Instructor Information

Instructor: Dr. George Lauster, Ph. D.
Office: MW Room 1148 (end of Hallway E), Baptist Health College Little Rock (BHCLR)
   TR Faculty Office, UAPTC Main Campus, Science Building, North Little Rock
Mailbox: as above
Hours: 11:00 – 12:15 PM
Phone: Please use email if at all possible, as I am in class most of the day
   MW 501-202-7462
   TR 501-812-2302
Email: GLauster@uaptc.edu

*All emails and telephone calls will receive a response within two business days.

Chair: Thomas Russell (501)812-2705 trussell@uaptc.edu
Dean: Marico Bryant Howe (501)812-2342 mbryanthowe@uaptc.edu

*If your emails and telephone calls do not receive a response within two business days, the appropriate chain of command is above.

Course Information

This course meets once in person per week for lab,
Monday: 9:00 PM – 10:50 AM Room 1201, Baptist Health College Little Rock campus

The lecture portion is done through readings, practice problems, and online electronic assignments.

Catalog Description

4 credit hours/special course fee. 3 lecture hours, 2 lab hours.

This is an algebra-based chemistry course specifically designed for majors in health-related professions. The course content provides a foundation for work in health-related areas and is not appropriate for chemistry or other science majors or pre-professional students. Nomenclature, atomic and molecular structure, bonding and reactions are explored. Lab is required.

Prerequisite: MATH 1302 (College Algebra) with a grade of “C” or better.

This course is not appropriate for pre-medical school and pre-physician assistant students. It is designed for pre-nursing, pre-BSN and pre-APN students.
Course Materials

1. **Textbook**    *General, Organic, and Biochemistry*, 8th Edition. Denniston, Topping, Woodrum and Caret. ISBN 978-0-07-777587-2. The bookstore sells a special shorter version for our class. We only cover the first nine chapters. There is also an electronic ebook version. We will use it extensively.

   *Used copies:* The UAPTC Bookstore has a limited supply of used copies. Also check Amazon, Chegg, etc. However, make sure it is the correct edition.


3. **Student UAPTC Email**
   Make a habit of checking UAPTC email daily. This is the only way UAPTC instructors, Financial Aid, and other staff can contact you.

4. **Phone Apps**
   These apps will make the semester easier for you. Available for all operating systems.

   - **Blackboard App** (has pencil in the icon) – access materials, videos, flashcards, announcements and discussions from your phone. You will receive notifications for announcements, which is quite handy.

   - **CamScanner** (or similar scanner app – there are many) - Your phone camera is used as a scanner. Photo is automatically turned into a pdf file. Great way to email in work if you cannot make it to class

   - **Mail**, or equivalent  Connect your UAPTC email to your phone email app, using Exchange. For help with iOS Mail app: https://support.office.com/en-us/article/set-up-email-using-the-ios-mail-app-7e5b180f-bc8f-45cc-8da1-5cefc1e633d1

Mission Statement

University of Arkansas – Pulaski Technical College provides access to high-quality education that promotes student learning and enables individuals to develop to their fullest potential.

Institutional Learning Outcomes and General Education

UA-PTC supports a college-wide institutional learning assessment program which concerns effective instructional methods and promotes student learning achievement by assessing:

1. Communication
2. Critical Thinking
3. Cultural Awareness
4. Information Literacy
5. Professionalism  
6. Quantitative Literacy  
7. Technology Literacy  

For more information, please consult the following website: https://uaptc.edu/sla

Chemistry Discipline or Program Mission and Learning Outcomes

The mission of the chemistry discipline at UA Pulaski Technical College is to expand the knowledge, skills, and values of its students, as well as, help them appreciate their place in an increasingly technical society. Our discipline strives to show its students how to make independent and empirical inquiries about the natural world, apply scientific principles, develop critical decision-making skills, and understand the roles that the discipline of chemistry play in their lives. Our efforts will result in students who can make informed personal and social decisions regarding the ever-increasing amounts of scientific information found relevant to the world community. In agreement with the institution’s mission, the chemistry discipline’s mission focuses on instilling into our students an active rather than a passive role in learning, transforming them into life-long learners.

1. Demonstrate critical and independent thinking through scientific investigation.  
2. Demonstrate professionalism in communication and collaboration.  
3. Analyze the influence of scientific thought on individuals and society.  
4. Demonstrate proper use of laboratory instrumentation and laboratory techniques.

UAPTC Chemistry Student Learning / Course Outcomes

Based on ACTS 2004 course description

Upon completion of this course, the student should be able to:

- Use instruments of measurement, write numbers in scientific notation, and round using significant figures.
- Describe measurable properties of matter and use the metric and American systems of measurement; convert units within and between each system.
- Describe the structure of the atom in terms of protons, neutrons, and electrons; know the structure and trends of the periodic table.
- Understand bonding patterns, stability, naming, and structures of ionic and covalent compounds.
- Understand the mole concept and perform mole/particle/mass conversions.
- Define parts and know different classes of chemical reactions; balance reactions and perform simple stoichiometry calculations.
- Understand the gas laws relating pressure, temperature, and volume.
- Understand the role of solutions in chemistry and how to describe them using various terms of concentration.
• Determine if a reaction will occur spontaneously, and predict the effect of different factors on reaction kinetics and equilibrium.
• Define an acid and a base, give their characteristics, describe their reactions, and perform titration calculations.
• Define the types of radioactive transmissions and apply the concept of half-life.

Policies

Report a Complaint or Concern

UA-P TC takes very seriously complaints and concerns regarding the institution. Most complaints or concerns of a specific nature should be initiated and resolved at the campus level through normal college processes whenever possible. UA - Pulaski Technical College receives and resolves complaints using a variety of methods. To report a complaint or concern, please follow the link below.

https://www.uaptc.edu/report-a-concern-complaint

UA-P TC and Department Attendance Policy

Education at UA-P TC requires students' active involvement in the learning process. Thus, students are expected to attend all classes and actively engage in all learning assignments and/or opportunities provided in their classes. Class attendance should be treated as mandatory by all students as attendance will be taken by all instructors during the first two weeks of class. Additionally, a written policy on student attendance that is tied to course objectives and included in a course syllabus will be provided for each course by instructors.

Course Policies

The UA-P TC Catalog rules and regulations will be enforced in this course at all times. Please consult the following website for more information: https://www.uaptc.edu/catalog

Professional behavior is required. Punctual attendance and intelligent participation are expected. Particulars as determined by the instructor are detailed in the paragraph below.

Appropriate behavior is expected for all communications, including any notes, email messages, or telephone conversations. Some guidelines for communication are included in this syllabus to help you.

Departmental Attendance Policy

You will be given a failing grade (F) for the course if you miss more than 25% of lab sessions regardless of your grade. You will be given a failing grade (F) for the course if you miss more than 25% of lecture sessions regardless of your grade.
Course Attendance Policy

Showing up consistently is an important part of professionalism. For this hybrid course, attendance includes both the weekly laboratory period in person, plus weekly online assignments and exams. Failure to come to two or more lab classes, or missing weekly online assignments, generally results with inability to pass the course, due to missing too many grade points. Make plans with work and at home to have a regular, undisturbed time and place to complete your work. There are quiet locations with computers available at both UAPTC and BHCLR locations for you to use. Note below there are also no make-up labs or make-up exams. This course is one of the first steps in your career, so be organized and have a plan, and a back-up plan, just as though it were a job.

Grading Policy

Letter grades will be based on the following scale:

- 90 to 100%  A
- 80 to 89%  B
- 70 to 79%  C
- 60 to 69%  D
- 0 to 59%  F

**75% Online Material**

<table>
<thead>
<tr>
<th>Online questions (1 each)</th>
<th>115</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online discussion participation</td>
<td>15</td>
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<tr>
<td>Online Assessment (chp 1 to 4)</td>
<td>20</td>
</tr>
<tr>
<td>4 Online exams (100 each)</td>
<td>400</td>
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<tr>
<td>1 In-person cumulative final</td>
<td>200</td>
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</table>

**25% Lab**

| 14 Prelab assignments (5 each)         | 70  |
| 14 Lab datasheets (12 each)            | 166 |
| Chemistry research paper              | 14  |
| **Total**                              | **1000** |

* Instructors have one week to provide feedback and post grades for all assignments unless otherwise noted by a departmental policy that has been approved by the Dean of the School. Per Dean approval, instructors of the Physical and Natural Sciences department will have two weeks to provide feedback and post grades for research papers and other hand-graded work.

In an online class, eligibility for Financial Aid is based on student participation. Logging into the course does not constitute participation. For purposes of roster certification, students must complete a gradable attendance artifact.
Missing Work  Late Assignments, Missed Labs and Missed Exams

Students must make every effort to keep up with the course and come to class. I understand that sometimes life does not allow this. If you cannot make it to class, you may submit homework and prelabs in an email. They must be in pdf form (Use a scanner or see CamScanner above). Because we have so much material to cover, you should make every effort to keep up with due dates even if you cannot come to class. There is very little time to make up work. Each day homework or a prelab is overdue results in a subtraction of 20% of the possible points. This means if you wait to turn in the homework at the next class the grade will be zero. Get it in the day it is due.

There are no make-up labs. However if you miss a lab, be sure you still turn in the prelab and complete any homework due. At the end of the semester the lowest lab grade will be dropped. This does not apply to prelabs and homework.

There are no make-up exams. You must complete exams during the time period given, whether online or the in-person final. At the end of the semester, the lowest or missed exam percentage grade can be replaced with the final percentage grade.

Academic Integrity

It is expected that all students who attend UA-PTC conduct themselves in a manner appropriate for the college experience. Academic integrity is a vital component of collegiate behavior. The UA-PTC catalog states, “The gaining of knowledge and the practice of honesty go hand-in-hand.”

The catalog also states, “The responsibility and authority of initiating discipline arising from violations of the rules against dishonesty during the process of the course are vested in the instructor of that course.”

The complete Academic Integrity Policy is in the UA-PTC code of conduct.

Accommodation Policy

Services for Students with Disabilities: UA-PTC is committed to fulfilling all federal requirements as stated in the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, and the American with Disabilities Amendments Act (ADAAA) of 2008. Accommodations are available to students who have documented disabilities. Students who request accommodations must register with the Disability Services Office (Main Campus: 501-812-2738 or South Campus: 501-812-2862) and must provide current and relevant documentation.

Students requesting accommodations should inform the instructor at the beginning of the course or as soon as accommodations are approved. It is the student's responsibility to provide their Accommodation Letter to the instructor. Accommodations are not retroactive and will only be provided once your instructor receives the Accommodation Letter.

Student Code of Conduct
All students are expected to abide by the UA-PTC Student Code of Conduct. For the full Student Code of Conduct, access the most current version of the UA-PTC Academic Catalog. http://uaptc.azurewebsites.net/docs/default-source/course-catalog/2017-18-academic-catalog.pdf?sfvrsn=a08a3038_2

Sexual Misconduct

No person at UA-PTC will, on the basis of gender, be excluded from participation in, be denied benefits of, or be subjected to sex discrimination, sexual harassment or sexual misconduct under any education program or activity. All college administrative policies and procedures regarding sex discrimination, sexual harassment, and sexual misconduct are in compliance with Title IX. Students who feel they are victims of sexual misconduct should contact the UA-PTC Title IX Deputy Coordinator for Students:

Michelle Anderson, Director of Student Life and Leadership
Campus Center Building Room 216
501-812-2756
manderson@uaptc.edu

Course Evaluations

Students may be asked to evaluate their instructor and course near the end of the semester. These student evaluations are very important to the improvement in the quality of instruction and course materials. All results are anonymous and shared with the faculty only after the semester is over and grades have been posted.

Information Literacy

UA-PTC is committed to the Information Literacy Competency Standards for Higher Education as established by the Association of College and Research Libraries and endorsed by the National Forum on Information Literacy. Therefore, all courses will incorporate an information literacy component so that, by graduation, all students will be able to recognize the need for information, then locate, evaluate, synthesize, and communicate information in an ethical manner. Information literacy encompasses critical thinking, research, media, technology, health, business, and visual literacy skills to produce lifelong learners who can make informed decisions in the workplace and in their personal lives.
## Tentative Course Schedule

The following course schedule details the assignments and corresponding due dates for this course. This schedule is tentative and is subject to change as necessary by the instructor.

<table>
<thead>
<tr>
<th>Dates</th>
<th>Week</th>
<th>Assignments</th>
<th>Points</th>
<th>Due Date</th>
<th>Learning Outcomes</th>
</tr>
</thead>
</table>
| **Jan 9-13** (half week) | Welcome | Course Agreement form  
Student Survey (online questions)  
Math Module (online questions)  
Read Sec. 1.5 to Example 1.8 | 5      | Jan 14      | CLO 1 and 2 |
| **Jan 14-20** | 1     | *Lab 1 – Conversion Factors*  
Prelab 1  
Reading & Study Questions 1a  
Online Exam Practice Questions 1a | 12     | Jan 14      | CLO 1 and 2 |
| **Jan 21-27** | 2     | **MLK Day – no lab**  
Participate in online discussion  
Online Exam Practice Questions 1b  
Prelab 2 | 5      | Jan 28      | CLO 1 and 2 |
| **Jan 28-Feb 3** | 3     | *Lab 2 – Safety & Measurement*  
Reading & Study Questions 1c  
Online Exam Practice Questions 1c  
Prelab 3 | 12     | Feb 4       | CLO 1 and 2 |
| **Feb 4-10** | 4     | **Exam 1 (chp 1)**  
Lab 3 – *Density of Three Substances*  
Reading & Study Questions 2  
Online Exam Practice Questions 2  
Prelab 4 | 100    | TBD         | CLO 3    |
| **Feb 11-17** | 5     | *Lab 4 – Identity of a Liquid*  
Reading & Study Questions 3a  
Online Exam Practice Questions 3a  
Prelab 5 | 12     | Feb 11      | CLO 4    |
| **Feb 18-24** | 6     | *Lab 5 – Percent Water in a Hydrate*  
Reading & Study Questions 3b  
Online Exam Practice Questions 3b  
Prelab 6 | 12     | Feb 18      | CLO 4    |
| **Feb 25-Mar 3** | 7     | *Lab 6 – Separating a Binary Mixture*  
Online Exam Practice Questions 3c  
Prelab 7 | 12     | Feb 25      | CLO 4    |
| **Mar 4-10** | 8     | **Exam II (chp 2 & 3)**  
Lab 7 – *Molecular Geometry*  
Reading & Study Questions 4a  
Online Exam Practice Questions 4a  
Prelab 8 | 100    | TBD         | CLO 5    |
<table>
<thead>
<tr>
<th>Date Range</th>
<th>Lab Number</th>
<th>Lab Title</th>
<th>Lab Questions</th>
<th>Prelab</th>
<th>CLO</th>
<th>Notes</th>
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<tr>
<td>Mar 11-17</td>
<td>9</td>
<td>Lab 8 – Calcium Tablet</td>
<td>Reading &amp; Study Questions 4b</td>
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<td>Mar 25-31</td>
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<td>Lab 10 – Chemical Reactions</td>
<td>Reading &amp; Study Questions 4c</td>
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<td>Apr 1-7</td>
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<td>Exam III (chp 4&amp;5)</td>
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<td>Apr 8-14</td>
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<td>Apr 15-21</td>
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<td>Lab 13 – Making Solutions</td>
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<td>Apr 22-28</td>
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<td>Lab 12 – Titration</td>
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<td>Prelab 14</td>
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<td>Apr 29-May 5</td>
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<td>Exam IV (chp 5, 6, 7 &amp; 8)</td>
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<td>May 6-9</td>
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<td>Cumulative Final (chp 1 to 9)</td>
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<td>May 6</td>
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</table>

**Final Exam Schedule:**

The first four exams will be taken online as per schedule. The weekdays the exam is available will be determined in class based on student schedules. The **final exam** will be taken **in person** on Monday, **May 6**, at the usual time we meet for lab.

Disclaimer: This schedule is a guide for the semester. The instructor reserves the right to amend the schedule as necessary.
Course Agreement Form

Read, complete, and return to instructor:

I have read the course syllabus for Dr. George Lauster’s Fundamentals of Chemistry I course at the University of Arkansas Pulaski Technical College, and I understand its content. I also understand the rules for the class, and I will follow and abide by these rules, including those relating to attendance, assignments, grading criteria, plagiarism, and behavior.

______________________________
Semester

______________________________
Date

______________________________
Print name

______________________________
Signature (Make a habit of checking UAPTC email daily)

______________________________
UA-PTC Email address

______________________________
Telephone