



Health Professions and Related Clinical Sciences CIP Code 51.9999

Introduction – Program of Study

Clinical laboratory testing plays a crucial role in the detection, diagnosis, and treatment of disease. Clinical laboratory technologists – also referred to as clinical laboratory scientists or medical technologists – and clinical laboratory technicians, also known as medical technicians or medical laboratory technicians, perform most of these tests.

Clinical laboratory personnel may examine and analyze body fluids and cells. They search for bacteria, parasites, and other microorganisms; analyze the chemical content of fluids; match blood for transfusions; and test for drug levels in the blood. Technologists also prepare specimens for examination, count cells, and look for abnormal cells in blood and body fluids. They use microscopes, cell counters, and other sophisticated laboratory equipment. They also use automated equipment and computerized instruments capable of performing a number of tests simultaneously.

In large hospitals or in independent laboratories that operate continuously, personnel may work the day, evening, or night shift; and, they may work weekends and holidays. Laboratory personnel in small facilities may work on rotating shifts, rather than on a regular shift. In some facilities, laboratory personnel are on call several nights a week or on weekends, in case of an emergency.

Personnel in the health professions field may include neurodiagnostic technologists, ophthalmic medical technologists, radiologic technicians, surgical assistants, midwives, speech and language pathology assistants, and endoscopy technicians.

The usual requirement for an entry level position as a clinical laboratory technologist is a bachelor degree with a major in medical technology or one of the life sciences; however, it is possible to qualify for some jobs with a combination of education, job experience and specialized training. The Clinical Laboratory Improvement Act requires technologists who perform highly complex tests to have at least an associate degree.

Many employers prefer applicants who are certified by a recognized professional association. In addition to certification, employers seek clinical laboratory personnel with good analytical judgment and the ability to work under pressure. Close attention to detail is also essential for laboratory personnel because small differences or changes in test substances or numerical documents can be crucial to a diagnosis. Manual dexterity and normal color vision are highly

desirable, and with the widespread use of automated laboratory equipment, computer skills are important.

Assumptions of this Program of Study

High quality programs should meet the following standards:

1. Promote positive working relationships.
2. Implement a curriculum that fosters all areas of skill development
3. Use appropriate and effective teaching approaches.
4. Provide ongoing assessments of student progress.
5. Employ and support qualified teaching staff.
6. Establish and maintain relationships and use resources of the community.
7. Provide a safe and healthy learning environment.
8. Implement strong program organization and supervision policies that result in high quality teaching and learning.
9. Integrate academic skills and aptitudes necessary for postsecondary education, gainful employment and a foundation of lifelong learning.

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This is a cluster program designed for individuals whose career objective is one within the technical allied health field. The program is designed to promote careers in health care and to permit graduates to pursue postsecondary education. In addition, the program requires a concentration of planned courses in mathematics and science. Basic health occupation instruction introduces field experience in extended classrooms within settings concerned with technical functions to obtain data for use in diagnosis, treatment and control of disease. Instruction may also include the use of technical equipment.

The health occupational core instruction includes planned courses in medical terminology, anatomy and physiology, clinical laboratory procedures, basic clinical skills, aseptic techniques, OSHA regulations and infection control. Clinical education is an integral part of the program. Science and math taught by certificated science and math teachers will be coordinated and deemed essential for students to successfully reach their career objectives.

For more information, contact:

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