

## Scholars Physics Syllabus

Mr. Stedronsky

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Teacher Website: Google Classroom - Students will be provided with more information.

Scholars Physics is an advanced science course designed to provide students with an in depth introduction to physics concepts spanning Kinematics and Newton's Laws, to Energy and Waves, to Electricity and Magnetism. This course is designed to provide students with a conceptual and mathematical look at how the physical world works. Students will likely encounter counter-intuitive concepts, challenging mathematics, and be expected to spend significant time studying to perform well in this course. Students should be prepared to complete a wide variety of homework, labs, projects, and exams throughout the year.

Units I plan to cover in this class (subject to change) are as follows:

- Measurements, Math Skills, and One-Dimensional Motion
- Vectors & Projectile Motion
- Newton's Laws
- Circular Motion & Gravity
- Energy & Momentum
- Harmonic Motion, Waves, & Sound
- Light and Optics
- Electricity & Circuits
- Magnetism
- Internal Energy, Temperature, & Thermodynamics

### Contact and Office Hours

My school email is [cstedronsky@natomasunified.org](mailto:cstedronsky@natomasunified.org) and when emailed I will attempt to respond as quickly as possible.

Due to after school obligations with varying hours, my office hours are not guaranteed to be consistent. However, I will attempt to be available after school from **3:00pm to 3:30pm on Tuesday, Wednesday, and Thursday**. I will also always attempt to be flexible if needed and will likely be able to meet outside of these time windows as long as I am informed ahead of time. In general, students should simply check in with me anytime they would like to meet with me out of class so I can check my availability and provide a campus re-entry pass.

### Textbook - Conceptual Physics by Paul G. Hewitt

Students should have already checked out their Conceptual Physics textbook from the school's textbook room. **Students may leave this book at home.** Students are required to carry too much as it is, and students will mostly be using this textbook for homework and studying. If textbooks are needed in class I will specifically request that they are brought in.

### Recommended Materials

- **3-Ring Binder** - Used to contain the wide variety of worksheets and resources that will be provided in this class as well as weekly warm-up sheets.
- **Notebook** - Used to contain the many notes and writing assignments that will be completed in this course.
- **Pencil (with eraser) and Pen** - I will keep a box of golf pencils (without erasers) handy for students that lose their writing utensils, but it is expected that students come prepared to write and erase.
- **Scientific Calculator** - In some instances I will allow students to use their cell-phones for calculations, but during tests and quizzes a stand-alone calculator will be required for each student. Again, I can provide some simple calculators but it is better for students to become familiar with a calculator of their own so they can be accurate.
- **Ruler** - Used often in labs and sometimes in other activities, I can provide some but it is beneficial for students to have their own rulers.
- **Highlighters (optional)** - May be beneficial during reading activities, studying, and worksheets.

Other materials may be requested as the year progresses.

## Class requirements and expectations

- Students should read and study each relevant chapter of the textbook as the class progresses through the subject and units within this physics course. Not all beneficial text will be explicitly assigned.
- Students will be expected to keep a binder and/or a notebook for this course.
  - At the end of each unit students will be required to submit a notebook (recommended) or a binder containing the relevant notes and writing assignments. These “Notebook Checks” will be graded based on completion, but require a reasonable amount of neatness and organization to be scored.
- Students are expected to be on time to class every day.
- Students will be required to sit at assigned seats as designated by the current seating chart, which will likely change a few times throughout the year.
- Lab groups will be assigned as well.
  - Students will be required to submit individual lab reports even when working as a group on a lab.
  - Lab reports must follow the format provided in class. They must be legibly written, and some may be required to be typed. **Lab reports that I find notably messy or difficult to read may be returned to the student for rewriting and will be subject to any applicable late penalties.**
- If two (or more) identical assignments, projects, or lab reports are handed in, all assignments involved will be penalized as I deem appropriate.
- Students should expect a warm-up activity on a daily basis. They will be expected to **quietly** begin work on the warm-up activity for each day immediately at the start of class. This allows me to take roll quickly and efficiently.
  - Warm-ups will be graded based on on-task attempts. Points will be lost for wasting warm-up time.
- Quizzes will be given sporadically throughout the class, sometimes without notice.
  - Some Quizzes will be open-notes, others may not be.
- Tests will be announced and scheduled in advance and will usually be preceded by a review activity and/or a practice test. During tests notes and other resources are not allowed unless directly specified.
- It is each student’s responsibility to communicate with me about any work missed for any reason so that make-up or late work can be provided.

**Late and Make-up Work** - Late work will be accepted for each unit up to one-week after the units end. For example, if a the unit exam on Electricity is on a Friday, the following Friday will be the last day to turn in late Electricity assignments. Late assignments without an officially excused absence will receive a penalty. For most assignments this penalty will be 50%, though some larger projects may be given different late policies.

**Grading Policy** - The following is an estimation of how I will balance grades in this course. This balance is subject to change, but if changed I will notify each of my classes.

**20% Assignments/Notebook** - All work completed in the notebook and other worksheets and stand-alone assignments will fall into this category. Notebooks will be collected and graded at specific times throughout the year. Other assignments will have specific due dates.

**10% Warm-ups & Participation** - Warm-up points and some other activities graded based on participation will fall into this category. Generally, these points will be given in full to all on-task students.

**20% Labs and Projects** - Some activities may require internet research at home or the library. Lab groups are assigned and rotated. The format of all labs must be followed in order to receive full credit. Every student is responsible for their own lab report. Projects may vary from written reports to physical constructions. Rubrics describing expectations will be provided to students with the project instructions.

**10% Quizzes** - May or may not be announced. If absent, any missed quizzes will count as a 0 unless made up before or after school in 3 days. At my discretion some quizzes may be corrected to recover some missed points after grading.

**25% Tests** - Students are given advanced notice of all tests and a chance to review test topics. Any missed tests due to excused absences are made up by arrangement with teacher and must be finished within three days of the return to school. After that, it is scored as a zero. Test retakes may be made available for low scorers at my discretion.

**15% Final Exam** - One final exam per semester will cover the entire curriculum of each semester.

**The following percentages are needed to achieve the specified grade:**

**A = 90-100%   B = 80-90%   C = 70-80%   D = 60-70%   F <60%**

**Middle Years Program (MYP)** - Students will also receive a “MYP score.” The Middle Years Program has four criteria for science. All four criteria will be assessed in a variety of different methods at least once per semester. The MYP score will be based off of a rubric score of 0-8 and will be reported on Infinite Campus including a final MYP score of 0-8 that has been converted from their grade percentage.

Criterion A: Knowing & Understanding  
Criterion B: Inquiring & Designing

Criterion C: Processing & Evaluating  
Criterion D: Reflecting on the Impacts of Science

**Class Rules and Consequences**

**Rules**

1. Be in your seat ready to begin working when the bell rings. Being off task after the bell will affect the Warm-up & Participation score.
2. Participate in class and do not disrupt others from learning. Disruptions will lead to me contacting parents, and/or office referrals.
3. Food and drink other than water is not allowed around the classroom. If food is seen out, I will ask that the food is either put away in a backpack, or thrown away. Water bottles are allowed, but if students are seen “bottle flipping” the bottle will be confiscated until the end of class.
4. Cell phone use is not allowed outside of specific academic uses cleared by me.
5. Follow all procedures/directions when given.

**Consequences**

My approach to consequences is based around flexibility and communication with my students. If students respond well to my requests, further consequences may not be required. Repeated offenses may lead to detention or an office referral. Please note: certain extreme or inappropriate behaviors may result in an immediate office referral.

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**Parent/guardian: Please sign acknowledgement and provide a phone number or E-mail address where I can reach you. Return this page to the class so I can keep it in my records.**

**I have read and acknowledge receipt of Mr. Stedronsky’s Scholars Physics class syllabus.**

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**Student Name Printed**

\_\_\_\_\_  
**Student Signature**

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**Parent/Guardian Name Printed**

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**Parent/Guardian Signature**

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**Parent/Guardian Email Address**

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**Parent/Guardian Phone Number**