Big Ideas/Key Concepts: Safety
The students will learn safety and infection control practices within the diagnostic setting. They will perform procedures following OSHA, CDC and NIOSH guidelines demonstrating aseptic techniques, proper body mechanics, environment and laboratory safety precautions.

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<th>Standards</th>
<th>Student Friendly “I Can” Statements</th>
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| 7) Obtain medical laboratory manuals from at least three different resources or physical laboratory sites. Identify the elements of containment regarding general infection control, chemistry precautions, fire safety, chemical hazards, electrical safety, mechanical safety, general lab safety, accident exposure, and disaster preparedness. Develop a written or digital lab manual for a medical laboratory at school based on findings from the research. (TN Reading 2, 4, 5, 9; TN Writing 4, 6, 8, 9) | • I can pass the Health Science Core Curriculum Safety Assessment with a 100%.  
• I can use basic medical terminology  
• I can correctly demonstrate hand washing skills without contaminating my hands  
• I can list blood borne pathogens and give characteristics of each.  
• I can name the different types of PPE’s available for use.  
• I can develop a written or digital lab manual for a medical laboratory at school based on findings from the research.  
• I can name the different types of isolations and determine which situation you would use each one.  
• I can properly don personal protective equipment.  
• I can discuss the role OSHA plays in workplace safety.  
• I can locate and use a fire extinguisher properly.  
• I can locate the fire pull station and fire extinguishers in my school  
• I can recognize situations that are potential fire and electrical hazards.  
• I can locate and utilize the AEDs in my school.  
• I can identify the area of diagnostics in which each piece of equipment could be found.  
• I can perform routine inspection of equipment that is used in diagnostic service areas.  
• I can construct a safety plan for the medical laboratory department. |
• I can inspect any diagnostic equipment prior to use on patient to maintain quality reporting of diagnostic results.
• I can lift an object correctly
• I can synthesize information into a digital or written presentation to instruct appropriate staff on the importance of implementing quality control processes according to policy.

Big Ideas/Key Concepts: Technology
The students will learn how technological advances are changing healthcare. The students will explore how technology is expanding the various modes of communication used throughout the healthcare industry. The student will explore technology tools and applications available to aid in patient communication, education, and helping them to stay healthy. They will put into practice diagnostic interpretations, patient population interaction, co-worker interaction, and facility policies using current technology.

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<td>3) Differentiate between telemedicine and telehealth. Identify the areas in which telehealth and/or telemedicine are being utilized nationally and globally with success. Describe in a written, verbal, or digital format what barriers currently exist to implementing such technologies in a larger scale, and outline any initiatives that can be incorporated to reduce the barriers. (TN Reading 2, 4, 9; TN Writing 2, 6, 8)</td>
<td>• I can explain various diagnostic procedures to persons with disabilities, cultural differences, and multiple age differences.</td>
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<td>4) Investigate and document the history of radiology, medical laboratories, and other related areas of diagnostic medicine. Explain how technology is influencing the future of each. Synthesize research from professional journals and other medical or technical literature (noting the authors and their purposes) to analyze the barriers to these technologies and predict how the industry might respond. (TN Reading 1, 2, 6, 8, 9; TN Writing 7, 8, 9)</td>
<td>• I can demonstrate the different ways to transmit data electronically.</td>
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<td>5) Synthesize information from professional journals and digital resources to investigate the use of robotics in healthcare other than in surgical procedures. Develop a proposal, sketch, mock press</td>
<td>• I can explain tele-health</td>
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<td>• I can interpret diagnostic principles and technology to deliver health care via tele-health.</td>
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<td>• I can use technical writing skills to chart patient care.</td>
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<td>• I can read, interpret, verbalize, and apply policies and procedures appropriate to the health care setting.</td>
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release, or similar written artifact for a new technology or an improvement to a current technology that can be used in the field of diagnostics. Detail all the specifications of the new technology, including an explanation of how the technology will be used, the projected cost-saving measures, and the most applicable professions that would use the technology. (TN Reading 1, 2, 4, 7, 9; TN Writing 2, 4, 8, 9)