



# ODESSA SCIENCE DEPARTMENT INTEGRATED SCIENCE SYLLABUS

Textbook: Physical Science: Concepts In Action  
Author: Wyssession & Frank (Prentice Hall)

<u>WEEK</u>	<u>UNIT</u>	<u>CONCEPTS</u>	<u>SUGGESTED READING</u>
<b>1-3</b>	Sci Method Engineering Concepts	Contracts & Safety Accuracy vs Precision Matter Phys / Chem Properties	Chpt. 1, 2, 3

## EXAM 1: Week 1Q-W3

**Introduction / Engineering / Matter**

<b>4-6</b>	Collisions Conservation Waves Momentum	Velocity, Speed Acceleration Free Fall Electromagnetic Waves	Chpt. 11, 17, 18
------------	---	---	------------------

## EXAM 2: Week 1Q-W6

**Linear Motion / Waves / Momentum**

<b>7-9</b>	Force Geometry Mass vs Weight	Moon / Tides Newton's Laws Free Body Diagrams	Chpts. 12, 25.2
------------	-------------------------------------	---	-----------------

## EXAM 3: Week 1Q-W9 (end of 1<sup>st</sup> Quarter)

**Forces / Tides / Moon**

<b>10-12</b>	Electricity Magnetism Charge	ElectroMagnetic Electronics / Tech Apps	Chpt. 20, 21
--------------	------------------------------------	---	--------------

**Electricity / Magnetism**

## EXAM 4: Week 2Q-W3

**13-15**

**INDEPENDENT  
STEM RESEARCH**

## 2<sup>nd</sup> QUARTER RESEARCH PROJECT

## EXAM 5 in form of PAPER & POWERPOINT PRESENTATIONS: Week 2Q-W6

<b>16-18</b>	Work Energy Machines	Potential, Kinetic Power Conservation	Chpts. 14, 15
--------------	----------------------------	---	---------------

**Work / Energy / Power**

## EXAM 6: Week 2Q-W9

## 1<sup>st</sup> SEMESTER FINAL: Week 2Q-W9



ODESSA SCIENCE DEPARTMENT  
**INTEGRATED SCIENCE SYLLABUS**

<u>WEEK</u>	<u>UNIT</u>	<u>CONCEPTS</u>	<u>SUGGESTED READING</u>	
<b>19-21</b>	Periodic Table	Classification History, Atomic Theory, Isotopes	Chpts. 4, 5	<b>Periodic Table/Atomic Structure</b>
<b><u>EXAM 7: Week 3Q-W3</u></b>				
<b>22-24</b>	Bonding	Ionic, Covalent, Metallic Scientific Method, Electronegativity,	Chpt. 6	<b>Bonding / Naming / Formula</b>
<b><u>EXAM 8: Week 3Q-W6</u></b>				
<b>25-27</b>	Reactions	Reaction Types, Balancing, Classifying Oxidation #'s	Chpt. 7	<b>Reactions</b>
<b><u>EXAM 9: Week 3Q-W9 (end of 3<sup>rd</sup> Quarter)</u></b>				
<b>28-30</b>	The Mole	Molarity, Avogadro, Formula Mass, Percent Composition, Molecular Mass, Empirical Formula	Resources From Mr. Wehr	<b>Mole</b>
<b><u>EXAM 11: Week 4Q-W3</u></b>				
<b>31-33</b>	Stoichiometry	Stoichiometric Reactions, Balancing, Percent Yield	Chpt. 7.5, Resources From Mr. Wehr	<b>Stoichiometry</b>
<b><u>EXAM 10: Week 4Q-W6</u></b>				
<b>34-36</b>	Acid/Base Salts	Properties, Reactions Acids/Bases, pH, Litmus Paper	Chpt. 8	<b>Acid / Base / Salts</b>
<b><u>EXAM 12: Week 4Q-W9</u></b>				

**2<sup>nd</sup> SEMESTER FINAL: Week 4Q-W9**

**Integrated Science: Grade 9, 1 Semester Credit**

Physical science studies matter and energy. Students study physical laws and chemical processes through student-driven research-based laboratory experiences. Physical science surveys the laws of motion, properties of matter, energy, light, and electricity at the high school level. Chemical science studies and investigates the structure and properties of matter. Add a dash of Earth Science now and again and VIOLA...Integrated Science!