



**Switched-On**  
SCHOOLHOUSE

# Course Catalog

General Science III

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**COURSE OVERVIEW**

General Science III is a basic intermediate course intended to expose students to the designs and patterns in God’s physical universe. This course expands on General Science I and II courses. Some of the areas covered in General Science III include the structure of matter, atomic nuclei and radioactivity, geology, oceanography, astronomy, microbiology, medicine, and science today and in the future.

Students at this level should show development in their ability and understanding of scientific inquiry. Some of the units contain experiments and projects that seek to develop meaning for the student and to engage the student actively. The continued exposure of science concepts and scientific inquiry will serve to improve the student’s skill and understanding.

Upon completion of the course, students should be able to do the following:

- Use their main senses for observation of the world around them.
- Describe the atomic structure of different elements.
- Calculate and measure volume, mass, and density for different objects.
- Identify different types of geological changes.
- Discuss how the layers of the earth’s crust can show history.
- Describe the different parts of the ocean, both living and non-living.
- Explain the differences in the stars and constellations.
- Distinguish between bacterial infections, viral infections, and other types of infections.
- Develop a plan to prevent and treat common diseases through proper health.
- Demonstrate an understanding of the resources of the earth and what is needed to conserve those resources.

GENERAL SCIENCE III			
UNIT 1: OUR ATOMIC WORLD			
Assignment Titles			
1.	Course Overview	9.	Essay: Reactors
2.	Structure of Matter	10.	Quiz 4: Nuclear Energy
3.	Quiz 1: Structure of Matter	11.	Applications and Environmental Hazards
4.	Radioactivity	12.	Quiz 5
5.	Quiz 2: Radioactivity	13.	Special Project*
6.	Atomic Nuclei	14.	Test
7.	Quiz 3: Atomic Nuclei	15.	Alternate Test*
8.	Nuclear Energy	16.	Reference

GENERAL SCIENCE III			
UNIT 2: VOLUME, MASS, AND DENSITY			
Assignment Titles			
1.	Volume	7.	Density
2.	Experiment: Determining Volume	8.	Quiz 3: Density
3.	Quiz 1: Volume	9.	Special Project*
4.	Mass	10.	Test
5.	Experiment: Mass of Gas	11.	Alternate Test*
6.	Quiz 2: Mass	12.	Reference

UNIT 3: PHYSICAL GEOLOGY		
GENERAL SCIENCE III	<b>Assignment Titles</b>	
	1. Earth Structures	11. Earth Movements
	2. Internal Structures	12. Experiment: Specific Gravity
	3. Igneous Structures	13. Experiment: Gravity
	4. Essay: Volcanic Eruptions	14. Plate Tectonics
	5. Mountains	15. Quiz 3: Earth Movements
	6. Quiz 1: Earth Structures	16. Special Project*
	7. Earth Changes	17. Test
	8. Erosion and Sediment	18. Alternate Test*
	9. Oceans	19. Reference
10. Quiz 2: Earth Changes		

UNIT 4: HISTORICAL GEOLOGY		
GENERAL SCIENCE III	<b>Assignment Titles</b>	
	1. An Observational Science	7. Absolute Time
	2. Sedimentary Rock	8. Quiz 2: Measuring Time
	3. Fossils	9. Special Project*
	4. Crustal Changes	10. Test
	5. Quiz 1: An Observational Science	11. Alternate Test*
	6. Measuring Time	12. Reference

UNIT 5: OCEANOGRAPHY		
GENERAL SCIENCE III	<b>Assignment Titles</b>	
	1. Chronology and Techniques for Investigation	10. Physical Properties of the Ocean
	2. Major Discoveries and Submersible Research	11. Essay: Marine Report
	3. Essay: The Moon and Tides	12. Quiz 3: Biological, Physical, and Chemical Properties
	4. Quiz 1: The History of Oceanography	13. Special Project*
	5. Geological Structure and Results of Profiling	14. Test
	6. Turbidity, Sedimentation, and Currents	15. Alternate Test*
	7. Quiz 2: Geology of the Ocean	16. Reference
	8. Biology of the Ocean	
	9. Chemistry of the Ocean	

UNIT 6: ASTRONOMY		
GENERAL SCIENCE III	<b>Assignment Titles</b>	
	1. Presuppositions	9. Quiz 2: Telescopes and Optics
	2. Extent of the Universe	10. Space Explorations
	3. Constellations	11. Quiz 3: Space Explorations
	4. Measuring the Universe	12. Special Project*
	5. Quiz 1: The Universe	13. Test
	6. Gathering Light and Types of Telescopes	14. Alternate Test*
	7. Other Types of Telescopes	15. Reference
	8. Essay: Telescopes	

UNIT 7: BODY HEALTH (PART 1)		
GENERAL SCIENCE III	<b>Assignment Titles</b>	
	1. Microorganisms	12. More Serious Viral Infections
	2. Categories of Pathogenic Organisms	13. Quiz 3: Viral Infections
	3. Characteristics of Infectious Diseases	14. Protozoan Infections
	4. Essay: Medical Science	15. Rickettsial Infections
	5. Quiz 1: Microorganisms	16. Fungal Infections
	6. Digestive Infections	17. Quiz 4: Protozoan, Rickettsial, and Fungal Infections
	7. Respiratory Infections	18. Special Project*
	8. Nervous System Infections	19. Test
	9. Quiz 2: Bacterial Infections	20. Alternate Test*
	10. Common Viral Infections	21. Reference
11. Childhood Viral Infections		

UNIT 8: BODY HEALTH (PART 2)		
GENERAL SCIENCE III	<b>Assignment Titles</b>	
	1. Body Defense Mechanisms	8. Governmental Agencies and Volunteer Groups
	2. Medical Drugs	9. Medical and Drug Control Organizations
	3. Essay: Chemotherapy	10. Quiz 3: Community Agencies
	4. Quiz 1: Disease Treatment	11. Special Project*
	5. Environmental Conditions	12. Test
	6. Medical Advances and Total Health	13. Alternate Test*
	7. Quiz 2: Disease Prevention	14. Reference

UNIT 9: SCIENCE AND TOMORROW		
GENERAL SCIENCE III	<b>Assignment Titles</b>	
	1. Ecology	9. Outer Space
	2. Agriculture and Waste	10. Inner Space and Self Exploration
	3. Population	11. Quiz 3: People and Their New Frontiers
	4. Quiz 1: People and Their Land	12. Special Project*
	5. Energy Sources	13. Test
	6. Debate: Fossil Fuels, Nuclear/Natural Power	14. Alternate Test*
	7. Industry, Transportation, and Urbanization	15. Reference
	8. Quiz 2: People and Their Work Environment	

UNIT 10: REVIEW		
GENERAL SCIENCE III	<b>Assignment Titles</b>	
	1. Nuclear Power	9. Practical Health
	2. The Metric System	10. Population and Environment
	3. Quiz 1: Nuclear Power	11. Quiz 4: Practical Health
	4. Weight Versus Mass	12. Special Project*
	5. Quiz 2: Weight Versus Mass	13. Test
	6. Deposition Versus Erosion	14. Alternate Test*
	7. The Oceans, Continents; Earth in Space	15. Reference
	8. Quiz 3: Deposition Versus Erosion	

(\*) Indicates alternate assignment