

NOTICE OF INTENT

Form No. BAAC-01

Section 1007.33(5)(d), Florida Statutes (F.S.), and Rule 6A-14.095, Florida Administrative Code (F.A.C.), outline the requirements for Florida College System baccalaureate program proposals. The completed Notice of Intent form, incorporated in Rule 6A-14.095, F.A.C., Site Determined Baccalaureate Access, shall be submitted by the college president to the chancellor of the Florida College System at ChancellorFCS@fldoe.org.

CHECKLIST

The notice of intent requires completion of the following components:

- Program summary
- Program description
- Workforce demand, supply, and unmet need
- Planning process

FLORIDA COLLEGE SYSTEM INSTITUTION INFORMATION

Institution Name:	Miami Dade College (MDC)
Institution President:	Madeline Pumariega

PROGRAM SUMMARY

1.1	Program name.	Clinical Laboratory Sciences
1.2	Degree type.	<input checked="" type="checkbox"/> Bachelor of Science <input type="checkbox"/> Bachelor of Applied Science
1.3	How will the proposed degree program be delivered? (check all that apply).	<input checked="" type="checkbox"/> Face-to-face (F2F) (Entire degree program delivered via F2F courses only) <input type="checkbox"/> Completely online (Entire degree program delivered via online courses only) <input checked="" type="checkbox"/> Combination of face-to-face/online (Entire degree program delivered via a combination of F2F and online courses)
1.4	Degree Classification of Instructional Program (CIP) code (6-Digit).	51.1005
1.5	Anticipated program implementation date.	08/01/2024
1.6	What are the primary pathways for admission to the program? Check all that apply.	<input type="checkbox"/> Associate in Arts (AA) <input checked="" type="checkbox"/> Associate in Science (AS) <input type="checkbox"/> Associate in Applied Science (AAS) If you selected AS/AAS, please specify the program: Clinical Laboratory Technology (AS - 1351100405)
1.7	Is the degree program a STEM focus area?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1.8	List program concentration(s) or track(s) (if applicable).	Not Applicable (N/A)

PROGRAM DESCRIPTION

2.1 This section is the **executive summary** of this notice of intent. We recommend providing an abbreviated program description including but not limited to: the program demand, current supply, and unmet need in the college's service district; primary pathways to program admission; overview of program curriculum; career path and potential employment opportunities; and average starting salary. We encourage approximately 300 words for a sufficient description.

Miami Dade College (MDC) is proposing to offer a Bachelor of Science (BS) degree in Clinical Laboratory Science, which is designed to meet the demand for Clinical Laboratory professionals and will support the prosperity and growth of health professions and related care in Florida.

Clinical Laboratory Technologist demand exceeds supply by large margin across the United States as clinical laboratories scramble to stay fully staffed. Clinical Laboratory Technologists perform complex tests on patient samples using sophisticated equipment like microscopes. The data they find plays an important role in identifying and treating cancer, heart disease, diabetes, and other medical conditions. It is estimated 60 to 70 percent of all decisions regarding a patient's diagnosis, treatment, hospital admission, and discharge are based on the results of the tests medical laboratory scientists perform. Job growth and security are high for clinical laboratory scientists and technicians. According to the Bureau of Labor Statistics, there is currently a shortage of medical lab technicians and scientists in many parts of the country which guarantees ample employment opportunities and sometimes higher salaries for graduates. With the volume of laboratory tests continuing to increase due to both population growth and the development of new types of tests, job opportunities are expected to increase faster than average with over 21,800 new positions expected to be available by 2031.

This program is suited for Associate in Science (AS) students who have graduated from a regionally accredited Clinical Laboratory Sciences program, possess Florida licensure as a Medical Laboratory Technician/ Technologist and possess certification as a Medical Laboratory Technician (MLT), Medical Technologist (MT). In addition, the AS program must be accredited by the National Accrediting Agency for Clinical Laboratory Science (NAACLS) and include clinical rotations. Through a comprehensive curriculum, students in this program will acquire the knowledge, skills, and advanced theory needed of the clinical laboratory profession. They will learn to enhance their clinical skills and develop crucial skills in medical laboratory management and operations [i.e., education, corporate workforce, marketing, office administration, public health, research, and entrepreneurship]. Course work includes Clinical Molecular Diagnostics, Clinical Hematology, Clinical Hemostasis, Clinical Chemistry, Clinical Urinalysis, Clinical Immunology, Clinical Diagnostic Microbiology, Clinical Immunohematology practice management, advanced ethics and leadership, research methods and issues in health science, education health care, teaching skills for health care professionals, social problems and policy, and vulnerable populations.

According to the Florida Department of Economic Opportunity (FLDEO), employment of *Clinical Laboratory Technologists and Technicians* is projected to grow by an average of 11.2% through the year 2030 Statewide (FL) [See Table 3.1.2] with an annual median salary of \$48,443 and is projected

to grow by an average of 9.4% through the year 2030 in Miami-Dade County/Work Force Region 23 [See Table 3.1.1] with an annual median salary of \$49,566. In addition, according to the Bureau of Labor Statistics (BLS), employment of clinical laboratory technologists and technicians is projected to grow 7 percent from 2021 to 2031 with an annual median salary of \$57,800.

WORKFORCE DEMAND, SUPPLY, AND UNMET NEED

3.1 Describe the workforce demand, supply, and unmet need for graduates of the program that incorporates, at a minimum, the shaded information from Sections 3.1.1 to 3.1.4. For proposed programs without a listed Standard Occupational Classification (SOC) linkage, provide a rationale for the identified SOC code(s). If using a SOC that is not on the CIP to SOC crosswalk, please justify why the SOC aligns with the baccalaureate program.

According to the Florida Department of Economic Opportunity (FLDEO), employment of *Clinical Laboratory Technologists and Technicians* is projected to grow by an average of 11.2% through the year 2030 Statewide (FL) [See Table 3.1.2] and is projected to grow by an average of 9.4% through the year 2030 in Miami-Dade County/Work Force Region 23 [See Table 3.1.1]. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire. An increase in the population of older adults is expected to lead to a greater need for diagnosing medical conditions, such as cancer or type 2 diabetes, through laboratory procedures. Prenatal testing for various types of genetic conditions also is increasingly common. Clinical laboratory technologists and technicians will be in demand to use and maintain the equipment needed for diagnosis and treatment.

SUPPLY: NATIONAL CENTER FOR EDUCATION STATISTICS, IPEDS

3.1.3 The Excel spreadsheet below is set up with predefined formulas. To activate the spreadsheet, right click within the spreadsheet, go to “Worksheet Object”, and then “Open”. To exit, save any changes and exit out of the spreadsheet. Alternatively, double click anywhere on the table. To exit the spreadsheet, single click anywhere outside of the table.

CLICK [HERE](#) FOR INSTRUCTIONS FOR COMPLETING THE SUPPLY SECTION: If institutions do not have data available for completers in the service district, please report statewide data. You may note these are statewide figures.

Barry University	51.1005	0	0	0	0	0	0
Florida Atlantic University	51.1005	0	0	0	0	0	0
Florida International University	51.1005	0	0	0	0	0	0
Florida Memorial University	51.1005	0	0	0	0	0	0
Nova Southeastern University	51.1005	0	0	0	0	0	0
St. Thomas University	51.1005	0	0	0	0	0	0
University of Miami	51.1005	0	0	0	0	0	0
	Total	0	0	0	0	0	0

*Please replace the “Most Recent Year” through “Prior Year 4” headers with the corresponding years reported.

ESTIMATES OF UNMET NEED

3.1.4 The Excel spreadsheet below is set up with predefined formulas. To activate the spreadsheet, right click within the spreadsheet, go to “Worksheet Object”, and then “Open”. To exit, save any changes and exit out of the spreadsheet. Alternatively, double click anywhere on the table. To exit the spreadsheet, single click anywhere outside of the table.

CLICK [HERE](#) FOR INSTRUCTIONS FOR COMPLETING THE ESTIMATES OF UNMET NEED SECTION: If institutions do not have data available for completers in the service district, please report statewide data. You may note these are statewide figures.

	Demand	Supply		Range of Estimated Unmet Need							
	(A)	(B)	(C)	(A-B)	(A-C)						
	Total Job Openings	Most Recent Year	5-year average or average of years available if less than 5 years	Difference	Difference						
DEO Total	323	0	0	323	323						
DOE - FL Tot	1891	0	0	1891	1891						

3.2 Describe any other evidence of workforce demand and unmet need for graduates as selected by the institution, which may include qualitative or quantitative data and information not reflected in the data presented in Sections 3.1.1 to 3.1.4, such as local economic development initiatives, emerging industries in the area, or evidence of rapid growth.

Using the Florida Department of Economic Opportunity Labor Market Statistics (2022), the projected number of jobs in the clinical laboratory field is 2,584 (323 openings per year) from 2022-2030 in Workforce Region 23, Miami-Dade and Monroe Counties. The proposed MDC BS-CLS degree program (CIP Code 51.1005) is not offered by any State University Systems (SUS) or non-public institution in Region 21 (Palm Beach County), 22 (Broward County), and 23 (Miami-Dade and Monroe Counties). Consequently, there are no graduates to meet Region 23 workforce demands and Miami Dade College (MDC) will be instrumental in providing trained graduates to fill the 323 job openings projected per year through 2030.

3.3 If the education level for the occupation identified by the Florida Department of Economic Opportunity (DEO) or the Bureau of Labor Statistics (BLS) presented in Sections 3.1.1 to 3.1.2 is below or above the level of a baccalaureate degree, provide justification for the inclusion of that occupation in the analysis.

Although the Florida Department of Economic Opportunity (DEO) specifies an associate degree as the educational requirement for SOC code 29-2010 (Clinical Laboratory Technologists and Technicians), the Bureau of Labor Statistics (BLS) indicates that a bachelor's degree is the typical entry-level education required. This requirement is further validated by the workforce analysis on Tables 3.1.1 and 3.1.2, where the aforementioned SOC code identifies a bachelor's degree as indicated in the Educational Level column for the BLS.

3.4 Describe the career path and potential employment opportunities for graduates of the program.

The proposed BS-CLS program is designed to prepare students for growth opportunities within the industry to fill occupational positions such as but not limited to: Clinical Laboratory Scientist Manager, Clinical Laboratory Scientist Coordinator, Clinical/Medical Laboratory Scientist (*Grade I-V*), Senior Clinical/Medical Laboratory Scientist, Specimen Technician, Travel Clinical Lab Scientist (CLS) Medical Laboratory Scientist (MLT), Federal - Medical Technologist, Medical Technologist, Lead Medical Technologist, Laboratory - Transfusion Services, Molecular Technologist.

PLANNING PROCESS

4.1 Summarize the internal planning process. In timeline format, please describe the steps your institution took in completing the internal review and approval of the baccalaureate program. For example, summarize actions taken by the academic department proposing the degree, any non-academic departments, the college-wide curriculum committee, the college president, the Board of Trustees and any other areas.

Fall 2022

- The School of Health Sciences form the Baccalaureate Clinical Laboratory Committee (*comprised of interdisciplinary administrators who worked with MDC faculty and local industry members to assess the need for a workforce in the field of clinical sciences*) and begun meeting regularly to discuss plans towards the creation of a stand-alone baccalaureate degree in Clinical Laboratory Sciences.
- The committee conducted industry surveys, examined national, state, and local workforce data; and analyzed the region's academic clinical laboratory sciences degree-completion programs.
- Faculty utilized knowledge, skills, and abilities evaluated and prioritized by the Baccalaureate Clinical Laboratory Committee to develop curriculum.
- Lower division coursework that feeds the baccalaureate was drafted.
- Baccalaureate Clinical Laboratory Committee met to discuss upper division courses and ensure competencies/learning outcomes are mapped to prioritized knowledge, skills and abilities.
- Hosted professional development workshop to raise awareness and interest for the BS in Clinical Laboratory Sciences.

Spring 2023

- Baccalaureate Clinical Laboratory Committee met regularly to review and discuss Clinical Laboratory Sciences baccalaureate degree curriculum.
- Baccalaureate Clinical Laboratory Committee met to prioritize course offerings and identify sequencing for the baccalaureate degree in Clinical Laboratory Sciences courses.
- Baccalaureate Clinical Laboratory Committee met to finalize draft curriculum in preparation for a meeting with the Clinical Laboratory Advisory Committee.
- Baccalaureate Clinical Laboratory Committee met with OAP to discuss the Notice of Intent (NOI) process and Baccalaureate Degree Application development process.
- Submitted Notice of Intent through the Curriculum Approval Process.

4.2 Summarize the external planning process with the business and industry community. In timeline format, please describe your institution's interactions and engagements with external stakeholders, including but not limited to industry advisory boards meetings, discussions with advisory committees, briefings from local businesses, consultations with employers, and conducting paper and online surveys.

Spring 2023

- The Baccalaureate Clinical Laboratory Advisory Committee was created to assist with the development of the clinical laboratory sciences curriculum. This committee is comprised of renowned industry professionals and community partners.
- Baccalaureate Clinical Laboratory Advisory first meeting launched with a Kick-Off, where valuable insights were shared about the knowledge, skills, and abilities (KSA) required by employers from graduates of a clinical laboratory sciences baccalaureate.
- KSAs were solidified and prioritized via vote by the Clinical Laboratory Advisory Committee.
- Held discussions on the need to transition to a Bachelor of Science degree with State and Accreditation officials.
- Survey sent to Clinical Laboratory Advisory Committee members to obtain feedback regarding the required science competencies in support of the Clinical Laboratory Sciences baccalaureate degree.
- Letters of support were requested from local Clinical/Medical Technology Partners and Laboratories.
- February 24, 2023: Received Letter of Support from Florida Memorial University
- February 26, 2023: Received Letter of Support from Florida Atlantic University
- March 01, 2023: Received Letter of Support from Jackson West Medical Center
- March 01, 2023: Received Letter of Support from CBS Labs – Genesis Medical Laboratory
- March 01, 2023: Received Letter of Support from Larkin Community Hospital

January 20, 2023

- Dr. Michaela Tomova, Vice Provost for Academic Affairs at MDC, submitted the APPRiSe notification.

4.3 List external engagement activities with public and nonpublic postsecondary institutions. This list shall include meetings and other forms of communication among external postsecondary institutions regarding evidence of need, demand, and economic impact.

4.3.1 Public Universities in College's Service District

Date(s): February 24, 2023

Institution(s): Florida International University (FIU)

Activity Descriptions and Outcomes:

Dr. Alwyn Leiba, Dean for the School of Health Sciences at Miami Dade College (MDC) contacted the Dean of Nicole Wertheim College of Nursing & Health Sciences at FIU to notify them of MDC's intent to submit a proposal for a baccalaureate degree in Clinical Laboratory Science.

4.3.2 Regionally Accredited Institutions in College's Service District

Date(s): February 24, 2023

Institution(s): Barry University

Activity Descriptions and Outcomes:

Dr. Alwyn Leiba, Dean for the School of Health Sciences at Miami Dade College (MDC) contacted the Dean of Barry University's College of Nursing & Health Sciences to notify them of MDC's intent to submit a proposal for a baccalaureate degree in Clinical Laboratory Science.

4.3.3 Institutions outside of College's Service District (If applicable)

Date(s): February 24, 2023

Institution(s): Florida Atlantic University

Activity Descriptions and Outcomes:

Dr. Alwyn Leiba, Dean for the School of Health Sciences at Miami Dade College (MDC) contacted the Dean of Florida Atlantic University Charles E. Schmidt College of Science college to notify them of MDC's intent to submit a proposal for a baccalaureate degree in Clinical Laboratory Science.

4.3 List external engagement activities with public and nonpublic postsecondary institutions. This list shall include meetings and other forms of communication among external postsecondary institutions regarding evidence of need, demand, and economic impact.

4.3.1 Public Universities in College's Service District

Date(s): February 24, 2023

Institution(s): St. Thomas University

Activity Descriptions and Outcomes:

Dr. Alwyn Leiba, Dean for the School of Health Sciences at Miami Dade College (MDC) contacted the Associate Vice President of Student Affairs to notify them of MDC's intent to submit a proposal for a baccalaureate degree in Clinical Laboratory Science.

4.3.2 Regionally Accredited Institutions in College's Service District

Date(s): February 24, 2023

Institution(s): University of Miami

Activity Descriptions and Outcomes:

Dr. Alwyn Leiba, Dean for the School of Health Sciences at Miami Dade College (MDC) contacted the Dean of University of Miami School of Nursing & Health Sciences to notify them of MDC's intent to submit a proposal for a baccalaureate degree in Clinical Laboratory Science.

4.3.3 Institutions outside of College's Service District (If applicable)

Date(s): February 24, 2023

Institution(s): Florida Memorial University

Activity Descriptions and Outcomes:

Dr. Alwyn Leiba, Dean for the School of Health Sciences at Miami Dade College (MDC) contacted the Dean of Florida Memorial University School of Arts & Sciences to notify them of MDC's intent to submit a proposal for a baccalaureate degree in Clinical Laboratory Science.

4.3.3 Institutions outside of College's Service District (If applicable)

Date(s): February 24, 2023

Institution(s): Nova Southeastern University

Activity Descriptions and Outcomes:

Dr. Alwyn Leiba, Dean for the School of Health Sciences at Miami Dade College (MDC) contacted the Dean of Nova Southeastern University Dr. Pallavi Patel College of Health Care Sciences to notify them of MDC's intent to submit a proposal for a baccalaureate degree in Clinical Laboratory Science.