WORTHINGTON CHRISTIAN SCHOOLS

Curriculum Map: High School Science

Essential Questions	Grade Level Scope and Sequence
1. How do we design and evaluate scientific investigations that reveal truth about the world around us? 2. Why are molecular structures studied across biological systems? 3. How do we relate the purpose of individual parts of an organism to its overall function? 4. How can we explain the structure, properties, and interactions of matter and energy? 5. How does an understanding of the natural world prove it to be a created world? 6. How do we cultivate problem solving and critical thinking skills to apply science knowledge to decision making about science, bioethical and technological issues? 7. How can the interaction between objects be described by forces? 8. How does the world around us demonstrate that energy, momentum, and matter are conserved and yet transferrable?	9th Grade - Biology 1. Nature of Science - Scientific processes 2. Organic chemistry 3. Cytology and Cell processes – photosynthesis and cell respiration 4. Genetics 5. Creationism and evolutionary theory 6. Classification by Kingdom 7. Ecology 10th Grade - Chemistry 1. Materials – formulating matter 2. Air – designing scientific investigations 3. Petroleum – breaking and making bonds 4. Water – exploring solutions 5. Atoms – nuclear interactions Anatomy & Physiology 1. Cells and tissues 2. Movement Systems - Skeletal and Muscular 3. Communication Systems – Nervous and Endocrine 4. Transport Systems – Respiratory, Circulatory, Lymphatic 5. Energy System - Digestive 6. Reproductive System Physics 1. Force and Motion 2. Conservation Laws 3. Oscillations and Waves 4. Electricity and Magnetism Immunology 1.Innate Immunity

	2. Antibody and B Cell Diversity 3. Acquired and Cell Mediated Immunity 4. Hypersensitivity 5. Parasitic Disease and Cancer 1054 Zoology 1. Eukaryotic Cell Physiology 2. Cellular Respiration 3. Protista and Animalia Taxonomy 4. Comparative Anatomy 5. Comparative Ecological Influence 6. Comparative Specialized Systems