Department: Science Course: Chemistry Teacher: Mr. Donnelly

Course Requirements

Regents Chemistry (1320/1321)

Teacher: Mr. Donnelly Email: pdonnelly@sfponline.org

Key Learning Intentions

- 1. To develop a high level of competence in the following areas
 - a. Chemistry knowledge
 - b. Application of mathematical skills and knowledge of Chemistry in problem solving
 - c. Develop knowledge and skills in the scientific method and laboratory procedures
- 2. To complete both the NYS Regents Chemistry Curriculum, and its Regents examination in June.
- 3. To complete approximately 20 hours of laboratory work with its associated laboratory reports. (Required for Regents)
- 4. Further explore possibilities in Science education and research.

Regents Chemistry Curriculum

Laboratory Requirements

1200 minutes (20 hours) of laboratory experience and satisfactory laboratory reports on file. This will entail a minimum of fifteen 80 minute periods of laboratory work. (Lab reports are required for Regents Chemistry examinations and MUST BE kept together in a folder as evidence of lab work done in lab.)

Course Content

- 1. Atomic Concepts
- 2. Periodic Table
- 3. Moles/Stoichiometry
- 4. Chemical Bonding
- 5. Physical Behavior of Matter
- 6. Kinetics/Equilibrium
- 7. Organic Chemistry
- 8. Oxidation-Reduction
- 9. Acids, Bases, and Salts
- 10. Nuclear Chemistry

Required Materials

Text book: *Chemistry* by A.C. Wilbraham, D.D. Staley, M.S. Matta and E.L. Waterman (Prentice-Hall Publishers, 2008). Textbooks will be distributed during the first week of classes (supplied by the Chemistry Division).

Review book: *Brief Review for New York Chemistry the Physical Setting* (Prentice Hall publication, 2016 edition). Homework may sometimes be assigned from this book, and it will be used for reviewing covered content. This is available in the SFP bookstore for approximately \$18.

Also required: 1 notebook to be used <u>only</u> for Chemistry notes, 1 hard cover notebook to record data in laboratory work, 1 large ring binder or folder with filler paper used for keeping homework, tests, quizzes, 1 folder for keeping lab reports (keep this folder in your locker. It will be collected for Regents Chemistry towards the end of the year), pens, HB pencil, pencil eraser, sharpener, ruler (metric units of measurement), hole punch and a scientific calculator.

N.B. Graphing or programmable calculators are not permitted in New York State Regents examinations. A simple cheap 4 function scientific calculator should be used in class.

Grading Policy

All grades are given as a percent value. Because a test is more important than a homework, quarter grades and final grades are calculated by using a weighted average from each of the four areas below. A Midterm Exam will usually make up 10% of end of semester 1 grade. The New York State Regents examination will make up 20% of the Final Grade.



<u>Tests</u>: These will be given at the end of each major unit. Students usually have 3 or 4 tests per quarter. Students will be given sufficient notice of each test for independent review.

Quizzes: Quizzes will be announced 1 or 2 days before, and will cover smaller sections of each unit covered.

<u>Labs</u>: Students will complete on average 2 full length lab reports per quarter as well as numerous abbreviated reports. Digital copies of most lab reports need to be uploaded to http://www.turnitin.com. Uploaded labs must be in either PDF of Word file types. Plagiarism and copying is forbidden and will be dealt with under the school policy.

<u>Homework</u>: It is expected that a student's homework is completed with care and diligence. Regular homework assignments are an important part of the learning process. It is used for review purposes, for continuation of work that is not able to be completed in class because of time constraints and for reinforcing concepts learnt.

Be fully prepared for class, on time, assignments handed in on the date due, ask questions when unsure of something, remain focused on your learning intentions for the day, respect yourself and those around you and follow the SFP honor code.