# **Nursing - Associate Degree**

# 10-543-1 Associate Degree (two-year)

# **Campuses: Ashland, New Richmond, Rice Lake, Superior**

# **Program Overview**

Nursing is the dynamic interpersonal goal-directed process that seeks to promote optimal health within the context of individuals, family, community and society. The concept of caring, which is central to nursing, is communicated through both attitude and action. Nursing uses the nursing process, a problem-solving approach to provide holistic care to individuals, families and groups within the healthcare system. Through collaboration with other healthcare professionals, nursing is responsive to the needs of the community across the health-illness continuum.

# Special Features

An agreement between the Wisconsin Technical College System (WTCS) and the University of Wisconsin System (UWS) and some other private colleges allows graduates of the WTCS Nursing -Associate Degree program to transfer, with junior standing, into their baccalaureate nursing program. For the student that is a licensed practical nurse (LPN) and is interested in becoming a registered nurse (RN), WITC offers an "LPN Progression to ADN" track. The LPN Progression pathway provides advanced standing for nursing courses in ADN Semesters 1 and 2 of the WITC ADN program. Additionally, credits may be transferred from the practical nursing program if the General Studies and/or elective credits were at an associate degree level. Contact the campus admissions advisor for more information

### Pre-Nursing Admission Requirements

- Complete application form and submit with fee (fee waiver may apply if previously submitted) Complete Accuplacer entrance assessment
- to determine placement (waiver may apply with acceptable alternative test scores and/ or postsecondary degree completion); note: required Accuplacer entrance assessment scores for core Nursing coursework are higher than pre-Nursing cores Complete WITC pre-ADN Admissions Quiz Review and sign Background Check Disclosure Review and sign Functional Abilities Disclosure

- Complete admissions meeting with a WITC counselor

# **Program-Specific Requirements**

Pre-Nursing students must complete the petition process to be eligible for the core Nursing program (go to: https://www.witc.edu/academicprograms/degree-programs-and-certificates/ nursing-associate-degree/requirements-and-application for detailed requirements). In addition to the requirements above, students in this program must:

•Complete one year, or one credit, of high school chemistry or one credit of college-level chemistry with a 2.0 or better

- Complete a Nursing Assistant course with grade of 2.0 or better
- Somplete priority petition for admission forms:
   Submit a high school diploma or GED certificate; current high school seniors must provide

documentation upon graduation -WITC transcripts to verify course completion (priority admission is given to students who have completed the ADN program-required General Studies courses) -Review and sign Background Check Disclosure -Review and sign the Functional Abilities

Disclosure

 Complete and sign Intent to Enter form
 Prior to attendance in core Nursing coursework, student must:

-Submit Background Check fee -Have an acceptable Wisconsin Caregiver Background Check, National Criminal Background Check, Minnesota Caregiver Background Check (if applicable), and other

states if applicable -Pass a physical exam, have current immunizations, and demonstrate negative status for tuberculosis (Tb)

Possess current certification of "CPR for Healthcare Providers" or the equivalent

- Review and sign Nursing and Allied Health Division Confidentiality Statement
- Participate in a mandatory orientation session

# **Program Outcomes**

ADN Graduates will be able to:

- Implement one's role as a nurse in ways that reflect integrity, responsibility, ethical practices, and an evolving professional identity as a nurse committed to evidence-based practice, caring, advocacy, and quality care
   Demonstrate appropriate written, verbal, and perverbal communication in a variety of clinical
- nonverbal communication in a variety of clinical contexts
- Integrate social, mathematical, and physical sciences, pharmacology, and pathophysiology in clinical decision making
   Provide patient centered care by utilizing the
- Notice process across diverse populations and health care settings
  Minimize risk of harm to patients, members of the healthcare team, and self through safe individual performance and participation in system effectiveness
- Lead the multidisciplinary health care team to provide effective patient care throughout the lifespan
- Use information and technology to communicate, manage data, mitigate error, and support decision-making

# Career Outlook

Graduates of this program will be qualified for the following position:

Reaistered Nurse

## **Related Program**

Nursing Assistant

WITC's Nursing - Associate Degree program is accredited by the <u>Accreditation Commission for</u> <u>Education in Nursing, Inc. (ACEN)</u>, and approved by the <u>Wisconsin State Board of Nursing</u>. Concerns about the Nursing - Associate Degree program or questions about current status may be communicated to the Accreditation Commission for Education in Nursing, Inc. (ACEN), located at 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326, phone 404-975-5000. Concerns may also be directed to the Wisconsin State Board of Nursing, PO Box 8935, Madison, WI 53708-8935, phone (877) 617-1565.





Number	Course Title	Credits (cr.)
Technical Studies Courses		
10543101	Nursing Fundamentals *	2 cr.
10543102	Nursing Skills*	3 cr.
10543103	Nursing Pharmacology *	2 cr
10543104	Nursing: Intro to Clinical Practice *	2 cr
10543105	Nursing Health Alterations *	3 cr
10543106	Nursing Health Promotion *	3 cr
10543107	Nursing: Clinical Care Across Lifespar	1* 2 cr
10543108	Nursing: Intro to Clinical Care Managem	
10543109	Nursing: Complex Health Alteration	s 1* 3 cr
10543110	Nursing: Mental Health and Commu	inity
	Concepts *	2 cr
10543111	Nursing: Intermediate Clinical Pract	ice * 3 cr
10543112	Nursing Advanced Skills *	1 cr
10543113	Nursing: Complex Health Alteration	s 2 * 3 cr
10543114	Nursing: Management and Professi	onal
	Concepts *	2 cr
10543115	Nursing: Advanced Clinical Practice	* 3 cr
10543116	Nursing Clinical Transition *	<u>2 cr.</u>
Technial St	udies Total	38 cr
General Studies Courses **		
10801136	English Composition 1	3 cr
10801196	Oral/Interpersonal Communication	or 3 cr
10801198	Speech	
10806177	General Anatomy and Physiology	4 cr
10806179	Advanced Anatomy and Physiology	
10806197	Microbiology *	4 cr
10809188	Developmental Psychology	3 cr
10809196	Introduction to Sociology	3 cr
10809198	Introduction to Psychology	<u>3 cr.</u>
General Studies Total 27		27 cr
ELECTIVES		5 cr
TOTAL PROGRAM REQUIREMENTS		70 cr.

Requires a prerequisite and/or corequisite that must be completed with a grade point of 2.0 or better.

\*\* See pages 33-36 for course descriptions.

For all 10543XXX courses, course repeat and failure policies exist within the ADN program that allow for only a certain number of retakes and failures of these classes; please refer to these policies for details.

All courses in the ADN program (core nursing, science, general studies, prerequisites, and electives) must be completed with a grade of 2.0 or better, including 10806177 General Anatomy & Physiology and 10806179 Advanced Anatomy & Physiology.

#### Professional Licensure and/or **Certification Information**

State Licensure Disclosure: WITC's Nursing program prepares students to obtain the required licensure to be employed/practice in the state of Wisconsin. The College does not guarantee its curriculum matches the requirements for preparation, examinations, or licensure for other states. Please click below to review more details about accreditation and licensure

National Council of State Boards of Nursing (NCSBN)

State of Wisconsin Department of Safety and Professional Services

# 2021/2022

# **Financial Aid Eligible**

WISCONSIN

INDIANHEAD

TECHNICAL COLLEGE

# **Course Descriptions** (See pages 33-36 for General Studies course descriptions)

#### 10543101

#### Nursing Fundamentals - Credits: 2

This course focuses on basic nursing concepts that the beginning nurse will need to provide care to diverse patient populations across the lifespan. Current and historical issues impacting nursing will be explored within the scope of nursing practice. The nursing process will be introduced as a framework for organizing the care of patients with alterations in cognition, elimination, comfort, grief/loss, mobility, integument, and fluid/electrolyte balance. PREREQUISITE: Admission to Nursing program and COREQUISITE: 10806177 General Anatomy and Physiology.

#### 10543102

Nursing Skills - Credits: 3 This course focuses on development of clinical skills and physical assessment across the lifespan. Content includes mathematic calculations and conversions related to clinical skills, blood pressure assessment, aseptic technique, wound care, oxygen administration, tracheostomy care, suctioning, management of enteral tubes, basic medication administration, glucose testing, enemas, ostomy care, and catheterization. In addition the course includes techniques related to obtaining a health history and basic physical assessment skills using a body systems approach. PREREQUISITE: Admission to Nursing program or current LPN license and COREQUISITE: 10806177 General Anatomy and Physiology.

#### 10543103

#### Nursing Pharmacology - Credits: 2

This course introduces the principles of pharmacology, including drug classifications and their effects on the body. Emphasis is on the use of the components of the nursing process when administering medications. PREREQUISITE: Admission to the Nursing program and COREQUISITE: 10806177 General Anatomy and Physiology.

#### 10543104

#### Nursing: Intro to Clinical Practice - Credits: 2

This introductory clinical course emphasizes basic nursing skills and application of the nursing process in meeting the needs of diverse clients. Emphasis is placed on performing basic nursing skills, the formation of nurse-client relationships, communication, data collection, documentation, and medication administration. COREQUISITES: 10543101 Nursing Fundamentals, 10543102 Nursing Skills, and 10543103 Nursing Pharmacology, 10801136 English Composition 1, 10809188 Developmental Psychology, and 10806177 General Anatomy and Physiology.

#### 10543105

#### **Nursing Health Alterations - Credits: 3**

This course elaborates upon the basic concepts of health and illness as presented in Nursing Fundamentals. It applies theories of nursing in the care of clients through the lifespan, utilizing problem solving and critical thinking. This course will provide an opportunity to study conditions affecting different body systems and apply therapeutic nursing interventions. It will also introduce concepts of leadership, team building, and scope of practice. PREREQUISITES: 10543101 Nursing Fundamentals, 10543102 Nursing Skills, 10543103 Nursing Pharmacology, 10543104 Nursing: Introduction to Clinical Practice, and 10806177 General Anatomy and Physiology.

#### 10543106

#### Nursing Health Promotion - Credits: 3

This course will cover topics related to health promotion for individuals and families throughout the lifespan. We will cover nursing care of the developing family, which includes reproductive issues, pregnancy, labor and delivery, postpartum, the newborn, and the child. Recognizing the spectrum of healthy families we will discern patterns associated with adaptive and maladaptive behaviors applying mental health principles. An emphasis is placed on teaching and supporting healthy lifestyles choices for individuals of all ages. Nutrition, exercise, stress management, empowerment, and risk reduction practices are highlighted. Study of the family will cover dynamics, functions, discipline styles, and stages of development. PREREQUISITES:10543101 Nursing Fundamentals 10543102 Nursing Skills, 10543103 Nursing Pharmacology, 10543104 Nursing: Introduction to Clinical Practice, 10806177 General Anatomy and Physiology, and 10809188 Developmental Psychology and COREQUISITE: 10806179 Advanced Anatomy and Physiology.

#### 10543107

Nursing: Clinical Care Across Lifespan - Credits: 2 This clinical experience applies nursing concepts and therapeutic interventions to clients across the lifespan. It also provides an introduction to concepts of teaching and learning. Extending care to include the family is emphasized. COREQUISITE:10543106 Nursing Health Promotion

#### 10543108

#### Nursing: Intro to Clinical Care Management - Credits: 2

This clinical experience applies nursing concepts and therapeutic nursing interventions to groups of clients across the lifespan. It also provides an introduction to leadership, management, and team building. COREQUISITES: 10543105 Nursing Health Alterations, 10806179 Advanced Anatomy and Physiology, and 10801196 Oral/ Interpersonal Communication.

#### 10543109

#### Nursing: Complex Health Alterations 1 - Credits: 3

Complex Health Alterations 1 prepares the learner to expand knowledge from previous courses in caring for clients across the lifespan with alterations in cardiovascular, respiratory, endocrine, and hematologic systems as well as clients with fluid/electrolyte and acid-base imbalance, and alterations in comfort. PREREQUISITES 10543105 Nursing Health Alterations, 10543106 Nursing Health Promotion, 10543107 Nursing: Clinical Care Across the Lifespan, 10543108 Nursing: Introduction to Clinical Care Management, 10806179 Advanced Anatomy and Physiology, and COREQUISITE: 10806197 Microbiology.

#### 10543110

#### Nursing: Mental Health and Community Concepts - Credits: 2

This course will cover topics related to the delivery of community and mental health care. Specific health needs of individuals, families, and groups will be addressed across the lifespan. Attention will be given to diverse and at-risk populations. Mental health concepts will concentrate on adaptive/maladaptive behaviors and specific mental health disorders. Community resources will be examined in relation to specific types of support offered to racial, ethnic, economically diverse individuals and groups. PREREQUISITES: 10543105 Nursing Health Alterations, 10543106 Nursing Health Promotion, 10543107 Nursing: Clinical Care Across the Lifespan, 10543108 Nursing: Introduction to Clinical Care Management, 10806179 Advanced Anatomy and Physiology, and COREQUISITE: 10809198 Introduction to Psychology.

# 10543111

#### Nursing: Intermediate Clinical Practice - Credits: 3

This intermediate level clinical course develops the RN role when working with clients with complex health care needs. A focus of the course is developing skills needed for managing multiple clients across the lifespan and priorities. Using the nursing process, students will gain experience in adapting nursing practice to meet the needs of clients with diverse needs and backgrounds. COREQUISITES: 10543109 Nursing Complex Health Alterations 1, 10543110 Nursing: Mental Health and Community Concepts, and 10543112 Nursing Advanced Skills, 10809198 Introduction to Psychology, and 10806197 Microbiology.

#### 10543112

#### Nursing Advanced Skills - Credits: 1

This course focuses on the development of advanced clinical skills. Content includes advanced IV skills, blood product administration, chest tube systems, basic EKG interpretation and nasogastric/feeding tube insertion. PREFEQUISITES: 10543105 Nursing Health Alterations, 10543106 Nursing Health Promotion, 10543107 Nursing: Clinical Care Across the Lifespan, 10543108 Nursing: Introduction to Clinical Care Management, and 10806179 Advanced Anatomy and Physiology.

### 10543113

# Nursing: Complex Health Alterations 2 - Credits: 3 Complex Health Alterations 2 prepares the learner to expand knowledge and skills from previous courses in caring for clients across the lifespan with alterations in the immune, neuro-sensory, musculoskeletal, gastrointestinal, hepatobiliary, renal/urinary and the reproductive systems. The learner will also focus on management of care for clients with high-risk perinatal conditions, high-risk newborns and the ill child. Synthesis and application of previously learned concepts will be evident in the management of clients with critical/life threatening situations. PREREQUISITES: 10543109 Nursing Complex Health Alterations 1, 10543110 Nursing: Mental Health and Community Concepts, 10543111 Nursing: Intermediate Clinical Practice, 10543112 Nursing Advanced Skills, and 10806197

#### Microbiology. 10543114

# Nursing: Management and Professional Concepts - Credits: 2

This course covers nursing management and professional issues related to the role of the RN. Emphasis is placed on preparing for the RN practice. PREREQUISITES: 10543109 Nursing: Complex Health Alterations 1, 10543110 Nursing: Mental Health and Community Concepts, 10543111 Nursing: Intermediate Clinical Practice, and 10543112 Nursing Advanced Skills.

#### 10543115

# Nursing: Advanced Clinical Practice - Credits: 3 This advanced clinical course requires the student to integrate

concepts from all previous courses in the management of groups of clients facing complex health alterations. Students will have the opportunity to further develop critical thinking skills using the nursing process in making clinical decisions. Continuity of care through interdisciplinary collaboration is emphasized. COREQUISITES: 10543113 Nursing Complex Health Alterations 2, and 10809196 Introduction to Sociology.

#### 10543116

# Nursing Clinical Transition - Credits: 2

This clinical experience integrates all knowledge learned in the previous courses in transitioning to the role of the graduate nurse. The course promotes relatively independent clinical decisions, delegation, and works collaboratively with others to achieve client and organizational outcomes. Continued professional development is fostered. PREREQUISITES: 10543113 Nursing Complex Health Alterations 2, 10543114 Nursing Management and Professional Concepts, and 10543115 Nursing Advanced Clinical Practice.

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# Communication

### 10801136

#### English Composition 1 - Credits: 3

This course is designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing and revising are applied through a variety of activities. Students will analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals will develop critical reading skills through analysis of various written documents.

#### 10801196

#### **Oral/Interpersonal Communication - Credits: 3**

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

#### 10801197

### **Technical Reporting - Credits: 3**

Prepare and present written, oral, and visual communication products, including instructions, proposals, informal and formal reports. Produce clear, usable communication by incorporating information design principles, arranging content to satisfy diverse audience needs, and presenting visuals for various contexts. Designed as an advanced course to develop collaborative communication practices, information literacy skills, and ethically responsible professional communication strategies.

# 10801198

Speech - Credits: 3

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of the course.

#### 20801219

#### English Composition 1 - Credits: 3

This course is designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing and revising are applied through a variety of activities. Students will analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals will develop critical reading skills through analysis of various written documents. Students in this college transfer course will complete a service learning or global awareness project in addition to the standard curriculum. PREREQUISITE: Admission to the University Transfer Degree - Associate of Arts in Liberal Arts or University Transfer Degree - Associate of Science in Liberal Arts program.

#### 20801260

#### **Technical Communications - Credits: 3**

Prepare and present written, oral, and visual communication products, including instructions, proposals, informal and formal reports. Produce clear, usable communication by incorporating information design principles, arranging content to satisfy diverse audience needs, and presenting visuals for various contexts. Designed as an advanced course to develop collaborative communication practices, information literacy skills, and ethically responsible professional communication strategies. Students in this college transfer course will complete a service learning or global awareness project in addition to the standard curriculum. PREREQUISITE: Admission to the University Transfer Degree Associate of Arts in Liberal Arts or University Transfer Degree - Associate of Science in Liberal Arts program.

#### 20810201

Fundamentals of Speech - Credits: 3 This course explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of the course. Students in this college transfer course will complete a service learning or global awareness project in addition to the standard curriculum. PREREQUISITE: Admission to the University Transfer Degree - Associate of Arts in Liberal Arts or University Transfer Degree - Associate of Science in Liberal Arts program.

#### 20810203

#### **Interpersonal Communication - Credits: 3**

This course focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication. Students in this college transfer course will complete a service learning or global awareness project in addition to the standard curriculum. PREREQUISITE: Admission to the University Transfer Degree

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Associate of Arts in Liberal Arts or University Transfer Degree - Associate of Science in Liberal Arts program.

#### 32801361 Applied Communications - Credits: 2

This basic communication course focuses on effective listening, speaking, reading, and writing in life and at work. Students demonstrate their skills both individually and in groups. Students also produce such employment documents as a cover letter, a resume, and a preliminary job portfólio.

# 32801362

Advanced Communication Skills - Credits: 2 This course focuses on building effective professional and personal communication skills. Students will practice, prepare, and deliver program-specific written documents, presentations, and interpersonal communication scenarios for diverse audiences. The course also examines the importance of community and engagement, and includes best practices in Computer-Mediated Communication. PREREQUISITE: 32801361 Applied Communications.

10838104

#### Intro to College Reading - Credits: 2

Provides learners with opportunities to develop and expand reading skills including comprehension and vocabulary. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources.

#### 76851740

Writing Foundations Writing Foundations is a course designed to improve a student's writing skills to prepare the student for success in Intro to College Writing. Completing the course with a grade of C or higher will allow a student to enter Intro to College Writing.

#### 76851750

#### Writing Foundations for Trades

Writing Foundations for Trades is a course designed to improve a student's writing skills to prepare the student for success in trades programs.

#### 76858740 **Reading Foundations**

Reading Foundations is a course designed to improve a student's reading skills to prepare the student for success in Intro to College Reading. Completing the course with a grade of C or higher will allow a student to enter Intro to College Reading.

#### 99831900

#### Writing Essentials - Credits: 2

This transitional course prepares students for success in English Composition 1. Topics include basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. This course cannot be used to meet any General Studies course requirements for graduation in a program. COREQUISITE: 10801136 English Composition 1.

## Mathematics

#### 10804107

#### College Mathematics - Credits: 3

This course is designed to review and develop fundamental concepts of mathematics in the areas of algebra, geometry, trigonometry, measurement and data. Algebra topics emphasize simplifying algebraic expressions, solving linear equations and inequalities with one variable, solving proportions and percent applications. Geometry and trigonometry topics include; finding areas and volumes of geometric figures, applying similar and congruent triangles, applying Pythagorean Theorem, and solving right triangles using trigonometric ratios. Measurement topics emphasize the application of measurement concepts and conversion techniques within and between U.S. customary and metric system to solve problems. Data topics emphasize data organization and summarization skills, including: frequency distributions, central tendency, relative position and measures of dispersion. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators.

10804113

# **College Technical Mathematics 1A - Credits: 3**

Topics include: solving linear equations, graphing, percent, proportions, measurement systems, computational geometry, and right triangle trigonometry. Emphasis will be on the application of skills to technical problems. Successful completion of College Technical Mathematics 1A and College Technical Mathematics 1B is the equivalent of College Technical Mathematics 1.

#### 10804114

#### College Technical Mathematics 1B - Credits: 2

This course is a continuation of College Technical Mathematics 1A. Topics

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include: performing operations on polynomials, solving quadratic and rational equations, formula rearrangement, solving systems of equations, and oblique triangle trigonometry. Emphasis will be on the application of skills to technical problems. Successful completion of or concurrent enrollment in College Technical Mathematics 1A is required for course enrollment. Successful completion of College Technical Mathematics 1A and College Technical Mathematics 1B is the equivalent of College Technical Mathematics 1. PREREQUISITE: 10804113 College Technical Mathematics 1A.

#### 10804118

# Intermediate Algebra with Applications - Credits: 4 This course offers algebra content with applications. Topics include

properties of real numbers, order of operations, algebraic solution for linear equations and inequalities, operations with polynomial and rational expressions, operations with rational exponents and radicals algebra of inverse, logarithmic and exponential functions. PREREQUISITE: 10834109 Pre-Algebra or any associate degree or college parallel level WTCS mathematics course, or additional measures may be considered as determined by the counselor.

#### 10804123

#### Math with Business Applications - Credits: 3

This course integrates algebraic concepts, proportions, percents, simple interest, compound interest, annuities, and basic statistics with business/ consumer scenarios. It also applies math concepts to the purchasing/ buying and selling processes.

### 10804133

#### Mathematics and Logic - Credits: 3

Students will apply mathematical problem solving techniques. Topics will include symbolic logic, sets, algebra, Boolean algebra, and number bases.

# 10804138

# Math for Health Professionals - Credits: 2

Following an arithmetic review, this course emphasizes those mathematical skills necessary for success in the nursing field and related health occupations. Emphasis will be placed on computational skills and applications of rational numbers; problem solving skills with ratios, proportions, and percents; basic principles and application of algebra, graphing, and statistics; measurement skills in U.S. Customary and Metric systems as well as apothecary and household systems; and the use of calculators as a tool

#### 10804189

#### Introductory Statistics - Credits: 3

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Recommended Prerequisite: Introductory computer skills to include spreadsheets. PREREQUISITE: 10834109 Pre-Algebra, any associate degree or college parallel level WTCS mathematics course, or additional measures may be considered as determined by the counselor.

### 10804196

#### Trigonometry with Applications - Credits: 3

Topics include circular functions, graphing of trigonometry functions, identities, equations, trigonometric functions of angles, inverse functions, solutions of triangles complex numbers, DeMoirrés Theorem, polar coordinates, and vectors. PREREQUISITE: 10804118 Intermediate Algebra with Applications.

#### 20804201

#### Intermediate Algebra - Credits: 4

This course offers algebra content with applications. Topics include properties of real numbers, order of operations, algebraic solution for linear equations and inequalities, operations with polynomial and rational expressions, operations with rational exponents and radicals, algebra of inverse, logarithmic and exponential functions. Students in this college transfer course will complete a final project related to issues in undergraduate research in addition to the standard curriculum. PREREQUISITES: 10834109 Pre-Algebra, any associated degree or college parallel level WTCS mathematics course, or additional measures may be considered as determined by the counselor and Admission to the University Transfer Degree - Associate of Arts in Liberal Arts or University Transfer Degree - Associate of Science in Liberal Arts program.

#### 20804213

#### Trigonometry - Credits: 3

Topics include circular functions, graphing of trigonometry functions, identities, equations, trigonometric functions of angles, inverse functions, solutions of triangles complex numbers, DeMoivre's Theorem, polar coordinates, and vectors. Students in this college transfer course will complete a final project related to issues in undergraduate research in addition to the standard curriculum. PREREQUISITES: 20804201 Intermediate Algebra and Admission to the Associate of Arts in



Liberal Arts or University Transfer Degree - Associate of Science in Liberal Arts program.

#### 20804240

#### **Basic Statistics - Credits: 3**

Students taking Basic Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate paraméters, and test hypotheses. They draw inferences about relationships including ANÓVA. Students in this college transfer course will complete a data analysis project related to issues in undergraduate research in addition to the standard curriculum. Recommended Prerequisite: Introductory computer skills to include spreadsheets. PREREQUISITES: 10834109 Pre-Algebra, any associate degree or college parallel level WTCS mathematics course, or additional measures may be considered as determined by the counselor and Admission to the University Transfer Degree - Associate of Arts in Liberal Arts or University Transfer Degree - Associate of Science in Liberal Arts program.

## 32804303

Applied Math - Credits: 2

This course covers practical applications of whole numbers, fractions, decimals, percent, proportion, and formula evaluation. The course also includes measurement, U.S. and metric systems of measurement, and basic geometry.

#### 32804313

#### Applied Math 2 - Credits: 2

This course is a continuation of Applied Math. A more thorough coverage of solving equations and rearranging formulas with special application to formulas used in the mechanical technician programs. Other topics include a study of solid geometry and direct and inverse proportions for work with hydraulics and transmission studies. The course is team-taught with the core instructor and direct application of math skills taught will be assessed in the math class and during time spent with the core instructor. PREREQUISITE: 32804303 Applied Math.

#### 32804325

#### Applied Technical Math 1 - Credits: 3

This technical diploma course begins with a short review of basic arithmetic skills and continues with the application of these skills. Problem solving involving fractional and decimal dimensions is emphasized. The course also includes introductory algebra with emphasis on utilization of formulas including work with signed numbers. Firstdegree equation solution is also emphasized.

#### 32804334

#### Applied Technical Math 2 - Credits: 2

This technical diploma course is a continuation of Applied Technical Math 1. Topics covered include the basic geometry of plane and solid figures, right-triangle trigonometry, oblique-triangle trigonometry, and applications of these topics to trade and industry programs. PREREQUISITE: 32804325 Applied Technical Math 1.

#### 32804335

#### **Advanced Technical Math - Credits: 3**

This technical diploma course is a continuation of Applied Technical Math 1. Topics covered include the basic geometry of plane and solid figures, right-triangle trigonometry, oblique-triangle trigonometry, and applications of these topics to trade and technical programs. Additional topics covered in this course are program specific. These topics include applications to machine shop formulas, Cartesian coordinates, point-topoint programming, land-surveying mathematics, and framing-square calculations. PREREQUISITE: 32804325 Applied Technical Math 1.

#### 10834109

#### Pre-Algebra - Credits: 3

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra related courses. This course cannot be used to meet any General Studies course requirements for graduation in a program.

#### 76854745

#### **Math Foundations**

Math Foundations is a course designed to improve a student's math skills to support their success in Pre-Algebra. Students will be able to co-enroll in Pre-Algebra. Completing the course with a grade of C or higher should prepare a student to successfully complete their Pre-Algebra course.

#### 76854740

#### Math Foundations for Health

Math Foundations for Health is a course designed to improve a student's math skills to prepare the student for success in health programs.

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# 76854750

# Math Foundations for Trades

Math Foundations for Trades is a course designed to improve a student's math skills to support their success in Applied Math or Applied Technical Math 1. Students in Math Foundations for Trades will be able to co-enroll in Applied Math or Applied Technical Math 1. Completing the course with a grade of C or higher should prepare a student to successfully complete their Applied Math or Applied Technical Math 1 course.

# Science

# 10806105

# Principles of Animal Biology - Credits: 4

Introductory course focusing on general biological principles, cell structure and function, genetics, comparative anatomy and physiology, evolution, and ecosystems. Includes dissection of various fresh and preserved materials. This course is appropriate for OTA, AODA and other allied health students. (This course is a prerequisite to Microbiology.) PREREQUISITE: Admission to Veterinary Technician plan. This course was developed through a grant from the Wisconsin Technical College System, grant #17171124140

#### 10806112

### Principles of Sustainability - Credits: 3

Prepares the student to develop sustainable literacy, analyze the interconnections among the physical and biological sciences and environmental systems, summarize the effects of sustainability on health and well-being, analyze connections among social, economic, and environmental systems, employ energy conservation strategies to reduce the use of fossil fuels, investigate alternative energy options, evaluate options to current waste disposal and recycling in the U.S. and analyze approaches used by your community to promote and implement sustainability.

# 10806114

# General Biology - Credits: 4

Introduces general biological concepts and principles. Emphasis is on cell structure and function, genetics, evolution, and taxonomical relationships. Consideration is also given to diversity among the various kingdoms.

#### 10806134

#### **General Chemistry - Credits: 4**

Covers the fundamentals of chemistry. Topics include the metric system, problem solving, periodic relationships, chemical reactions, chemical equilibrium, properties of water; acids, bases, and salts; and gas laws.

#### 10806140 Chemistry - Credits: 1

This is a combined lecture/laboratory course for those entering health occupations programs. You will study chemical bonds and the solution process; chemical reactions and chemical equilibria; and acids and bases. You will participate in labs where appropriate. No previous background in chemistry is required. Good math skills are helpful.

#### 10806175 Pathophysiology - Credits: 3

This introductory course in pathophysiology covers topics related to alterations of homeostasis and the associated pathophysiological processes. Course studies include the processes involved that generate illness; signs and symptoms of commonly occurring illness states; and effects of disease processes on the cell. Review of normal homeostatic mechanisms is included. Study of these fundamental processes in relation to the pathophysiological processes can enable the students to apply this knowledge to clinical situations. PREREQUISITES: 10806179 Advanced Anatomy and Physiology and 10806197 Microbiology.

# 10806177

#### General Anatomy and Physiology - Credits: 4

Examines basic concepts of human anatomy and physiology as they relate to health sciences. Using a body systems approach, the course emphasizes the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. It is intended to prepare health care professionals who need to apply basic concepts of whole body anatomy and physiology to informed decision-making and professional communication with colleagues and patients. This course includes a one-credit lab component that supports the course objectives. (This course also provides the foundation, and is prerequisite to, Advanced Anatomy and Physiology and Microbiology.) NOTE: Successful completion of a chemistry course within the last five years is highly recommended.

#### 10806179

Advanced Anatomy and Physiology - Credits: 4 Advanced Anatomy and Physiology is the second semester in a two-semester sequence in which normal human anatomy and physiology are studied using a body systems approach with emphasis on the interrelationships between form and function at the gross and microscopic levels of organization. Instructional delivery within a classroom and laboratory setting. Experimentation within a science lab will include analysis of cellular metabolism, the individual components of body systems such as the nervous, neuromuscular, cardiovascular, and urinary. Continued examination of homeostatic mechanisms and their relationship to fluid, electrolyte, acid-base balance and blood. Integration of genetics to human reproduction and development are also included in this course. PREREQUISITE: 10806177 General Anatomy and Physiology, preferably within the last five years.

### 10806197

### Microbiology - Credits: 4

Examines microbial structure, metabolism, genetics, growth and the relationship between humans and microorganisms. Addresses disease production, epidemiology, host defense mechanisms and the medical impact of microbes. Examines the role of microbes in the environment, industry, and biotechnology. This course includes a one-credit lab component that supports the course objectives. PREREQUISITE: 10806177 General Anatomy and Physiology, preferably within the last five years or 10806105 Principles of Animal Biology.

#### 10806198

Human Biology - Credits: 4 This is an introductory course that emphasizes the structure of the human body and the functional interrelationships of the body's systems. Consideration is given to the human body and disease, human genetics, human ecology, and the role that humans play in the environment. The course consists of three hours of lecture and two hours of lab per week. NOTE: this course does not meet requirements for or substitute for General Anatomy and Physiology or Anatomy & Physiology 1 and II.

#### 20806201

Principles of Biology - Credits: 4 Introduces general biological concepts and principles. Emphasis is on cell structure and function, genetics, evolution, and taxonomical relationships. Consideration is also given to diversity among the various kingdoms. Students in this college transfer course will complete an academic research project in addition to the standard curriculum. PREREQUISITE: Admission to the University Transfer Degree - Associate of Arts in Liberal Arts or University Transfer Degree - Associate of Science in Liberal Arts program.

#### 20806207

Anatomy & Physiology 1 - Credits: 4 Examines basic concepts of human anatomy and physiology as they relate to health sciences. Using a body systems approach, the course emphasizes the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. It is intended to prepare health care professionals who need to apply basic concepts of whole body anatomy and physiology to informed decision-making and professional communication with colleagues and patients. (This course also provides the foundation, and is prerequisite to, Anatomy and Physiology 2.) NOTE: Successful completion of a chemistry course within the last five years is highly recommended. Students in this college transfer course will complete an academic research project in addition to the standard curriculum. PREREQUISITE: Admission to the University Transfer Degree - Associate of Arts in Liberal Arts or University Transfer Degree - Associate of Science in Liberal Arts program.

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#### 20806208

Anatomy & Physiology 2 - Credits: 4 Advanced Anatomy and Physiology is the second semester in a two-semester sequence in which normal human anatomy and physiology are studied using a body systems approach with emphasis on the interrelationships between form and function at the gross and microscopic levels of organization. Instructional delivery within a classroom and laboratory setting. Experimentation within a science lab will include analysis of cellular metabolism, the individual components of body systems such as the nervous, neuromuscular, cardiovascular, and urinary. Continued examination of hemostatic mechanisms and their relationship to fluid, electrolyte, acid-base balance and blood. Integration of genetics to human reproduction and development are also included in this course. Students in this college transfer course will complete an academic research project in addition to the standard curriculum. PREREQUISITES: 20806207 Anatomy & Physiology 1, preferably within the last five years and Admission to the University Transfer Degree - Associate of Árts in Liberal Arts or University Transfer Degree - Associate of Science in Liberal Arts program.

## 20806209

#### **College Chemistry 1 - Credits: 4**

Covers the fundamentals of chemistry. Topics include the metric system, problem solving, periodic relationships, chemical reactions, chemical equilibrium, properties of water; acids, bases, and salts; and gas laws. Students in this college transfer course will complete an academic research project in addition to the standard curriculum. PREREQUISITE: Admission to the University Transfer Degree - Associate of Arts in Liberal Arts or University Transfer Degree - Associate of Science in Liberal Arts program.

#### 20806229

### Introduction to Human Biology - Credits: 4

This is an introductory course that emphasizes the structure of the human body and the functional interrelationships of the body's systems. Consideration is given to the human body and disease, human genetics, human ecology, and the role that humans play in the environment. The course consist of 3 hours of lecture and 2 hours of lab per week. Note: This course does not meet requirements for or substitute for General Anatomy and Physiology or Anatomy & Physiology I and II. Students in this college transfer course will complete an academic research project in addition to the standard curriculum. PREREQUISITE: Admission to the University Transfer Degree - Associate of Arts in Liberal Arts or University Transfer Degree - Associate of Science in Liberal Arts program.

### 20806274

#### **General Microbiology - Credits: 4**

Examines microbial structure, metabolism, genetics, growth and the relationship between humans and microorganisms. Addresses disease production, epidemiology, host defense mechanisms and the medical impact of microbes. Examines the role of microbes in the environment, industry, and biotechnology. This course includes a one-credit lab component that supports the course objectives. Students in this college transfer course will complete an academic research project in addition to the standard curriculum. PREREQUISITES: 20806207 Anatomy and Physiology 1, preferably within the last five years and Admission to the University Transfer Degree - Associate of Arts in Liberal Arts or University Transfer Degree - Associate of Science in Liberal Arts program.

#### 20806280

#### **Environmental Issues - Credits: 3**

Prepares the student to develop sustainable literacy, analyze the interconnections among the physical and biological sciences and environmental systems, summarize the effects of sustainability on health and well-being, analyze connections among social, economic, and environmental systems, employ energy conservation strategies to reduce the use of fossil fuels, investigate alternative energy options, evaluate options to current waste disposal and recycling in the U.S., and analyze approaches used by your community to promote and implement sustainability. Students in this college transfer course will complete an academic research project in addition to the standard curriculum. PREREQUISITE: Admission to the University Transfer Degree - Associate of Arts in Liberal Arts or University Transfer Degree - Associate of Science in Liberal Arts program.

# Social Science

#### 10809122

### Introduction to American Government - Credits: 3

Introduces American political processes and Institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our . federal system.

#### 10809166

#### Introduction to Ethics: Theory and Application - Credits: 3 This course provides a basic understanding of the theoretical

foundations of ethical thought. Diverse ethical perspectives will be used to analyze and compare relevant issues. Students will critically evaluate individual, social and/or professional standards of behavior, and apply a systematic decision-making process to these situations.

## 10809172

### Introduction to Diversity Studies - Credits: 3

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, religion are explored.

# 10809195

# Economics - Credits: 3

This course is designed to give an overview of how a market-oriented economic system operates, and it surveys the factors which influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues.

### 10809196

Introduction to Sociology - Credits: 3 Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions, including family, government, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, social organization, and workplace issues.

#### 20809203

Introductory Sociology - Credits: 3 This course introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions, including family, government, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, social organization, and workplace issues. **Students in this college** transfer course will complete a global awareness project in addition to the standard curriculum. PREREQUISITE: Admission to the University Transfer Degree - Associate of Arts in Liberal Arts or University Transfer Degree - Associate of Science in Liberal Arts program.

#### 20809221

#### American National Government - Credits: 3

This course introduces American political processes and Institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties and public opinion in the political process. Also explores the role of state and national government in our federal system. Students in this college transfer course will complete a global awareness project in addition to the standard curriculum. PREREQUISITE: Admission to the University Transfer Degree - Associate of Arts in Liberal Arts or Associate of Science in Liberal Arts program.

# 20809222

#### Economics - Credits: 3

This course is designed to give an overview of how a market-oriented economic system operates, and it surveys the factors which influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues. **Students in** this college transfer course will complete a global awareness project in addition to the standard curriculum. PREREQUISITE: Admission to the University Transfer Degree - Associate of Arts in Liberal Arts or University Transfer Degree - Associate of Science in Liberal Arts program.

#### 20809225

# Ethics - Credits: 3

This course provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives will be used to analyze and compare relevant issues. Students will critically evaluate individual, social and professional standards of behavior, and apply a systematic decision-making process to these situations. Students in this college transfer course will complete a global awareness project in addition to the standard curriculum. PREREQUISITE: Admission to the University Transfer Degree - Associate of Arts in Liberal Arts or University Transfer Degree - Associate of Science in Liberal Arts program.

#### 20809272

## **Diversity Studies - Credits: 3**

This course introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, religion are explored. Students in this college transfer course will complete a global awareness project in addition to the standard curriculum. PREREQUISITE: Admission to the University Transfer Degree - Associate of Arts in Liberal Arts or University Transfer Degree - Associate of Science in Liberal Arts program.

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# **Behavioral Science**

#### 10809159

### Abnormal Psychology - Credits: 3

The course in Abnormal Psychology surveys the essential features, possible causes, assessments, and treatment of mental health challenges from the viewpoint of the major historical and theoretical perspectives in the field. Students will be introduced to the diagnostic system of the Diagnostic and Statistical Manual of Mental Disorders. Biological, psychological, and socio-cultural perspectives in understanding and responding to abnormal behavior will be addressed, as well as current topics and issues. PREREQUISITE: 10809198 Introduction to Psychology.

#### 10809188

Developmental Psychology - Credits: 3 Developmental Psychology is the study of human development throughout the lifespan. This course explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills will enable students to gain an increased knowledge and understanding of themselves and others.

#### 10809198

#### Introduction to Psychology - Credits: 3

This science of psychology course is a survey of the multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

### 20809231

20809231 Introductory Psychology - Credits: 3 This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development. Students in this college transfer course will complete a global awareness project in addition to the standard curriculum. PREREQUISITE: Admission to the University Transfer Degree - Associate of Arts in Liberal Arts or University Transfer Degree - Associate of Science in Liberal Arts program.

#### 20809237

# Abnormal Psychology - Credits: 3

This course in Abnormal Psychology surveys the essential features, possible causes, assessments, and treatment of mental health challenges from the viewpoint of the major historical and theoretical perspectives in the field. Students will be introduced to the diagnosis system of the Diagnostic and Statistical Manual of Mental Disorders. Biological, psychological, and socio-cultural perspectives in understanding and responding to abnormal behavior will be addressed, as well as current topics and issues. Students in this college transfer course will complete a global awareness project in addition to the standard curriculum. PREREQUISITE: 20809231 Introductory Psychology and Admission to the University Transfer Degree - Associate of Arts in Liberal Arts or University Transfer Degree - Associate of Science in Liberal Arts program.

#### 32809380

#### **Applied Interpersonal Skills - Credits: 2**

Improve intrapersonal and interpersonal skills in high demand by employers to enhance life-long learning both professionally and personally. Areas that are highlighted include providing excellent customer service in a diverse workplace, working ethically, improving motivation, applying critical thinking skills, and managing difficult situations

# Interdisciplinary

#### 10890116 Job Quest - Credits: 1

Develop documents and skills to seek, obtain, and retain employment. Strengthen your professional image by developing self-awareness of elements affecting interpersonal and work relationships. Guidelines for determining appropriate grooming, dress, and poise will be covered. Personal life management along with career/life goal setting will be reinforced. This class should be taken in the last semester of the program.

### 30890320

# Working Smart - Credits: 1

This course will work in collaboration with student internship, second 8 weeks, to address employability skills in a natural, work-based learning environment. Students will continue the development and enhancement of job seeking skills, while practicing job retention skills such as problem solving, time management, accountability, self-awareness and working relationships. COREQUISITES: 30109330 Hospitality Applications, 30109331 Safety and Sanitation Fundamentals and 30109332 Guest Relations Fundamentals.

# 32890305

#### Applied Information Resources - Credits: 2 This course will allow the learner to develop skills in research,

evaluation, selection, and preparation of information resources useful to their career area. Learners will use various information resources, including computer software applications to develop sound information research strategies. Learners will be exposed to ethical use of information, information provided by various methods and stored in various management formats, communicating by e-mail, developing search and selection of information resources, analysis, and use of results. This discussion- and lab-based course will use individual and group work to search and share information resources. Competencies learned in this course will be able to be applied in other courses within your program and will continue to be valuable in lifelong learning. You should have experience in keyboarding and basic computer skills for this course.

#### 10835103 Study Skills - Credits: 1

This course provides learners with strategies to develop study skills for success in college. Through hands-on experiences, learners will apply study skills, learn how to think critically, and use information resources and technology. This course cannot be used to meet any General Studies course requirements for graduation in a program.

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