

## Chem 1A GENERAL COLLEGE CHEMISTRY I (Section 1067)

Fall 2022

Lecture: **ONLINE**. You will not be required to attend lectures via video conference, e.g., Zoom, on specific days and times. Lecture slides, videos, and practice problems will be posted on the Chem 1A website.

Laboratory: **IN PERSON - Required**. TTh 6:00-9:10, S 207

<b>Instructor:</b>	Lawrence Yee
<b>Office/phone:</b>	S226/755-6887
<b>Office hours:</b>	TTh 5:15-6:00 in S226
<b>Prerequisites:</b>	Chem 22 with a grade of C or better, Intermediate Algebra
<b>Materials:</b>	TEXT: Open Learning Initiative General Chemistry I <a href="https://oli.cmu.edu/courses/general-chemistry-1/">https://oli.cmu.edu/courses/general-chemistry-1/</a> ( <b>FREE</b> – Set up an account at <a href="https://oli.cmu.edu/jcourse/webui/register/student.do">https://oli.cmu.edu/jcourse/webui/register/student.do</a> Use this course key: yee-f22. See <a href="https://olihelp.freshdesk.com/support/solutions/articles/32000020120">https://olihelp.freshdesk.com/support/solutions/articles/32000020120</a> for help signing up.) Chem 1A website: <a href="http://ccchemteach.com">http://ccchemteach.com</a> Chem 1A Lab Experiments ( <b>FREE</b> – go to Chem 1A website) Safety goggles or safety glasses Calculator
<b>Optional Materials:</b>	" <b>Chemistry</b> ", Open Stax, <b>FREE</b> - <a href="https://openstax.org/details/books/chemistry">https://openstax.org/details/books/chemistry</a> Any chemistry textbook or website or reference that helps you with this class ChemDoodle chemical drawing software ( <b>FREE</b> download with your school e-mail)

### COURSE DESCRIPTION

- Chem 1A is a course designed for students in science and engineering programs. Chemistry is a quantitative/predictive science. It is not an isolated collection of facts but a body of knowledge that fits together in laws and theories to describe nature. We will discuss these laws and theories that will allow us to predict chemical phenomena. In Chem 1A, we will discuss scientific measurement, the structure and properties of elements and compounds, chemical reactions and calculations, heat and thermochemistry, light and color, and states of matter.
- This course consists of lecture and lab. Hands-on work and group work will be used to help you learn and understand chemistry. Your learning depends on you; you are responsible for your learning. This course is fast-paced and covers a lot of material. Furthermore, each successive topic builds upon previous topics. In other words, you have to learn and understand topics covered at the beginning of the course to learn and understand topics covered later in the course. To maximize your learning of chemistry, study the assigned sections in each chapter and try working questions/problems at the end of each chapter **prior** to each class. This practice allows you to focus on important points in class discussions and ask questions over material you don't understand. After each class, review your notes and the assigned chapter and try working more questions/problems. When questions arise, please ask! I am available during office hours or by appointment. In addition, the ACCESS and MESA Programs offer study sessions and tutoring for related problem-solving practice.
- Chem 1A is a 5 unit course. You are expected to work/study/practice 15 hours per week (9 hours for lecture, 6 hours for lab) in this class.

### COURSE OBJECTIVES/SKILLS

1. Scientific measurement – represent uncertainty in measurement and calculations using sig figs, apply dimensional analysis (factor-label method) in conversions and calculations.
2. Classify substances as elements, compounds, mixtures. Relate substance type to properties. Use properties to identify substances and separate mixtures.
3. Write chemical formulas of ionic and molecular compounds. Determine mole ratio of elements in compounds. Name ionic and molecular compounds.
4. Perform mole-mass calculations with compounds and reactions. Determine chemical formula from elemental analysis (% composition). Determine masses of reactants/product from mass of products/reactants in chemical reaction.
5. Double replacement reactions 1: balancing precipitation reactions, applying solubility table, write net ionic equations to predict whether a reaction occurs, perform mole-mass and mole ratio calculations (gravimetric)
6. Double replacement reactions 2: balancing acid-base and gas forming reactions, identifying strong and weak acids, write net ionic equations to predict whether a reaction occurs, perform C-V-mole and mole ratio calculations (volumetric)
7. Single replacement reactions: balancing, apply Activity Series, write net ionic equations to predict whether a reaction occurs, perform mole-mass and mole ratio calculations
8. Energy and heat 1: predict heat in a physical heat transfer. Apply heat equations ( $q = m\Delta T$ , heat gained = heat lost)
9. Energy and heat 2: predict heat and work in a chemical reaction and chemical heat transfer. Apply using Hess' law.
10. Light and color: relate EM radiation properties (wavelength, frequency, energy). Describe how light is produced with energy level diagrams. Understand quantization.
11. Light and atomic structure: apply quantum numbers to write electron configuration of atoms, identify valence electrons, draw Lewis dot symbols. Draw Lewis structures, identify polar bonds, distinguish isomers, draw skeletal structures.

12. Apply VSEPR theory to determine shape. Determine polarity from shape. Determine IM forces from polarity.
13. States of matter - gases: relate kinetic theory of gases to gas variables (P, V, T, and n). Apply ideal gas law.
14. States of matter - liquids and solids: relate liquid and solid types to chemical forces and properties. Use phase diagrams.
15. Apply chemistry lab skills, which include the proper use and operation of lab chemicals, equipment, instruments, lab techniques, and safety procedures, and critical thinking skills to experiments.

### STUDENT LEARNING OUTCOMES

By the end of the course, you should be able to apply the course objectives to:

- (i) Given information about a substance, a student will be able to apply chemical concepts, laws, and theories to describe and predict chemical phenomena, such as properties and reactivity.
- (ii) Given a chemical problem, a student will be able to apply chemical concepts, laws, and theories to formulate a reasonable solution to this problem.
- (iii) Given experimental data, a student will be able to analyze the data, calculate results from data, and interpret results to draw rational conclusions.

### ASSIGNMENTS AND GRADING

Your CHM 1A Course Grade (lecture and lab) will be based on your mastery of the 15 Course Objectives.

A = demonstrate knowledge, comprehension, application, analysis, synthesis, and evaluation of concepts and principles

B = demonstrate knowledge, comprehension, application, and analysis of concepts and principles

C = demonstrate knowledge and comprehension of concepts and principles.

Your mastery of each Course Objective will be evaluated with these Graded Assignments you will do each week:

- Lecture Quiz (15-20 minutes) or Exam (30-45 minutes).
- Lab Activity.
- OLI Module Reading and Checkpoints for Homework. These Checkpoints are generally easier than Lecture Quizzes but are good preparation and practice.
- Science News Story of the Week for Homework.
- You are expected to work/study/practice 15 hours per week in this class.

Your Chem 1A grade consists of 13 Lecture Quizzes, 2 Exams, Final Exam, 15 OLI Module Checkpoints for homework, 15 Lab assignments, and 6 Science News assignments. Every student will have an Incomplete Grade in this course until every assignment has been completed. Your Course Grade will be determined at the end of the semester when you have completed all course assignments based on the following criteria:

Grade	Lecture Quizzes	Two Exams and Final Exam	OLI Checkpoints	Science News	Lab
A	Pass 11 (change from 12) of 13	B+ average ( $\geq 85\%$ ), A ( $\geq 87.5\%$ ) on 1 Exam	$\geq 87.5\%$	$\geq 87.5\%$	$\geq 87.5\%$
B	Pass 10 of 13	B- average ( $\geq 75\%$ ), B ( $\geq 80\%$ ) on 2 of 3 Exams	$\geq 75\%$	$\geq 75\%$	$\geq 75\%$
C	Pass 7 of 13	OR C average ( $\geq 60\%$ )			$\geq 60\%$
D or F	Pass less than 7				

A  $\geq 87.5\%$ , B range (75-87.5%), B- = 75-79.9%, B = 80-84.9%, B+ = 85-87.4%, C = 60-74.9%

**Example:** A student passes 11 Lecture Quizzes, earns 70% on the 2 Exams and Final Exam, earns 65% on OLI Checkpoints, 70% on Science News, and 80% on Lab assignments earns an overall C grade.

Your mastery of each Course Objective will be evaluated with the following assignments:

#### 13 Quizzes (weekly)

Each Quiz will evaluate one or two Course Objectives and will be given every Friday. *Make sure you are available to take the Quiz on Fridays between noon and 6 pm.* You will be allowed to use your book and notes. Each Quiz is designed to take 20-30 minutes to complete, will consist of 4 or 5 questions, and will be graded **Pass (Master)/Not Pass (Master)**. A Pass (Master) Grade (80% or higher) means you have mastered that Course Objective.

**If you do not pass a quiz**, i.e., do not master a Course Objective, you can **retake** Quizzes 1-5 on 10/7/22 after Exam 1, Quizzes 6-10 on 11/18/22 after Exam 2, Quizzes 11 and 12 on 12/9/22 after Quiz 13, and Quiz 13 after the Final Exam.

#### Two (2) Exams

Each Exam will evaluate three or more Course Objectives and will be given on Friday, 10/7/22 and Friday, 11/8/22. *Make sure you are available to take each Exam on these days between noon and 6 pm.* You can use your book and notes. Each Exam is designed to take 30-40 minutes to complete. Exams are graded A-F.

#### Final Exam

The Final Exam will cover all Course Objectives and will be on Thursday, 12/15/22. *Make sure you are available to take the Final Exam on this day between noon and 6 pm.* The Final Exam is designed to take you 45-60 minutes to complete. You can use your book and notes. The Final Exam is graded A-F.

**NOTE:** Do **NOT** miss Exams, Quizzes, or the Final Exam. If you know you cannot take an exam on the scheduled date and time, inform me as soon as possible before the exam in **writing** and reschedule the exam. Missing an exam without valid reasons will result in a F grade.

### Homework

You have to put in the study time (2 hours of deliberate, active work for every lecture hour) to learn and perform well in this course.

**Homework** includes:

1. **OLI Checkpoints** on the Open Learning Initiative General Chemistry 1 website. As you read/study a module, try the "Did I Get This" question to practice retrieval of the information you just learned. When you finish a module, take the OLI Checkpoint. **The OLI Checkpoint is graded.** You will have three attempts; your highest attempt score will be your grade. OLI Checkpoints for the modules covered that week will be due **Friday at noon.** **Self-testing is an extremely effective way to learn faster and retain more.**
2. **Science News** assignment will increase our awareness and knowledge of chemistry and science and its effect on and relevance to us and society. This assignment will be ongoing during the semester. See the Science News page on the Chem 1A website.
3. **Retrieval and Deliberate Practice of course material.** While reviewing course material, practice retrieving the information and develop your problem solving skills by doing the Quiz Practice Problems (with solutions) spaced over time on the Chem 1A website. This will help your long term retention of these concepts.

### Laboratory

In science, observations are made to discover, learn, and understand what's going on in nature. In a science course, hands-on activities are the best way to make observations and learn science. As such, the laboratory is a very important part of this course. Lectures and labs will be coordinated so you will be able to relate what you do in lab to what you do in lecture and vice versa. You will learn lab techniques to separate, isolate, and identify compounds. **All laboratory assignments must be completed to pass Chem 1A.** Guidelines for lab procedures and lab safety are described in the Chem 1A Lab web page.

Science is a collaborative endeavor. Employers value employees who know how to work as a team. In Chem 1A Lab, you will work in a group of 2 to 4. When you work in a larger group, assign a team leader, communicator, record keeper, and counselor for each lab and rotate roles for each lab. Each role is described in the Chem 1A Lab web page. Make sure each team member contributes equally to each lab activity.

Your **Lab Grade** consists of:

#### **15 Lab Assignments** (weekly)

Lab Activities are designed for you to apply and practice the objectives discussed in lecture to lab and to develop skills to collect data, analyze data to obtain results, and interpret results to draw conclusions. You will work with your lab partners on experiments but **you must submit Lab Assignments individually** due at the end of Thursday's lab.

### Lab Safety Factor

The **Lab Safety Factor** will be determined by your lab instructor at the end of the semester. It will be based on your attendance (including **being on time**), your timely submission of lab assignments, your observation of lab safety rules and regulations, your lab technique, and your initiative and cooperation (ability to do your own work and an equal share of group work, ability and willingness to work, collaborate, and cooperate with other students). If you arrive late; hand assignments in late; do not observe lab safety, e.g., don't use eye protection, endanger the safety of your peers and instructor; have poor lab technique, or no one likes working with you, you will receive a low lab safety factor grade and a lower lab grade.

### Lab Policies

1. Safety glasses or goggles and other appropriate personal protective equipment (PPE) are required in lab. For students who wear contact lenses, you will need to wear safety glasses/goggles over your contact lenses. Try to be aware of your safety as well as the safety of others in lab.
2. FAILURE TO CHECK-IN YOUR LOCKER, whether you drop the course or complete it, results in a \$25 LAB FEE plus a charge for any broken or missing equipment.
3. **ALL LABS MUST BE PERFORMED TO PASS THIS COURSE.**
4. Late lab assignments will be penalized 5% per calendar day.
5. The chemistry lab has 14 computers.

- a. You **cannot** store your lab data and results on the hard drive of a computer you are using. Please bring a flash/thumb drive to store lab files.
- b. Each computer is connected to a network printer. You will need to supply your own printer paper.
- c. These computers are connected to the internet so you can look up scientific information. Please do not download images, files, or software onto these computers.

### **College Policies**

**Incomplete grades** will only be given to students who are passing the course, have completed at least 70% of the course requirements, and have special circumstances that prevent completion of the course.

The *Attendance Policy* states that "a college student is expected to attend all of his/her class sessions". Students who do not attend the first class meeting will be dropped and will be replaced by other students unless the student notifies the instructor in advance. **Non-attendance does not automatically drop you from the course.** You must submit the appropriate forms to the Admissions Office to drop or withdraw from any course at this College. Failure to submit the proper forms will result in a failing grade (F) for the course.

The Department of Supportive Programs and Services (DSPS) facilitates academic accommodations for students with documented disabilities at Hartnell College. If you have, or suspect you may have, a disability that impacts your education, please contact the DSPS Office to determine your eligibility for accommodations. DSPS is located in the Student Services Building B, Room 107 (831) 755-6760. I encourage you to meet with a DSPS Counselor to discuss your specific accommodations and to have test proctoring forms 5 days in advance.

## Fall 2022 Chem 1A TENTATIVE SCHEDULE

Week	OLI Module	Course Objective	Tuesday Lab	Thursday Lab
Week 1 8/29 Quiz 1	1 and 3	1. Scientific measurement –uncertainty, sig figs, dimensional analysis.	Locker check-out and lab safety. Lab 1 Uncertain World	Continue Lab 1
Week 2 9/5 Quiz 2	2 and 5	2. Classify substances. Use properties to ID substances and separate mixtures. <b>9/5 Labor Day - no class.</b> <b>9/8 Last day to drop with No Grade</b> <b>9/10 Last day to add a course</b>	Finish Lab 1	Lab 2 Test, Not Taste. Using Properties to Identify and Separate Substances
Week 3 9/12 Quiz 3	4, 6, 11	3. Chemical formulas and naming, mole ratio of elements in compounds. 4. Mole-mass calculations with compounds and reactions, % composition.	Continue Lab 2	Finish Lab 2
Week 4 9/19 Quiz 4	18, 19, 20 (skip acid-base and oxidation-reduction)	5. Double replacement reactions 1: precipitation reactions, solubility table, net ionic equations, mole-mass calculations	Lab 3 Antacid Preparation	Finish Lab 3
Week 5 9/26 Quiz 5	12 and 13	6. Double replacement reactions 2: acid-base, gas forming reactions, net ionic equations, perform C-V-mole calculations	Lab 4 Give and Take: Acids and Bases, Parts 1 and 2	Finish Lab 4, Part 3
Week 6 10/3 <b>Exam 1</b>	19, 20 (skip precipitation and oxidation-reduction)	Continue Objective 6. <b>Exam 1 and Quizzes 1-5 retakes</b>	Lab 5 Acid-Base Magic	Finish Lab 5
Week 7 10/10 Quiz 6	19, 20, 21 (skip precipitation and acid-base)	7. Single replacement reactions: Activity Series, net ionic equations, mole-mass calculations	Lab 6 Give and Take: Rust and Bleach	Finish Lab 6
Week 8 10/17 Quiz 7	30, 31, 32	8. Energy and heat 1: heat in a physical heat transfer.	Lab 7 Give and Take: Heating and Cooling	Finish Lab 7
Week 9 10/24 Quiz 8	32, 33	9. Energy and heat 2: heat and work in chemical heat transfer. Hess' law	Lab 8 Give and Take: Heating and Cooling with Reactions	Finish Lab 8
Week 10 10/31 Quiz 9	38, 39	10. Light and color: EM radiation properties. Light and quantization.	Lab 9 Let There Be Light!, Pt. 1	Continue Lab 9, Pt. 2A
Week 11 11/7 Quiz 10	40, 41	11. Light and atomic structure: quantum numbers, electron configuration, Lewis dot symbols, Lewis structures, polar bonds, isomers, skeletal structures. <b>11/11 Veteran's Day - no class</b>	Continue Lab 9 Finish Lab 5 Rust	Finish Lab 9
Week 12 11/14 <b>Exam 2</b>	43, 44, 45	Finish Objective 11. Start Obj. 12. VSEPR theory, shape, polarity. IM forces. <b>Exam 2 and Quizzes 6-10 retakes</b> <b>11/18 Last day to drop with W</b>	Lab 10 A Stain in Time	Continue Lab 10
Week 13 11/21 Quiz 11	46	Continue Objective 12. <b>11/24-26 Thanksgiving - no class</b>	Finish Lab 10	No lab
Week 14 11/28 Quiz 12	25-28	13. States of matter – gases: kinetic theory, ideal gas law.	Lab 11 Gas Laws, Pts. 1 and 2	Continue Lab 11, Pts. 3 and 4
Week 15 12/5 Quiz 13	49-52	14. States of matter - liquids and solids: liquid and solid types and properties, phase diagrams. <b>Quizzes 11-12 retakes</b>	Finish Lab 11, Pt. 5	Lab 12 Gas, Liquid, Solid Applications
Week 16 12/12		Chemistry and us. Review for Final. 12/15 <b>FINAL EXAM and Quiz 13 retake</b> <b>12/17 Last Day of Class</b>	Finish Lab 12 Locker check-in	No lab

## Chemistry Study Strategies

"It is not how smart a person is but how efficiently does a person work?"

-- Dr. Lawrence Doyle, Executive Director, UCLA Medical School Prime Program and Expert on improving study skills, 3/11/11 presentation. Parts of these strategies are adapted from his talk.

You have other classes, a job, a family, and a life. You have academic and professional goals that you want to achieve. You want to learn what you need to learn from every class to prepare you for your next classes and to learn and develop a set of well rounded skills that employers value.

**Review, review, review:** You will forget 25-30% of what you learned within 1-2 hours (to 12 hours) if you don't review. You'll forget another 25-30% after 24-48 hours if no review.

"**Spacing Effect**" – *deliberate* practice, e.g., learning and reviewing, that is spread out over time enhances long term retention. Cramming does not help you remember.

"**Retrieval Effect**" – repeated practice of active retrieval of information, not studying, promotes and enhances long term retention. Repeated retrieval practice through testing was shown to enhance long term retention, whereas repeated studying produced essentially no benefit.

Practice retrieval by **Quizzing yourself** – self-testing is an extremely effective way to learn faster and retain more.

**Need to sleep** 6 to 8 hours per night. A rested brain and body learns, retains, recalls, and processes information better than a tired one. Put in the time so you don't feel compelled to pull an all-nighter. Cramming does not help you remember.

### Study Skills:

1. **Time management.** It does not matter how smart you are if you don't or can't put in the time to study.

Study two hours for every class hour.

It is better to take fewer units and get better grades than to take too many units and get poor grades. *Protect your GPA.*

2. **Memory.** See "Spacing Effect" and "Retrieval Effect".

**Chunking information.** Learn better in groups of 4 or less. E.g., phone number: xxx-xxx-xxxx

Use mnemonics, e.g., place mnemonics – relate what you are trying to remember to a place.

Lists – usually items at the beginning and end are learned first and remembered, middle not so well. If items on a list are on flash cards, need to shuffle the cards.

3. **Reading.** Relate what you already know to what you are reading.

Reading a science textbook is **NOT** the same as reading a newspaper or novel.

Scan a chapter before reading it helps you identify main ideas and main points and determine what you are reading.

For example, look over the headings first. Next, read the end of chapter summary. Then, read the chapter. You'll have an idea of what you are reading and know what to look for and focus on. **Quiz yourself when you are done.**

4. **Note taking.** Process information as you get it - class lecture and textbook reading.

**Predict** an answer or what the teacher is about to say improves learning. You'll get immediate feedback.

Write one idea per line in your notes. Is it a main idea, lesser point, or digression?

Write a summary of the lecture ASAP (ideally at end of lecture). Then, share it with or teach someone else. **(Those who TEACH learn faster and retain more.)**

Compare your notes with other students if you feel you have missed something in a lecture.

**Quiz yourself when you are done.**

5. **Test taking.** Improve your exam performance by taking a **PRETEST** or **PRACTICE TEST** (with immediate feedback) to prepare.

Common mistakes include: **not setting plans** for every test, **premature closure** (get an answer and move on to next question), **change answer** (most people should not change answer. Intuition is usually right. Test taker often tricks self into believing teacher is trying to trick them), and **not reviewing every test** to identify mistakes. **Have a Growth (not fixed) Mindset.** Use visualization to visualize self doing well on test or other goal like athletes do.

Several books have been written on how people get good at something (see "Talent Is Overrated: What Really Separates World-Class Performers from Everybody Else", Geoffrey Colvin and "The Talent Code: Greatness Isn't Born. It's Grown. Here's How.", Daniel Coyle). Here are three important factors:

1. **Deliberate practice** is deep, focused practice that makes you get better each time. More than just reading and reviewing, work on practice questions/problems that push you to a deeper learning and understanding. Try to teach someone what you are studying. This is a good reason to study with other students.

2. **Insightful coaching** for help, feedback, and guidance. See your instructor or SI Leader for help.

3. **Motivation** so you feel you are investing your time to accomplish something worthwhile. A positive attitude helps.

**BASIC SERVICES**

211 Monterey County (<https://www.unitedwaymcca.org/211>) “We're here for you 24 hours a day, 7 days a week, in 170 languages. You can count on 211 for fast, free, confidential help whether you're looking for: Food, Clothing, Health and Dental Care, Mental Health Services, Housing & Utilities, Job Training, Veteran's Assistance, Disaster Relief & Recovery”

**EMERGENCY NOTIFICATION**

In the event of a life-threatening emergency call 911.

To report a non-life threatening incident, safety hazard, or a suspicious activity please contact campus security at 831-755-6888. From a campus line, dial 6888.

To obtain campus status information, call the campus safety and facilities emergency status bulletin telephone number: 831-796-6222. From a campus line, simply dial 6222.

Please visit Hartnell's emergency reporting link here: <http://www.hartnell.edu/reporting-emergencies>

Non-emergency police business. . . . .831-758-7321	Non-life threatening incidents, injuries or illness during school hours call Campus Safety 831-755-6888 after school hours call 831-755-6888	Utility Failure during school hours call the Facilities Office at x6950 or 831-755-6950 after school hours call 831-755-6888	Any incident with potential for adverse publicity to the college call President's Office, x6900 or 831-755-6900 after school hours call 831-755-6888
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**Emergency Text Notifications**

In the event of an emergency, Hartnell College can contact you by email, text, and voice. [Hartnell College has partnered with the Everbridge Mass Notification](#) system to provide emergency notifications. The system is used to send emergency notifications to Hartnell faculty, staff, and students in the event of a campus emergency such as a campus closure or hazardous situation. The system will send notifications through email, voice calls, and text messaging.

Students: If you receive an emergency notification, please tell your instructor immediately.

Students: If you have knowledge of an emergency on campus, share it immediately. If you see something suspicious or potentially hazardous, let someone know.

If you have been notified that the campus has been closed because of an emergency, please do not proceed to campus until you have confirmed that it is clear to enter the campus.

**During A Campus Emergency**

During a campus emergency, you will generally be told to do one of two options, SHELTER IN PLACE or EVACUATE. When either of these are given, vehicle traffic coming onto campus will likely be turned away. Students are required to obey the directions of staff in a timely fashion.

**EVACUATION:**

Please note the exit(s) in the room. In the event of an alarm or safety threat, uniformed Hartnell personnel equipped with two-way radios—including security, and maintenance staff—have up-to-date information; they also have the authority to order either shelter-in-place or immediate building evacuation. For evacuation, immediately heed their directions by proceeding calmly and quickly to an exterior assembly area as indicated by trained staff. Please stay back at least 200 feet from any building until the “all clear” command is issued.

In the event of an alarm or safety threat, uniformed Hartnell personnel equipped with two-way radios—including security, and maintenance staff—have up-to-date information; they also have the authority to order either shelter-in-place or immediate building evacuation.

**SHELTER IN PLACE:**

A shelter in place order is when personnel are told not to leave their immediate area. Shelter in place means that personnel should stay where they are. This could be for safety from an environmental threat, like a chemical leak off campus, to a threat of violence on campus. A LOCKDOWN is a shelter in place.

In the event of an alarm or safety threat, uniformed Hartnell personnel equipped with two-way radios—including security, and maintenance staff—have up-to-date information; they also have the authority to order either shelter-in-place or immediate building evacuation.

**Lockdown**

A lockdown is a Shelter in Place. In the event of a safety threat, instructors and staff will lock classroom doors and direct occupants to stay clear of windows. Occupants are requested to remain quiet. During this time, DO NOT access any exits unless directed by first responders or staff.

In the event of an alarm or safety threat, uniformed Hartnell personnel equipped with two-way radios—including security, and maintenance staff—have up-to-date information; they also have the authority to order either shelter-in-place or immediate building evacuation.

**Run, Hide, Fight:**

In the event of an Active Shooter Event, there are three things you need to know in order to survive: [Run, Hide, Fight Ready.gov Active Shooter Website](#)

<p><b>RUN</b> Have an escape route and plan in mind Leave your belongings behind Keep your hands visible</p>	<p><b>HIDE</b> Hide in an area out of the shooter's view Block entry to your hiding place and lock the doors Silence your cell phone and/or pager</p>	<p><b>FIGHT</b> As a last resort and only when your life is in imminent danger Attempt to incapacitate the shooter Act with physical aggression and throw items at the active shooter</p>
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**AFTER**

- Keep hands visible and empty
- Know that law enforcement's first task is to end the incident, and they may have to pass injured along the way.
- Follow law enforcement instructions and evacuate in the direction they come from.
- Officers may be armed with rifles, shotguns, and/or handguns and may use pepper spray or tear gas to control the situation.
- Officers will shout commands and may push individuals to the ground for their safety.
- Consider seeking professional help for you and your family to cope with the long-term effects of the trauma.
- Helping the Wounded
  - Take care of yourself first, and then you may be able to help the wounded before first responders arrive:
  - If the injured are in immediate danger, help get them to safety.
  - While you wait for first responder to arrive, provide first aid- apply direct pressure to wounded and use tourniquets if you have been trained to do so;
  - Turn wounded people onto their sides if they are unconscious and keep them warm.

**EMERGENCY PREPAREDNESS:** The first 72 hours of a disaster are often the most difficult, but this period can be less stressful if everyone has extra supplies on hand. The college has a limited amount of emergency supplies, so students and staff should have on campus their own portable emergency kit including snacks, water, and prescription medication; this is especially important for those who may need to shelter on campus. For more information go to [Ready.gov lists essential 72 Hour Kit Components here](#)

**Reporting suspicious Behavior**

If you see suspicious behavior on campus, please contact [Campus Safety](#)

**Anonymous reporting of incidents or concerns**

Hartnell's Behavioral Intervention Team (BIT) accepts and processes anonymous reports from anyone about incidents or concerns on our campus. Please visit the [Behavioral Intervention Team website](#) for more information.

**Reporting Forms**

Public Incident Report Form Use the <a href="#">Public Incident Report form</a> for: Student Conduct Violations Academic Integrity Issues Student Complaints or Grievances	CARE Form Use the <a href="#">CARE form</a> for: Concerns about Well-being Mental Health Concerns Unusual or Disruptive Behavior	Useful Links <a href="#">Campus Maps and directions</a> <a href="#">Emergency online resources</a> <a href="#">Campus Safety Policies</a> <a href="#">Hartnell's Emergency Alert System</a> <a href="#">Hartnell Emergency Action Plan 2017 - 2018</a>
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