

The University Senate of Michigan Technological University
Proposal 33-23

Bachelor of Science in Nursing

Basic Program Information

Primary Contact: Andrew Storer, Provost and Senior Vice President for Academic Affairs

- With support from:
 - David Hemmer, Dean of the College of Sciences and Arts
 - Shekhar Joshi, Chair, Department of Biological Sciences

Program/Degree type: BSN

Program Title: Bachelor of Science in Nursing

Planned Implementation Date : Fall 2023

Program location/modality : Face to Face

Target student population : new target student population

General description and characteristics of program¹

The Bachelors of Science in Nursing (BSN) program will prepare students to be registered nurses. This BSN program is being proposed in light of the announced closure of Finlandia University after 126 years in the community.

The four-year curriculum leading to the BSN integrates courses in the humanities, social, biological, and natural sciences with the theory and practice of nursing. The curriculum will remain essentially the same as it was while operated by Finlandia, with some minor translations to Michigan Tech's existing, non-Nursing, courses and general education program.

The combination of both general and professional education courses provides the foundation for understanding physiological, psychosocial, and spiritual factors that ultimately affect a person's health status and includes an introduction to the economic and political factors that affect the health of the community. Clinical coursework focuses on nursing interventions designed to help persons reach their optimal health status. The curriculum is designed to prepare a well-educated citizen as a professional nurse. Upon successful completion of the Nursing Major, graduates are eligible to apply for the registered nurse licensure examination (NCLEX-RN).

Graduates of the nursing program have the opportunity to become leaders and managers in clinical nursing within a variety of health care settings, prepared to practice in rural as well as

¹ Portions of the wording in this proposal are drawn from existing program related documents at Finlandia University, including but not limited to the nursing program student handbook. In all cases these are used with permission from collaborators assisting in the transfer of the program to Michigan Tech

urban areas. The BSN program is designed to provide the stimulus and foundation for progression to the graduate level of academic preparation.

While Michigan Tech formerly had a Department of Nursing within the School of Technology, it is currently suggested that the BSN be housed in the Department of Biological Sciences based on curriculum needs and affinity with the MLS and Pre-Med programs.

Rationale

For approximately the past 40 years, Finlandia has been the sole provider of a baccalaureate nursing program in our local community, meaning they educated many of the nurses our community relies on daily. Michigan Tech entered into dialogue with Finlandia regarding a transfer of their program after numerous conversations with leaders of our local health care providers who expressed concern regarding a potential loss of this source of nurses. Michigan Tech is deeply appreciative of the value that Finlandia's nursing program has contributed to our local community and welcomes this opportunity to partner with Finlandia in an effort to retain this important program for our local community. No other local university can take over the BSN program, as our local Community Colleges are not able to offer baccalaureate programs (but new state funding is available for community colleges to collaborate with universities on BSN programs).

“In 2004, the AACN Board of Directors reaffirmed its position that baccalaureate education is the minimum level required for entry into professional nursing practice in today's complex healthcare environment. Baccalaureate generalist education, as defined in this document, is the foundation upon which all graduate nursing education builds. The preferred vision for nursing education includes generalist, advanced generalist, and advanced specialty nursing education. Generalist nurse education occurs at a minimum in baccalaureate-degree nursing programs. Advanced generalist education occurs in master's degree nursing programs... Advanced specialty education occurs at the doctoral level in Doctor of Nursing Practice (DNP) or research focused degree programs (PhD, DNS, or DNSc). End of program outcomes for the baccalaureate, master's, and doctoral nursing programs build on each other.”²

The [U.S. Bureau of Labor Statistics reports](#) that nursing jobs will increase by 6% in the next decade but there is also a notable nursing shortage, which means that current jobs are not being filled.

The United States and the global market are experiencing a nursing shortage that is expected to intensify as the demand for more and different nursing services grows. Buerhaus, Staiger, and Auerbach (2008)³ reported that the U.S. may experience a shortage of more than 500,000 registered nurses by the year 2025.

² [The Essentials of Baccalaureate Education for Professional Nursing Practice](#) (AACN, 2008)

³ [The future of the nursing workforce in the United States: data, trends, and implications](#)

According to a more recent summary of the nursing shortage:⁴

- “The United States Registered Nurse Workforce Report Card and Shortage Forecast published in the September/October 2019 issue of the American Journal of Medical Quality, a shortage of registered nurses is projected to spread across the country through 2030”.
- “In April 2022, Dr. David Auerbach and colleagues published a nursing workforce analysis in Health Affairs, which found that total supply of RNs decreased by more than 100,000 from 2020 to 2021 – the largest drop than ever observed over the past four decades. A significant number of nurses leaving the workforce were under the age of 35, and most were employed in hospitals.”
- “The Institute of Medicine in its landmark report on The Future of Nursing called for increasing the number of baccalaureate-prepared nurses in the workforce to at least 80% to enhance patient safety. The current nursing workforce falls short of this recommendation with only 65.2% of registered nurses prepared at the baccalaureate or graduate degree level...”.

Addressing the need for an increased number of baccalaureate-prepared nurses is critical but it is not sufficient to meet the national need by itself. Maintaining a local BSN program that can work together with the two local associate’s-level programs at Gogebic and KBOCC will support and benefit our local healthcare system by providing multiple educational pathways for nursing students.

That 100-percent of Finlandia nursing graduates are able to secure a job within six months of passing their NCLEX exam speaks to the need for these graduates.

Related programs: within MTU and at other institutions

Michigan Technological University currently offers BS degrees in Medical Lab Science, Human Biology, and Exercise Science, in addition to a Pre-Health minor that can be coupled with other majors to help prepare students for graduate health programs. Michigan Tech previously offered a nursing program (between 1973 and 1982) at the associate’s level and even had a department of nursing under the School of Technology.⁵

No other BSN programs will exist in the area after the closure of Finlandia University. The nearest BSN program will be at Northern Michigan University which is about 100 miles away from the Houghton/Hancock area. Overall, there are currently 37 baccalaureate nursing programs [approved by Michigan’s Board of Nursing](#) in the state, including the Finlandia Program.

Given that:

⁴ [AACN Nursing Shortage Fact Sheet](#) (accessed 3/19/2023)

⁵ [Flashback Friday: Thank You, Michigan Tech Nurses](#)

- the nearest BSN program to Michigan Tech’s would be 100 miles away (at Northern Michigan University), whereas most of the other 37 programs are located in close proximity to one another;
- this proposed degree would replace an existing approved program rather than being a new program;
- there is sustained demand for Finlandia’s program; and
- we have been explicitly told of the need to maintain a local BSN program to support the local healthcare system;

there is demonstrated demand and need for this program locally and there should be minimal impact on other universities with BSN programs. Strategic cooperation with the local community colleges could benefit surrounding colleges and their students by providing seamless pathways to a BSN credential.

Projected Enrollment

Enrollment in Fall 2022 in Finlandia’s Nursing program breaks down as follows:

- Pre-Nursing (Freshman): 16
- Nursing (Sophomore-Senior): 19
- RN-BSN online program: 10

Projected enrollment is 16 per year into the BSN program, with an estimated total program size of 54 without the need for more faculty. The Michigan Board of Nursing limits the size of a clinical group to 8 students per instructor, so this impacts the need for clinical instructors.

Specialized Accreditation Requirements

Finlandia’s Nursing program has been accredited by the Commission on Collegiate Nursing Education (CCNE) since April 21, 2007. Discussions with CCNE indicated that the accreditation can be transferred to Michigan Tech by taking the program wholesale (e.g., faculty, curriculum, maintaining established clinical sites). The intent would be to maintain this relationship with the CCNE.

Professional Licensure Requirements

Pre-licensure nursing education programs are approved by the Michigan Board of Nursing. Nursing is a licensed profession and students would need to obtain licensure in their state in order to work in this discipline.

Finlandia currently states the following:

“Students considering pursuing an academic program that leads to professional licensure are advised that the Finlandia Nursing Program prepares students to practice in the state of Michigan and are not intended to prepare students for out of state licensure. Finlandia has not determined whether its curriculum prepares students for licensure in any other state.”

Should this program be approved, it is proposed that Michigan Tech pay for a one-year membership to a service like [The Bookmark](#), which would allow Michigan Tech to more quickly and accurately make the state-level determinations needed to be in compliance with student disclosure laws for licensure programs.

Curriculum Details

Learning Goals

The BSN program outcome competencies support Michigan Tech’s Undergraduate Student Learning Goals and the domains and concepts defined by the American Association of Colleges of Nursing in The Essentials: Core Competencies for Professional Nursing Education (2021).

USLG Alignment	BSN Learning Outcomes	AACN Alignment
Disciplinary Knowledge	<p>The nursing graduate provides holistic, evidence-based, compassionate, safe person-centered care of patient populations, families, and communities that is age and culturally appropriate.</p> <p>The nursing graduate coordinates care and resources through shared decision-making with the patient, family, and interdisciplinary teams that considers social determinants of health, health policy and population health.</p>	<p>AACN Concept(s): Clinical Judgment; Communication; Compassionate Care; Evidence-Based Practice; Diversity, Equity and Inclusion; Health Policy; Social Determinants of Health</p> <p>AACN Domain: 1, 2, 3, 5, 6</p>
Knowledge of the Physical and Natural World	<p>The nursing graduate synthesizes knowledge from the liberal arts, mathematics, sciences, and research with nursing knowledge to enhance practice and the quality of care.</p>	<p>AACN Concept(s): Clinical Judgment; Evidence-Based Practice</p> <p>AACN Domain: 1, 5</p>
Global Literacy	<p>The nursing graduate participates in ethical, professional activities that recognize the unique aspects of being human within person-centered nursing practice with an emphasis on equity, cultural humility, and inclusion.</p>	<p>AACN Concept(s): Diversity, Equity, and Inclusion; Ethics</p> <p>AACN Domain: 7</p>
Critical & Creative Thinking	<p>The nursing graduate engages in scholarly inquiry and critical and creative thinking to evaluate ideas, evidence, and perspectives.</p>	<p>AACN Concept(s): Clinical Judgment; Evidence-Based Practice</p> <p>AACN Domain: 1, 4</p>

USLG Alignment	BSN Learning Outcomes	AACN Alignment
Communication	The nursing graduate communicates effectively and professionally with persons through the use of verbal & non-verbal skills, written abilities, active listening, and informational technologies.	AACN Concept: Communication AACN Domain: 6, 9
Information Literacy	The nursing graduate applies clinical judgment effectively to understand and interpret information in the delivery of quality care.	AACN Concept: Clinical Judgment AACN Domain: 8
Technology	The nursing graduate demonstrates proficiency in the use of patient care technology and information systems in the provision and communication of safe, efficient nursing care.	AACN Concept(s): Communication AACN Domain: 5, 8
Social Responsibility and Ethical Reasoning	The nursing graduate develops a professional nursing identity guided by principles of ethics, leadership, advocacy, and social responsibility that is fostered by self-reflection and life-long learning.	AACN Concept(s): Ethics; Health Policy AACN Domain: 9, 10

Assessment Plan

The BSN program competencies support Finlandia University’s assessment plan and the competencies defined by the American Association of Colleges of Nursing in the Essentials of Baccalaureate Education for Professional Nursing Practice (1998).

Program competencies serve as the exit outcomes for BSN graduates and are leveled for each academic year of the formal nursing program (sophomore, junior, senior).

Performance indicators and rubrics have been developed for each learning goal and are in use to assess Finlandia’s BSN program.

Curriculum Design

Total Credits: 124 + 3 “units” PE

Curriculum Design:

Required Courses (96 cr):

BL 1710 Medical Terminology: 1 cr
BL 1200 General Bio II: Intro to Cellular and Molecular Biology & BL 1210 (lab): 4 cr
BL 2010 Anatomy and Physiology I & BL 2011 (lab): 4 cr
BL 2020 Anatomy and Physiology II & BL 2021 (lab): 4 cr
BL 2940 Human Nutrition: 3 cr
BL 3210 General Microbiology: 4 cr
CH 1000: Intro to Chemistry: 3 cr
NUR 2000 Pharmacology: 3 cr
NUR 2020 Health Assessment/Interviewing: 3 cr
NUR 2030 Dosage Calculations: 1 cr
NUR 2040 Introduction to Nursing Practice: 6 cr
NUR 2050 Application of Nursing Practice: 2 cr
NUR 2060 Pathophysiology: 3 cr
NUR 3000 Mental Health Nursing: 6 cr
NUR 3120 Nursing Theory (online): 2 cr
NUR 3180 Nursing Research/Statistics: 3 cr
NUR 3200 Maternal-Child Nursing: 9 cr
NUR 3240 Adult Medical/Surgical Nursing I: 3 cr
NUR 3280 Adult Medical/Surgical Nursing II: 10 cr
NUR 4000 Acute and Urgent Clinical Nursing (summer only): 3 cr
NUR 4020 Nursing Management/Leadership: 6 cr
NUR 4040 Issues in Professional Nursing: 2 cr
NUR 4060 Community Nursing: 6 cr
NUR 4080 Nursing Capstone: 2 cr
PSY 2300 Developmental Psychology: 3 cr

General Education (24 cr):

Core: Critical and Creative Thinking: 3 cr
Core: Social Responsibility and Ethical Reasoning: 3 cr
Core: UN 1015 Composition: 3 cr
Core: UN 1025 Global Issues: 3 cr
HASS (6 credits upper division)

- Communication Course: 3 cr
- HU/FA Elective: 3 cr
- SBS: PSY 2000⁶ 3 cr
- Upper Lvl HASS: 3 cr

STEM (4 cr, 11 credits met by program requirements):

- Math (MA 1020 Quantitative Literacy or Higher, MA/PSY 2720 recommended): 4 credits
- Remaining STEM: met by program

Co-Curricular: 3 “units”

⁶ Students will be advised into PSY 2000, Introduction to Psychology. A rule exception under senate proposal 60-21 will be submitted to the provost following approval of this program. Standards for the BSN expect degree totals to be 120-126 credits.

Model Schedule

Semester	Course	Credits	Pre-reqs	co-req
1 - Fall	BL 2010 Anatomy and Physiology I BL 2011 (lab) 1 cr	4		
	CH 1000: Intro to Chemistry	3		
	MATH (MA 1020 or higher, MA/PSY 2720 recommended based on ALEKS placement)	4		
	BL 1710 Medical Terminology	1		
	UN 1015 Composition	3		
	Totals	15		
2 - Spring	UN 1025 Global Issues	3		
	Social Responsibility List (NOT: EC 2001)	3		
	BL 1200 General Biology II: Introduction to Cellular and Molecular Biology BL 1210 Lab	4		
	BL 2020 Anatomy and Physiology II BL 2021(lab) - 1 cr	4	BL 2010, BL 2011	
	PSY 2000 Introduction to Psych	3		
	Totals	17		
3 - Fall	BL 3210 General Microbiology	4	BL 1020 or BL 1040 or (BL 1200 and BL 1210) or (BL 1400 and BL 1410)	
	NUR 2000 Pharmacology	3	CH 1000 and BL 2020 and BL 2021	
	NUR 2020 Health Assessment/Interviewing	3	BL 1710 and BL 2020 and 2021	
	NUR 2030 Dosage Calculations	1	MATH 1020 or higher	NUR 2040
	NUR 2040 Introduction to Nursing Practice	6	BL 2020 and BL 2021	NUR 2000, NUR 2020
	Totals	17		
4 - Spring	BL 2940 Human Nutrition	3		
	NUR 2050 Application of Nursing Practice	2	NUR 2020 and NUR 2040	

Semester	Course	Credits	Pre-reqs	co-req
	NUR 2060 Pathophysiology	3	CH 1000 and BL 2020 and BL 2021	
	NUR 3000 Mental Health Nursing	6	NUR 2000, NUR 2020, and NUR 2040	NUR 2050, NUR 2060
	PSY 2300 Developmental Psychology	3	PSY 2000	
	Totals	17		
5 - Fall	NUR 3120 Nursing Theory (online)	2	UN1015 and NUR 204	
	NUR 3200 Maternal-Child Nursing	9	NUR 3000 and PSY 2300	NUR 3240
	NUR 3240 Adult Medical/Surgical Nursing I	3	NUR 3000	NUR 3200
	Totals	14		
6 - Spring	NUR 3180 Nursing Research/Statistics	3	MATH 1020 or higher and NUR 3120	
	NUR 3280 Adult Medical/Surgical Nursing II	10	NUR 3200 and NUR 3240	NUR 3180
	Totals	13		
6.5 - Summer	NUR 4000 Acute and Urgent Clinical Nursing	3	NUR 3180, NUR 3280, and PSY 2300	
	Totals	3		
7 - Fall	NUR 4020 Nursing Management/Leadership	6	NUR 3120, NUR 3180, and NUR 4000	NUR 4040
	NUR 4040 Issues in Professional Nursing	2	NUR 3120, NUR 3180, and NUR 4000	
	Communication and Composition List*	3		
	Critical and Creative Thinking List	3		
	Totals	14		
8 - Spring	NUR 4060 Community Nursing	6	NUR 4040	NUR 4080
	NUR 4080 Nursing Capstone	2		NUR 4060
	HU/FA List*	3		
	Upper Lvl HASS	3		
	Totals	14		

+ 3 "units" PE

* at least one of these courses must be upper level (3000+) to meet GenEd requirements

New Course Descriptions

Course Title	cr	Description
NUR 2000 PHARMACOLOGY	3	Introduction to the basic concepts of pharmacology and their relationships to health care. Focuses on the major drug classifications, principles of drug actions/interactions, application of specific drugs in the treatment of disease, normal and abnormal responses to drug therapy, dosage calculations, and appropriate nursing actions to achieve desired outcomes of drug therapy. The nurse's role and responsibilities in clinical pharmacology are examined. Fall semesters. Prerequisite: CH 1000 and BL 2020 and BL 2021.
NUR 2020 HEALTH ASSESSMENT AND INTERVIEW	3	Provides an introduction to the skills used in data collection and physical assessment, including interviewing, communication, comprehensive history taking, physical assessment, and formulating a nursing diagnosis. The course draws on the nursing process in assessing the health of individuals across the lifespan. Fall semesters. Prerequisite: BL 1710 and BL 2020 and 2021.
NUR 2030 DOSAGE CALCULATIONS	1	Introduces nursing students to the concepts, terminology, equipment, and math calculations necessary for safe medication administration in the clinical setting. Topics include systems of measurements, equivalents and conversions, selected abbreviations, and computation of medication dosages. Fall semesters. Prerequisite: MA 1020 or higher. Co-requisite: NUR 2040.
NUR 2040 INTRODUCTION TO NURSING PRACTICE	6	Introduces the basic concepts of the practice of nursing. An introduction to Nursing program philosophy is presented. Focuses on the skills required to care for adult clients in structured, non-emergent environments using demonstration and simulated practice. The role of the nurse as provider of care is discussed. Students are introduced to the clinical setting where the nursing process is used as the basis for decision making and nursing behaviors. Communication skills and nurse-client relationships are developed. Laboratory settings include campus lab, senior living complex, community events, schools, and in-patient units. Fall semesters. Prerequisite: BL 2020 and BL 2021. Co-requisite: NUR 2000 and NUR 2020.
NUR 2050 APPLICATION OF NURSING PRACTICE	2	Provides students with the opportunity to use previously attained nursing skills in caring for an adult client in a non-emergent environment. Students apply the skills necessary to demonstrate the role of the nurse as provider of care. Spring semesters. Prerequisites: NUR 2020 and NUR 2040. Co-requisite: NUR 2060.

Course Title	cr	Description
NUR 2060 PATHOPHYSIOLOGY	3	Introduces concepts and diseases common to the general practice of health care. Studies how normal physiological processes are altered by disease. Core content provides understanding of the mechanisms and principles of disruptions of health. Theories related to pathogenesis, etiology, and clinical manifestations are used to study common diseases with an emphasis on clinical correlations. Spring semesters. Prerequisites: CH 1000 and BL 2020 and BL 2021.
NUR 3000 MENTAL HEALTH NURSING	6	Provides theoretical and clinical foundations for application of the nursing process in support of the person's mental health. Examines theories, concepts, and responses related to mental health and illness. Further develops nursing assessment and intervention and explores patient rights and legal issues for individuals and groups of mental health clients in various health care and community environments. Applies Individual and group nursing care used to promote, maintain, and restore the person's mental health. Spring semesters. Prerequisite: NUR 2000, NUR 2020, and NUR 2040. Co-requisite: NUR 2050 and NUR 2060.
NUR 3120 NURSING THEORY	2	Designed to enable the students to examine nursing from a historical as well as present-day perspective. Examines the organizing framework of the nursing program philosophy and the concepts of nursing, person, environment, and health that underscore nursing's metaparadigm. Nursing conceptual models and theories and their relationship to research and professional nursing practice are discussed. Fall semesters. Prerequisite: UN1015 and NUR 2040.
NUR 3180 NURSING RESEARCH/ STATISTICS	3	Introduces the concepts of the research process including research methodologies, measurement, and analysis of research data provides students with a basis to interpret and evaluate research and its application to practice. Emphasis is placed on students becoming knowledgeable consumers of research. Spring semesters. Prerequisite: MATH 1020 or higher and NUR 3120.
NUR 3200 MATERNAL-CHILD NURSING	9	Theoretical and clinical foundations are applied using the nursing process in caring for children and child-bearing families throughout the lifespan including women's health. Emphasizes the promotion, maintenance, and restoration of health of the primary family unit, including the concepts of changing relationships and the impact of the community and culture on growing families. Physiological and psychosocial adaptation of the child and family during normal and complex health needs are addressed. Fall semesters. Prerequisite: NUR 3000 and PSY 2300. Co-requisite: NUR 3240.

Course Title	cr	Description
NUR 3240 ADULT MEDICAL- SURGICAL NURSING I	3	Expands theoretical foundation for application of the nursing process throughout the adult lifespan. Scientific principles in health promotion and management of care are applied with adults experiencing health deficits. Critical judgments in planning and implementing nursing interventions are integrated in caring for adults in various health care environments. Fall semesters. Prerequisite: NUR 3000. Co-requisite: NUR 3200.
NUR 3280 ADULT MEDICAL- SURGICAL NURSING II	10	Further expands the theoretical foundation of the nursing process throughout the adult lifespan. Scientific principles in health promotion and management of care are applied with adults experiencing health deficits. Critical judgments in planning and implementing nursing interventions are integrated in caring for adults in various health care environments. Spring semesters. Prerequisite: NUR 3200, NUR 3240. Co-requisite: NUR 3180.
NUR 4000 ACUTE AND URGENT CLINICAL NURSING	3	This summer course broadens the clinical professional nursing experience and prepares students for the final year of the BSN curriculum. The primary focus is an expanded opportunity for achieving clinical competencies in acute and urgent care settings within the regional medical center. A total of 135 contact hours is required with time scheduled for pre-clinical activities, hospital orientation, day and evening shift rotations in various acute and urgent care settings, and compiling final case presentations to share individual experiences with others. Travel associated with scheduled clinical experiences at a regional medical center is expected. Summer semesters. Prerequisite: NUR 3180, NUR 3280, and PSY 2300.
NUR 4020 NURSING MANAGEMENT /LEADERSHIP	6	Synthesizes previously acquired theoretical and clinical foundation for application of the nursing process as it relates to management in professional nursing. Further development of entry-level leadership and management skills as provider of care and manager of clients with complex multidimensional health problems. Students refine their autonomy, accountability, collaboration, and caring communication in managing groups of clients in a variety of settings. Fall semesters. Prerequisite: NUR 3120, NUR 3180, and NUR 4000. Co-requisite: NUR 4040.
NUR 4040 ISSUES IN PROFESSIONAL NURSING	2	Explores the issues and trends in nursing as a profession. Social, economic, political, and educational forces influencing nursing and health care in the United States are discussed. The professional, legal, and ethical responsibilities of the nurse, and the career opportunities available within the profession, are examined. Health care delivery systems, entry into practice, and professional organizations are discussed. Investigates role socialization from student to professional nurse. Taken in the final year of the Nursing program.

Course Title	cr	Description
		Fall semesters. Prerequisites: NUR3120, NUR 3180, and NUR 4000.
NUR 4060 COMMUNITY NURSING	6	Focuses on the theoretical and clinical foundation for application of the nursing process in caring for individuals, families, groups, and the community as a client. Emphasis on disease prevention, health promotion, health maintenance, health education, and coordination of care. Content includes application of public health nursing principles, epidemiological investigation, knowledge of rural environments, supervision and leadership in promoting desired health evaluation, and outcomes in community and home environments. Explores the roles of the nurse as teacher, collaborator, advocate, and direct care provider. Spring semesters. Prerequisite: NUR 4040. Co-requisite: NUR 4080 in the final semester of the Nursing program.
NUR 4080 NURSING CAPSTONE	2	Capstone experience in which students synthesize evidence-based practice and theoretical and research-based knowledge to develop a senior project using critical thinking skills, critical judgment, and independent decision-making. Students demonstrate proficiency in meeting the BSN terminal objectives and accreditation outcome criteria. Spring semesters. Co-requisite: NUR 4060 in the final semester of the Nursing program.

Faculty Qualifications

Current Nursing faculty at Finlandia will be brought over to support this program. All faculty have a Master's of Science in Nursing and higher and are considered qualified to teach this accredited and state-board approved program. The intent is to bring them over as instructional-track faculty with the same rank they hold at Finlandia (e.g. Professor to Teaching Professor).

Name	Role	Role Detail
Lori Sullivan, DNP, MSN, RN	Faculty, Program Chair	Program oversight, course Instruction, student advisor, clinical lead (RN-BSN program and other courses as needed)
Mark Miron, MSN, RN	Faculty	Course Instruction and student advisor. Mental health clinical lead
Marnie Polkky, MSN, RN	Faculty	Course Instruction and student advisor. Clinical lead (site varies based on need)
Aliina Radcliff, MSN, RN	Faculty	Course Instruction and student advisor. Medical-Surgical clinical lead

Theresa Rajala-Halsey, MSN, RN	Faculty	Course Instruction and student advisor. Fundamentals clinical lead
Irina Sergeyeva, MSN, RN	Faculty	Course Instruction, Coordinator of RN-BSN track (includes advising RN-BSN students)

Program-specific policies, regulations, and rules

A student handbook similar to [Finlandia's current BSN Handbook](#) would be adapted to Michigan Tech Policies.

Finlandia's Nursing program policy requires a B- or better for their Anatomy and Physiology courses and a C or better for all other courses. There is support from both the Nursing Program and MTU's Biological Sciences advisor for requiring a C or better in all courses. This would be more consistent for students and likely reflect a similar level of subject mastery in the Michigan Tech courses.

Resources Needed

Library and other learning resources needed

While we have a number of allied programs, benchmarking conducted by Michigan Tech's Library Directory indicates that we would need to expand our collection to properly support a BSN program. There would be likely a small one-time cost (~\$1,000) to add some nursing-specific reference books and the following recommended subscriptions (costs rounded to the nearest \$100):

- Nursing Clinics of North America: \$2000
 - plus a one-time fee to access their back files: \$4000
- Nursing and Allied Health Premium: \$11,700
- CINAHL Nursing Plus: \$15,000

Total Library Startup Needs: \$33,700

On-going Library Subscription Costs: \$28,700 +5% estimate annual increase

Suitability of existing space, facilities, and equipment

The lecture, lab, and office space currently used by Finlandia's Nursing program in Hirvonen Hall (the old Hancock Central High School building) has been examined by representatives from Michigan Tech's Facilities Management Team. Work is underway to identify suitable spaces on MTU's main campus. A maximum of 25 seats would be needed for new nursing lecture courses and the two lab spaces would need only basic outlets and sinks with eyewash stations. The Finlandia program possesses all needed lab equipment.

Program Costs

Program costs will primarily be related to employing Finlandia's current nursing faculty and staff to support the program:

- \$550,000, including fringes and SSE (Supplies, Services, Equipment) for the first year for the 6 full time faculty (instructional-track), and 1 full time staff member.

There is expected to be a one-time accreditation new applicant fee (as a new institution with no prior relationship with CCNE), as well as annual accreditation fees:

- \$2500 applicant fee,
- \$2,777 annual fee.

It is also recommended to subscribe to [The Bookmark's](#) professional licensure service for the first year to determine the ability of the Nursing Program to meet educational requirements in states other than Michigan.

- \$5,000/yr for one year.

108.1.2: Criteria for Financial Evaluation Proposed Academic Programs

(section only needed for new degree programs/majors. Delete section for non-degree programs like minors and certificates or for name changes)

Relation to University Strategic Plan

Michigan Technological University's stated vision and mission are as follows:

Vision

Michigan Tech is a globally recognized technological university that educates students, advances knowledge, and innovates to improve the quality of life and to promote mutual respect and equity for all people within the state, the nation, and the global community.

Mission

Create solutions for society's challenges by delivering action-based undergraduate and graduate education, discovering new knowledge through research, and launching new technologies through innovation.

Continuing to provide a local nursing program "improves the quality of life" in our community and helps "create solutions for society's challenges," particularly as nursing shortages impact our state and country.

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Michigan Tech already provides specialized training in the biological, physical, and behavioral sciences and has extended that to “the care, treatment, counsel, and health teaching of individuals” through several existing programs:

- BS in Medical Laboratory Sciences,
- BS in Exercise Science
- Pre-Health Pathways
- MS Kinesiology
- PhD Integrative Physiology

Impact on University Enrollment

- **Projected number of students in the program:** current numbers in the program are 35 in the traditional BSN program, 10 in the online RN to BSN degree completion program.
- **Source of new students:** Students are currently enrolled with Finlandia. Many enrollments are local students who would not otherwise attend Michigan Tech. There has also been interest from some current Michigan Tech students about changing majors into Nursing if it is an option. Additionally, in terms of majors we don't currently offer, Nursing is one of the top inquiries from prospective students.
- **How will demand for the new program correlate with existing enrollment patterns?** Overall MTU is expecting and planning for long term growth. Nursing as a field is expected to grow by 6% in the next decade nationally and there is also a sustained nursing shortage that also needs to be filled. Many Nursing programs turn away otherwise qualified students and can have substantial waitlists.
- **Current enrollment in the unit:** Per the MTU Compendium, the Biology Department has had an average undergraduate enrollment of around 230 students since 2018.

Impact on Resources in Home Department

This would include, but not be limited to:

- **Faculty lines:** Nursing faculty will be brought over from Finlandia specifically to support this program. This would increase the number of students in courses already close to their cap (e.g. Anatomy & Physiology, General Microbiology, General Biology II, Medical Terminology)
 - Student to Faculty ratio within Biological Sciences in 2021-22 was 10.6:1 (all faculty). The addition of 35 students and 7 faculty members would drop that to 10.3:1 (233 + 35 nursing students to 19 + 7 nursing faculty based on most recent numbers in the Compendium)
- **Faculty and student labs:** Nursing students are required to take several biology courses with labs, adding to the number of students using those lab facilities. Nursing currently has 2 dedicated lab spaces in their current location at Hirvonen Hall. The only specialized requirement is for a sink with eyewash station in each lab. It is currently being evaluated if we have similar and available spaces on campus.

- **Advising:** Nursing students will be advised primarily by the Nursing faculty, but assistance with advising in the MTU curriculum will be needed. This assistance can be met through existing advising resources.
- **Assessment:** Nursing is a professionally accredited program and would be assessed using already established methods.

Impact on Resources in Other Units Within the University.

Based on Fall 2022 enrollments, the expected enrollment in the Nursing program (16 in each cohort) will increase the number of students in CH 1000 and PSY 2000 by about 10% in the Fall (but both would still be under the student cap). There could be a significant increase in demand for MA 1020 depending on how students place with ALEKS. As not many programs accept that level of math and the course is limited to specific majors, the current cap is only 24 students and exactly 16 seats were free during Fall 2022 so an expected 16-student cohort would completely fill that section.

PSY 2300 is a required course and currently has a cap of only 40 students with only 1 free seat in Spring 2023 and is taught by adjunct faculty. The Chair of Cognitive and Learning sciences has indicated they can make it work in Academic Year 23-24, but additional instructional resources will likely be needed long term so this key course can support the needs of both Psychology and Nursing students, as well as students pursuing specific pre-health pathways.

Overall, with the addition of faculty to support the program, this proposal would not increase the current student to faculty ratio of the university.

Impact on other resources

As a registered nursing educational program, contracts with clinical sites will need to be made for Michigan Tech and kept current. We already have existing contracts with some of these facilities already due to the MLS programs, but new contracts will be needed. The standard contracts do not involve any fee to the clinical site but do require maintaining specific insurance coverage.

All students will be covered by the laptop requirement and no special software is required so additional IT resources should be minimal. One-time assistance above normal needs would be required to onboard all faculty and students.

The Library will need to acquire some additional resources to meet the needs of a nursing program.

Assessment of the ability to obtain the necessary resources assuming requested funds are obtained

As we are proposing to move the fully formed program from Finlandia, all required faculty and staff, major lab equipment, and supplies are readily available.

Past Proposal Outcomes

The Biological Sciences Department has initiated the following new degree programs in the last five years:

- Human Biology (proposal 20-20)
 - Enrollment 2021-22: 48
 - Projected: 80-100
- Ecology & Evolutionary Biology (proposal 24-20)
 - Enrollment 2021-22: 26
 - Projected: 40
- How have degree programs added in the past five years affected total enrollment in the department?
 - Undergraduate enrollment has overall increased since 2015, but was around 225 for the three years between 2018-2021. Fall 2021 saw a jump in undergraduate enrollment to 240, suggesting these new majors attracted new students rather than just being an internal shift from other Biological Sciences majors.

Departmental Budget Contribution

- What is the department's total general fund budget?
 - \$2,737,306 in 2022-23
 - Total College budget (CSA): \$24,316,290.03
- How much tuition does the department generate?
 - In FY 2019-20:
 - \$4,903,040 for tuition generated by credit hours taught by the Biological Sciences department
 - \$5,271,961 for tuition generated by the number of credit hours taken by Biological Sciences enrolled students (majors)

How do the benefits from this program compare to other alternatives that are currently under consideration or development?

This program has the potential to attract students who would not otherwise attend Michigan Technological University and serves an important role for our local community. There are no other alternatives under consideration or development, but bringing on board an accredited and

established program is easier, quicker, and more cost efficient than if we were to start one from scratch.

Financial analysis suggests that tuition generated by this program is sufficient to cover the faculty and staff costs in its first year and would generate net income for the university by fiscal year 2027.