructor.

Cheating policy:

See your Spring Cerritos College Schedule of Classes: Academic Honesty/Dishonesty Policy. Essentially, if you cheat, you will be dismissed from the course with an "F" grade.

Word to the Wise:

Come prepared. It is your responsibility to come to lecture, lab and exams with the proper material (paper, pencils, calculator, text, lab sheets...etc.)

STUDY HABITS and SCHEDULE:

Probably the main reason that students do not succeed in Chemistry is because of their schedule. Either they have too many hours of work and/or too many difficult classes. Please analyze your schedule now to see that you will not be overwhelmed by the work load. Science classes tend to be much more difficult and require many hours outside of class. You need to keep up with the assignments daily: last-minute cramming in chemistry does not work! I strongly suggest you read the appropriate material in the text book before and after the lecture. Students need to understand that science courses tend to be more difficult than other subjects. Chemistry is designed to prepare students for such things as medical school or pharmacy school or other graduate work. Therefore it is expected that the student will learn to be an independent learner and studier. I want to help you

succeed, but I also want you to be prepared for the rigorous environment of graduate level study. It is my hope that this semester you will accomplish more than you thought that you were capable of. I hope to see you grow as a person as well as grow academically.

Electronic Devices

Make sure all cell phones are off during class. There is to be no texting during class. There is to be no video or audio recording or photography in class without the instructor's permission. Just ask first.

I want you to know that my goal is for you to succeed not just in Chem. 111 but to succeed in life. If you need help with chemistry or any other problem you have please know I am available, when I can be, to help you, or just to listen to you.

Chemistry 111, Spring 2017 Tentative
Lecture Schedule and Assigned Problems

All chapters assigned are from the textbook, Chemistry: A Molecular Approach. Those items with a **W)** mark are worksheets posted online http://www.cerritos.edu/cshimazu. Download and print the worksheets. (Answer keys are online, too!) Similar types of problems will be on Quizzes and Exams.

Week of	Topic	Chapter	Pages	Textbook Assigned Problems
CHEM 110 Review Material:				
Jan. 9	• **Matter, Measurement, and Problem Solving** • **Atoms and Elements** • **Molecules, Compounds, and Chemical Equations** • **Chemical Quantities and Aqueous Reactions** **Set 1 Review Quizzes (*Given during lecture*):** 1. Nomenclature (Quiz 1)	Chap 1 Chap 2 Chap 3 Chap 4	1-33 44-50 53-66 69-74 86-122 138-161	**Ch 3:** 39,41,43,47,49,51,53,83,87,89, 91,95, 97,99,103,107,109 **Ch 4:** 37,41,43,45,47,49,51
Jan. 16	**Set 1 Review Quizzes, continued:** 1. Stoichiometry-Limiting Reactant (Quiz 2) 2. Equations (Quiz 3) **Set 2 Review Quizzes (*Given during lecture during the week of JAN 25*):** General Chemistry Stoichiometry (Quiz 4 & 5)	Chap 3 All 4.1-4.3	86-115 138-151	***See Cheryl's Packet-Handout*** • Worksheet: Formulas • Worksheet: Equations • Worksheet: Stoichiometry and Chemical Formula Calculations ws#1 & ws#2 **W)** See problems at the end of my Lecture Outline
Jan. 16	**Gases**	Chap 5	196-236	**Ch 5:** 33,41,45,63,67,69,71,73,75,77,81,89,91,101,103 **Gas Packet!** (given D_{Hg}=13.6 g/ml),
EXAM II	MATERIAL			
Jan. 23	**Thermochemistry**	Chap 6	248-280	**Ch 6:** 2,10,26,29,32,82,86,88,92 **Ch 11:** 35,36,37,38

Feb. 6	**Periodic Properties of the Elements**	Chap 8	336-372	**Ch 8:** 2,10,26,29,32,82,86,88,92 **W)** Worksheet: Lewis Structure. **Ch 7:** 59,61,62,63,64,68,69 **Ch 11**: 4,8,11,69

EXAM III Material:				
Feb. 13	**Chemical Bonding I: The Lewis Theory**	Chap 9	382-416	**Ch 9:** 99,101,103,105,107 **W)** Worksheet: Solids Structure.
Feb. 22	**Liquids, Solids, and Intermolecular Forces**	Chap 11	484-520	**W)** Worksheet: Solids Structure.
	REVIEW: Electrolytes and Net-Ionic Equations	Chap 4.4-4.5 Chap 4.7	151-162 166-167	**Ch 4:** 67,68,75,77 **W)** Worksheet: Molecular and Ionic Equations
March 6	**Solutions**	Chap 13	570-610	**Ch13:** 18,19,20,21,22,23,24,25,26,27, 28,51,52,53,54,55,59,60,63,64,68,69,70,71,73,75,77,79,81,83,85,87,88,89,91,92,109,110,111 **W)** Worksheet: Solutions and Colligative Properties.
Exam IV Material:				
March 27	**Chemical Equilibrium.**	Chap 15	674-710	**Ch 15**: 21,23,27,29,31,33, 37,39,41,43,45,51,53,57,61,63,65,67,69 **W)** Worksheet: Chemical Equilibrium.
April 3	**Acid and Bases**	Chap 16	722-768	**Ch 16**: 33,35,37,39,45(a,b), 49,51,55,57, 61,65,67,69,73,77,81,83,87,91, 121,122,123,124
Exam V Material:				
April 10	**Acid-Base Equilibrium. Continued**	Chap 16	722-768	**Ch 16:** 88,93,95,97,99,101,103, 105,109-111 **W)** Worksheet: Acid-Base Equilibria (Solution Equilibria).
April 17	**Aqueous Ionic Equilibrium**	Chap 17	778-814	**Ch 17:** 27,29,31,35, (Henderson Hasselbach 37,39) 41,43,45,47,49,53,57,59,61,63,87,89,91,93,95,97,99,101, 103,105,107 **W)** Worksheet: Buffers **W)** Worksheet: Acid-Base Equilibria (Solution Equilibria).
April 24	**Solubility Equilibria**	Chap 17	815-825	**Ch 17:** 87,89,91,93,95,97,99,101,103,105,107

- **Final Exam** You must pass lecture, lab and lecture final and obtain a 70% overall to obtain a grade of a "C" or higher (in other words if you fail (w/ an "F"/54% and below) lecture or lab or the lecture final, your highest grade will be a "D")
- **See Review Worksheet:** Chem 111 Final Exam

How to Join Another MasteringChemistry Course

CHEM 111 - BRADBURY

COURSE ID: CHEM111SPRING2017BRADBURY

To join another MasteringChemistry® course, see which column below applies to you. You can be in up to four MasteringChemistry courses, whether at the same time or one after another.

If you CAN STILL LOG IN to a MasteringChemistry course **-AND-** **Your next MasteringChemistry course uses the same textbook (including its edition) or the same resource, such as Virtual Lab, as the original course:**	**If you CANNOT LOG IN to a MasteringChemistry course anymore** **-OR-** **If your next MasteringChemistry course uses a different textbook or different resource, such as Virtual Lab, than your previous course:**
Follow the instructions below. You don't need to register again (i.e., redeem an access code or buy access online). *Note:* Your instructor controls the end date for each MasteringChemistry course. You can no longer log in to a course after its end date.	**Follow the instructions in the student guide for getting started** (available from www.masteringchemistry.com > Tours & Training > Getting Started). You will need to redeem an access code or buy access online. *Tip:* To help manage your Pearson resources, use the same Pearson user account (as identified by your Login Name and Password) for all of your Pearson products.

Join another MasteringChemistry course and open available self-study resources

1. Click **My Courses** in the upper left.
2. Choose **Join Another Course**
3. Enter the Course ID- **CHEM111SPRING2017BRADBURY** and click **Continue**.
   - *Don't have the Course ID yet?* Get this information from your instructor.
   - *If the Course ID you entered applies to a different book or another resource for which you don't have access yet:* You will be asked to either redeem an access code or buy access online. Follow the on-screen instructions.
2. If asked, enter your Student ID according to the instructions provided and click **Continue**.
   - *If you want to consult with your instructor first:*
     You can add your Student ID later by clicking your name link in the upper right.

You should see the Course Home page of the additional course. From now on, logging in will take you to the Course Home page of the MasteringChemistry course you last worked in.

- *To switch your view among MasteringChemistry courses:*
  My Courses > **Switch to a Different Course** menu.
- *To check out self-study resources:* Click **eText** and/or **Study Area**, as available.

Support

Go to the Support area of www.masteringchemistry.com, where you will find:

- System Requirements
- Answers to Frequently Asked Questions
- Registration Tips & Tricks video
- Contact information for Support, including Live Chat

MasteringChemistry®

CHEM. 111 – BRADBURY

COURSE ID: CHEM111FALL2016BRADBURY

Student Registration for New Mastering Chemistry Students

In this course you will be using MasteringChemistry®, an online tutorial and homework program that accompanies your textbook. *If you have joined a MasteringChemistry course before and can still log in*:
Save time by following the guide for joining another course found under the STUDENT heading at www.masteringchemistry.com > *Tours & Training> Getting Started* instead of using the steps below.

What You Need:

- ✓ **A valid email address**
- ✓ **A student access code**
  (Comes in the Student Access Code Card/Kit that may have been packaged with your new textbook or that may be available separately in your school's bookstore. Otherwise, you can purchase access online at www.masteringchemistry.com.)
- ✓ **The ZIP or other postal code for your school: 90650**

A Course ID: CHEM111SPRING2017BRADBURY (Provided by your instructor.)

✓ 1. Register

- Go to www.masteringchemistry.com and click **Students** under **Register**.
- To register using the student access code inside the MasteringChemistry Student Access Code Card/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, whether you want access to the eText, and click **Continue**. Follow the on-screen instructions to purchase access using a credit card. The purchase path includes registration, but the process is a bit different 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?" Continue to give the requested information until you complete the process. 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.

2. Log In

- Go to www.masteringchemistry.com.
- Enter your Login Name and Password that you specified during registration and click **Log In**.

3. Join Your Instructor's Online Course and/or Open Self-Study Resources

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

- **Join a Course** by entering the **MasteringChemistry Course ID** provided by your instructor. If you don't have a Course ID now, you can return to join the MasteringChemistry course later. When you join a course, you may also be asked for a Student ID (follow on-screen instructions).
- **Explore the Study Area** or **Launch Your eText**, if these resources are available for your textbook.

To Access MasteringChemistry Again Later

Simply go to www.masteringchemistry.com, enter your Login Name and Password, and click **Log In**.

After you have joined a course: You can open any assignments from the **Assignments Due Soon** area or from the **Assignments** page. For self-study, click **eText** or **Study Area**, if these options are available.

Support

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

- System Requirements
- Answers to Frequently Asked Questions
- Registration Tips & Tricks video
- Additional contact information for Customer Support, including Live Chat

Spring 2017

CHEMISTRY 111 LABORATORY
GENERAL INFORMATION AND GROUND RULES

Lab Experiments are online http://www.cerritos.edu/cshimazu. You are required to download, print out, and read the experiment before coming to the lab. You will not be allowed to attend the lab if you do not have your experiment with you. You must staple all pages of the experiment.

Materials available online:

1) Packet, Safety in the Chemistry Laboratory
2) Practice Quiz Safety in the Chemistry Lab

The above material can be downloaded and printed from the webpage www.cerritos.edu/chemistry

Materials available from the bookstore:

2) Scan-tron #882 for the Safety Quiz
2) SAFETY GOGGLES which have splash protection in compliance with ANSI Z87.1-1989 as required by California State law.
3) A scientific calculator - Calculators in combination with electronic communication devices are not allowed.
4) Lab apron

SAFETY: All safety procedures specified in the packet, Safety in the Chemistry Laboratory, must be followed at all times in the laboratory. Failure to work safely in accordance with those as well as any other safety procedures presented to you in the safety video, in written experiment instructions, or verbal instructions from your lab instructor, can result in your being removed from the lab. Failure to wear safety goggles can result in your being removed from the lab.

Experiments:

- You will be doing the experiments in the order in which they are listed in the course schedule.
- If you fail to successfully complete **two or more experiments** (including lab reports), your course grade will be no higher than a "D".
- You are responsible for reading the experiment before coming to the lab.
- You are to perform each experiment without a partner unless otherwise directed by the instructor.

Data:

- Data is to be recorded in non-erasable ink only, directly onto the report sheet.
- If you make a mistake, draw a single line through the incorrect data and write the correct one above. No "whiting-out" is acceptable.
- Have your data initialed and dated before you leave the lab (no credit without initials).

Lab make-up:

- For permission to attend another Chem111 lab to do make-up work, obtain a permission card from your instructor.
- Be sure to have the instructor in the lab that you visit initial your data.

Unknowns:

- You will be graded for the accuracy and precision of the results obtained in those experiments that involve unknowns.
- There are 10 points for the accuracy and 10 points for the precision of each unknown sample.
- If you are given a second unknown sample in order to repeat the experiment, four points may be deducted from your score for the accuracy or precision for that experiment.

Reports:

- The completed Report Sheet(s) is due as indicated in the schedule.
- Each Report is worth 20 points.
- Late Reports will be accepted only at the discretion of the professor. Late reports, if accepted by the professor, will be discounted 2 points per lab period (4 points per week). Reports turned in more than 2 labs late will not be accepted and you will receive no credit.

Quizzes:

- One quiz will be given for each experiment. The quiz will be given as indicated in the schedule.
- Each quiz is worth 20 points.
- There will be no make-up quizzes given.
- You will be expected to take the quiz whether or not you have completed the experiment.
- At the end of the semester your lowest quiz score will be dropped.

Safety quizzes:

- A Safety Quiz will be given on the date indicated in the laboratory schedule. You will prepare for this quiz by reading the packet, Safety in the Chemistry Laboratory. You must get a satisfactory score on this safety quiz, which may be done by scoring at least 90%
- If you do not receive a satisfactory score on the Safety quiz, you will be allowed to retake the quiz **once,** at a place and time arranged by your instructor**. If you do not get a satisfactory score when you retake the quiz you will receive an F grade for the laboratory portion of the course. If you choose not to drop the class but to remain, knowing that the lab grade and therefore the course grade will be an F, you will NOT be allowed to do any experiments.**

Note: If you fail to successfully complete two or more experiments (including lab reports), your course grade will be no higher than a "D".

Grading structure:

% Q = percent of total possible points on lab quizzes plus unknowns.
% R = percent of total possible points on reports.

$$Lab\ overall\ \% = \frac{4(\%Q) + (\%R)}{5}$$

- Your lab grade accounts for 33 % of your overall grade in Chem 111.
- **To pass Chem 111 you must pass (D or better) both the lab and the lecture.**

Student locker responsibility: Each student will be assigned a drawer and a combination to its Master Lock. Once a drawer is assigned, the Lock, combination, and drawer contents become the responsibility of the student. You will be charged for any missing or broken glassware or equipment.

Community drawer responsibility: The community drawers contain items of equipment that are not found in a student's assigned drawer. These items are shared among Chem 111 and Chem 112 students in other lab sections. You may use these items during a lab, but they must be returned to the community drawers before you leave the laboratory. If any of these items are found in your assigned drawer, the item will be removed and you will be fined.

Dropping the course:

- You must check-in your drawer during your regularly scheduled lab period before dropping.
- If the above is not possible, then contact the stockroom by phone [Tel # (562)860-2451, Ext 2695] to make an appointment. However, the stockroom will charge you a fee if they check you in.
- You will be placed on an administrative hold if you fail to check-in your drawer.

Cheating policy:

- If you cheat, you will be dismissed from the course with an "F" grade.

Chemistry 111 Lab

TUESDAY	*THURSDAY*
Jan10 • Introduction • Online Material: *Safety in the Chemistry Laboratory* • Handout: *Uncertainty in Measurements* • Video: *Safety in the laboratory*	**Jan 12** • Handout: *Precision and Accuracy* • Quiz- *Uncertainty in Measurements* ***Must Have: GOGGLES and APRON***
Jan 17 ***Must Have: GOGGLES and APRON*** • Locker Check-in, Clean Glassware • Laboratory Weighing ***Quiz- Safety in the Chemistry Laboratory***	**Jan 19** • ***Video: The Use of the Buret.*** • Titration
Jan 24 Empirical Formula	**Jan 26** Empirical Formula
Jan 31 Gas Packet	**Feb 2** Gases
Feb 7 Ideal Gas Constant and Molar Volume of Hydrogen.	**Feb 9** Ideal Gas Constant and Molar Volume of Hydrogen.
Feb 14 A: Standardization of a NaOH Solution	**Feb 16** B: Titration of an Unknown Acid
Feb 21 Reactions of Copper	***Feb 23*** Finish Reactions of Copper
Feb 28 Dry Lab: Electrolytes and Net-ionic Equations	***March 2*** Electrical Conductivity
March 6 Crystal Structures	***March 8*** Finish Crystal Structures

Monday	***Wednesday***
March 14 ***Spring Break***	***March 16*** ***Spring Break***
March 20 Molar Mass by Freezing Point Depression	***March 22*** Molar Mass by Freezing Point Depression
March 27 pH and Its Measurement	**March 29** Finish pH an Its Measurement
April 4 K_a of Acetic Acid	***April 6*** Finish Ka of Acetic Acid
April 11 Titration Curve of an Unknown Acid	***April 13*** Finish Titration Curve of Unknown Acid
April 18 Reactions of Salts with Water	***April 20*** Finish Reactions of Salts with Water
April 25 • Buffers	***April 27*** Finish Buffers
May 2 • Determination of the Solubility Product of Constant • Equilibrium Calculations	***May 4*** Continue Determination of the Solubility Product of Constant
May 9 Finish Determination of the Solubility Product of Constant	***May 11*** Quiz on Determination of the Solubility Product of Constant (This quiz may not be dropped)
May 16 Check with your lab instructor on the date and time for Checking-out and Paying Bill	***May 18*** Check with your lab instructor on the date and time for Checking-out and Paying Bill