



The wise man doesn't give the right answers, he poses the right

--Claude Levi-Strauss, Belgian anthropologist

## PHYSICS 139

### Instructor Igor Glozman

Office: 29-332

email: [iglozman@highline.edu](mailto:iglozman@highline.edu)

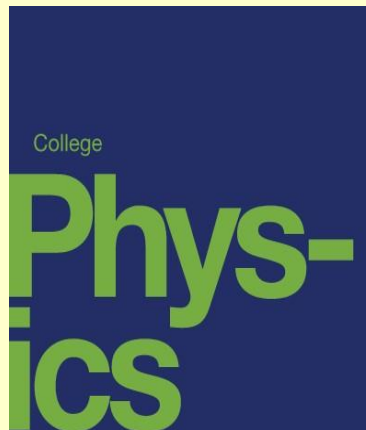
web: <http://people.highline.edu/iglozman/>

**Lecture** check [here](#) for up-to-date room schedule

**Office Hours** Please visit the link on the left (or on the homepage) for the latest office hours.

*\*also by appointment and via email*

### Textbook



Any algebra-based physics textbook (published within the last 10 years) is acceptable. Here's a free version from OpenStax, although several others are probably just as good:

[OpenStax Physics](#)



### Course description

Intended to prepare students for success in the calculus-based physics series. Major [topics](#) include Newton's laws of motion, conservation of energy, collision and momentum. Students are presumed to have had some exposure to calculus.

### Why Physics?

Whether you are a participant or a spectator, you need to know the rules of a game before you can fully enjoy it. To fully appreciate Mother Nature, in all her glory, you need to know the rules she plays by. And that's what physics is all about.

### Learning



### outcomes

- Apply the fundamentals of physics to quantitatively and qualitatively solve problems in kinematics, dynamics, and energy.
- Apply a structured approach, including dimensional analysis, to problem solving.
- Collaborate effectively in applying course specific content to problem-solving, data collection and data analysis.
- Effectively communicate, orally and/or in writing, problem solving methods, results, and implications related to the fundamentals of physics.
- Accurately implement arithmetic operations, programming, and graphical methods using a graphing calculator.

## Grading

Grading components	weight
homework	10%
participation/forum	5%
journals	10%
presentation/science articles	20%
data analysis	10%
midterm	20%
final	25%

\*The midterm occurs roughly 5 weeks into the quarter and the final occurs during [finals week](#). All due dates will be announced in class.

## Grading scale

Grades will be assigned according to the following scale (1% = 0.1):

%	Grade
95 or higher	4.0
90	3.5
85	3.0
80	2.5
75	2.0
70	1.5
65	1.0



Only grades of a 0.7 or above will earn credit. Below 0.7, the assigned grade is a 0.0.

Students are guaranteed a grade no worse than one based on the scale above, but they may also benefit from bonuses acquired in exceptional participation.

## Course content

- 1-D Kinematics (ch.2)
- Vectors and Projectile Motion (ch.3)
- Newton's laws (ch.4-5)
- Uniform Circular Motion (ch.6)



- Work and energy (ch.7)

Chapters numbers are based on [OpenStax Physics](#), although any algebra-based physics book should have similar content.

**Special Accommodations:** If you need course adaptations or accommodations because of a disability, please provide the instructor with the Letter of Accommodation you have received from the Office of Access Services. Contact info for Access Services is: building 99, suite 180, phone: 206-592-3857, email: [access@highline.edu](mailto:access@highline.edu), or web site: [www.access.highline.edu](http://www.access.highline.edu).

**Student rights and responsibilities:** One of the fundamental objectives of this institution is to provide the students with a high-quality education while developing in them a sense of ethics and social responsibility. Students are therefore always expected to abide by the highest ethical standards. Unethical conduct, most notably discrimination and various forms of academic dishonesty (cheating, plagiarism, *etc.*), hurts the entire community and is subject to disciplinary action, as laid out in the [Student Rights and Responsibilities](#) document available at the Office of the Dean of Students. Anyone aware of such unethical activities should report to the instructor.

"Living up to basic ethical standards in the classroom—discipline, tolerance, honesty—is one of the most important ways children learn how to function in society at large." -- Eloise Salholz

**Tutoring:** If you need extra help with this or any other class, you may find the [tutoring center](#) (26-319, x3444) useful. The people are friendly and the services are free. Many other student resources can be found here: <https://www.highline.edu/current-students/>

**Cultural Diversity Policy:** Highline College actively promotes and supports a learning and work environment which ensures social justice, mutual respect, understanding, civility, and non-violence. Highline College is committed to the elimination of discrimination based on biological sex, gender identity and expression, sexual orientation, race, ethnic background, national origin, class, economic status, age, military and veteran status, disability, language, culture, and religious beliefs.

**Inclusivity Statement:** Highline actively promotes and supports a learning environment which ensures social justice, mutual respect, understanding, civility, and nonviolence. We will all treat each other respectfully.

**Grievance Procedure:** In the case of a complaint about a course, students are encouraged to speak with their instructor first, and if the matter is not resolved, students should then contact the division chair if the complaint is against a full-time faculty member, or with the department coordinator if the complaint is against a part-time faculty member. For more detail, please visit: <http://www.highline.edu/policies/>