



STARK STATE COLLEGE

GENERAL SYLLABUS

Course Information

Course Name: Principles of Physics
Course Number: PHY101

Required Materials

Textbook(s):

Instant Access (including CCP)

- The Physics of Everyday Phenomena; 10th edition; Griffith & Brossing; McGraw Hill 2022
- Connect – Online homework is also part of instant access

Required Readings: N/A

Additional Materials:

These are required for this course

- Lab Kit – For online only
- Lab manual – from bookstore.
- Brightspace – Learning Management System. (LMS)
- Calculator, but not programable. A Texas Instrument 30 (TI30) for \$10-\$20 is sufficient.
- Respondus Lockdown Browser

Course Outline/Calendar

The date of coverage and order of coverage may be modified based on the faculty member and events beyond the control of faculty members that interfere with class times and teaching.

16 Week Calendar: Online

Week	Chapters / Homework	Lab	Exams
1	Introduction to Connect Ch1 Physics, the Fundamental Science	Algebra Review - worksheet	Syllabus quiz Plagiarism quiz MS Office quiz
2	Ch2 Describing Motion	Techniques of Measurement – partial report	
3	Ch3 Falling Objects & Projectile Motion	Acceleration Due to Gravity – partial report	
4	Ch4 Newton’s Laws: Explaining Motion	Friction – partial report	Exam I (Ch 1-4)
5	Ch5 Circular Motion, the Planets, & Gravity	Centripetal Force – full report	
6	Ch6 Energy & Oscillations Ch7 Momentum	Pendulum – full report	

7	Ch8 Rotational Motion of Solid Objects	Torque – no report	Exam II (Ch 5-8)
8	Ch9 The Behavior of Fluids	Density & Buoyancy – full report	
9	Ch10 Temperature & Heat	Heat of Fusion – full report	
10	Ch11 Heat Engines & the Second Law of Thermodynamics Phenomena		Exam III (Ch 9-11)
11	Ch12 Electrostatic	Electrostatics – video submission	
12	Ch13 Electric Circuits	Ohm’s Law – full report	
13	Ch14 Magnets & Electromagnetism	Kirchhoff’s Laws – full report	Exam IV (Ch 12-14)
14	Ch15 Making Waves		
15	Ch16 Light Waves & Color Ch17 Light & Image Formation	Light and Spectra – no report	
16		Lab Practical – in LMS	Exam - Final cumulative

16 Week Calendar: In person

Week	Chapters / Homework	Lab	Exams
1	Introduction to Connect Ch1 Physics, the Fundamental Science	Algebra Review - worksheet	Syllabus quiz Plagiarism quiz MS Office quiz
2	Ch2 Describing Motion	Techniques of Measurement – partial report	
3	Ch3 Falling Objects & Projectile Motion	Acceleration Due to Gravity – partial report	
4	Ch4 Newton’s Laws: Explaining Motion	Friction – partial report	Exam I (Ch 1-4)
5	Ch5 Circular Motion, the Planets, & Gravity	Centripetal Force – full report	
6	Ch6 Energy & Oscillations Ch7 Momentum	Pendulum – full report	
7	Ch8 Rotational Motion of Solid Objects	Torque – no report	Exam II (Ch 5-8)
8	Ch9 The Behavior of Fluids	Density & Buoyancy – full report	
9	Ch10 Temperature & Heat	Heat of Fusion – full report	
10	Ch11 Heat Engines & the Second Law of Thermodynamics Phenomena		Exam III (Ch 9-11)
11	Ch12 Electrostatic	Electrostatics – worksheets only	
12	Ch13 Electric Circuits	Ohm’s Law – full report	
13	Ch14 Magnets & Electromagnetism	Kirchhoff’s Laws – full report	Exam IV (Ch 12-14)
14	Ch15 Making Waves	Waves in Strings – full report	
15	Ch16 Light Waves & Color Ch17 Light & Image Formation	Light and Spectra – no report	
16		Lab Practical – in LMS	Exam - Final cumulative

8 Week Calendar: Online

Week	Chapters / Homework	Lab	Exams
1	Introduction to Connect Ch1 Physics, the Fundamental Science Ch2 Describing Motion	Algebra Review - worksheet Techniques of Measurement – partial report	Syllabus quiz Plagiarism quiz Introductions
2	Ch3 Falling Objects & Projectile Motion Ch4 Newton's Laws: Explaining Motion	Acceleration Due to Gravity – partial report Friction – partial report	Exam I (Ch 1-4)
3	Ch5 Circular Motion, the Planets, & Gravity Ch6 Energy & Oscillations Ch7 Momentum	Centripetal Force – no report Pendulum – full report	
4	Ch8 Rotational Motion of Solid Objects Ch9 The Behavior of Fluids	Torque – no report Buoyancy – full report	Exam II (Ch 5-8)
5	Ch10 Temperature & Heat Ch11 Heat Engines & the Second Law of Thermodynamics Phenomena	Heat of Fusion – full report	Exam III (Ch 9-11)
6	Ch12 Electrostatic Ch13 Electric Circuits	Electrostatics – video submission Ohm's Law – full report	
7	Ch14 Magnets & Electromagnetism Ch15 Making Waves Ch16 Light Waves & Color	Kirchhoff's Laws – full report Light and Spectra – no report	
8	Ch17 Light & Image Formation	Lab Practical – in LMS	Exam - Final cumulative