MHEC
Creating a state of achievement

Cover Sheet for In-State Institutions
New Program or Substantial Modification to Existing Program

Institution Submitting Proposal	College of Southern Maryland

Each action below requires a separate proposal and cover sheet.

○ New Academic Program   ○ Substantial Change to a Degree Program

○ New Area of Concentration   ○ Substantial Change to an Area of Concentration

○ New Degree Level Approval   ◉ Substantial Change to a Certificate Program

○ New Stand-Alone Certificate   ○ Cooperative Degree Program

○ Off Campus Program   ○ Offer Program at Regional Higher Education Center

Payment Submitted: ○ Yes ○ No	Payment Type: ○ R*STARS ☒ Check	Date Submitted:	1-8-19

Department Proposing Program	Health Science
Degree Level and Degree Type	Certificate
Title of Proposed Program	Pharmacy Technician Certificate
Total Number of Credits	31
Suggested Codes	HEGIS: 5299.05 CIP: 51.0805
Program Modality	◉ On-campus ○ Distance Education (*fully online*) ○ Both
Program Resources	◉ Using Existing Resources ○ Requiring New Resources
Projected Implementation Date	◉ Fall ○ Spring ○ Summer Year:2019
Provide Link to Most Recent Academic Catalog	URL: ttps://catalog.csmd.edu/preview_program.php?catoid=22&poid=3915&returnto=2243
Preferred Contact for this Proposal	Name: Dr. Laura Polk
	Title: Health Science Division Chair
	Phone: 301-934-7535
	Email: laurap@csmd.edu
President/Chief Executive	Type Name: Dr. Maureen Murphy
	Signature: _____ Date: 5/1
	Date of Approval/Endorsement by Governing Board: 12/13/18

Revised 6/13/18

> **A. Centrality to mission and planning priorities, relationship to the program emphasis as outlined in the mission statements, and an institutional priority for program development;**

The College of Southern Maryland Pharmacy Technician Certificate program prepares pharmacy technicians to work under the direction of a licensed pharmacist. Pharmacy technicians stock and inventory prescription and over-the-counter medications; maintain written or computerized patient medication records; count or pour medications into dispensing containers; prepare sterile intravenous medications; type prescription labels, prepare insurance claim forms; and provide direct customer service. Pharmacy technicians work in hospital pharmacies, retail pharmacies, home healthcare pharmacies, nursing home pharmacies, clinic pharmacies, nuclear medicine pharmacies, and in mail order prescription pharmacies. As an approved program of the Maryland Board of Pharmacy, graduates of this program may register as Pharmacy Technicians in Maryland with no further testing. Graduates are also eligible to take the national Pharmacy Technician Certification Examination (PTCE).

In adherence with the College of Southern Maryland's (CSM, 2018) mission statement, the program enhances lives and strengthens the economic vitality of a diverse and changing region by providing affordable postsecondary education, workforce development and cultural and personal enrichment opportunities. The program supports entry level admission into the workforce of our local community thereby transforming the lives for graduates.

College of Southern Maryland (2018), *Mission, Vision, and Values Statement*, retrieved on November 2, 2018 from https://www.csmd.edu/about/mission-vision-and-values/.

> **B. Critical and compelling regional or Statewide need as identified in the State Plan;**

Pharmacy technicians are essential members of the healthcare team and are required to meet the societal needs and demands of an expanding pharmaceutical industry. With this in mind, the profession is showing an increasing trend to added responsibilities and duties that require increased training utilizing recognized and standardized standards. To continue to meet the demands of the expanding profession, the "occupational and professional needs relative to upgrading vocational/technical skills or meeting job market requirements" (COMAR, 2016, 13b.02.03.08.3) will be required.

Based on the results of the February 2017 National Pharmacy Technician Stakeholders Convention, the Pharmacy Technician Certification Board (PTCB) will only allow students to sit for the National Pharmacy Certification Exam if student has complete a certified training program beginning January 1, 2020 (Humphrey, 2018). Certification must comply with ASHP/ACPE or ABHES accreditation standards. The program changes being submitted are in compliance with ASHP/ACPE

accreditation standards.

In addition, the State of Maryland held a Pharmacy Technician Consensus Conference in June of 2018. The conference results supported the change to require all pharmacy technician training programs in the State of Maryland to be certified by ASHP/ACPE or ABHES (Thompson, 2018). The Maryland Board of Pharmacy is currently working with legislative officials to draft these new regulations and have them approved during the next legislative session in 2019. Maryland would like to initiate all regulation changes by January or 2020. This would negate our current approved training program by the state of Maryland, significantly impacting the lives of our regional population in entering the pharmacy technician field and impacting the economic vitality of our diverse and rapidly growing region.

In support of Maryland's State Plan for Postsecondary Education, the state has a fundamental commitment to equity, equality, and embracing diversity (MHEC, 2017). To continue Maryland's status as a leading state in providing access to higher education to our citizens through a variety of focused programs, the changes to the College of Southern Maryland's Pharmacy Technician Certificate program is essential. Denial of program changes would result limited access to higher education in the pharmacy program thereby impacting the state's commitment to equity, equality, and diversity of educational opportunities to all residents in the state of Maryland.

COMAR. (2016). Section 13B.02.03.08.03 Need for the Proposed Program. Retrieved on November 2, 2018 from http://mdrules.elaws.us/comar/13b.02.03.08.

Humphrey. (2018). *PTCB Announces New Pharmacy Technician Certification Examination Content Outline and Updated Education/Training Requirements for CPhT Certification*. Pharmacy Technician Certification Board; retrieved on November 2, 2018 from http://www.ptcb.org/about-ptcb/news-room/news-landing/2018/01/11/ptcb-announces-new-pharmacy-technician-certification-examination-(ptce)-content-outline-and-updated-education-training-requirement-for-cpht-certification#.W9yUi5NKiUk.

Maryland Higher Education Commission (October 30, 2017). Higher Education Today: Partners of Maryland's Postsecondary Education and Current Initiatives. Retrieved on November 2, 2018 from https://www.umes.edu/uploadedFiles/_WEBSITES/Senate/Content/2017%20MD%20State%20Plan%20for%20Postsecondary%20Education%20Public%20Comment%20Draft%20(Oct%2030,%202017).pdf.

Thompson, C. (Aug. 8, 2018). *Maryland Reaches Consensus on Some Pharmacy Technician Issues*. American Society of Healthcare Practicioners (ASHP). Retrieved on November 2, 2018 from https://www.ashp.org/news/2018/08/10/maryland-reaches-consensus-on-some-pharmacy-technician-issues.

C. Quantifiable and reliable evidence and documentation of market supply and demand in the region and service area;

According to the Bureau of Labor and Statistics Occupational Outlook Handbook from 2016, the job outlook for pharmacy technicians is expected to grow at a rate of 12% with a projected employment change of 47,600 from 2016-2026 with a projected number of jobs in 2016 at 402,500. This a faster than average growth rate and supports the states recognition by the state that there is an increased demand for prescription medications and pharmaceutical service and by leading Pharmacy organizations that technicians play an essential role in the dispensing of pharmaceuticals and a focus must be placed on developing entry-level standards for technician education and training, with the expectation that advance level competencies will evolve over time.

Table 1: Department of Labor, Licensing and Regulations, 2016-2026.

Quick Facts: Pharmacy Technicians	
2017 Median Pay	$31,750 per year $15.26 per hour
Typical Entry-Level Education	High school diploma or equivalent
Work Experience in a Related Occupation	None
On-the-job Training	Moderate-term on-the-job training
Number of Jobs, 2016	402,500
Job Outlook, 2016-26	12% (Faster than average)
Employment Change, 2016-26	47,600

Table 2: Department of Labor, Licensing and Regulations, Maryland Labor Projections,

Occ. Code	Occup. Title	Employment			Educational Value
		2016	2026	Change	High School diploma with certification course
29-2052	Pharmacy Technician	7121	7692	8.02%	

Maryland Department of Labor, Licensing, and Regulations. (2016-2026) Pharmacy Technician Employment Projections. Retrieved on November 2, 2018 from https://www.dllr.state.md.us/lmi/iandoproj/maryland.shtml.

US Department of Labor Bureau of Labor Statistics. (2016-2026). Pharmacy Technician Occupational Projections. Retrieved November 2, 2018 from https://www.bls.gov/ooh/healthcare/pharmacy-technicians.htm.

D. Reasonableness of program duplication, if any;

Anne Arundel Community College and Hagerstown Community College have ASHP/ACPE National Accreditation. They are the only two programs in the state of Maryland and represent the geographical regions of Northern and Central Maryland.

Institution	Graduates 2015	Graduates 2016	Graduates 2017
Anne Arundel Community College	6	4	8
Hagerstown Community College	2	1	4

https://mhec.maryland.gov/publications/Documents/Research/AnnualReports/2017DegreesbyProgram.pdf

 Their programs are built around the national standards for pharmacy technician education and training. Both programs have a course structure similar to the one the College of Southern Maryland is proposing and consist of 33 credit hours respectively. National Accreditation of the Pharmacy Technician Certificate at the College of Southern Maryland would guarantee equal educational access to students in the Southern Maryland Region.

The State of Maryland, supported by the Maryland Board of Pharmacy, will propose that the State of Maryland only license pharmacy technicians from nationally accredited programs by the year 2020 or 2021 at the latest. To meet the minimum requirements for national certification by ASHP/ACPE, the College of Southern Maryland must meet a minimum of 600 hours within the educational modalities of didactic learning, simulation, and experiential categories.

E. Relevance to the implementation or maintenance of high-demand programs at HBIs;

There are no HBI's that offer a Pharmacy Technician program.

With no HBI within the State of Maryland, there is currently not any potential to collaborate between a HBCU and the College of Southern Maryland.

A comparison of the current curriculum to the proposed curriculum can be found directly below. This is followed by a detailed description of the proposed changes to include student learning outcomes, program sequence and course descriptions.

Current Curriculum		Proposed NEW Curriculum	
COURSE	**CREDITS**	**COURSE**	**CREDITS**
BIO 1040 Introduction to Human Anatomy and Physiology	3	BIO 1040 Introduction to Human Anatomy and Physiology	3
		BIO 1040 Introduction to Human Anatomy and Physiology Lab	1
HTH 1100 Medical Terminology	1	HTH 1105 Comprehensive Medical Terminology	3
HTH 1751 Introduction to Legal and Biomedical Issues in Healthcare	1	HTH 1755 Legal and Ethical Issues	3
HTH 1440 Pharmacology for Allied Health	3	HTH 1440 Pharmacology for Allied Health	3
HTH 1340 Introduction to Pharmacy Technician	1	PHM 1010 Pharmaceutical Calculations	3
HTH 1351 Operational Skills for the Pharmacy Technician	2	PHM 1015 Introduction to Pharmacy Technician Practice	3
HTH 1444 Pharmacology Lab for Pharmacy Technicians	1	PHM 1015L Introduction to Pharmacy Technician Practice Lab	2
HTH 1540 Pharmacy Technician Practicum	4	PHM 1020 Advanced Pharmacy Technician Practice	3
		PHM 1020L Advanced Pharmacy Technician Lab	3
		Pharmacy Technician Practicum	4
TOTAL	**16**	**TOTAL**	**31**

Pharmacy Technician Program Outcomes

1. Demonstrates professionalism and ethics when communicating and providing quality patient care.
2. Utilize professional knowledge & skills in the application of the pharmacy technician role.
3. Demonstrate competency in the processing and handling of medication and medication orders.
4. Demonstrate competency in compounding procedures using sterile and nonsterile techniques.
5. Demonstrate competency in procedures regarding procurement, billing, reimbursement, and management of pharmacy inventory.
6. Utilize current healthcare technology to ensure safe and accurate medication dispensing and healthcare delivery.
7. Safely provide quality patient care, in compliance with federal and state laws.

Recommended Course Sequence:

Pharmacy Technician Certification Program Course Sequence		
First Semester		
BIO-1040	Introduction to Human Anatomy and Physiology	3
BIO-1040L	Introduction to Human Anatomy and Physiology Lab	1
HTH-1105	Comprehensive Medical Terminology	3
PHM-1015	Introduction to Pharmacy Technician Practice	3
PHM-1015L	Introduction to Pharmacy Technician Practice Lab	2
PHM-1010	Pharmaceutical Calculations	3

	Total Semester Credits	15

Pharmacy Technician Certification Program Course Sequence		
Second Semester		
PHM-1020	Advanced Pharmacy Technician Practice	3
PHM-1020L	Advanced Pharmacy Technician Lab	3
HTH-1440	Pharmacology for Allied Health	3
HTH-1755	Legal and Ethical Issues	3
	Total Semester Credits	**12**

Pharmacy Technician Certification Program Course Sequence		
Third Semester		
PHM-1030	Pharmacy Technician Practicum	4
	Total Semester Credits	**4**
	Total Program Credits	**31**

BIO-1040 - Introduction to Human Anatomy and Physiology* (3)
Students learn the structure and function of human systems. Topics include basic chemistry, cell structure and function, tissues, and the integumentary, skeletal, muscular, nervous, cardiovascular,

respiratory, urinary digestive, endocrine, and reproductive systems.

BIO-1040L - Introduction to Human Anatomy and Physiology Lab* (1)
Students study the basic anatomy and functioning of human systems including musculoskeletal, cardiovascular, respiratory, digestive, nervous, and urogenital.

HTH-1105 Comprehensive Medical Terminology
This course teaches the students to accurately spell and define common medical terms related to major disease processes, pharmacology categories, diagnostic procedures, laboratory tests, abbreviations, drugs, and treatment modalities for each body system. Case studies and medical reports are utilized to prepare students for using medical terms in context as they are encountered in medical transcription, coding, and other record processing activities

PHM-1015 Introduction to Pharmacy Practice (3)
Students will explore the role of the pharmacy technician in healthcare delivery while gaining an understanding of the current direct care delivery and medication distribution systems. The course will also discuss the impact of history on the evolution of the profession and how the role of the pharmacy technician has evolved. Additionally, students will gain an understanding of pharmacy laws and regulations, drug characteristics, preparations, dispensing, and inventory and information management systems used in the practice of pharmacy.

PHM-1015L Introduction to Pharmacy Practice Lab (2)
Students will apply laws, regulations, and professional standards governing pharmacy operations to prepare and dispense medication orders while learning to work professionally and ethically as a member of the healthcare team. Students will learn to utilize reference material, medication distribution system, and information management systems to assist the pharmacist in collecting, organizing, recording and evaluating demographic and clinical information for direct patient care. Additionally, students will be exposed to the techniques associated with non-sterile compounding, inventory management, and billing and reimbursement standards.

PHM-1010 Pharmaceutical Calculations* (3)
This course prepares students to accurately perform common calculations that are used in pharmacy operations to accurately and safely prepare solid and liquid medications, nonsterile compounds and sterile compounds.

PHM-1020 Advanced Pharmacy Technician Practice * (3)
The course will provide students with knowledge necessary to understand the process of sterile technique, sterile compounding, infection control, and safe handling of hazardous/non-hazardous medications/products in institutional and community practice. Students will learn about quality assurance processes and standards that are utilized to ensure the safe preparation, dispensing and use of pharmaceutical products and medical equipment. Additionally, students will explore major issues, trends, and concepts in contemporary pharmacy practice.

PHM-1020L Advanced Pharmacy Technician Practice Lab * (3)
The course will allow students to apply their knowledge in the compounding of sterile products while demonstrating appropriate infection control requirements and safe handling of non-hazardous/hazardous medications. Quality assurance standards will be applied to the dispensing of medication orders/prescriptions, preparation of sterile/non-sterile compounds and the use/dispensing of medical equipment, devices and supplies. Additionally, students will interpret major trends,

issues, goals, and initiatives taking place in the pharmacy profession and utilize these to explore non-traditional roles of the pharmacy technician as a member of the healthcare team.

HTH-1440 Pharmacology for Allied Health (3)
This course is a study of prescription drugs, PDR use, drug classifications, drug actions and interactions, safe drug storage, methods of medication administration, dosage calculations, and documentation. Pharmacy calls and patient medication instructions are included.

HTH-1775 Legal and Ethical Issues (3)
This course presents an overview of the legal and ethical issues facing professionals in the health care industry. It provides students with a basic working knowledge of health law and ethics. It is a comprehensive and inclusive review of a wide variety of health care legal and ethical issues. Students are provided with a realistic knowledge of health law and its application to the real world through varied learning opportunities and experiences.

PHM-1030 Pharmacy Technician Practicum * (4)
Formerly HTH-1540 (course will be re-coded to match new subject and numbering)
Students apply pharmacy technician skills in this 180-hour practicum in a variety of healthcare/ pharmacy settings. In addition, students participate in seminars preparing them for entry into practice and credentialing.

Program Description for the Catalog:

This certificate program prepares pharmacy technicians to work under the direction of a licensed pharmacist. Pharmacy technicians stock and inventory prescription and over-the-counter medications; maintain written or computerized patient medication records; count or pour medications into dispensing containers; prepare sterile intravenous medications; type prescription labels, prepare insurance claim forms; and provide direct customer service. Pharmacy technicians work in hospital pharmacies, retail pharmacies, home healthcare pharmacies, nursing home pharmacies, clinic pharmacies, nuclear medicine pharmacies, and in mail order prescription pharmacies.

As an approved program of the Maryland Board of Pharmacy, graduates of this program may register as Pharmacy Technicians in Maryland with no further testing. Graduates are also eligible to take the national Pharmacy Technician Certification Examination (PTCE).

All pharmacy technician students must achieve a minimum grade of "C" in each course in the curriculum for successful program completion.

The maximum number of credits accepted in transfer from other institutions to this program is 12.

NOTE: Students are required to provide proof of immunization status, a completed health form, a criminal background check and drug screen at the students' expense. Students are also required to provide proof of health insurance and CPR certification. The American Heart Association Basic Life Support for Healthcare providers and the American Red Cross CPR for Professional Rescuers are the only accepted CPR courses.

The college will not be responsible for any tuition, fees or other costs that may be charged or paid or lost due to incomplete, untimely or unsatisfactory health records, CPR certification, background check or drug screen. The college is not responsible for the conduct of background checks and drug screenings, or decisions made by other entities as a result of the background check and drug screening requirements.

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H. Adequacy of any articulation;

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There are no articulation agreements for this program.

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I. Adequacy of faculty resources consistent with Regulation .11 of this chapter;

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Faculty member name	Terminal degree	Full-time or part-time	Courses taught
Sharon Baker	BS Pharmacology Masters in Higher Education	Full Time	-Introduction to Pharmacy Technician Practice -Introduction to Pharmacy Technician Practice Lab -Pharmaceutical Calculations -Advanced Pharmacy Technician Practice -Advanced Pharmacy Technician Lab -Pharmacology for Allied

			Health -Pharmacy Technician Practicum
Candi Hume	BS of Science in Health Administration Masters of Health Administration	Full Time	Comprehensive Medical Terminology
Robin Solomon	Doctor of Philosophy	Part-Time	Legal and Ethical Issues
Melanie Osterhouse	Doctor of Chiropractic	Full Time	Introduction to Anatomy & Physiology and Lab

J. Adequacy of library resources consistent with regulation .12 of this chapter

Students may borrow circulating materials from any of the three CSM library branches. Through the interlibrary loan program (ILL), students can order almost any book, periodical article, or ERIC document needed, generally available within one week of the request. Library resources also include audiovisual collections use in the library and classrooms only. Additionally, substantial material is available through online databases, including ProQuest and EBSCO.

The President assures that appropriate library resources are available to support the needs of this program.

K. Adequacy of physical facilities, infrastructure, and instructional equipment consistent with Regulation .13 of this chapter;

CSM is a leader among Maryland community colleges in offering courses which meet the busy schedules of our students, traditional weekday face to face courses, weekend and evening classes,

Web-hybrid courses which offer a mix of online and traditional classroom face-to-face instruction and a popular online learning community. The college makes available state of the art facilities on three campuses to accomplish its mission in support of our community's academic, professional, and self-enrichment pursuits.

The President assures that appropriate physical facilities, infrastructure, and instructional equipment are available to support the needs of this program.

L.   Adequacy of financial resources with documentation consistent with Regulation .14 of this chapter;

TABLE 1: RESOURCES:

Resource Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Reallocated Funds	0	0	0	0	0
2. Tuition/Fee Revenue (c + g below)	64480	79360	89280	104160	114080
a. Number of F/T Students	3	4	5	6	7
b. Annual Tuition/Fee Rate (160 per credit)	4960	4960	4960	4960	4960
c. Total F/T Revenue (a x b)	14880	19840	24800	29760	34720
d. Number of P/T Students	10	12	13	15	16
e. Credit Hour Rate	160 per credit	160 per credit	160 per credit	160 per credit	160 per credit
f. Annual Credit Hour Rate	31	31	31	31	31
g. Total P/T Revenue (d x e x f)	49600	59520	64480	74400	79360
3. Grants, Contracts & Other External Sources	0	0	0	0	0
4. Other Sources	0	0	0	0	0
TOTAL (Add 1 – 4)	64480	79360	89280	104160	114080

TABLE 2: PROGRAM EXPENDITURES:

Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5

1. Faculty (b + c below)	$60,000	$60,000	$60,000	$60,000	$60,000
a. Number of FTE	1 FT x 5 courses	1 FT x 5 courses	1 FT x 5 courses	1 FT x 5 courses	1 FT x 5 courses
b. Total Salary	$60,000	$60,000	$60,000	$60,000	$60,000
c. Total Benefits	0	0	0	0	0
2. Admin. Staff (b + c below)	0	0	0	0	0
a. Number of FTE	0	0	0	0	0
b. Total Salary	0	0	0	0	0
c. Total Benefits	0	0	0	0	0
3. Support Staff (b + c below)	0	0	0	0	0
a. Number of FTE	0	0	0	0	0
b. Total Salary	0	0	0	0	0
c. Total Benefits	0	0	0	0	0
4. Technical Support and Equipment	0	0	0	0	0
5. Library	0	0	0	0	0
6. New or Renovated Space	0	0	0	0	0
7. Other Expenses (Disposal lab supplies & equipment maintenance)	$4000.00	$4000.00	$5000.00	$6000.00	$6500.00
TOTAL (Add 1 – 7)	$64000.00	$64000.00	$65000.00	$66000.00	$66500.00

M. Adequacy of provisions for evaluation of program consistent with Regulation .15 of this chapter;

OAP's focus is the primary mission of the college: to provide quality opportunities for intellectual development that result in student learning. The SLOAP outlines the process of collecting information to determine whether CSM's academic offerings are having the appropriate educational impact on students. Student Learning Outcomes Assessment (SLOA) is defined as the systematic collection of information about academic offerings and analysis thereof, for the purpose of

improving student learning.

Program Assessment at CSM is a cyclical process that includes:
1. Program Reviews conducted every five-six years, or more often as needed.
2. Academic certificate programs are included within the review of degree programs.
3. Program Monitoring conducted every other year (except in the year of a Program Review).
4. Program Assessments of Student Learning conducted on a cycle established by faculty.
In addition, CSM conducts course evaluations every semester or, more often when deemed necessary.

N. Consistency with the Commission's minority student achievement goals; and

The College of Southern Maryland defines civility as the demonstration of respect for others through basic courtesy and the practice of behaviors that contribute toward a positive environment for learning and working. While on any college campus or facility, attending any college event, or on any college electronic/cyber space (online course, email, telephone, etc.), faculty, staff, students, and visitors can all have the expectation of civility from one another.
The college views the following ideals as fundamental to civil behavior:
- Courteous and honest communication in both face-to-face and electronic environments
- Fair and just treatment of individuals
- Freedom from harassment
- Collegiality
- Fostering a diverse campus community
- Adherence to the values of the professions in dealings with students, colleagues, and associates
- Respectful of diverse cultures and points of view
- Refraining from vulgar and offensive language

Members of the college community can expect these ideals are modeled consistently by trustees, administrators, faculty, and staff.

In support of this statement, the pharmacy technician program is currently an open access program with support provided by faculty for tutoring and educational support. Peer work groups and support networks are encouraged during the program to develop a network social and educational inclusion.

College of Southern Maryland. (2018). Civility Statement. Retrieved November 5, 2018 from https://www.csmd.edu/about/diversity/civility/.

O. Relationship to low productivity programs identified by the Commission.

The Pharmacy Technician Certification Program is not identified as a low productivity program.

P. If proposing a distance education program, please provide evidence of the Principles of Good Practice (as outlined in COMAR 13B.02.03.22C)

The program is not offered as a distance learning program.