

SAS Program Change Request Form

No. 10-21

Date of Submission: September 13, 2010Submitted by: Kathy Hupp, Dir. CLS Student AffairsIdentify the nature of the request:        New Program         Modification        Deletion       

Proposal must be attached to this form.

Rationale must be attached which includes assessment data to support request. (note: submissions will not be accepted which do not include assessment information)

Effective Date for Implementation: May 1, 2011**New Programs**

- An approved detail budget (pro forma) must accompany the proposal.
- Explain how existing faculty/university resources will be utilized.
- Attach the complete proposal.
- Have existing courses on campus been utilized where possible? Please identify where a similar course may exist.
- Have cooperative efforts with existing programs been incorporated? Explain.
- Have existing catalogue numbers been ruled out to avoid Banner/registrar problems.
- Advising form/degree audit form should accompany proposals.

**Program Modification**

- Provide a copy of existing curriculum.
- Provide a copy of the proposed curriculum.
- Describe and detail all differences between current and proposed curriculum.
- Describe the impact of changes on faculty/adjunct resources.
- Provide budget information (i.e., requests for or reductions in adjuncts, faculty, books, equipment, etc.)

**Deletion of Program**

- Identify number of current majors
- Submit a timeline for the phase out of program.
- Describe how current program resources (i.e., equipment, etc.) will be reallocated
- Describe how existing majors will be able to complete their requirements.
- Describe the impact of changes on faculty/adjunct resources.

Department Approval: Michelle Shipley Date: 9/13/10C&P Approval: [Signature] Date: 9/13/2010Faculty Council Approval: [Signature] Date: 10/8/10Dean Approval: [Signature] Date: 10/10/10

Presented to SAS Curriculum Committee for consideration: September 13, 2010  
Presented to SAS Faculty Council: September 22, 2010

Kathy Hupp BA  
Director of CLS Student Affairs

Regarding: **Washburn University Clinical Laboratory Science program**

**Proposal:**

Move the CLS program from the CAS (currently advised by the Biology department) to the Department of Allied Health within the School of Applied Studies. Change the degree from a Bachelor of Science with a major in Clinical Laboratory Science (BS/CLS) to a Bachelor of Health Science with a major in Clinical Laboratory Science (BHS/CLS). This proposal is in conjunction with a proposal being brought forward through the CAS by the Biology Department to **delete** the B.S.degree in Clinical Laboratory Science, the plan being that both proposals will be presented to Academic Affairs and Faculty Senate at the same time.

**Rational:**

In the spring of 2009 the Washburn Board of Regents approved a contract with the University of Nebraska Medical Center (UNMC) to provide the curriculum and all academic/clinical faculty for the CLS program.

Because of the change of focus of the program and Washburn's contractual agreement with the University of Nebraska Medical Center, the CLS program would be more appropriately housed in the SAS, specifically the Allied Health Department, which has the needed experience regarding hospital affiliation agreements and student clinical placements.

The only faculty with CLS academic degrees reside in the SAS. Oversight of the program was determined to best meet the needs of students and to best coordinate with the program at the University of Nebraska by having discipline-trained faculty involved.

This proposal has the support of the Biology and Allied Health Departments as well as the Deans of the CAS and SAS.

**Existing Curriculum:** See attached from 2010-2011 catalog

**Proposed Curriculum:** See attached proposed catalog description

**Describe and detail all the differences between current and proposed curriculum**

**CURRENT:** The current curriculum as listed in the Washburn catalog requires students to complete prerequisites, general education and university requirements prior to application to an accredited hospital -based CLS program. Upon completion, a minimum of 30 clinical course hours are transferred to Washburn to fulfill the major. The hospital- based CLS program courses are not part of the Washburn curriculum, and each hospital program's curriculum varies in consistency and course content.

PROPOSED: The proposed curriculum is provided through a partnership and contractual agreement with University of Nebraska Medical Center totaling 39 CLS credit hours which will be part of the Washburn curriculum. Students are required to complete current prerequisites, general education and university requirements prior to application to the CLS program. The proposed program creates a consistent CLS clinical program for each student and uniformity in learning outcomes which allows for program assessment.

**Describe the impact of changes on faculty/adjunct resources**

All CLS coursework and faculty are contractually provided by the University of Nebraska Medical Center; therefore no changes to resources are anticipated.

**Provide budget information**

No additions to the budget are anticipated.

No transfer of funds or positions will occur between the CAS and SAS.

# CURRENT CATALOG LISTING

**Clinical Laboratory Science**  
(Formerly Medical Technology)  
**Biology Department**  
Website: <http://www.washburn.edu/cas/biology>

Stoffer Science Hall, Room 202  
(785) 670- 2077

On-campus advising in Clinical Laboratory Science is under the direction of the Biology Department.  
Dr. Susan Bjerke, Clinical Laboratory Science Advisor

## STUDENT LEARNING OUTCOMES

Washburn University students completing this degree are expected to have:

- mastered an understanding of biological and chemical disciplines, including cell biology, genetics, human biology, microbiology, immunology, organic chemistry and biochemistry;
- mastered the laboratory skills necessary to perform diagnostic testing in clinical chemistry, clinical microbiology, clinical hematology, and clinical immunology;
- developed analytical skills;
- developed oral and written presentation skills; and
- qualified to take a national certification examination • required to become a registered clinical laboratory scientist (medical technologist).

The BS degree with a Clinical Laboratory Science major requires a 30 hour certified clinical program that includes the courses listed at the end of this section. A first minor in biology and a second minor in chemistry are required. The biology minor must include Biology 102, 110, 255, 301, 305, 325, 362. Biology 343, 353, and/or 370 are also recommended. The chemistry minor must include Chemistry 151, 152, 340, 342, 350, and 351. Chemistry 341 is recommended. In addition Mathematics 116 and 140 along with either Physics 101 or Physics 261 and 262 or Physics 281 and 282 are also required. Students must successfully apply to and complete an approved regional hospital clinical program. These clinical course hours are then transferred to Washburn to fulfill the major.

Students who receive the baccalaureate degree in biology from Washburn can also receive a Bachelor of Science in Clinical Laboratory Science after successful completion of an approved clinical program, provided that the required academic courses for the degree have been taken and that the student has a total of at least 154 credit hours. Students may also apply for a BS degree with a double major by following the University guidelines for a double major.

Students with a BS or BA degree that includes the university courses required for the BS in Clinical Laboratory Science will be qualified to apply for the clinical program at most accredited schools of medical technology in the United States.

The biology department can also provide the pre-professional academic courses needed by students who wish to complete the clinical requirements at either the University of Kansas or Wichita State University. The prerequisite courses differ depending on the clinical program, so students should contact the Clinical Laboratory Science advisor for additional information. These students receive the B.S. in Clinical Laboratory Science from the university at which they complete the clinical program.

## CLINICAL COURSE OFFERINGS

The courses listed below are offered by the hospital schools of Medical Technology and are not a part of Washburn University's curriculum. The variation in credit hours is due to unique differences between hospital programs.

**Clinical Microbiology (6-8)**

**Clinical Chemistry (6-10)**

**Clinical Hematology (4-6)**

**Clinical Immunology (2-6)**

**Clinical Immunohematology (2-5)**

**Topics in Clinical Laboratory Science (2-6)**



## ***PROPOSED CATALOG LISTING***

### CLINICAL LABORATORY SCIENCE

Allied Health

Website: [www.washburn.edu/cls](http://www.washburn.edu/cls)

**Degree offered:** Bachelor of Health Science/Clinical Laboratory Science (BHS/CLS)

**Priority Deadline for Application:** December 1

#### Advisors:

Kathy Hupp, Director of CLS Student Affairs

Benton Hall, Room 108

[kathy.hupp@washburn.edu](mailto:kathy.hupp@washburn.edu) 785-670-1412

#### MISSION

Upon completion of the clinical laboratory science (CLS) education program, the graduate will be the health care team professional responsible for providing laboratory information that is timely, cost-effective and of high quality. The laboratory professional will demonstrate a command of clinical laboratory science theory and application such that s/he develops, implements, and evaluates the total laboratory process to improve patient care outcomes.

#### DESCRIPTION OF PROGRAM

The CLS Program provides patient-centered educational opportunities, with theoretical knowledge and practical experience in hematology, clinical chemistry, microbiology, immunohematology (blood bank), immunology, molecular diagnostics and laboratory management. The program emphasizes laboratory principles and procedures, clinical significance and application, principles and practice of quality assurance, principles of laboratory management and supervision, safety, instructional methods, and computer applications.

#### CLS PROGRAM GOALS

- Graduate technically competent practitioners, who interpret, assess validity and correlate clinical laboratory data.
- Instill the highest standards of performance and professional ethics in all graduates.
- Provide graduates with tools that promote sound, independent judgment, successful problem-solving abilities, and essential educational and administrative skills.
- Graduate professionals who are effective communicators with all members of the health care team, patients and the public (community).
- Support and mentor the development of professional responsibility to include lifelong learning activities, teamwork skills, and the ability to adapt to and facilitate change.
- Graduate professionals who actively educate others regarding the integral role of clinical laboratory scientists in delivering quality patient care.
- Prepare graduates to pass national certification examinations in order to enter professional practice.

#### ACCREDITATION

Washburn University's CLS program, in conjunction with the University of Nebraska Medical Center, is accredited by: National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). 8410 West Bryn Mawr Avenue, Suite 670 Chicago, IL 60631-3415(773) 714-8880

#### ADMISSION REQUIREMENTS

This program has special admission requirements due to limited enrollment.

In addition to the 39 hours of major coursework listed below, students must meet all prerequisites, general education and university requirements. The prerequisites include a minimum of 16 credit hours of biology and 16 credit hours of chemistry. Interested students should contact the CLS advisor for information about the prerequisites, application packets and priority application deadlines.

Some students complete a Bachelor of Science degree prior to entering the CLS program. These students should contact the CLS advisor to determine program eligibility.

**Required courses (39 hours)****CL 414: Clinical Chemistry I****(4 cr. hrs)**

This course includes the introduction to the theory, practical application, technical performance and evaluation of clinical chemistry laboratory procedures. Correlation of clinical Laboratory data with the diagnosis and treatment of carbohydrate, renal, liver, cardiac, protein, pancreatic and endocrine disorders is emphasized.

**CL 415: Clinical Chemistry II****(3 cr.hrs)**

This course incorporates advanced theory, practical application, technical performance and evaluation of clinical chemistry laboratory procedures. Correlation of clinical Laboratory data with the diagnosis and treatment of carbohydrate, renal, liver, cardiac, protein, pancreatic and endocrine disorders is emphasized.

**CL 416: Clinical Hematology I****(4 cr. hrs)**

This course includes the introduction to the theory, practical application, technical performance and evaluation of hematological and hemostasis procedures. There is an emphasis on the correlation of clinical laboratory data with the diagnosis and treatment of anemia, leukemia, and bleeding/clotting disorders.

**CL 417: Clinical Hematology II****(3 cr.hrs)**

This course incorporates advanced theory, practical application, technical performance and evaluation of hematological and hemostasis procedures. There is an emphasis on the correlation of clinical laboratory data with the diagnosis and treatment of anemia, leukemia, and bleeding/clotting disorders.

**CL 418: Clinical Microbiology I****(4 cr. hrs)**

This course includes the introduction to the theory, practical application, technical performance and evaluation of procedures for isolation, identification and susceptibility testing of infectious disease organisms in humans. This course includes bacteriology, mycology, parasitology, virology and serology, and emphasizes the correlation of clinical laboratory data with the patient's diagnosis and treatment.

**CL 419: Clinical Microbiology II****(3 cr. hrs)**

This course incorporates advanced theory, practical application, technical performance and evaluation of procedures for isolation, identification and susceptibility testing of infectious disease organisms in humans. This course includes bacteriology, mycology, parasitology, virology and serology, and emphasizes the correlation of clinical laboratory data with the patient's diagnosis and treatment.

**CL 420: Clinical Immunology and Molecular Diagnostics****(1 cr.hr)**

This course includes the theory, practical application, and evaluation of immunological components, principles and methodologies used in the assessment of immunologically related disorders, including hypersensitivity reactions, autoimmune, immunoproliferative and immunodeficiency disorders, tumors, and transplantations. Theory and application of molecular diagnostic tools, such as polymerase chain reaction (PCR), nucleic acid probes, fluorescent in situ hybridization (FISH) and microarray are also addressed.

**CL 422: Clinical Immunohematology I****(3 cr. hrs.)**

This course includes the introduction to the theory, practical application, technical performance and evaluation of blood bank procedures required for transfusion of blood and blood components and for handling and storage of blood and blood components.

**CL 423: Clinical Immunohematology II****(2 cr. hrs)**

This course incorporated advanced theory, practical application, technical performance and evaluation of blood bank procedures required for transfusion of blood and blood components and for handling and storage of blood and blood components.

**CL 490: Clinical Laboratory Management I****(2 cr. hrs)**

This course includes the theory, practical application, technical performance and evaluation of laboratory management principles and associated models. Opportunities for building critical thinking, problem-solving, and management/professional leadership skills are provided.

**CL 490A: Phlebotomy****(1 cr. hr.)**

This course includes the theory, practical application, technical performance and evaluation of procedures used in collecting, handling and processing blood specimens.

**CL 490B: Urine and Body Fluid Analysis**

(1 cr. hr.)

This course includes the theory, practical application, technical performance and evaluation of procedures used in the analysis of urine and other body fluids, including cerebrospinal, synovial, serous and amniotic fluids.

**CL 490C: Clinical Laboratory Management II**

(3 cr. hrs)

This course includes the theory, practical application, technical performance and evaluation of laboratory management principles and associated models. Opportunities for building critical thinking, problem-solving, and management/professional leadership skills are provided.

**CL 490D: Clinical Laboratory Science Theory, Application and Correlation**

(5 cr. hrs)

This course includes the application, evaluation and correlation of laboratory procedures used in the diagnosis and treatment of common disease states. Opportunities for building critical thinking, problem solving, and leadership skills are provided in small group clinical case discussions.

**School of Applied Studies**  
**Clinical Laboratory Science Program Proposal**

Re: Supporting Documentation from Natural Science Division (CAS)


The following document is being provided with permission from Dr. John Mullican, Biology department chair, to illustrate the collaboration between the CAS and SAS.





Department of Biology

MEMORANDUM

To: Members of the Washburn University Faculty Senate Academic Affairs Committee  
From: John Mullican, Chair, Department of Biology   
Date: October 28, 2010  
Re: Clinical Laboratory Science (CLS) Program Proposals

Following the October 15, 2010 Academic Affairs Committee (of Faculty Senate) Meeting, I was asked to provide additional information regarding the CLS program. In short, this memo is two-fold, (1) to fully support the School of Applied Studies (SAS) proposal to begin a **new major** (Clinical Laboratory Science) within the Bachelor of Health Science degree program, and (2) to fully support the **Program Deletion Proposal** of the existing major (Clinical Laboratory Science) in the Bachelor of Science degree program within the College of Arts & Sciences, currently advised by the Biology Department. The latter is in CAS approval process and is scheduled for vote by the CFC at the upcoming Nov 3 meeting.

It should be noted that the existing CLS program is not being eliminated, rather it is "moving" to a new, more appropriate, administrative home on campus. The Biology Department acknowledges that this move neither involves any transfer of funds between CAS and SAS nor any transfer of faculty positions, FTE or other support from CAS to SAS.

A bit of history – over the course of the 2009-2010 academic year, the Biology Department met numerous times to discuss the feasibility of continuing to advise the CLS major as a BS degree within the CAS. We examined programs throughout the Midwest, studied various CLS curricula, and assessed how our current resources might be affected given the new contract negotiated with UNMC. Ultimately, the Biology Department faculty members decided that the CLS major would best serve Washburn University students in the School of Applied Studies, which is better suited to handle issues relating to accreditation, contract negotiations with UNMC, etc. CAS Dean Gordon McQuere supports the transfer of administrative oversight to the SAS.

On June 29, 2010, Acting VPAA Nancy Tate, Dean Gordon McQuere (CAS), Dean Willie Dunlap (SAS), Chair Pat Munzer (Allied Health) and I met to discuss the best way to "move" the CLS program from the CAS to the SAS. Dr. Tate suggested that the best mechanism to achieve the "transfer" of CLS from CAS to SAS was to submit individual proposals from each unit.

Thus, earlier this fall semester the Biology Department put forward a Program Deletion Proposal to delete the CLS major from the BS degree program within CAS. This passed unanimously in the Natural Science Division meeting on Sep 17, 2010, approved by Dean McQuere, approved by the CAS Curriculum Committee on Oct 22, 2010, and is now on the Nov 3, 2010 CFC agenda. Simultaneously, the SAS put forward a proposal to create a new CLS major within the existing BHS degree program. The SAS met on Sep 24, 2010 and passed this proposal unanimously. Unfortunately, the curriculum approval processes in CAS and SAS subscribe to different time lines and protocols, and therefore the proposals do not arrive at Faculty Senate at the same time.

If necessary, I will do my best to attend the Faculty Senate Meeting when this issue will be addressed. In the meantime, please feel free to contact me by phone at x. 2079 or email via [john.mullican@washburn.edu](mailto:john.mullican@washburn.edu) should you have any questions or need additional information

cc: Gordon McQuere

Approved by Faculty Senate:

November 8, 2010





