

972-243-2272 and ask for the Education Department) or explore

Admission requires an overall GPA of 2.50. In the admissions process, the GPAs for the cognate science courses and clinical laboratory science content courses are computed together. This combined GPA must be a minimum of 2.50. Should applications exceed class capacity, preference is given to students with the higher GPAs.

Applicants must be able to meet the program's published *Essential Functions*, copies of which are incorporated into the application packet, and express a willingness to comply with the principles, rules, regulations, and policies of both the university and the program as they relate to the ideals and values of the Seventh-day Adventist Church and the clinical laboratory science profession.

All prerequisite course work, including General Education, cognate science, and pre-clinical courses, must be completed prior to entry into the clinical year. A personal interview may be required at the discretion of the Admissions Committee.

In exceptional circumstances, the Admissions Committee may accept students outside the stated policy.

**Student Progression in Clinical Year.** The clinical year is highly structured and sequential. Enrolled students may not drop a class, audit a class, or earn a grade lower than C- in any class. Students may enter clinical practica only upon satisfactory completion of on-campus course work. Satisfactory completion is defined as a senior-year minimum cumulative GPA of 2.50 and the recommendation of the faculty. A student receiving a cumulative GPA of less than 2.50 may be allowed to advance if the program faculty identifies exceptional circumstances and recommends that the student continue in the program.

Student continuance in the clinical practica is conditional upon acceptable ethical deportment and exemplary patient-care practices. The hospital supervisors and program faculty are final arbiters in determining student continuance.

**Professional Certification.** Students who complete the degree program are eligible to write national certification examinations sponsored by the American Society of Clinical Pathologists (ASCP) and the National Credentialing Agency of Laboratory Personnel (NCA).

**Program Accreditation.** The Andrews University Program for Clinical Laboratory Sciences holds accreditation from the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 8410 West Bryn Mawr Avenue, Suite 670, Chicago, IL 60631-3415, (773) 714-8880.

#### ACADEMIC CALENDAR 2001-2002

May 3 Senior Spring semester (Clinicals) ends  
May 6 Senior Summer semester (Clinicals) begins

Remaining dates for Summer 2002 will be announced.

## Undergraduate Programs

### BS: Clinical Laboratory Science (BSCLS)—127

#### General Education requirements—37 (Adjustments for BSCLS)

Directed Electives—6

Arts & Humanities—3

Language/Communication

Social Science—3

Mathematics—3

AU students—Statistics preferred. Students transferring into clinical program—any college-level course

PE/Wellness—2

HLED130. Must also pass a physician-administered physical exam before advancement to clinical practicums

Physical/Natural Sciences: see cognate sciences below

Religion—12

(or one course per year of residence)

Service Fieldwork—fulfilled through 23 credits of clinical practicum.

#### Cognate Science Requirements—29

BIOL165: BIOL166 or 111, and 3-4 credits of relevant BIOL, PHTH, or ZOOLOG courses; CHEM131, 132, 231, 232, 241, 242.

#### Major Requirements—61

*Prerequisites*—11

CLSC101, 102, 230, 250, 260

*Major courses*—50

CLSC320, 400, 401, 402, 411, 412, 413, 421, 423, 431, 432, 433, 441, 442, 443, 451, 452, 453, 460, 463, 490, 495.

#### Directed electives—6

Students select courses in consultation with and by the consent of their advisors in a planned program to enhance professional preparation. Courses are chosen from biology, business, chemistry, computer science, electronics, and education. Pre-medical/pre-dental students must include PHYS141 142 General Physics (8 credits).

### BS: Allied Health Administration—65

This degree is designed for health-care professionals seeking to enhance the knowledge they already have and to help them prepare for future career employment requirements. The degree format features a strong general education and administrative/business component and provides an academic foundation for health-care administrative positions. It is open only to individuals holding an associate degree or a two-year certificate in an allied-health professional area with earned certification where applicable in such areas as diagnostic ultrasound, nuclear medicine, physician assistant, radiation therapy, radiologic technology, respiratory therapy, and special procedures in radiologic technology. Admission to the program is by permission of the Department of Allied Health chair.

#### Degree Requirements—124

Transfer credits accepted from an AS degree or certificate program—34

*General Education Requirements*—54

Complete Bachelor of Science General Education requirements.

*Business/Administration Courses*—27

ACCT 121, 122, BSAD335, 341, 355, 384,

ECON226, MKTG310 and management courses selected in consultation with and approval of the advisor.

ALHE480 Practicum in Administration—4

# Graduate Programs

## MS: Clinical Laboratory Science (MSCLS)—32

The Department of Allied Health offers a graduate program leading to the Master of Science in Clinical Laboratory Science. In response to the diversity of career skills required by the clinical laboratory scientist (medical technologist), the degree features a variety of program emphases, including concentrations in biomedical sciences, business and management, computer information science, and education.

**Admission requirements.** In addition to the minimum general requirements for admission to a graduate program listed in the graduate admission section of this bulletin, the following are departmental requirements:

- Applicants' previous course work must include 16 semester credits of biological sciences, 16 semester credits of chemistry, and one college-level course in mathematics. Deficiencies must be removed prior to admission to the graduate program.
- Applicants must hold professional certification and/or licensure in clinical laboratory science (medical technology) acceptable to the admissions committee. Certification may be either general or in one of the recognized areas of specialization. Acceptable certification is usually defined as that offered by the American Society of Clinical Pathologists or The National Credentialing Agency for Laboratory Personnel sponsored by the American Society of Clinical Laboratory Science.

Individuals lacking professional certification may be granted provisional admission while they pursue the course work required for eligibility to write the national certification examinations. These clinical courses and their prerequisites require a minimum of four academic semesters. The courses include CLSC320, 400, 401, 402, 411, 412, 413, 421, 423, 431, 432, 433, 441, 442, 443, 451, 452, 453, 460, 463, and 495. Students must receive professional certification before completing 16 graduate credits.

### DEGREE REQUIREMENTS

In addition to meeting the general requirements for graduate degree programs, students must meet the following departmental requirements:

- Complete a minimum of 32 semester credits including the core of 20 semester credits and 12 semester credits selected from the emphasis chosen.
- Have the graduate program coordinator approve course selections and course sequencing. Students may substitute alternate courses listed in this bulletin with the consent of the coordinator and the approval of the dean of the College of Arts and Sciences.
- No grade lower than C is acceptable in the graduate portion of the program.
- Maintain a minimum cumulative GPA of 3.00 for the graduate portion of the program.

### Core courses—20

ACCT500 or 635; BSAD500; CLSC501, 502, 561, 562, 585; plus a minimum of 3 graduate religion credits selected in consultation with graduate program coordinator

A minimum of 12 semester credits from one of the following options:

**Biomedical Emphasis:** BCHM421, 422, 430; BIOL419, 444, 445, 446, 447, PHTH417, 427, 447, 457, BOT525, ZOOL464, 475, 500

**Business and Management Emphasis:** ACCT635 (if not taken as part of the core), BSAD436, 475, 515, 530, 531, 532, 535, 638, 670, MKTG500, 540, NRS517

**Computer Information Science Emphasis:** Courses selected in consultation with and approved by the graduate program coordinator.

**Education Emphasis:** EDAL520, EDCI486, 547, 552, 636, 655, EDFN500, EDPC514, EDTE404, 424

**Enrollment Continuation Requirements.** A student whose cumulative graduate GPA falls below 3.00 in any given semester is placed on academic probation. Academic probation students are not allowed to register for or continue participation in CLSC585.

In consultation with the graduate program coordinator, the clinical laboratory science graduate faculty determines the student's proposed course load for the following semester. The faculty's recommendation is referred to the dean/graduate program coordinator of the College of Arts and Sciences for final approval.

A student who does not raise his/her graduate GPA to 3.00 within one full-time equivalent semester (12 credits) is terminated from the program. Exceptions require the approval of the clinical laboratory science graduate faculty and the dean/graduate program coordinator of the College of Arts and Sciences.

## Courses

(Credits)

See inside front cover for symbol code.

**ALHE440** (1-4)

**Topics in \_\_\_\_\_**

Repeatable in different areas. Prerequisite: Permission of Program Director.

**ALHE480** (4)

**Practicum in \_\_\_\_\_**

Prerequisite: Permission of Program Director.

**CLSC101** (1)

**Medical Terminology and Introduction to Health Professions**

An in-depth study of medical terminology and an introduction to the health professions offered on Andrews University campus. Weekly: One lecture.

**CLSC102** (1)

**Introduction to Clinical Laboratory Science**

Exercises from major clinical laboratory science disciplines are demonstrated or performed. Weekly: One three-hour lab.

**CLSC230** \$ (3)

**Fundamentals of Clinical Microbiology**

Orientation to clinical microbiology; specimen selection, collection, and transport; microscopic evaluation; stains and sterilization techniques; media and incubation selections; identification of routine and non-routine microorganisms; susceptibility testing; automation and quality assurance. Weekly: Two lectures and two labs.

**CLSC250** \$ (3)

**Fundamentals of Clinical Chemistry**

Clinical lab procedures, safety, application of statistical procedures in quality control, and principles of clinical laboratory instrumentation. Topics include carbohydrates, lipids, electrolytes, and hepatic function with selected pathologies. Weekly: Three lectures and one lab.



**CLSC453** (5)

***Clinical Chemistry Practicum***

Professional health-care laboratory practicum. Emphasis on patient-care applications in clinical chemistry. Prerequisites: CLSC451, 452 and permission of Program Director.

**CLSC460** (2)

***Clinical Laboratory Systems***

Survey of current Laboratory Information Systems (LIS) including database design and maintenance, test requesting, result entry, result