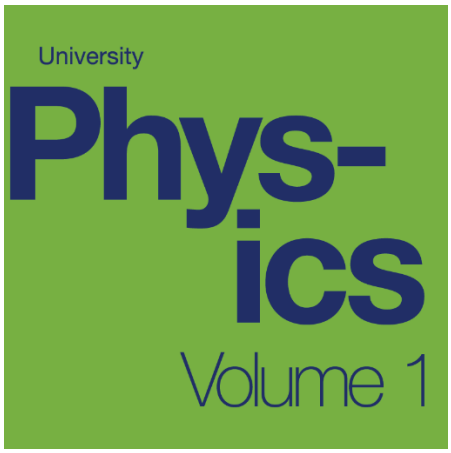
Course	**Physics 201**
Instructor	Igor Glozman Office: 29-332 email: iglozman@highline.edu
Office Hours	Please visit the link on the left (or on Canvas) for the latest office hours. For alternate times, please email.
Course description	The study of motion, force, energy, momentum, and rotational motion. A calculus-based approach to physics especially for students of science and engineering. Includes one credit of laboratory.
Textbook	 Any calculus-based physics textbook published within the last 10 years is acceptable. The one referenced in this class is online and free: **University Physics, by OpenStax**
Learning outcomes	• Apply the fundamentals of physics to quantitatively and qualitatively solve problems in kinematics, dynamics, energy and momentum with regards to both translational motion (linear and circular) and rotational motion. • Interpret and translate a conceptual description of a physical context (with or without a visual representation) into its mathematical expression. • Effectively communicate, both orally and in writing, problem solving methods and results, the reasoning and assumptions behind the choice of

method/model, and implications of the results in the specific physical context.
- Clearly and accurately communicate data collected using appropriate laboratory tools and apparatus in a graphical format.
- Accurately analyze and interpret data and measurements to draw valid conclusions.
- Collaborate effectively in applying course specific content to problem-solving, data collection and data analysis.
- Identify and explain how previously learned physics concepts apply to everyday life.

Course content

- 1-D Kinematics (Ch. 3)
- 2-D Kinematics (Ch. 4)
- Newton's laws (Ch. 5-6)
- Work and energy (Ch. 7-8)
- Gravity (Ch. 13)
- Momentum and collisions (Ch.9)
- Rotation (Ch. 10)
- Angular Momentum (Ch. 11)
- Introduction to Statics (Ch.12)

Chapter numbers are based on **University Physics, by OpenStax**.

Grading

Grading components	Weight
homework	10%
participation	15%
Journals	15%
presentation/Science articles	15%
stargazing	10%
Midterm	15%

Final	20%

*The midterm occurs roughly halfway into the quarter and the final occurs during finals week. All due dates can be found in Canvas's Calendar.

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	3.5
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 through exceptional participation.

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, or web site: 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 all discrimination, including that based on gender and gender identity, 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. Everyone is expected to contribute to an environment of mutual respect.

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://catalog.highline.edu/content.php?catoid=2&navoid=33#Instructional_grievance