

## General Syllabus for Applied Physics in Conneaut School District

### Text Book: Physics in Context

**Course Description:** Applied Physics is a hands on approach to Physics for student who are considering technological education

### Unit 1

Week	Topics Covered	PA anchors
1	Forces in Mechanical Systems	S11.A.1.1.1
2	Pressure in Fluid Systems	S11.A.1.1.2
3	Voltage in Electrical Systems	S11.A.1.1.3
4	Temperature in Thermal Systems	S11.A.1.1.4 S11.A.1.1.5 S11.A.2.1.1 S11.A.1.2.2 S11.A.2.1.3 S11.A.2.1.4 S11.A.2.1.5 S11.C.2.1.3 S11.C.2.1.4 S11.C.3.1.2

### Unit 2

Week	Topics Covered	PA anchors
7-8	Work in Mechanical Systems	S11.A.1.1.1
9	Work in Fluid Systems	S11.A.1.1.2
10	Work in Electrical Systems	S11.A.1.1.3
		S11.A.1.1.4 S11.A.1.1.5 S11.A.2.1.1 S11.A.1.2.2 S11.A.2.1.3 S11.A.2.1.4 S11.A.2.1.5 S11.C.2.1.3 S11.C.2.1.4 S11.C.3.1.2

**Unit 3**

<b>Week</b>	<b>Topics Covered</b>	<b>PA anchors</b>
11-12	Rate in Mechanical Systems	S11.A.1.1.1 S11.A.1.1.2 S11.A.1.1.3
13-14	Rate in Fluid Systems	S11.A.1.1.4 S11.A.1.1.5 S11.A.2.1.1 S11.A.1.2.2 S11.A.2.1.3 S11.A.2.1.4 S11.A.2.1.5 S11.C.2.1.3 S11.C.2.1.4 S11.C.3.1.2
15-16	Rate in Electrical Systems	
17	Rate in Thermal Systems	

**Unit 4**

<b>Week</b>	<b>Topics Covered</b>	<b>PA anchors</b>
18-19	Resistance in Mechanical Systems	
20-21	Resistance in Fluid Systems	S11.A.1.1.1
22-23	Resistance in Electrical Systems	S11.A.1.1.2
24	Resistance in Thermal Systems	S11.A.1.1.3
		S11.A.1.1.4 S11.A.1.1.5 S11.A.2.1.1 S11.A.1.2.2 S11.A.2.1.3 S11.A.2.1.4 S11.A.2.1.5 S11.C.2.1.3 S11.C.2.1.4 S11.C.3.1.2

## Unit 5

<b>Week</b>	<b>Topics Covered</b>	<b>PA anchors</b>
24-25	Energy in Mechanical Systems	S11.A.1.1.1
26-27	Energy in Fluid Systems	S11.A.1.1.2
28-29	Energy in Electrical Systems	S11.A.1.1.3
30	Energy in Thermal Systems	S11.A.1.1.4 S11.A.1.1.5 S11.A.2.1.1 S11.A.1.2.2 S11.A.2.1.3 S11.A.2.1.4 S11.A.2.1.5 S11.C.2.1.3 S11.C.2.1.4 S11.C.3.1.2

## Unit 6

<b>Week</b>	<b>Topics Covered</b>	<b>PA anchors</b>
31	Power in Mechanical Systems	S11.A.1.1.1
32	Power in Fluid Systems	S11.A.1.1.2
33	Power in Electrical System	S11.A.1.1.3
		S11.A.1.1.4 S11.A.1.1.5 S11.A.2.1.1 S11.A.1.2.2 S11.A.2.1.3 S11.A.2.1.4 S11.A.2.1.5 S11.C.2.1.3 S11.C.2.1.4 S11.C.3.1.2

**Unit 7**

<b>Week 34</b>	<b>Linear Momentum</b>	
<b>Week 35</b>	<b>Angular Momentum</b>	S11.A.1.1.1 S11.A.1.1.2 S11.A.1.1.3
		S11.A.1.1.4 S11.A.1.1.5 S11.A.2.1.1 S11.A.1.2.2 S11.A.2.1.3 S11.A.2.1.4 S11.A.2.1.5 S11.C.2.1.3 S11.C.2.1.4 S11.C.3.1.2

**Instruction:**

Lecture  
Power point presentations  
Streaming Media  
Demonstrations  
Student Inquiry labs/ Guided labs  
Videos  
CD-Rom instructions  
Cooperation learning

**Assessment:**

Success tracker (online testing and remediation)  
Projects/ independent research (power point presentation, research paper)  
Teacher observation  
Tests  
Quizzes  
Lab activities with writing component

**Parent/ Student Resources:**

Online textbook with audio capabilities