|  |  |
| --- | --- |
| CHEMISTRY | CODES: SCS21 |
| 2014-2015 SCHOOL YEAR | INSTRUCTOR: Ms. Bui |
| CLASSROOM: 510 | LAB ROOM: 506 |

**COURSE SYLLABUS**

*“Tell me and I forget,*

*Teach me and I may remember,*

*Involve me and I learn.”*

*By: Benjamin Franklin*

**Course Description:**

* Chemistry is the exploration of matter and its interactions.
* We will explore this branch of science through inquiry-based demonstrations and experiments, research, knowledge gathering, and practices.

**Topic Overview (**may be subject to change**)**

|  |  |
| --- | --- |
| **Unit** | **Approximate Duration** |
| Unit 1: Introduction to Chemistry | 1 week |
| Unit 2: The Physical Nature of Matter | 2 week |
| Unit 3: Atomic Concepts | 4 weeks |
| Unit 4: Periodicity | 1 week |
| Unit 5: Chemical Bonding | 5 weeks |
| Unit 6: Chemical Reactions | 6 week |
| Unit 7: Solution Chemistry | 6 weeks |
| Unit 8: Acids and Bases | 3 weeks |
| Unit 9: Redox Chemistry | 3 weeks |
| Unit 10: Nuclear Chemistry | 1 weeks |
| Unit 11: Organic Chemistry | 2 weeks |
| Unit 12: Review | 2 weeks |

**Required Labs (**may be subject to change**)**

|  |  |
| --- | --- |
| **Lab Experiments** | **Approximate Time** |
| Safety | 50 minutes |
| Quantitative Observations | 50 minutes |
| Density | 100 minutes |
| Physical and Chemical Changes | 120 minutes |
| Calorimetry: Heat of Fusion of ice | 120 minutes |
| Calorimetry: Heat of Crystallization of Wax | 60 minutes |
| Composition of Hydrates | 100 minutes |
| Determining an Empirical Formula | 100 minutes |
| Conservation of matter | 100 minutes |
| Flame Tests | 100 minutes |
| Properties of Acids and Bases | 100 minutes |
| Conductivity, Ionization, and Dissociation | 100 minutes |
| Acid-Base Titration | 100 minutes |
| Electrochemical cells | 100 minutes |
| Modeling Molecular Shapes | 50 minutes |
| Spec | 50 minutes |

**Our Goals:**

1. Achieve academic success
2. Cultivate inquiry-based skills
3. Solidify ethical standards

**My Success Toolkit:**

* Be prepared
* Be prompt
* Follow instructions
* Be an active engaged participant
* Be willing to learn
* Be opened to new ideas
* Be non-judgmental
* Be respectful

**My Daily Gears:**

* 1-1.5 inches binder
* Tab dividers (5)
* 2 pencils
* 2 pens (1 black and 1 blue)
* 1 ruler (12 inches with inches and centimeters)
* 1 highlighter
* 1 folder with pocket on each side
* any additional materials will be mentioned as required

**Evaluation**

**Grading Policy**

* Assessments (Exams and Quizzes): 40%
* Laboratories: 20%
* Classwork/Participation: 20%
* Homework: 10%
* Writing: 10%
* Extra Credits: Randomly provided throughout the school year

**Quizzes**

* Given weekly
* Represent 40 percent of the Assessment grades
* Corrected quizzes may regain up to half the points missed (more instruction will be provided)

**Exams**

* Given every 2-3 weeks (will be announced). Exams will always be given on a Friday.
* One comprehensive midterm and one comprehensive final exam (all materials and concepts discussed in class, labs and given as assignments may be on the exams)
* More than one version of the exam.
* Represent 60 percent of the Assessment grades
* Reviews will be provided at least one day before the exam
* Retakes:
  + All students are allowed 1 retake per marking period.
  + Your grade will be the average of the two exams.
  + A date for the retake exam will be announced in class.
  + Retakes are given after school. More information will be provided.
  + Exam will be different from the original
* Makeup exam:
  + If you return to school before retake exam day: makeup exam will be the same day as the retake exam.
  + If you return to school after the retake exam day: makeup exam will be taken within 2 school days after you return to school.
  + Makeup exam will not be taken during normal class hour. Make arrangement with me.
  + Exam will be different from the original.
  + There is no retake allowed for makeup exam.

**Laboratories**

* Lab will usually occur at least once per week.
* Makeup labs will be announced.
* Laboratory Grading:
  + Participation (part of classroom/participation grading)
  + Informal lab reports: interactive handouts completion and correctness
    - Due at the end of class
  + Formal lab reports (more detail will be provided)
    - Due date will be given

**Classwork/Participation**

* Daily grade
* If absent, will automatically be given a zero for the day
* Lateness is not tolerated and will represent 20 percent of classroom/participation grade
* Science Starter
  + First 5 minutes of class
  + Silently and individually perform the Do Now
  + Participate in class discussion
  + Represent 10 percent
* Exit Ticket
  + Within the last 5 minutes of class
  + Silently and individually perform the Exit Ticket
  + Represent 10 percent
* Partner works
* Group works
* Classroom discussion
* Lowest classroom/participation grade will be dropped per marking period
* See the SUCCESS Packet for more details

**Homework**

* Given daily (unless otherwise noted)
* Graded on completion and/or correctness
* Homework is due at the beginning of the period
* Late homework:
  + homework is allowed to be late one day
  + maximum score will be 70 points
  + late beyond one day will earn a zero
  + homework late due to an excused absence will not be considered late.
* Lowest score will be thrown out (for each marking period)
* See the SUCCESS Packet for more details

**Writing Assignments:**

Writing is a required tool to be successful. All assignments submitted (classwork, quizzes, exams, homeworks, labs and other assignments) must be completed using complete sentences or paragraphs where possible. In addition, at least one writing assignment will be given for each unit covered.

**Assignment Basket**

Check the assignment basket for missed assignments on days you are out.

**Academic Honesty**

* Copying from other students is not allowed. Both students will lose credit.
* Students may work with one another but must submit all works in their own words.
* Lab data may be shared but the answers to questions and/or lab reports should be your own work.