

Advanced Physical Science Course Syllabus
John Carroll Catholic High School – 2011-2012
Ms. Casey Thomas: Room 227
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Course Title: Adv Physical Science 413

Text: Holt Science Spectrum Physical Science, 2004

Credit: 1 Core Science Credit

Content: Advanced physical science is a preparatory course for biology, chemistry and physics with extensive development in the skill of sciencing. The first semester covers the physics topics of motion and forces to emphasize the processing skills of science. The second semester, which covers topics integral to chemistry, concludes with optics and a study of the microscope. The processing skills of thinking within the context of conceptual physics are emphasized during the first semester. Students practice implementing these skills the second semester as they are introduced to the topics of matter, energy, chemical bonding, equations and reactions.

Grading: Nine-week grading will be graded using a point system based on the scale below. To determine the percentage grade, divide points earned by the total possible points.

- a) Lecture Notebook – varies between 30 to 75 points
 - b) Homework – 5 to 10 points
 - c) Quizzes – 10 to 25 points
 - d) Tests – 100 points
 - e) Labs (including pre-lab assignments, formal lab reports, lab write-ups and lab performance) – 15 to 50 points
 - f) Group assignments – varies
 - g) Major Projects – 100 points or more
 - h) Student Participation – 10% of final score
- The semester exams will be computed as part of the final average. Each of these exams will account for 20% of that semester's final grade.
 - Official grade reports will be home at the interim, 4.5 weeks into the quarter and quarter reports at the end of each quarter.
 - Bonus points can be earned on some tests, projects, quizzes, projects, and daily grades.
 - There will be NO extra credit assignments given to individual students.
 - Late work can be turned in one day late with a 20% reduction of the earned grade.

Heading of Assignments: All assignments must be headed in the top left corner using MLA formatting:

Name
Teacher/Period
Course
Date

Daily Work: All homework and in class assignments will be graded. This work will be graded or checked for completeness and/or correctness when due. Students may keep their graded assignments in their assigned folder in the classroom. Students will have full access to their work at all times. Daily warm-ups and notebooks will be

checked periodically and graded for completeness and/or correctness.

Homework: In addition to any assigned homework assignments, it is your daily homework to REVIEW the material that was covered during class. All assignments should be written in your agenda daily. All homework assignments must be turned in upon entering the classroom unless otherwise told.

Absences: Please see the student handbook for information concerning the attendance and make-up work policies. It is your responsibility to copy any notes that were missed and check the appropriate make-up work location for any missed assignments. I will not chase you down to complete make-up work. If a test or quiz was missed, please see me before or after class to schedule a make-up date and time. Any work assigned before your absence is due on the day you return to class. If an absence is unexcused work cannot be made up.

Projects: Several projects will be assigned through the year. These will include written reports, oral presentation and models along with other activities. You may be given time to work on these during school; however, they will require you to work on them outside of the scheduled class time.

Major Tests: Major tests will occur at regular intervals, usually after each chapter or unit when a major concept is completed. Each test will cover all material previously taught as a comprehensive exam but will focus on the current concept. Testing at John Carroll Catholic High School is conducted on a rotating test day calendar as noted on the school calendar. The sciences will test on "B" days.

Laboratory Requirements: We will be completing numerous laboratory exercises during this course. The very nature of laboratory exercises can lend itself to danger so safety is our number one concern. Because of this all students must pass a laboratory safety test with a score of 80% or above in order to participate in the lab. Laboratory participation is necessary in order to fully understand the concepts of the course.

Most labs will begin with a pre-lab assignment that must be completed and reviewed before participation. If labs are to be completed in groups, all work must be equally divided and accurate. Each group member will score the other members on participation. At the completion of the lab or class, the lab must be cleaned and returned to its original condition and this will be counted towards the final lab grade. All labs will be followed with a formal lab report or a lab write-up to determine comprehension. The formal lab report must be completed in the correct format (this format is consistent throughout the science department).

Daily Supplies: The following supplies need to be brought to class on a daily basis unless otherwise told.

- Assigned Textbook
- Pen in classic black or blue (No other ink colors will be accepted)
- Pencil (Mechanical Preferred)
- Paper (Must have clean edges)
- Red Binder (must be at least 1 inch)
- Daily Planner
- Composition Style Notebook (it would be great if you could find the correct color in this also)
- Simple Scientific Calculator (or graphing calculator)
- Box of Tissues (Optional – for classroom use)

Conduct: The school's student handbook will govern this classroom. Furthermore, the rules of the classroom are

- 1) *Be Prepared*
 - a) Have all necessary supplies
 - b) Have homework completed and ready to turn in
 - c) Already have pencils sharpened
 - d) Use the restroom and water fountain before class begins

- 2) *Be on Time*
 - a) Be in your seat and ready to begin when the tardy bell rings

- 3) *Be Respectful*
 - a) Of the teacher and her supplies
 - b) One another and others' materials
 - c) The school building and equipment

- 4) *Follow Directions*
 - a) In the handbook
 - b) Of the classroom and given by the teacher
 - c) Written on assignments

- 5) *Follow all Laboratory Safety Rules at all times*
 - a) Failure to follow the safety rules will result in the removal from the lab which will adversely affect the lab grade.

Any minor violation of the rules could negatively affect a student's participation grade and a percentage of the quarter grades. It can also result in detention or the assigning of a petty misconduct as well as a parent contact.

Any major violations will result in notification of the Dean's office.

Please refer to the handbook for further information on the discipline system. The policy found within the handbook will be followed at all times within my classroom and will govern the consequences that result from student misconduct.

Additional Information: I have a website that will contain project guidelines, notes, classroom policies and procedures, etc. that will be beneficial to you, especially if you are absent. Please check this regularly at <http://cthomas07.wikispaces.com/>

STI Home is a great resource for you and your parent to use to check your grades, attendance, and daily homework. Please check this daily.

For those parents who submit their email address, I will be sending home e-newsletters informing you of important information regarding our class. These alerts include homework, tests, project due dates, etc. Please check your email for this newsletter.

I will provide tutoring each morning from 7:15-7:45 in my classroom and after school by appointment.

Topics: Tentatively the following main topics will be covered in this order:

Unit of Study	
1. Introduction to High School Science	5. Structure and Properties of Atoms
2. Measurement and Metrics	6. Investigating Chemical Reactions
3. The Scientific Method	7. Analyzing the Effects of Forces and Motion
4. The Study of Matter	8. Identifying the Types of Properties of Waves