Proposal for a New Degree Program

I. Information and Rationale

A. Primary Contact Information

Institution: University of Alabama at Birmingham

Contact: Dr. Floyd Josephat, MLS(ASCP), AHI(AMT)

Title: Medical Laboratory Science Program Director

Email: josephat@uab.edu

Telephone: (205) 934-1348

B. Program Information

Date of Proposal Submission: 10/5/2023

Award Level: Bachelor's Degree

Award Nomenclature (e.g., BS, MBA): BS

Field of Study/Program Title: Medical Laboratory Science

CIP Code (6-digit): 51.1005

C. Implementation Information

Proposed Program Implementation Date: 8/1/2025

Anticipated Date of Approval from Institutional Governing Board: 4/4/2025

Anticipated Date of ACHE Meeting to Vote on Proposal: 6/13/2025

SACSCOC Sub Change Requirement (Notification, Approval, or NA): Notification

Other Considerations for Timing and Approval (e.g., upcoming SACSCOC review):

D. Specific Rationale (Strengths) for the Program

It is anticipated that the development of the BSMLS program will help fill and meet the need of the shortage of the laboratory professionals in Birmingham and the surrounding community. Currently, we have clinical sites requesting students for clinical practice and graduates to help fill vacancies. By implementing the bachelor's level MLS program, that will increase the number of students in our programs and therefore graduates to help fill the workforce need in the profession.

List 3 – 5 strengths of the proposed program as specific rationale for recommending approval of this proposal.

1. The proposed BSMLS program contains faculty who are highly trained to deliver a competitive curriculum that will effectively prepare students for employment within the medical laboratory science community.

2. The proposed BSMLS program will provide a comprehensive didactic and clinical curriculum to prepare students to take on roles and assume responsibilities as a Medical Laboratory Scientist.

3. The proposed BSMLS will have less of an overall financial burden to students. For example, under the BSMLS program, students can apply for federal student aid (FAFSA) including grants and other financial aid. Whereas In the MSMLS program, financial resources may be limited.

4. The proposed BSMLS program will be delivered in-person/on-campus at a world-renowned institution. Students will complete this program in 21 months after completing their undergraduate prerequisite courses.

5. The proposed BSMLS program will be taught at an institution that is affiliated with world class clinical laboratories to enhance students clinical practice experience.

List external entities (more may be added) that may have supplied letters of support attesting to the program's strengths and attach letters with the proposal at the end of this document.

1. Delores Bush, MLS Advisory Board Member
2. Lauren Spivak, MLS Advisory Board Member

II. Background with Context

A. Concise Program Description

The Medical Laboratory Science program is committed to providing a high-quality clinical education to help prepare students with a solid education background and a set of skills translatable to a variety of healthcare settings. Graduates will become competent to perform and interpret laboratory tests, and to explain the appropriate use and meaning of these tests to other health-care professionals and to patients. In addition, graduates of this degree program would gain ability to synthesize clinical and laboratory data and provide a narrative interpretation to help guide and support the decision-making process by the healthcare team (including patients) based upon medical evidence. This program will help to prepare individuals with job skills which are directly related to one of the overarching mission pillars of UAB – "to deliver the highest quality patient care that reflects our ability to translate discoveries into revolutionary therapies in one of the nation's largest academic medical centers." This program will aid in improving the quality of patient care, as laboratory tests make up a large proportion of diagnostic tests used to guide patient care.

B. Student Learning Outcomes

List four (4) to seven (7) of the student learning outcomes of the program.

1. Demonstrate the knowledge, technical skills, and professional conduct required of a Medical Laboratory Scientist.

2. Critically review, appraise, and synthesize clinical and laboratory data; and present narrative interpretations of data based on medical evidence.

3. Demonstrate the ability to provide appropriate and effective communication about tests results through the effective exchange of information and expertise with other health care professionals, patients, patients' families, and the community at large.

4. Synthesize new concepts, models, and theories through appropriate application of empirical knowledge and use this new information effectively toward the practice of evidence-based laboratory medicine.

5. Successfully demonstrate the ability to accurately perform medical laboratory procedures.

C. Administration of the Program

Name of Dean and College: **Dr. Andrew Butler**, UAB School of Health Professions

Name of Department/Division: Clinical & Diagnostic Sciences (CDS)

Name of Chairperson: **Dr. Kathy Nugent**

D. Similar Programs at Other Alabama Public Institutions

List programs at other Alabama public institutions of the same degree level and the same (or similar) CIP codes. If no similar programs exist within Alabama, list similar programs offered within the 16 states. If the proposed program duplicates, closely resembles, or is similar to any other offerings in the state, provide justification for any potential duplication.

CIP Code	Degree Title	Institution with Similar Program	Justification for Duplication
51.1005	Baptist Hospital Based Medical Laboratory Science Program in Montgomery, Alabama	Baptist Hospital (not similar)	There is an increased demand for Medical Laboratory Science professionals locally and nationally [1,2,3]
51.1004	Bachelor of Science in Medical Laboratory Science (MLS)	Auburn University in Montgomery, Alabama (AUM)	There is an increased demand for Medical Laboratory Science professionals locally and nationally [1,2,3]
51.1005	Medical Laboratory Science (major only, not a degree)	Auburn University, Auburn, Alabama	There is an increased demand for Medical Laboratory Science professionals locally and nationally [1,2,3]

E. Relationship to Existing Programs within the Institution

1. Is the proposed program associated with any existing offerings within the institution, including options within current degree programs? **Yes ☒ No ☐**

   (Note: Most new programs have some relationship to existing offerings, *e.g.*, through shared courses or resources). If yes, complete the following table. If this is a graduate program, list any existing undergraduate programs which are directly or indirectly related. If this is a doctoral program, also list related master's programs.

Related Degree Program Level	Related Degree Program Title	Explanation of the Relationship Between the Programs
M.S	Medical Laboratory Science (MLS)	It is related to the current master's program in Medical Laboratory Science. The current master's is for students with a prior Bachelor's degree in Biology, Chemistry, or Biochemistry, for example, that want to pursue a career as a medical laboratory scientist. The professional master's degree allows graduates to attain professional certification and skill qualifications to work in a clinical laboratory.

2. Will this program replace any existing programs or specializations, options, or concentrations? **Yes ☐ No ☒**

   If yes, please explain.

3. Will the program compete with any current internal offerings? **Yes ☐ No ☒**

   If yes, please explain.

F. Collaboration

Have collaborations with other institutions or external entities been explored? **Yes ☐ No ☒**

If yes, provide a brief explanation indicating those collaboration plan(s) for the proposed program.

Have any collaborations within your institution been explored? **Yes ☐ No ☒**

If yes, provide a brief explanation indicating those collaboration plan(s) for the proposed program.

G. Specialized Accreditation

1. Will this program have any external accreditation requirements in addition to the institution's SACSCOC program requirements? **Yes ☒ No ☐**

   If yes, list the name(s) of the specialized accrediting organization(s) and the anticipated timeframe of the application process.
   NAACLS- National Accrediting Agency for Clinical Laboratory Science. Existing M.S in Medical Laboratory Science program is already accredited.

2. Does your institution intend to pursue any other non-required accrediting organizations for the program?* **Yes ☐ No ☒**

   If yes, list the name(s) of the organization(s) and the purpose of the pursuit.

   If there are plans to pursue non-required external accreditation at a later date, list the name(s) and why the institution is not pursuing them at this time.

Note: Check *No* to indicate that non-required external accreditation will not be pursued, which requires no explanation.

H. Admissions

Will this program have any additional admissions requirements beyond the institution's standard admissions process/policies for this degree level? **Yes ☒ No ☐**

If yes, describe any other special admissions or curricular requirements, including any prior education or work experience required for acceptance into the program.

Prerequisite Requirements

- Pre-calculus Algebra (or higher) 3 Sem Hrs.
- General Chemistry I with Lab 4 Sem Hrs.
- General Chemistry II with Lab 4 Sem Hrs.
- Introductory Biology with Lab 4 Sem Hrs.
- Organic Chemistry I with Lab 4 Sem Hrs.
- Microbiology with Lab 4 Sem Hrs.
- Genetics 3 Sem Hrs.

I. Mode of Delivery

Provide the planned delivery format(s) (*i.e*., in-person, online, hybrid) of the program as defined in policy along with the planned location(s) at which the program will be delivered (*i.e*., on-campus and/or at specific off-campus instructional site(s)). Please also note whether any program requirements can be completed through competency-based assessment.

The BSMLS program will be delivered in-person in the UAB School of Health Profession. Students will be required to do 12 hours of clinical practice/rotation at our approved clinical affiliates. Program requirements cannot be met through competency-based assessments.

J. Projected Program Demand (Student Demand)

Briefly describe the primary method(s) used to determine the level of student demand for this program using evidence, such as enrollments in related coursework at the institution, or a survey of student interest conducted (indicate the survey instrument used), number and percentage of respondents, and summary of results.

UAB previously offered a BS in Clinical Laboratory Sciences which was very similar to this curriculum. Based on a past enrollment of approximately 25 students total, at any one time, in the previous bachelor's degree program, we anticipate that the enrollment of the proposed BSMLS degree program will be similar. Student demographics, interests, and visibility of the profession is similar to when we last had the BS program, we anticipate numbers remaining very similar. In addition, because the BMD (Biomedical Science) program is located within our department and currently contains over 750 undergraduate students, we anticipate recruiting heavily from that pool of student population.

III. Program Resource Requirements

A. Proposed Program Faculty*

Current Faculty and Faculty to Be Hired

Complete the following **New Academic Degree Proposal Faculty Roster** to provide a brief summary and qualifications of current faculty and potential new hires specific to the program.

***Note**: Institutions must maintain and have current as well as additional faculty curriculum vitae available upon ACHE request for as long as the program is active, but CVs are **not** to be submitted with this proposal.

Current Faculty			
1	2	3	4
CURRENT FACULTY NAME (FT, PT)	**COURSES TAUGHT** including Term, Course Number, Course Title, & Credit Hours (D, UN, UT, G, DU)	**ACADEMIC DEGREES and COURSEWORK** Relevant to Courses Taught, including Institution and Major; List Specific Graduate Coursework, if needed	**OTHER QUALIFICATIONS and COMMENTS** Related to Courses Taught and Modality(ies) (IP, OL, HY, OCIS)
Dr. Floyd Josephat MLS (ASCP), Professor and Program Director- FT	CLS 528, Hematology I 3CH, Fall -UG,G. CLS 529 Hematology Lab, 1CH, Fall -UG,G. CLS 532, Hematology II, 3CH, Spring -UG,G. CLS 533, Hematology Lab, Spring -UG,G. CLS 505, Laboratory Management co-taught, 3CH, Fall -UG,G. CLS 698, Non-Thesis Research, co-taught, 4CH, F, Sp, Su. G	B.S Medical Laboratory Science Degree; B.A Biology M.S Education; Ed.D. Higher Education Administration American Society for Clinical Pathology certification (ASCP)	14 yrs.Teaching Experience, IP, OL 32 yrs. Medical Laboratory Science Experience
Dr. Tera Webb, MLS (ASCP)- FT	CLS523, Clinical Microbiology, 3CH Spring -UG,G. CLS524, Clinical Microbiology Lab, 1CH Spring - UG,G. CLS 502, Phlebotomy 1CH, F, Sp -UG,G. CLS 505 Laboratory Management, co-taught, Fall -UG,G.. CLS 698, Non-Thesis Research, co-taught 4 CH, F,Sp,Su -G.CLS 538, Infectious Disease, 3CH Su -UG,G. CLS 539, Infectious Disease Lab 1 CH, Su -UG,G.	B.S. Biology M.S. Medical Laboratory Science Degree PhD Health Service Administration ASCP Certification	8 yrs. Teaching Experience- IP, OL,HY 12 yrs. Medical Laboratory Science Experience
Dr. Jie Gao, MLS (ASCP)- FT	CLS 501, Intro to Clinical Lab Science, 3 CH, Fall -G. CLS 551, Clinical Chemistry, 4 CH, Fall -G. CLS 552, Clinical Chemistry Lab, 1CH, Fall -G. CLS 526, Instrumentation & Automation, 3CH, Spring -,G. CLS 527 Instrumentation & Automation Lab Co-taught 1CH Sp -G. CLS 698, Non-Thesis Research, 4 CH, F,Sp,Su -G. CLS 542, Molecular Diagnostics, 3CH Su -G. CLS 543, Molecular Diagnostics Lab co-taught 1CH, Su -G.	B.S. Pharmaceutical Sciences M.S. Medical Laboratory Science Degree PhD Pharmaceutical Sciences ASCP Certification	7 yrs.Teaching Experience, IP, OL,HY 6 yrs. Medical Laboratory Science Experience

Current Faculty			
1	2	3	4
CURRENT FACULTY NAME (FT, PT)	**COURSES TAUGHT** including Term, Course Number, Course Title, & Credit Hours (D, UN, UT, G, DU)	**ACADEMIC DEGREES and COURSEWORK** Relevant to Courses Taught, including Institution and Major; List Specific Graduate Coursework, if needed	**OTHER QUALIFICATIONS and COMMENTS** Related to Courses Taught and Modality(ies) (IP, OL, HY, OCIS)
Ms. Brianna Miller, MLS,SBB (ASCP)- FT	CLS 530, Immunohematology, 4CH Su -UG,G. CLS 531, Immunohematology Lab, co-taught 1CH Su - UG,G. CLS 560, Clinical Correlations 3CH, Fall - UG,G. CLS 571 Certification Review, 1CH Spring. CLS 595, Clinical Practice 12CH, Sp -UG,G.	B.S. Biology M.S. Medical Laboratory Science Degree ASCP MLS Certification ASCP Specialist, Blood Bank Certification	10yrs.Teaching Experience, IP,OL,HY 20yrs. Medical Laboratory Science Experience
Ms. Shanequa Roscoe, MLS (ASCP)- FT	CLS 503, Body Fluids, 1CH Fall - G. CLS 504, Body Fluids Lab, 1 CH Fall - G. CLS 529 Hematology Lab, co-taught, Fall -G. CLS 552, Clinical Chemistry Lab, 1CH Fall - G. CLS 524, Clinical Microbiology Lab, 1CH Spring -G. CLS 533, Hematology Lab, 1 CH Spring -G. CLS 539, Infectious Disease Lab 1CH, Su - G. CLS 531, Immunohematology Lab, 1CH Su -G. CLS 543, Molecular Diagnostics Lab 1CH, Su -G .	B.S. Biology M.S. Medical Laboratory Science Degree ASCP MLS Certification	2yrs.Teaching Experience, IP 7 yrs. Medical Laboratory Science Experience
Ms. Katelynn Perry, MLS (ASCP)- PT	CLS 518, Immunology, 3CH Fall - G	B.S. Biomedical Sciences M.S. Medical Laboratory Science Degree ASCP MLS Certification	6 Mos. Teaching Experience, IP 2.6 yrs. Medical Laboratory Science Experience

Additional Faculty (To Be Hired)			
1	2	3	4
FACULTY POSITION (FT, PT)	**COURSES TO BE TAUGHT** including Term, Course Number, Course Title, & Credit Hours (D, UN, UT, G, DU)	**ACADEMIC DEGREES and COURSEWORK** Relevant to Courses Taught, including Institution and Major; List Specific Graduate Coursework, if needed	**OTHER QUALIFICATIONS and COMMENTS** Related to Courses Taught and Modality(ies) (IP, OL, HY, OCIS)
FT	Clinical Lab Courses	M.S MLS (ASCP)	2 yrs Teaching Exp. IP

Abbreviations: (FT, PT): Full-Time, Part-Time; (D, UN, UT, G, DU): Developmental, Undergraduate Nontransferable, Undergraduate Transferable, Graduate, Dual: High School Dual Enrollment
Course Modality: (IP, OL, HY, OCIS): In-Person, Online, Hybrid, Off-Campus Instructional Site
Courses Taught/To be Taught – For a substantive change prospectus/application, list the courses *to be taught*, not historical teaching assignments.

B. All Proposed Program Personnel

Provide all personnel counts for the proposed program.

Employment Status of Program Personnel		Personnel Information		
		Count from Proposed Program Department	Count from Other Departments	Subtotal of Personnel
Current	Full-Time Faculty	6	0	6
	Part-Time Faculty	1	0	1
	Administration	0	0	0
	Support Staff	1	0	1
**New To Be Hired	Full-Time Faculty	1	0	1
	Part-Time Faculty	0	0	0
	Administration	0	0	0
	Support Staff	0	0	0
			Personnel Total	**9**

****Note**: **Any new funds** designated for compensation costs (Faculty (FT/PT), Administration, and/or Support Staff to be Hired) **should be included** in the **New Academic Degree Program Business Plan Excel file**. Current personnel salary/benefits (Faculty (FT/PT), Administration, and/or Support Staff) **should not be included** in the **Business Plan**.

Provide justification that the institution has proposed a sufficient number of faculty (full-time and part-time) for the proposed program to ensure curriculum and program quality, integrity, and review.
The MLS program has 5 FTE's and 1 Part-time faculty which is sufficient for the number of students in the program. Approx Ratio: 7:1. We are anticipating hiring an additional FTE for the program.

C. Equipment

Will any special equipment be needed specifically for this program? **Yes ☐ No ☒**
If *yes*, list the special equipment. Special equipment cost should be included in the **New Academic Degree Program Business Plan Excel file.**

D. Facilities

Will any new facilities be required specifically for the program? **Yes ☐ No ☒**

If *yes*, list only **new** facilities. New facilities cost should be included in the **New Academic Degree Program Business Plan Excel file.**

Will any renovations to any existing infrastructure be required specifically for the program? **Yes ☐ No ☒**

If *yes*, list the renovations. Renovation costs should be included in the **New Academic Degree Program Business Plan Excel file.**

E. Assistantships/Fellowships

Will the institution offer any assistantships specifically for this program? **Yes ☐ No ☒**

If *yes*, how many assistantships will be offered?

The expenses associated with any *new* assistantships should be included in the **New Academic Degree Program Business Plan Excel file.**

F. Library

Provide a brief summarization (one to two paragraphs) describing the current status of the library collections supporting the proposed program.

The University of Alabama at Birmingham (UAB) library facilities for available students are extensive and comprehensive. The institution has two libraries that support all its educational programs, whether campus-based or online. The book and periodical holdings are in the Lister Hill Library of the Health Sciences and the Mervyn H. Sterne Library. The Lister Hill Library contains the relevant resources to assist and support students. The libraries collectively and collaboratively provide all faculty, students, staff, Alabama health care providers, and community users with access to library collections as well as to other learning/information resources.

Lister Hill Library, established in 1945, is the largest biomedical library in Alabama and one of the leading such libraries in the South. The collection spans over seven centuries beginning with 13,475 old and rare books and faculty and student access to 102,507 circulating monograph titles, 107,182 electronic monographs, and 39,499 electronic full text journals. Access to electronic resources is available across the campus and remotely to authorized users. The library provides a dynamic electronic collection of heavily used and just-in-time resources that meet the teaching, learning, and research needs of the faculty, staff and students at the University. Materials acquired for the library's collection is generally purchased in electronic format, except in cases where the only format available for sale is print. Content added to the library's collection is selected by user input, and there are demand driven systems in place to purchase book and journal content at the point of need. Sixty- Six Medical Laboratory/Clinical Laboratory Science, and 18 Clinical Pathology journals are available through electronic format. All the library's electronic resources are available from the campus network. The library utilizes EZProxy software to verify affiliation to provide off campus access to licensed content.
Sterne Library houses a collection of more than one million items that support teaching and research in the arts and humanities, business, education, engineering, natural sciences and mathematics, and social and behavioral sciences. The library provides electronic access to more than 35,000 serials and 72,000 electronic books, and subscriptions to more than 40,000 periodicals. Resources also include microforms and sound and video recordings. The facility has seating for over 1,100 users. The library offers special services for distance education students, such as document delivery and online research consultations. For guidelines and more details, please see *Services for Distance Students* (http://www.mhsl.uab.edu/distance).

Will additional library resources be required to support the program? **Yes ☐ No ☒**

If *yes*, briefly describe how any deficiencies will be remedied, and include the cost in the **New Academic Degree Program Business Plan Excel file.**

G. Accreditation Expenses

Will the proposed program require accreditation expenses? **Yes ☐ No ☒**

If *yes*, briefly describe the estimated cost and funding source(s) and include cost in the **New Academic Degree Program Business Plan Excel file.**

No additional cost. The master's degree program is already accredited. BSMLS degree will be accredited under existing accreditation.

H. Other Costs

Please explain any other costs to be incurred with program implementation, such as marketing or recruitment costs. Be sure to note these in the **New Academic Degree Program Business Plan Excel file.**

No additional cost

I. Revenues for Program Support

Will the proposed program require budget reallocation? **Yes ☐ No ☒**

If *yes*, briefly describe how any deficiencies will be remedied and include the revenue in the **New Academic Degree Program Business Plan Excel file.**

Will the proposed program require external funding (*e.g.*, Perkins, Foundation, Federal Grants, Sponsored Research, etc.)? **Yes ☐ No ☒**

If *yes*, list the sources of external funding and include the revenue in the **New Academic Degree Program Business Plan Excel file.**

Please describe how you calculated the tuition revenue that appears in the **New Academic Degree Program Business Plan Excel file.** Specifically, did you calculate using cost per credit hour or per term? Did you factor in differences between resident and non-resident tuition rates?

IV. Employment Outcomes and Program Demand (Industry Need)

A. Standard Occupational Code System

Using the federal Standard Occupational Code (SOC) System, indicate the top three occupational codes related to post-graduation employment from the program. A full list of SOCs can be found at https://www.onetcodeconnector.org/find/family/title#17.

A list of Alabama's *In-Demand Occupations* is available at https://www.ache.edu/index.php/policy-guidance/.

SOC 1 (**required**): 29-2011.00

SOC 2 (*optional*):

SOC 3 (*optional*):

Briefly describe how the program fulfills a specific industry or employment need for the State of Alabama. As appropriate, discuss alignment with Alabama's Statewide or Regional Lists of In-Demand Occupations (https://www.ache.edu/index.php/policy-guidance/) or with emerging industries as identified by Innovate Alabama or the Economic Development Partnership of Alabama (EDPA).

There is a current and growing shortage of medical laboratory scientists to fill the workforce needs of our local healthcare community, the state, and beyond. According to the 2023 Bureau of Labor Statistics (BOL), Medical Laboratory Scientist (MLS) jobs are projected to grow by 7% and 8% nationally and in the state of Alabama by 2030 and 2031[1]. This means that the job openings for MLS in the state of Alabama will be approximately 420 by year 2030[2]. The national job openings for this profession are projected to be at 25,600 by the year 2031 (7% increased from 2021) [3]. The UAB Bachelors of Science in Medical Laboratory Science (BSMLS) degree is designed for students who wish to pursue a career in laboratory medicine. Graduates will enter the workforce as a medical laboratory scientists upon degree completion and successfully passing the required board certification examination. It is anticipated that graduates will be able to make a positive impact on the growing shortage. The ultimate goals of the MLS program are to prepare students to assume the role of a health care professional in the field of medical laboratory sciences, to accept responsibilities as a health care team member, and to continue to develop professionally as a medical laboratory scientist. There is no difference in the entry level job position of the BS and MS laboratory professionals. The MS level program we currently offer is designed for the student who did not find out about the profession early in their education and already have a BS degree and does not want to get a second BS degree but would rather get an MS degree.

Projected Jobs (National)	Employment number		Growth Change		
	2021	2031	Numeric	Projected Annual Openings	Percent
Medical and Clinical Laboratory Technologists	329,200	351,000	21,800	25,600	7

Projected Jobs (State)	Employment number		Growth Change		
	2020	2030	Numeric	Projected Annual Openings	Percent
Medical and Clinical Laboratory Technologists	5730	6210	480	420	8.0

Citations: [1,2,3] Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, Clinical Laboratory Technologists and Technicians, at https://www.bls.gov/ooh/healthcare/clinical-laboratory-technologists-and-t technicians.htm (visited *July 03, 2023*).

Example of survey used to determine the level of demand in the Birmingham community. Please see below for survey conducted to assess program demand.

Survey questions	Yes	No	N/A
Are you experiencing a shortage of Medical Laboratory Scientists?			
If you are experiencing a shortage of MLS personnel, do you see value in UAB starting back the BS MLS program to help with this shortage?			
Should the UAB MLS program bring back the Bachelor's degree program in addition to the Master's program currently available?			
Any comments related to the UAB BS MLS program or this survey?			

We conducted a survey among clinical laboratory science preceptors, across hospitals in the Birmingham, AL area as to the current job market for this position. There were 42-43 responses to the survey. In addition, there were comments submitted to support the need of a BSMLS program.

As we anticipated, the survey overwhelmingly revealed that healthcare institutions in the Birmingham area currently do have a need for graduates with this degree (BSMLS) and skills set. Results of the survey are as follows:

1. Are you experiencing a shortage of Medical Laboratory Scientists?

   42 Survey participants responded Yes

2. If you are experiencing a shortage of MLS personnel, do you see value in UAB starting back the BS MLS program to help with this shortage?

   43 survey participants responded Yes

3. Should the UAB MLS program bring back the Bachelor's degree program in addition to the Master's program currently available?

   43 survey participants responded Yes.

4. Any comments related to the UAB BS MLS program or this survey?

   - We need the bachelor's program available here. This will help us fill all the vacant positions we have.
   - There is great value in pursuing potential candidates at any level interested in this field, as we continue to experience shortages.
   - I am thrilled to hear about this plan. Thank You!!!
   - I feel that having the option to receive BS would increase the interest in the MLS program and the field of medical technology.
   - Any help getting MLS into the work force is needed and appreciated.
   - I think it would be very beneficial to bring the program back.
   - I believe having the Bachelor's program would allow more students an easier path to becoming a MLS.
   - The BS is better suited for entry level MT's.

B. Employment Preparation

Describe how the proposed program prepares graduates to seek employment in the occupations (SOC codes) identified.

This program will provide didactic and clinical training that will enable program graduates to take the American Society of Clinical Pathology (ASCP) or the American Medical Technologist (AMT) certification examinations upon completion of the program. Upon certification, graduates will be certified medical laboratory scientist.

C. Professional Licensure/Certification

Please explain if professional licensure or industry certification is required for graduates of the proposed program to gain entry-level employment in the occupations selected. Be sure to note which organization(s) grants licensure or certification.

Certifications: American Society for Clinical Pathology (ASCP) or American Medical Technologist (AMT) Certification

D. Additional Education/Training

Please explain whether further education/training is required for graduates of the proposed program to gain entry-level employment in the occupations selected.

No further education/training is required.

V. Curriculum Information for Proposed Degree Program

A. Program Completion Requirements: Enter the credit hour value for all applicable components (enter N/A if not applicable).

Curriculum Overview of Proposed Program	
Credit hours required in **general education & Pre-Requisite**	54
Credit hours required in **program courses**	61
Credit hours in **program electives/concentrations/tracks**	N/A
Credit hours in **free electives**	8
Credit hours in **required research/thesis**	N/A
Total Credit Hours Required for Completion	**123**

Note: The above credit hours **MUST** match the credit hours in the *Curriculum Components of Proposed Program* table in Section V.G.

B. Maximum number of credits that can be transferred in from another institution and applied to the program:

Students cannot transfer credits for any MLS program courses, but may transfer in credits for any prerequisites or general education courses as allowed by UAB.

C. Intended program duration in semesters for full-time students:

5 Semesters

D. Intended program duration in semesters for part-time students:

Currently the program is designed to be full-time. No part-time students are allowed.

E. Does the program require students to demonstrate industry-validated skills, specifically through an embedded industry-recognized certification, structured work-based learning with an employer partner, or alignment with nationally recognized industry standards? **Yes ☒ No ☐**

If yes, explain how these components fit with the required coursework.

As part of the degree plan completion, students are required to complete12 credit hours of clinical rotation/internship at one of the program's hospital affiliations.

F. Does the program include any concentrations? **Yes ☐ No ☒**

If yes, provide an overview and identify these courses in the *Electives/Concentrations/Tracks* section in the Curriculum Components of Proposed Program Table in Section V.G.

G. Please provide all course information as indicated in the following table. Indicate new courses with "Y" in the associated column. If the course includes a required work-based learning component, such as an internship or practicum course, please indicate with a "Y" in the WBL column.

Program Name:	Medical Laboratory Science			
Program Level:	Undergraduate			
Curriculum Components of Proposed Program				
Course Number	**Course Title**	**Credit Hours**	**New? (Y)**	**WBL? (Y)**
General Education Courses *(Undergraduate Only)*				
Area I	**Local Beginnings (3 hrs)**			
HRP 101	FYE Course	3		
Area II	**Academic Foundations (15 hrs)**			
Writing	English Comp I EH 101	3		
	English Comp II EH 102	3		
Quant Lit	Mathematics MA 105	3		
Reasoning		3		
Comms		3		
Area III	**Thinking Broadly (20hrs)**			
History & Meaning**		3		
Creative Arts**		3		
Scientific Inquiry	General Chem I w/ Lab CH115/CH116	4		
	General Chem II w/Lab CH117/CH118	4		
Humans & Society**		3		
Area IV	**City as Classroom (CAC) (3hrs)**			
	CAC Approved Course	3		
Area V	**Additional Courses Req by Major (16hrs)**			
BY 123	Intro Biology I w/Lab	4		
CH 235/236	Organic Chem. I w/Lab	4		
BY 261/271	Intro to Microbiology or Biology of Microorganisms	4		
BY 210	Genetics	4		
Program Courses				
MT 401	Introduction to Clinical Laboratory Science	3	Y	
MT 403	Body Fluids	1		
MT 404	Body Fluid Lab	1		
MT 418	Immunology	3		
MT 428	Hematology I	4		
CLS 402	Fundamentals of Phlebotomy BFC	1		
MT 423	Clinical Microbiology	3		
MT 424	Clinical Microbiology Laboratory	1		
MT 426	Instrumentation and Automation	2		
MT 427	Instrumentation and Automation Laboratory	1		
MT 432	Hematology II	4		
MT 430	Immunohematology	4		
MT 431	Immunohematology Laboratory	1		
MT 438	Infectious Diseases	3		
MT 439	Infectious Diseases Laboratory	1		

MT 442	Molecular Diagnostics	3		
MT 443	Molecular Diagnostics Laboratory	1		
MT 405	Laboratory Management	3		
MT 451	Clinical Chemistry	4		
MT 452	Clinical Chemistry Laboratory	1		
MT 460	Clinical Correlations	3		
MT 470	Certification Review	1		
MT 495	Clinical Practices	12		
Program Electives/Concentrations/Tracks				
Electives		8		
Research/Thesis				
NA				
	***Total Credit Hours Required for Completion**	**123**		

***Note**: The total credit hours should equal the total credit hours in the Curriculum Overview table (V.B, p. 9).
** Two Courses (6 hrs) must be completed in one of these areas

New Academic Degree Program Summary/Business Plan

Use the Excel form from ACHE's Academic Program webpage located at https://www.ache.edu/index.php/forms/, named **New Academic Degree Program Business Plan**, to complete the New Academic Program Degree Proposal.

Instructions and definitions are provided in the Excel file. **The New Academic Degree Program Business Plan should be uploaded as an Excel file (.xlsx) in the Academic Program Review (APR) Portal.**

Steps for Submitting the New Academic Degree Proposal

1. Complete the **New Academic Degree Proposal** document.
2. Attach the letters of support from external entities listed in *Section I.D.* at the end of the **New Academic Degree Proposal** document.
3. Save the **New Academic Degree Proposal** document as a **.pdf file**.
4. Complete the **New Academic Degree Program Business Plan** and save as an **.xlsx file.**
5. Login to the Academic Program Review (APR) Portal at apr.ache.edu using your ACHE-provided login information. If you are not a designated user for your institution, contact your designated user.
6. Provide responses to questions in the APR Portal.
7. Upload the **New Academic Degree Proposal .pdf file** in the APR Portal.
8. Upload the **New Academic Degree Program Business Plan .xlsx file** in the APR Portal.
9. Click to "Validate" the proposal and then address any issues with your submission.
10. Once validation is clear, click "Review" to check your responses before submitting. If all looks good, click "Submit" at the bottom of the review screen.
11. The system will then prompt you to "Lock" the submission. Your proposal is considered submitted only once it has been locked within the APR Portal.

➔ **Note: Proposals that have not been locked by the deadline will not be reviewed for inclusion on the next Commission agenda.**

NEW ACADEMIC DEGREE PROGRAM PROPOSAL SUMMARY

INSTITUTION:University of Alabama at Birmingham Medical Laboratory Science Program (MLS)

PROGRAM: Medical Laboratory Science Program *Select Level:* *Bachelor's*

ESTIMATED *NEW* EXPENSES TO IMPLEMENT PROPOSED PROGRAM

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	**TOTAL**
FACULTY	115650	115650	115650	115650	115650	115650	115650	809550
STAFF	0	0	0	0	0	0	0	0
EQUIPMENT	1200	0	0	0	0	0	0	1200
FACILITIES	9000	9000	9000	9000	9000	9000	9000	63000
LIBRARY	0	0	0	0	0	0	0	0
ASSISTANTSHIPS	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0
TOTAL	**125850**	**124650**	**124650**	**124650**	**124650**	**124650**	**124650**	**873750**

***NEW* REVENUES AVAILABLE FOR PROGRAM SUPPORT**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	**TOTAL**
REALLOCATIONS	0	0	0	0	0	0	0	0
EXTRAMURAL	0	0	0	0	0	0	0	0
TUITION	0	134540	269080	269080	269080	269080	269080	1479940
TOTAL	**0**	**134540**	**269080**	**269080**	**269080**	**269080**	**269080**	**1479940**

ENROLLMENT PROJECTIONS

Note: "New Enrollment Headcount" is defined as unduplicated counts across years.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	**AVERAGE**
FULL-TIME HEADCOUNT	Year 1 - No data reporting required	10	20	20	20	20	20	18.33333333
PART-TIME HEADCOUNT	Year 1 - No data reporting required	0	0	0	0	0	0	0
TOTAL HEADCOUNT	Year 1 - No data reporting required	10	20	20	20	20	20	18.33333333
NEW ENROLLMENT HEADCOUNT	Year 1 - No data reporting required	10	10	10	10	10	10	10

DEGREE COMPLETION PROJECTIONS

Note: Do not count Lead "0"s and Lead 0 years in computing the average annual degree completions.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	**AVERAGE**
DEGREE COMPLETION PROJECTIONS	Year 1 - No data reporting required	0	10	10	10	10	10	10

February 8, 2024

To Whom It May Concern:

I am submitting this letter in support of creation of the Bachelor of Science in Medical Laboratory Science at UAB.

The University is well known as a major medical center and school. The availability of resources makes the addition of this degree a natural fit. The level of academics and experiences provided by the University are unmatched by any other school in the state of Alabama.

As in many areas of health care there is a well-documented shortage of qualified laboratory professionals. As a consumer in a rural area this is very concerning for me, my family and others. I have spoken with a number of people still working in the small hospital laboratory in my area learning they have had to resort to hiring personal with science backgrounds and training them on the job. This means there are people performing laboratory testing without adequate training and credentials. As a laboratory professional myself I am very aware of what it takes to be a well-trained tech. While the Masters MLS program is a great option for someone with a bachelor's degree in a scientific field to gain the knowledge to become a laboratory professional the Bachelor degree in MLS is a much-needed addition to the School of Health Professions. With the prohibitive cost of a higher education the ability to gain the knowledge needed in a four-year tract will be a major benefit to the University, its students and to the citizens and taxpayers of the state of Alabama. Graduates are qualified to enter the work force immediately, something many potential students are seeking.

This degree will be a tremendous addition to the curriculum at UAB. I respectfully request your approval of it.

Sincerely,

Delores D Bush BSMT, MT(ASCP), BSCIS, MBA

02.08.2024

To Whom It May Concern:

I am writing in support to add the Bachelor track option for the Medical Laboratory Science program at UAB.

I am a 2016 alum of the Master track for the MLS program at UAB, I returned in 2017/2018/2019 to teach in that program, and I am currently at Children's of Alabama Laboratory working in various roles for the last 8 years. I see the whole picture from student to starting their career to being a successful MLS, and I see the necessity of adding in the Bachelor track option for those who are ready to get to the workforce sooner. I have experienced, firsthand, the student side, the alum side, the teaching side, and the hiring side.

Like the majority of hospitals, we are short-staffed in the lab at COA. The need to have more Medical Laboratory Scientists is great. We need them now. Not only do we need them sooner, but we need quality ones. UAB provides just that. This program produces quality applicants that COA seeks to hire. UAB MLS students and graduates are always prepared, professional, and knowledgeable. We know if we get an applicant from UAB, they will be an excellent hire. As a former student myself, I felt prepared and ready to pass boards and begin my career, and I have the MLS program and the professors to thank for that. I have no doubt that a Bachelor option would be successful, and the students would find success after graduation. These professors in the program are brilliant and truly care about the success of their students. Working alongside them, they are thorough and will make sure these Bachelor students are ready for their career. Many students are just ready to work and be independent, and I know having a Bachelor option would certainly help students who are ready to work get in the workforce sooner. Birmingham has so many great hospitals and healthcare facilities who have such a need for MLS applicants, so bringing in more Medical Laboratory Scientists would be huge. I am confident it would make a significant positive impact.

Thank you for your consideration in bringing back this Bachelor track to the MLS program. I am happy to provide any additional information in support of this option.

Sincerely,
Lauren Spivak
Medical Laboratory Scientist- Children's of Alabama
laurenspivak@outlook.com
205.529.0076

THE UNIVERISITY OF ALABAMA AT BIRMINGHAM

Resolution

Granting Initial Approval and Submission to the Alabama Commission on Higher Education (ACHE) for a Proposal for a Bachelor of Science (B.S.) Degree in Medical Laboratory Science (CIP 51.1005)

WHEREAS, the School of Health Professions received feedback about the Notice of Pending Proposal (NPP) for a New Program of Instruction from The University of Alabama System campuses for the Bachelor of Science (B.S.) degree in Medical Laboratory Science on September 12, 2024; and

WHEREAS, there is a shortage of Medical Laboratory Scientists in the current state and national labor market; and

WHEREAS, the B.S. degree in Medical Laboratory Science (BSMLS) offers a comprehensive didactic and clinical curriculum to prepare students to take on roles and assume responsibilities as Medical Laboratory Scientists at an institution that is Accredited by the National Accreditation Agency for Clinical Laboratory Science (NAACLS) and is affiliated with world-class clinical laboratories to enhance students clinical practice experience; and

WHEREAS, the development of the BSMLS program is designed to help meet the shortage of laboratory professionals in Birmingham and the surrounding community and positively contribute to filling the workforce needs in the profession more broadly; and

WHEREAS, course delivery is expected to be in an in-person format in the UAB School of Health Professions, with program implementation proposed to begin in fall 2025;

NOW, THEREFORE, BE IT RESOLVED by The Board of Trustees of The University of Alabama that it grants initial approval of and submission to the Alabama Commission on Higher Education (ACHE) a Proposal for a Bachelor of Science (B.S.) degree in Medical Laboratory Science (CIP 51.1005) by The University of Alabama at Birmingham.

THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

RAY L. WATTS, M.D.
President

February 24, 2025

Chancellor Sid J. Trant
The University of Alabama System
500 University Boulevard East
Tuscaloosa, AL 35401

Dear Chancellor Trant:

The School of Health Professions at UAB proposes establishing a Bachelor of Science (B.S.) degree in Medical Laboratory Science. This degree will offer a comprehensive didactic and clinical curriculum to prepare students to take on roles and assume responsibilities as Medical Laboratory Scientists at institutions that are Accredited by the National Accreditation Agency for Clinical Laboratory Science (NAACLS) and is affiliated with world-class clinical laboratories to enhance students clinical practice experience. Due to a shortage of Medical Laboratory Scientists, this degree program will help fill and meet the need of the shortage of the laboratory professionals in Birmingham and the surrounding community.

The proposal has been thoroughly reviewed here at UAB and has my full support. If you approve, please include this item on the Board's agenda for its April 4, 2025 meeting and then forward it to the Alabama Commission on Higher Education. If additional information is needed, we will be pleased to provide it.

Sincerely,

Ray L. Watts

Ray L. Watts, M.D.
President

RLW:khm

Attachments

cc: Dr. Janet Woodruff-Borden
Dean Andrew Butler
Dr. Tonja Johnson
Mrs. Kirsten Burdick

OFFICE OF THE PRESIDENT

1070 Administration Building | 701 20th Street South
Mailing Address:
AB 1070 | 1720 2ND AVE SOUTH | BIRMINGHAM AL 35294-0110
phone: 205.934.4636 | fax: 205.975.8505
www.uab.edu

UAB OFFICE OF THE PROVOST

The University of Alabama at Birmingham

February 17, 2025

MEMORANDUM

TO: Ray Watts, M.D.
President

FROM: Janet Woodruff-Borden, Ph.D.
Senior Vice President for Academic Affairs and Provost

SUBJECT: Academic Affairs Items for April 4, 2025, Board of Trustees Meeting

For the April 4, 2025, Board of Trustees meeting, we are submitting the following Academic Affairs items from the following UAB Deans:

Teresa Taber-Doughty, Dean of the School of Education and Human Sciences

- Discontinue EdS in Education: K-6 and 6-12 Collaborative Teacher with Reading
- Discontinue EdS in Education Elementary Education Concentration
- Discontinue EdS in Education with Concentration in Early Childhood Education
- Discontinue MAEd in Early Childhood Education Alternative Master's Teacher Certification Concentration
- Discontinue MAEd in Elementary Education Alternative Masters Certification Concentration
- Discontinue MAEd Reading Specialist
- 15-Hour Undergraduate Certificate Health Coaching

Kecia Thomas, Dean, College of Arts and Sciences

- Theatre Education Concentration within the B.S. in Theatre

Andrew J. Butler, Dean, School of Health Professions

- Closure of the M.S. in Occupational Therapy
- B.S in Medical Laboratory Science
- M.S. in Applied Nutrition

Christopher L. Shook, Dean, Collat School of Business

- Changing the Name of the B.S. in Industrial Distribution to the B.S. in Distribution
- Establishment of a Science, Innovation, and Technology Concentration within the B.S. in Distribution

These requests have my full endorsement for submission to the Board of Trustees for review and approval at their April 4, 2025, meeting. Please let me know if you have any questions.

JWB/khm

Janet Woodruff-Borden, Ph.D.
Senior Vice President for Academic Affairs and Provost

1019 Administration Building | 701 20th Street South | 205.934.0622 | Fax 205.934.1221 | www.uab.edu

Executive Summary

The proposed Bachelor of Science (B.S.) degree in Medical Laboratory Science (BSMLS) degree program will be a new degree within the Department of Clinical and Diagnostic Sciences in the School of Health Professions. This program will be in addition to the already existing master's degree program in MLS within the same department and school. The proposed program is an undergraduate level professional program that will provide students the knowledge, skills and training needed to practice as a laboratory professional in the United States. as well as provide current Medical Laboratory Scientists advanced knowledge in the field of laboratory medicine. There is currently a shortage of MLS professional in the Birmingham and other medical communities throughout the United States (BOL, 2023). This program is timely from UAB's medical community perspective because it will help alleviate this shortage by increasing the number of MLS graduates each academic year.

The development of this new program in the state of Alabama is for a few reasons. The roles and responsibilities of the Medical Laboratory Scientist have evolved over the years with the adoption of more testing procedures and practices in healthcare. However, the number of graduates of these laboratory professional programs has not kept up with the need especially in the Birmingham medical community. One major example is Medical Laboratory Scientists assuming a consulting role for what tests to order, follow-up testing, result interpretation, etc. Physicians, nurses, and other healthcare providers are leaning more on Medical Laboratory Scientists for test information and proper utilization. Medical Laboratory Science programs are now all but forced to develop additional programs or increase recruitment efforts in existing programs to become and remain competitive within medical communities throughout the United States.

The new and proposed degree (BSMLS) will provide the necessary knowledge and skills needed to adequately equip students to become competent medical laboratory scientist and to successfully serve their medical community. Graduates will be competent in knowing how to accurately perform high complex medical laboratory test procedures, address proper test selection and utilization among physicians and other healthcare providers, test interpretations and minimal test consulting. All major test performance and interpretations (i.e., cardiac markers, abnormal blood smear reviews, test consulting, etc.) are done by the medical laboratory scientist. These responsibilities and many more will be that of graduates from this proposed BSMLS degree program.

The prerequisite requirements for admission to the BSMLS program include: Pre-calculus Algebra (or higher) 3 semester hours; General Chemistry I with Lab 4 semester hours; General Chemistry II with Lab 4 semester hours; Introductory Biology with Lab 4 semester hours; Organic Chemistry I with Lab 4 semester hours; Microbiology with Lab 4 semester hours; Genetics 3 semester hours; and minimum GPA of 2.75 on a 4.0 scale.

The BSMLS program will have four major strengths. These strengths will be as follows:

1. The proposed BSMLS program contains faculty who are highly trained to deliver a competitive curriculum that will effectively prepare students for employment within the medical laboratory science community.
2. The proposed BSMLS program will provide a comprehensive didactic and clinical curriculum to prepare students to take on roles and assume responsibilities as a Medical Laboratory Scientist.
3. The proposed BSMLS program will be delivered in-person/on-campus at a world-renowned institution. Students will complete this program in 21 months after completing their undergraduate prerequisite courses.
4. The proposed BSMLS program will be taught at an institution that is Accredited by the National Accreditation Agency for Clinical Laboratory Science (NAACLS) and is affiliated with world class clinical laboratories to enhance students clinical practice experience.

As mentioned, the proposed BSMLS curriculum will be delivered in -person format in a minimum of 21 months. The total of 120 credit hours will be divided as follows: fifty-seven credit hours will come from General Education Core courses, 61 credit hours will come from program courses, which will include a 12-hour clinical internship; 2 credit hours will come from program electives.

The proposed BSMLS program will be evaluated by assessing students' performance on course examinations, student learning outcomes (SLO's) and by graduate and employment surveys. The survey instruments will address the graduate's aptitude in clinical performance, technical knowledge, and communication skills.

The proposed program will require one new faculty resource. An additional faculty is needed to support sustainability since we will need to manage more courses, more student advising, and more clinical placements. Based on historical data, its reasonably possible that our enrollment numbers could double. With strong enrollment numbers, an additional faculty member is necessary. Furthermore, there is a needed opportunity to better distinguish the BSMLS from the MSMLS. The MSMLS is designed to build specialize knowledge that go beyond the foundational skills provided for the typical bench tech that holds a Bachelor's degree. With an additional faculty member, the MS program can support the curriculum and prioritize advanced clinical skills, interprofessional collaboration beyond the bench, timely and relevant research that's translatable to our field, clinical laboratory management, and leadership development. So, by adding an additional faculty member, it will allow us to clearly define these two separate pathways and strengthen both tracks. Existing faculty teaching in the MS MLS degree program will also teach in the BSMLS program. There are five core faculty, and one instructor dedicated to teaching in the newly BSMLS proposed program. The program will be housed in the School of Health Professions building. The campus library facilities (primarily Lister Hill Library) will provide excellent support to students and faculty.

There is a remarkable amount of interest by the program advisory board committee for the BSMLS program. Current Medical centers in the Birmingham areas are eagerly

awaiting the development of the BSMLS program. It is anticipated that a program of this degree type (BSMLS) will help fill the much-needed shortage of laboratory professionals in the area.

In summary, this proposed program will help address a specific and crucial healthcare need, not only in Alabama, but nationwide. This program will prepare Medical Laboratory Scientists (MLS) to assume their roles and responsibilities as part of the medical team in the Birmingham communities.

University of Alabama System®

Attachment C to Board Rule 502
New Program Proposal Supplement

In addition to the items ACHE has requested for program proposals, please include the following additional items when developing and submitting academic program proposals to the System Office and the Board of Trustees for approval.

1. Institution:

○ UA ◉ UAB ○ UAH

2. Program Identification

Program name: Bachelors of Science in Medical Laboratory Science

Degree Nomenclature: BSMLS

Date of NPP submission: August, 2024

3. Six-digit CIP Code: 51.1005

4. Executive Summary (not to exceed two pages)

Executive Summary

The proposed Bachelor of Science in Medical Laboratory Science (BSMLS) degree program will be a new degree within the Department of Clinical and Diagnostic Sciences in the School of Health Professions. This program will be in addition to the already existing master's degree program in MLS within the same department and school. The proposed program is an undergraduate level professional program that will provide students the knowledge, skills and training needed to practice as a laboratory professional in the United States. as well as provide current Medical Laboratory Scientists advanced knowledge in the field of laboratory medicine. There is currently a shortage of MLS professional in the Birmingham and other medical communities throughout the United States (BOL, 2023). This program is timely from UAB's medical community perspective because it will help alleviate this shortage by increasing the number of MLS graduates each academic year.

The development of this new program in the state of Alabama is for a few reasons. The roles and responsibilities of the Medical Laboratory Scientist have evolved over the years with the adoption of more

5. Steps taken to determine if other UA System institutions might be interested in collaborating in the program.

This new program proposal will be the only one within the UA system

6. Summary of other campus comments, internal to the UA System or external (if any), regarding your plans for developing this program. Please include substantive feedback from the pre-proposal process.

Summary of other campus comments:
1. How can a BS align with a MS which should have different learning outcomes and prepare students ?
Response:
The BS aligns with the MS because they both have the same National Accreditation Agency for Clinical Laboratory Science (NAACLS) Standard Core Courses. The MS will include an advanced curriculum (Cases, Research and Mgmt. components).
2. How will the BS not “cannibalize” your MS?
Response:
We are talking about two different population of students.
1) Who just wants to get a BS in MLS
2) Those that already have a BS in one of the sciences and can’t do anything with that degree. In addition they don't want to get a second bachelors degree. However, they now have an opportunity to pursue a Master's degree in MLS and taking advantage of the advanced curriculum that it offers.

7. Describe the process that will be used by your institution for routine internal and/or external program review.

Internal Review Process:
There will be annual review/assessment of students learning outcomes (SLO)
We will be assessing yearly SLO's in the following categories:
SLO1: Students Affective Behavior in the classroom and during clinical rotation

Affective Evaluation Forms will be completed by program faculty and clinical instructors a total of three times (Spring & Fall during didactic and once during Clinical Practice) on each student. The Affective Behavior Evaluation Form is an evaluation of the behavior of the student during their didactic and clinical practice phases. The form contains essential professional behavior criteria that students must meet. Students must obtain satisfactory on all criteria to progress to their clinical rotation phase and to be able to graduate. The evaluation also measures the application of professionalism and ethics in the medical laboratory Science program. Students evaluation outcome on criteria are Satisfactory, or Needs Improvement.

8. Describe the process that will be used in assessing program outcomes (to include student learning outcomes).

The process that will be used in assessing program outcomes will be the program's National Accreditation Agency for Clinical Laboratory Science (NAACLS) benchmark indicators. These benchmark assessment indicators are as follows:
Graduates from the UAB BSMLS program will be expected to demonstrate a 75% or above pass rate on the American Society for Clinical Pathology (ASCP) certification exam every cycle.
Program's yearly graduation rate will be expected to be at 70% or above
Program's yearly placement rate of graduates will be expected to be at 70% or above
Program's yearly attrition rate will be expected to be at <5%

Failure of any of these bench mark indicators will warrant the program to initiate an action plan to address the deficiency

9. Other pertinent information, if any.

None

Board Rule 502
Notice of Pending Proposal (NPP) for a New Program of Instruction

(To be completed by the Provost's Office)

1. Institution
(Please select more than one institution for cooperative, joint, and shared degree programs.)

- UAB

Date of NPP Submission (mm/dd/yyyy):

10/28/2024

3. Contact Information

Institutional Contact Person:	Katrina Mintz
Telephone:	2059342753
Email:	kmintz@uab.edu

4. Program Identification

Program Name:	Medical Laboratory Science
Degree Nomenclature:	B.S.

5. CIP Code

2-digit CIP Code:	51 HEALTH PROFESSIONS AND RELATED PROGRAMS
4-digit CIP Code:	51 HEALTH PROFESSIONS AND RELATED PROGRAMS ~ 51.10 Clinical/Medical Laboratory Science/Research and Allied Professions
6-digit CIP Code:	51 HEALTH PROFESSIONS AND RELATED PROGRAMS ~ 51.10 Clinical/Medical Laboratory Science/Research and Allied Professions ~ 51.1005 Clinical Laboratory Science/Medical Technology/Technologist

6. Program Mode of Delivery
Provide the planned delivery format(s) (i.e., in-person, online, hybrid) of the program along with the planned location(s) at which the program will be delivered (i.e., on-campus and/or at specific off-campus instructional site(s)). Please also note whether any program requirements can be completed through competency-based assessment.

- On-campus

7. Select a meeting for Board consideration:

- February 6-7, 2025

8. Is the proposed academic degree program currently listed on your campus Three-Year Academic Program Planning Report that is annually submitted to the Board of Trustees?

- Yes

9. Provide a brief description of the program.

The Medical Laboratory Science program is committed to providing a high-quality clinical education to help prepare students with a solid education background and a set of skills translatable to a variety of healthcare settings. Graduates will become competent to perform and interpret laboratory tests, and to explain the appropriate use and meaning of these tests to other health-care professionals and to patients. In addition, graduates of this degree program would gain the ability to synthesize clinical and laboratory data and provide a narrative interpretation to help guide and support the decision-making process by the healthcare team (including patients) based on medical evidence. This program will help to prepare individuals with job skills directly related to one of the overarching mission pillars of UAB – "to deliver the highest quality patient care that reflects our ability to translate discoveries into revolutionary therapies in one of the nation's largest academic medical centers." This program will aid in improving the quality of patient care, as laboratory tests make up a large proportion of diagnostic tests used to guide patient care.

10. Relationship of program to other programs within the institution.

10.1. How will the program support or be supported by other programs within the institution?

The propose BSMLS program is in alignment with the current existing masters in medical laboratory science program in the department of clinical and diagnostic sciences, and therefore will utilize faculty resources from that program

10.2. Will this program replace any existing program(s) or specialization(s), option(s) or concentration(s) within existing programs?

- No

11. If this program is similar or duplicative of any other programs in the system or the state, please give your rationale for program duplication.

The BS in Medical Laboratory Science is related to the current master's program in Medical Laboratory Science. The current master's is designed for students with a prior Bachelor's degree in Biology, Chemistry, or Biochemistry, for example, who want to pursue a career as a medical laboratory scientist. The professional master's degree allows graduates to attain their professional certification and skill qualifications to work in a clinical laboratory.

12. Do you plan to explore possible program collaboration with other institutions? Please explain.

There is no intent to collaborate with other institutions at this time.

13. Please describe the need and/or level of student demand for this program.

We conducted a survey among clinical laboratory science preceptors across hospitals in the Birmingham, AL, area regarding the current job market for this position. There were 42-43 responses to the survey. In addition, comments were submitted to support the need for a BSMLS program.

As we anticipated, the survey overwhelmingly revealed that healthcare institutions in the Birmingham area currently need graduates with this degree (BSMLS) and skill set. The results of the survey are as follows:

In a recent survey, UAB respondents answered the following questions:

1. Have you experienced a shortage of Medical Laboratory Scientists? Forty-two survey participants responded Yes;

2. If you are experiencing a shortage of MLS personnel, do you see value in UAB starting the BS MLS program back to help with this shortage? 43 survey participants responded Yes;

3. Should the UAB MLS program bring back the Bachelor's degree program in addition to the Master's program currently available? 43 survey participants responded Yes