SAINT JOSEPH'S PREPARATORY SCHOOL
PHYSICS -- COURSE EXPECTATIONS

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Remind 101 signup:

For Text Messages text the class code to 81010

For email alerts send an email to [the class code]@mail.remind.com

1 September 2015

Course Description:

This is a college preparatory course intended to prepare students to study physics in a curriculum such as engineering or physics. The course is algebra based with some mention of calculus. Students are expected to develop the ability to apply imagination and ingenuity to the solution of problems. The major intent of this course is to help the students to gain the ability to succeed in more advanced courses in college. At the same time, the major areas of physics will be covered in an effort to develop an understanding of and an appreciation for the principles of physics.

The topics covered will include:

a. problem solving
b. vector algebra
c. mechanics
d. mechanical waves and sound
e. geometric optics
f. basic electricity and magnetism
g. electromagnetic waves
h. thermodynamics

If time permits, the following topic will be introduced:
modern physics including relativity and quantum physics.

Format:

Five class periods per cycle.
One double period lab per cycle.
One two-part test every other cycle.

Grading:

Quarter grades:

30%	Test Problems..
30%	Test Objective Questions.
16%	Homework, Other Assignments both individual and group.
8%	Classroom Work.
8%	Lab Work.
8%	Lab Reports.

Semester grade: Each quarter 40.0%, Exam 20.0%
Final grade: simple average of both semester grades.

Tests: Three two-part tests per quarter. Usually, tests will be given every other cycle. This pattern will be adjusted to accommodate Kairos retreats and other important events.

Homework:
- ✧ Before each class, students should read ahead the text book sections and on line resources that are expected to be covered during the next class. After each class, students should review class notes, compare the class lesson with the text and other resources paying particular attention to summaries, sample problems and review sections
- ✧ In addition to the daily, routine homework, problem sets will be assigned and graded. Homework will be assigned through "WebAssign.net". Students will be given specific instructions about WebAssign sign up and use in class. Students are responsible for the WebAssign fee. The assignments with their due dates and times will be accessible via WebAssign and assignment numbers will be listed on the class calendar as well. ***Answers to odd numbered text book problems*** are in the back of the book beginning on page A-27.

Lab Reports: Each student will be required to submit several lab reports each quarter. The format for lab reports is posted on line. Reports must be turned in on the date posted on the class calendar. Because of the importance of useful lab reports, significant class time will be spent addressing the several parts of a good lab report.

Class Work: Active involvement in the learning process is required. Students will be required to explain concepts and homework problems. They will be graded on this work.

Materials required in class each day:

1. **Scientific calculator.** (This should be the student's own calculator.)
2. **Notebook.**
3. **Pencil or other writing instrument.**
4. **A few colored pencils might be helpful.**

Materials required to be available:

1. **Graphing software. (Most spread sheets do adequate graphing.)**
2. **Word processor.**
3. **Chromebook. This will be used often but not continuously.**

Test taking:

1. Tests will be given in two parts. The first part will consist of short answers and essays and multiple choice questions. Calculators are not permitted during the first part. The second part will consist of problems for which calculators may be used.
2. All work must be shown in the space provided in order to receive credit. Basic arithmetic should be done with a calculator and not shown on the test paper.
3. Each student must bring **his own** calculator for tests. A wise student will use the same calculator in class as he intends to use for tests. Learning to use the calculator is important preparation for tests. Cell phones, Chromebooks and other devices that connect wirelessly with other devices may not be used during a test.
4. **No printed or handwritten material** other than that provided by the teacher may be used during a test. This includes calculator manuals, directions and reference cards.

Final Examination Exemptions:

According to Science Department policy, any student who completes the course with an A average in each of the four quarters and the first semester examination may be exempted from taking the final examination and will be considered to have earned an A for the course. This exemption policy is not subject to revision or alteration and **IS NOT AUTOMATIC**. Note: the student must earn an A for the fourth quarter.

Absence or canceled school:

1. If school is canceled on a day that a test is scheduled, the test will be given on the next class day.
2. If a student is absent **for any reason**, he must **see the teacher on the day that he returns to school** in order to make arrangements to make up the work that was missed. This also applies to missed tests and quizzes. Missed work, including tests and quizzes will be counted as zero if the student fails to meet these requirements.
3. Assignments that were due during a student's absence or on the day of his return **are due** on the day of his return. The student may ask for an extension but the teacher's decision is final. **It is the student's responsibility** to obtain assignments and complete them even if they are given during his absence. It is doubly bad for a student to miss school and to skip homework.

Academic Honesty - Cheating is wrong for several reasons. Among them are:

- **Cheating is a lie. It attempts to give the impression that the student's skills, effort and/or knowledge of the subject are greater than they are.**
- **Cheating is stealing. It falsely gives a better grade to a student than that student deserves and leaves an honest student with a lower grade. This can ultimately result in a college admission or a job being given to a less qualified cheater and not to an honest, deserving student.**

1. Any student who copies another's work or allows another to copy his work, is guilty of cheating and will be given a zero for the assignment.
2. In tests and examinations: Any student found to have cheated, attempted to cheat or made preparations to cheat will be given a zero for the entire test or examination.
3. Lab Reports are to be the student's own work. Only the data may be shared among the members of a lab group. Copying another student's purpose, procedure, graphs and/or analysis constitutes cheating and both students will receive a zero for the report. In addition, using data obtained by others without one's own participation is also cheating as is the fabrication of data.
4. Students are not permitted to store any formulas or data in a calculator's memory except those explicitly mentioned by the teacher.
5.. School policy requires that all incidents be reported to the Assistant Principal for further action. Refer to the student directives for details.

Extra Help:

Extra help is available after school each day in the Physics Prep room until at least 3:15 PM except when meetings intervene. Before school, extra help is usually available in the Physics Prep room from approximately 7:15 AM. Extra help is not available before school on test days. Help during the school day is available whenever a mutually acceptable time can be found. Students are encouraged to come for extra help in groups of two or three.

Text Books: These books are the property of the state of Pennsylvania or St Joe's Prep and must be returned in good condition. Any student who has not returned the text book by the date of the final examination will be given and 'INCOMPLETE' for the course until the book is returned or the school is reimbursed.

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