# PROGRAM OF STUDY: Diagnostic – Clinical Lab

This Program of Study may serve as a graduation guide for the next four plus years, along with other career planning and educational materials. Courses listed in this model may include recommended coursework and should be individualized to students’ educational and career goals. Each graduation plan needs to meet minimum high school graduation requirements. Dual Enrollment courses can be high school academic and/or career technical education courses.

## SECONDARY:

<table>
<thead>
<tr>
<th>COURSE/ GRADE</th>
<th>NINTH</th>
<th>TENTH</th>
<th>ELEVENTH</th>
<th>TWELFTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>9th grade Lit/ Composition</td>
<td>10th grade Lit/ Composition</td>
<td>American Lit/ Composition</td>
<td>World Lit/ Composition / British Lit</td>
</tr>
<tr>
<td>MATHEMATICS</td>
<td>Coordinate Algebra / Algebra I</td>
<td>Analytic Geometry / Geometry</td>
<td>Advanced Algebra / Algebra II</td>
<td>Pre-calculus</td>
</tr>
<tr>
<td>SCIENCE</td>
<td>Physical Science</td>
<td>Biology</td>
<td>Chemistry</td>
<td>Physics</td>
</tr>
<tr>
<td>SOCIAL STUDIES</td>
<td>World History</td>
<td>Psychology</td>
<td>US History</td>
<td>Government (½ unit) Economics (½ unit)</td>
</tr>
<tr>
<td>PATHWAY COMPLETER</td>
<td>Introduction to Healthcare Science**</td>
<td>Essentials of Healthcare</td>
<td>Clinical Lab I</td>
<td>Another course in focus area, Work-Based Learning, or Youth Apprenticeship</td>
</tr>
</tbody>
</table>

### Required/ Selective Electives

- Health & Personal Fitness (can be taken in grades 9-12)
- Financial Literacy
- Latin I
- AP Biology
- Modern Language/Latin
  2 units required for admissions to Georgia University System Colleges/Universities For a listing of Modern Language/Latin courses offered at your high school, please contact your advisor, counselor, or curriculum handbook.

- Other Electives
  For a listing of other elective courses offered at your high school, please check with your advisor, counselor, or curriculum handbook.

### Industry Recognized Credential (Pathway Completer)

Visit the End of Pathway Assessment Page (see note below).

## POSTSECONDARY:

<table>
<thead>
<tr>
<th>TCC</th>
<th>DIPLOMA OR AAS</th>
<th>BACHELOR OF SCIENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCC</td>
<td>Diploma, Degree options</td>
<td>The University System of Georgia offers students’ higher education options at 30 institutions throughout the state, providing a wide range of academic programming including certificates and associate, baccalaureate, masters, doctoral and professional degrees. <a href="https://apps.ds.usg.edu/ords/?p=118:1:0">https://apps.ds.usg.edu/ords/?p=118:1:0</a>;</td>
</tr>
<tr>
<td>CLT3 Clinical Lab Technology Degree</td>
<td>Find the campus for the Diploma, Degree options</td>
<td></td>
</tr>
<tr>
<td>Find the campus for the TCC options</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### NOTE:

Students have many options to ENTER and EXIT from their academic studies into the workforce. When a student graduates from high school, they are eligible to choose one of many ENTRANCE POINT options: 1. Enroll in either a 2 or 4 year post-secondary program; 2. Enroll in an apprenticeship program or the military; or 3. Enter the workforce using technical skills learned in high school. When a student finishes a 2- or 4-year degree program, they may choose to EXIT 1. Enroll in an apprenticeship program or the military; 2. Enroll in a professional university degree program; or 3. Enter the workforce using technical skills learned.

### Diagnostics – Clinical Lab Career Pathway Completers - Industry Credentialing for High School Students

Upon completion of sequenced courses in the Diagnostics – Clinical Lab Pathway, students are eligible to complete the Industry-Recognized student credential for fulfillment of the End of Pathway Assessment. Secondary students completing the Diagnostics – Clinical Lab pathway will be able to sit for the National Industry Credentialed assessment offered on-line from NCHSE, and OKCareerTech. Once mastery is reached, students will receive recognition for completion and use this credential in conjunction with their job or continuing training. For specific assessment information, refer to: [http://bit.ly/GAHealthScience](http://bit.ly/GAHealthScience).

** = Statewide Articulation
## Sample In Demand Careers in Georgia

<table>
<thead>
<tr>
<th>Occupation Specialties</th>
<th>Level of Education Needed</th>
<th>Georgia Average Salary</th>
<th>Annual Average Openings in Georgia</th>
<th>2014 – 2024 Employment Outlook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical &amp; Clinical Lab Technologists</td>
<td>Bachelor's Degree</td>
<td>$58,776</td>
<td>219</td>
<td>InDemand, HighSkill</td>
</tr>
<tr>
<td>Medical &amp; Clinical Laboratory Technicians</td>
<td>Associates Degree</td>
<td>$38,166</td>
<td>248</td>
<td>InDemand, HighSkill</td>
</tr>
<tr>
<td>Ophthalmic Medical Technologists</td>
<td>Postsecondary credentials</td>
<td>$41,009</td>
<td>106</td>
<td>InDemand, HighSkill</td>
</tr>
<tr>
<td>Medical &amp; Health Services Managers</td>
<td>Bachelor's Degree</td>
<td>$104,956</td>
<td>320</td>
<td>InDemand, HighSkill, HighWage</td>
</tr>
</tbody>
</table>

Go to GAfutures at [www.gafutures.org](http://www.gafutures.org) for more information about your education and career planning, including valuable financial information (grants and scholarships including HOPE Program, grants and loans, FAFSA, and CSS forms).

### Career-Related Education Activities
- Career Awareness
- Career Exploration
- Instructional Related
- Connecting
- Work-Based Learning
- Employability Skill Dev.
- Cooperative Education
- Internship
- Youth Apprenticeship
- Clinicals

### Postsecondary Options:
- 4-Year Universities/Colleges
- 2-Year Colleges/Technical Colleges
- State Registered Apprenticeships
- Special Purpose Schools
- On-the-Job Training
- Military

### Earning Postsecondary Credits While in High School
- Dual Enrollment Program
- Earn postsecondary credit while in high school
- You can complete
  - Industry Credential
  - Technical Certificate of Credit (TCC)
  - Associates of Applied Science Degree
  - Bachelor's Degree
- Who can help?
  - Parents
  - School Counselor
  - Advisor

### Postsecondary Transition
- University System of Georgia Institutions: Admissions Testing
- ACT or SAT
- For More Information:
  - Contact the institution of your choice OR
- Technical College System of Georgia
- Placement Exam
- United States Military
- ASVAB Assessment
- Use BRIDGE Law platform to inform decisions on postsecondary opportunities
- Dual Enrollment
- Earning high school course credits while taking college courses

### Related Pathway Occupations
- Medical Technologists
- Medical & Health Services Managers
- Medical & Clinical Laboratory Technicians
- Medical Lab Assistants
- Clinical Chemistry Technologists
- Immunology Technologists
- Microbiology Technologists
- Registered Nurses
- Nuclear Medicine Technologists

### Other Related Occupations

*ONET Online

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### Diagnostics – Clinical Lab Pathway Description

Students that successfully complete the Essentials of Healthcare course will also earn credit for the Science course Anatomy/Physiology as an embedded credit. The grade earned in Essentials will be the same grade for Anatomy/Physiology.

The Diagnostic Services pathway provides career opportunities for persons with a strong interest in the initial phase of detecting health problems—the diagnostic phase. This phase includes procedures such as X-rays, fluoroscopies, sonograms, and clinical laboratory tests examining blood and other body fluids. Workers in this pathway discover “evidence” that physicians use to make correct diagnoses and administer appropriate treatment. Occupations are increasingly more varied because of complex new technology seeking to explain how the human body works.

Clinical laboratory testing is critical in the detection and diagnosis of disease. Laboratory personnel examine and analyze body fluids and cells using complex chemical, blood, immunologic, and bacteriological tests. Technologists evaluate test results and monitor programs to ensure accuracy of tests. Technicians perform fewer complex tests using automated analyzers or tests in accordance with detailed instructions.

Entry into the field of diagnostic services includes education/training in hospitals, technical colleges, colleges and universities, and the Armed Forces. Two-year programs are the most prevalent avenues for entry-level jobs. With experience and additional education and training, advancement opportunities exist in department administration, hospital administration, research, or sales with equipment manufacturers. As the population grows and ages, employment is projected to grow faster than average due to the increasing demand for diagnostic services.

Medical laboratory technologists (also known as medical laboratory scientists) and medical laboratory technicians collect samples and perform the tests to analyze body fluids, tissue, and other substances. Workers in the medical laboratories, technicians and technologist will enjoy an 11%-15% growth in occupations between 2014-2024, which is about as fast as the average for all occupations. Medical technologists generally have a bachelor’s degree, while technicians usually need an associate degree.