# AODA (Alcohol and Other Drug Abuse) Certificate Certificate Number 905501

# **Description**

The AODA Certificate is designed for individuals interested in becoming licensed to provide AODA counseling to people, or improving their skills in providing AODA counseling. All hours required by the Department of Regulations and Licensing are included in all content areas. It is also designed to assist individuals working in service occupations, to identify substance abuse problems and provide guidance to people who have AODA issues. Completion of this certificate can be applied to the HUMAN SERVICES ASSOCIATE Degree offered at NTC.

# **Certificate Completers will be able to**

• This certificate provides a good foundation for learners who will be working with people in any capacity. Focus is on the impact of substance abuse on both the individual and society, identification of substances and AODA, facilitating engagement with individuals and groups, and the physical and psychological pathology associated with AODA.

# **Requirements for Certificate Entry:**

Successful completion of background check on www.
 CertifiedBackground.com and enter package code NF54.

# **Wisconsin Caregiver Law**

NWTC is required to comply with the Wisconsin Caregiver Law (1997 WISCONSIN ACT 27). The completion of a caregiver background check includes the review of criminal records for convictions of serious crimes or a history of improper behavior. Students accepted into this program must complete a background check through www.CertifiedBackground.com. Information regarding this process is provided to students immediately

# Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-550-177	AODA Assessment and Diagnosis	3
10-550-176	Ethical AODA Case/Record Mgmt	3
10-550-172	Group Facilitation	3
10-550-178	Intro to Counseling Theory	3
10-550-179	Methods of AODA Counseling	3
10-550-174	Overview of Mental Disorders	3
10-550-175	Personal and Professional Dev	1
10-550-173	Psychopharmacology	3
10-550-170	Understanding Substance Abuse	3
	CERTIFICATE TOTAL	25

upon acceptance into the program. Students with a criminal history may be denied access to placement at the discretion of the clinical or practicum site. Consequently, should a student have a history of convictions of serious crimes or a history of improper behaviors, NWTC cannot guarantee clinical/practicum placement or guarantee graduation within typical program timing.

#### Note

- We are an approved Comprehensive 360-hour program through the State of Wisconsin, Department of Safety and Professional Services. We follow the Substance Abuse Counselor education requirements of SPS 166.03 and 166.09.
- Consideration is made for transfer of credit for the Introduction to Counseling Theory, and Methods of AODA Counseling classes from graduate programs. To be considered, the program director must review the student's official transcript(s) and course competencies in order to profess to the competency of each individual in 90 hours of the 375 hours.

### **COURSE DESCRIPTIONS**

10-550-177 AODA Assessment and Diagnosis...learners develop a working knowledge of gathering and interpreting information used in forming diagnoses based on the criteria in the DSM-IV TR. Learners will explore various diagnostic tools and determine the level of care utilizing the Wisconsin UPC. (Prerequisite: 10-550-170, Understanding Substance Abuse.)

10-550-176 Ethical AODA Case/Record Mgmt...covers ethical case management, coordination of integrative services for AODA clients and the accurate management of treatment records. (Prerequisite: 10-550-177, AODA Assessment and Diagnosis.)

10-550-172 Group Facilitation... Learners are introduced to group counseling techniques such as facilitating the process of forming a group, determining group type, purpose, size, leadership, establishing goals and clarifying group rules. (Corequisite: 10-550-179, Methods of AODA Counseling.)

10-550-178 Intro to Counseling Theory...learners are introduced to the basic counseling skills and will begin to examine the counseling theories utilized in the human services professions.

10-550-179 Methods of AODA Counseling... learners are introduced to a number of counseling theories and techniques that can be utilized in the human services profession. The theories will be explored in relation to substance abuse counseling. (Prerequisite: 10-550-178, Intro to Counseling Theory)

10-550-174 Overview of Mental Disorders... Learners will be introduced to the symptomology and etiology and classification of psychiatric disorders and treatment.

10-550-175 Personal and Professional Dev... this course will introduce the personal and professional qualities and responsibilities AODA counselors should incorporate into their practice. Learners will clarify personal values and beliefs while examining their strengths and weaknesses. The course content will include ethical issues surrounding substance abuse counseling.

10-550-173 Psychopharmacology... Learners will be introduced to the basic concepts of psychopharmacology and the function of the organs and systems of the human body and brain.

10-550-170 Understanding Substance Abuse... a holistic approach including epidemiology, etiology and definitions; prevention and treatment, social and health care institutions and resource agencies and ethics and legal issues in the helping profession with a focus on self-attitudes, values and goals.

For more information, please contact: The Public Safety Department, (920) 498-5485 or (800) 422-NWTC, extension 5485,or contact Enrollment Services at 888-385-NWTC.

# **Applied Graphics for Prototype and Design Certificate** Certificate Number 906141

# **Description**

This certificate emphasizes a combination of Marketing & Graphic Communications and Prototype & Design courses. Student will focus on computer graphics and model building.

# **Certificate Completers will be able to**

Build a variety of prototype models and render, illustrate, and photograph various models.

# **Requirements for Certificate Entry:**

- High school diploma or equivalent.
- High school background in mathematics and science.
- High school algebra or equivalent.
- Recent computer familiarity and ability to use a keyboard and mouse.
- Ability to sit behind a computer workstation for prolonged sessions.

# **Curriculum**

CATALOG NO.	DESCRIPTION	CREDITS
10-614-113	2D Essentials	2
10-111-161	Macintosh Illustration	3
10-111-101	Macintosh-Image Editing	3
10-614-152	Prototyping-Introduction to	5
	CERTIFICATE TOTAL	13

Note

10-614-152, Prototyping-Introduction is offered only in the Fall.

Completers will be able to apply credits toward the following programs:

- 101117, Design and Graphic Technology
- 106142, Prototype & Design

## **COURSE DESCRIPTIONS**

10-614-113 2D Essentials... an introduction to technical communication, annotation, geometric construction, model, orthographic and pictorial, section and auxiliary views and dimensioning.

10-111-161 Macintosh Illustration...create and paint basic shapes, draw, transform objects, work with type, blend shapes and colors, work with layers, special effects, and color separations. An introduction to manipulating vector based images.

10-111-101 Macintosh-Image Editing... (Adobe Photoshop + Adobe Acrobat) scanning, editing, color correcting and creating composite montage photographs. Prepare images for publication in print. An introduction to manipulating bitmap images.

10-614-152 Prototyping-Introduction to... introduction to the prototype & design industry using a variety of shop tools and equipment, machine processes, and fabrication techniques with an emphasis on shop safety, hand skills, accuracy, professionalism, and working within specified tolerances to build three dimensional models.

#### For more information, please contact:

The Business & Information Technology Department, (920) 498-5435 or (800) 422-NWTC, extension 5435, or contact Enrollment Services at 888-385-NWTC.

# Audio Production Certificate Number 902062

# **Description**

The Audio Production Certificate is designed for a person seeking skills in audio recording and internet/broadcast radio.

# **Certificate Completers will be able to**

- Engineer and plan recording sessions and distribute that content digitally and over the air.
- Conduct recording sessions using state-of-the-art equipment and produce professional broadcast quality material.
- Plan, record and distribute music and talk programming.
- Manage the sound reinforcement, monitoring, and recording aspects of a live performance.
- Produce music for broadcast, podcast, video and film.
- Record and master recordings on a variety of computer software applications, convert files to various digital formats.
- Create broadcast liners, sots and programming.

# **Curriculum**

CATALOG NO.	DESCRIPTION	CREDITS
10-206-102	Audio Engineering 1	3
10-206-103	Audio Engineering 2	3
10-206-120	Audio Production with Logic Pr	3
10-206-100	Digital Audio Overview	3
	CERTIFICATE TOTAL	12

#### Note

10-206-102, Audio Engineering 1 is offered only in the Fall. 10-206-103, Audio Engineering 2 is offered only in the Spring.

Completers will be able to apply credits toward the following programs:

• 102065, Digital Media Technology

## **COURSE DESCRIPTIONS**

10-206-102 Audio Engineering 1...apply the basics of recording both live and in studio situations with state-of-the-art equipment to produce professional quality audio for broadcast and digital file distribution; learn about microphones and their placement; use various audio interfaces and mixers.

10-206-103 Audio Engineering 2...handson studio and live recording course covering advanced engineering and signal processing, live recording of music and talk radio show production for internet distribution. (Prerequisite: 10-206-102, Audio Engineering 1; 10-206-100, Digital Audio Overview) 10-206-120 Audio Production w /Logic Pro...covers the basic concepts of music production using Logic Pro; develops skills in portable audio, audio for video and advanced audio production of radio programming. (Prerequisite: 10-206-100, Digital Audio Overview)

10-206-100 Digital Audio Overview... concept of analog to digital audio conversion; audio production with software including editing, processing, mixing and exporting. Creating radio imaging and advertising; producing various length content for distribution through multiple medium.

#### For more information, please contact:

The Business & Information Technology Department, (920) 498-5435 or (800) 422-NWTC, extension 5435, or contact Enrollment Services at 888-385-NWTC.

# Bilingual/English Language Learning Certificate Certificate Number 905225

# **Description**

This certificate is designed for anyone working or interested in working/serving ELL/ESL/SLL/Bilingual children, schoolage students or adults. This course gives an understanding of language diversity, bilingual/English language learners, models and programming, assessment and strategies to support all learners.

# **Certificate Completers will be able to**

- Summarize the history of bilingual education in the US
- Understand Title III funding
- Demonstrate reading, writing, speaking strategies for bilingual/English language learners
- Identify bilingual resources
- Serve/work with bilingual learners
- Discuss issues and debates in bilingual education
- Understand assessment and placement of English Language Learners
- Appreciate the unique learning needs of bilingual/English Language Learners

# **Curriculum**

CATALOG NO.	DESCRIPTION	CREDITS
10-522-133	IA: Bilingual/ELL Overview	3
10-522-134	IA: Bilingual/ELL Strategies	3
	CERTIFICATE TOTAL	6

#### Note

- This certificate does not meet Wisconsin Department of Instruction certification/license requirements. Students may also be required to demonstrate proficiency in another language i.e. Spanish to work as an interpreter.
- Either course transfers to the Instructional Assistant Associate Degree as an elective.
- Both of these courses are offered online.

#### **COURSE DESCRIPTIONS**

10-522-133 IA: Bilingual/ELL Overview... understand language diversity, bilingual/ English language learners, models and programming, identification and placement, and discuss current issues and debates. This course will also have a brief introduction to language acquisition and parent/community resources.

10-522-134 IA: Bilingual/ELL Strategies... research, study and practice best practices/ strategies for young children, school-age students and adults with an emphasis on reading, writing, and speaking/ communication. Students will select areas of interest/specialty to meet their individual learning needs; for example, if you are working at a literacy center with adult learners, you will focus on strategies/supports/ community resources for adult learners. This course requires twenty service learning hours with Bilingual/English Language Learners.

For more information, please contact:

# Biomedical Electronics Certificate Certificate Number 906052

# **Description**

The Biomedical Electronics Certificate designed for individuals seeking additional knowledge and skills in biomedical electronics, especially those in health or electronics occupations. This certificate is also appropriate for individuals wishing to explore the field of biomedical electronics. All courses transfer to the Electronics / Biomedical Program.

# **Certificate Completers will be able to**

- Analyze and troubleshoot biomedical electronics equipment.
- Design, implement and maintain medical networking system.

# **Requirements for Certificate Entry:**

- This certificate requires qualification by education, training, or work experience in the area of data communication or electronics, including theory and design calculations.
- An Associate Degree from an accredited 2 year Electronics program also meets the certificate entry requirements.

# **Wisconsin Caregiver Law**

NWTC is required to comply with the Wisconsin Caregiver Law (1997 WISCONSIN ACT 27). The completion of a caregiver background check includes the review of criminal records for convictions of serious crimes or a history of improper behavior. Students accepted into this program must complete a background check through www.CertifiedBackground.com. Information regarding this process is provided to students immediately upon acceptance into the program. Students with a criminal history may be denied access to placement at the discretion of the clinical or practicum site. Consequently, should a student have a history of convictions of serious crimes or a history of improper behaviors, NWTC cannot guarantee clinical/practicum placement or guarantee graduation within typical program timing..

## Curriculum

CATALOG NO. 10-806-189 10-605-106 10-605-107 10-605-108 10-605-109 10-806-134 10-501-101	DESCRIPTION Basic Anatomy Biomed Electronics 1: Signalin Biomed Electronics 2: Instrume Biomed Electronics 3: Networki Biomed Electronics 4: Calibrat General Chemistry Medical Terminology	CREDITS  3 1 1 1 1 4 3
	CERTIFICATE TOTAL	14

#### Note

Enrollment in some courses requires an Academic Skills Assessment (Accuplacer) with appropriate benchmark scores. See course descriptions for detail; equivalent assessment scores are acceptable. To learn more about these assessments and benchmark scores, please contact a counselor at (920) 498-5444 or (888) 385-6982.

Completers will be able to apply credits toward the following programs:

• 106051, Electronics (with optional Biomedical speciality)

#### Note

10-605-106, Biomed Electronics 1 is offered in the Spring semester only.

10-605-107, Biomed Electronics 2 is offered in the Spring semester only.

10-605-108, Biomed Electronics 3 is offered in the Spring semester only.

10-605-109, Biomed Electronics 4 is offered in the Spring semester only.

#### **COURSE DESCRIPTIONS**

10-806-189 Basic Anatomy...examines concepts of anatomy and physiology as they relate to health careers. Learners correlate anatomical and physiological terminology to all body systems. (Prerequisite: Accuplacer-Reading=55 OR ACT-Reading=15 OR 10-838-105, Intro to Reading and Study Skills OR equivalent)

10-605-106 Biomed Electronics 1... the study will present the characteristics of biomedical electronics signaling and provide a survey of biomedical electronics signaling systems. (Prerequisites: 10-605-162, Linear Electronics 3: Filters; 10-605-172, Datacomm 3: Delta Modulation)

10-605-107 Biomed Electronics 2... study will present the characteristics of biomedical electronics instrumentation and provide a survey of biomedical electronics instrumentation. (Prerequisite: 10-605-106, Biomed Electronics 1)

10-605-108 Biomed Electronics 3... study will present the characteristics of biomedical electronics networking and provide a survey of biomedical electronics networking systems. (Prerequisite: 10-605-107, Biomed Electronics 2)

10-605-109 Biomed Electronics 4... study will present the characteristics of biomedical electronics calibration and provide a survey of biomedical electronics calibration. (Prerequisite: 10-605-108, Biomed Electronics 3)

10-806-134 General Chemistry... covers chemistry fundamentals. Topics: metric system, problem-solving, periodic relationships, chemical reactions, chemical equilibrium, properties of water; acids, bases, and salts; and gas laws. (Prerequisites: Accuplacer-Arithmetic score=65 or ACT-Math score=15 or 10-834-109, Pre Algebra AND Accuplacer-Reading=55 or ACT-Reading=15 or 10-838-105, Intro to Reading & Study Skills with "C" or better OR equivalent)

10-501-101 Medical Terminology... focuses on the component parts of medical terms: prefixes, suffixes, and root words. Students practice formation, analysis and reconstruction of terms. Emphasis on spelling, definition and pronunciation. Introduction to operative, diagnostic, therapeutic and symptomatic terminology of all body systems, as well as systemic and surgical terminology.

For more information, please contact: The Trades & Engineering Technologies Department, (920) 498-5461 or (800) 422-NWTC, extension 5461, or contact Enrollment Services at 888-385-NWTC.

# **Boat Patrol Operators Master's Certificate** Certificate Number 904731

# **Description**

This certificate is designed for recreation, commercial, public service, and law enforcement boat operators to provide the knowledge and skills needed to operate a vessel of up to 100 tons in a safe and responsible manner. The core courses meeting the USCG education and exam requirement for an operator of uninspected vessel license and Master of Vessel (inspected vessels.) The courses add skills to be able to identify, evaluate, and properly respond to on-the-water situations related to boaters safely, effectively, and professionally manage and maneuver watercrafts of varying sizes up to 35 feet in length.

# **Certificate Completers will be able to**

- Apply for an operator of uninspected passenger vessel license.
- Apply to upgrade their license to Master's 100 Ton license.
- Apply for a license for Master of Vessel 100 Ton license.

# **Requirements for Certificate Entry:**

• NASBA-approved state boater's certificate.

# Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
CATALOG NO.	DESCRIPTION	CHEDITS
10-473-150	Assistance Towing/Aux Sail	1
10-473-151	Global Marine Distress/Radio	1
10-473-152	Marine Radar for Recreational	1
10-473-157	Master of Vessel 100 Gross Ton	4
10-473-153	Rules of the Road	1
10-473-155	USCG OUPV Inland/Great Lakes	3
10-473-156	USCG OUPV Near Coastal	3
10-473-154	USCG OUPV Upgrade to Master	2
	CERTIFICATE TOTAL	16

#### Note

For complete information about licensing, please see the following U.S. Coast Guard web site: http://www.uscg.mil/nmc.

## **COURSE DESCRIPTIONS**

10-473-150 Assistance Towing/ Aux Sail...this course covers both the various aspects of assistance towing and auxiliary sail as required by the USCG to qualify for these endorsements.

10-473-151 Global Marine Distress/ Radio...this course focuses on the needs of recreational boaters and will teach the learner how to understand maritime comm. distress systems. It will cover how to operate emergency equipment to effectively notify other vessels and the Coast Guard.

10-473-152 Marine Radar for Recreational... this course targets recreational boaters and will teach about the function of a marine radar including how a radar works, basic system components, radar distance, installation and radar operating tools.

10-473-157 Master of Vessel 100 Gross Ton...this course combines both the OUPV and the 100 Ton Masters Upgrade. Ideal for anyone wanting a 100 Ton Masters license with no previous license.

10-473-153 Rules of the Road...this course is an in-depth review of navigation rules of the road for international and inland navigation rules. Required to upgrade a OUPV inland license to OUPV near coastal license.

10-473-155 USCG OUPV Inland/Great Lakes...participants will learn rules of the road, navigation aids for safe boating, proper and safe operations of a vessel, handling emergency situations, navigation techniques, Federal Code of regulations for mariners.

10-473-156 USCG OUPV Near Coastal... participants will learn rules of the road, navigation aids for safe boating, proper and safe operations of a vessel, handling emergency situations, navigation techniques, Federal Code of regulations for mariners.

10-473-154 USCG OUPV Upgrade to Master...this course will teach vessel handling skills, emergency procedures, regulations, required drill.

For more information, please contact: The Public Safety Department, (920) 498-5485 or (800) 422-NWTC, extension 5485, or contact Enrollment Services at 888-385-NWTC.

# Business Operations Certificate Certificate Number 901023

# **Description**

This certificate is a 15-credit program designed to develop understanding of basic concepts and skills in general business operations. The program is offered on a flexible schedule to include online, self-paced, or accelerated courses. There are no prerequisites for the courses included in the certificate. The certificate could be completed in one or two semesters.

# **Certificate Completers will be able to**

- Demonstrate basic knowledge of contemporary business issues.
- Explore career options in business.
- Apply concepts, methods and processes in business operations.

Completers will be able to apply credits toward the following programs:

- 101023, Business Management
- 101092, Hotel & Restaurant Management

# **Curriculum**

CATALOG NO. 10-101-190 10-101-106 10-102-158 10-104-110 10-103-131 10-103-121 10-102-156	DESCRIPTION  Accounting-QuickBooks  Accounting-for Non-Accountants  Business Principles  Marketing Principles  Micro: Excel-Intro  Micro: Word-Intro  Operations Management 1	CREDITS  1 3 3 3 1 1 1 3
10-102-156	Operations Management 1 CERTIFICATE TOTAL	3 <b>15</b>

 101023-H, Business Management -Hotel & Restaurant Emphasis

# **Requirements for Certificate Entry:**

- · Basic math.
- Ability to use a keyboard.

## **COURSE DESCRIPTIONS**

10-101-190 Accounting-QuickBooks...an introductory course in using QuickBooks to create vendor/employee accounts, invoices, budgets, profit/loss statements, balance sheets, A/R, A/P, journals, graphs.

10-101-106 Accounting-for Non-Accountants...teaching non-accountants to read, analyze, and interpret financial information for making informed business decisions. This class de-emphasizes the use of debits, credits, journal entries and other accounting procedures.

10-102-158 Business Principles...economics and business; global business; ethics and social responsibility; business ownership; entrepreneurship; business management; marketing; managing financial resources; legal issues impacting business; using technology to manage information.

10-104-110 Marketing Principles...marketing management, market segmentation, market research, consumer behavior, product decisions and management of distribution, pricing, promotional decisions for strategy planning.

10-103-131 Micro: Excel-Intro...creating a worksheet, enhancing worksheet appearance, moving and copying data, using formulas and functions, creating charts and using clip art. Windows experience improves success; consider 10-103-111, Windows/Computer Basics.

10-103-121 Micro: Word-Intro...word processing basics including creating, revising, formatting, printing; sections, tabs, multiplepage numbering; manipulating text; creating headers/footers; creating/formatting tables, graphics; and merging documents. Windows experience improves success; consider 10-103-111, Windows/Computer Basics.

10-102-156 Operations Management 1...a cross-functional approach to operations management with an overview of safety, quality, and service. (Prerequisite: 10-102-158 Business Principles)

For more information, please contact: The Business & Information Technology Department, (920) 498-5435 or (800) 422-NWTC, extension 5435, or contact Enrollment Services at 888-385-NWTC.

# Business Writing Certificate Certificate Number 908011

# **Description**

The Business Writing Certificate is designed for students to review basic writing skills and to apply that knowledge into acceptable written business documents. Some of the credits earned through this certificate may be applied to technical diploma or associate degree programs at NWTC. Some credits may also transfer to other technical colleges, the University of Wisconsin system, or private four-year colleges. Check with the college you are interested in transferring to for more information.

# **Certificate Completers will be able to**

- Use the correct grammar, punctuation, and spelling in written documents.
- Assess the needs of a reader for a written document.
- Select the correct format to use for various business documents.
- Select the appropriate style and tone for each document.
- Engage in critical thinking to solve problems.
- Engage in creative thinking to develop business materials.
- Utilize word processing to achieve professional documents.
- Utilize software to assemble professional presentational materials.

# **Requirements for Certificate Entry:**

• Learners must be at least 16 years old.

# **Curriculum**

CATALOG NO. 10-801-136 10-103-151 10-103-121	DESCRIPTION English Composition 1 Micro: PowerPoint-Intro Micro: Word-Intro	<b>CREDITS</b> 3  1  1
10-103-122	Micro: Word-Part 2	1
10-801-197	Technical Reporting	3
10-809-103	Think Critically and Creativel	3
	CERTIFICATE TOTAL	12

• We strongly recommend that learners hold a high school or high school equivalency diploma.

#### Note

Please note that enrollment in some courses requires an Academic Skills Assessment (Accuplacer) with appropriate benchmark scores. See course descriptions for detail; equivalent assessment scores are acceptable. To learn more about these assessments and benchmark scores, please contact a counselor at (920) 498-5444 or (888) 385-6982.

Completers will be able to apply credits toward the following programs:

• 101023, Business Management

# **COURSE DESCRIPTIONS**

10-801-136 English Composition 1...learners develop knowledge/skills in planning, organizing, writing, editing. Students will also analyze audience/purpose, use elements of research, format documents using standard guidelines, and develop critical reading skills. (Prerequisite: Accuplacer-Sentence Skills =75 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 77-851-759; BE Communication Prep IIB OR 10-831-103, Intro to College Writing with "C" or better OR equivalent)

10-103-151 Micro: PowerPoint-Intro... presentation skills using: graphics, diagrams, design themes, sounds, animations, slide transitions, and integration with other software. Windows experience improves success; consider 10-103-111, Windows/Computer Basics. (Corequiste: 10-103-121, Micro: Word-Intro)

10-103-121 Micro: Word-Intro...word processing basics including creating, revising, formatting, printing; sections, tabs, multiple-page numbering; manipulating text; creating headers/footers; creating/formatting tables, graphics; and merging documents. Windows experience improves success; consider 10-103-111, Windows/Computer Basics.

10-103-122 Micro: Word-Part 2... advanced word processing features including working with headers/footers, inserting quick parts, themes, styles, sort and select; footnotes/endnotes, images, shapes, shared documents; specialized tables and indexes; forms; and sharing data. (Corequiste: 10-103-121, Micro: Word-Intro)

10-801-197 Technical Reporting...principles of report writing and correspondence, proposals, feasibility reports, progress reports, investigation reports, evaluation reports, meeting reports, memos, and correspondence. (Prerequisite: 10-801-136, English Composition I OR 10-801-195, Written Communication with "C" or better)

10-809-103 Think Critically & Creatively... instruction in realistic/practical methods of thinking, including decision making, problem solving, analyzing ideas, troubleshooting, argumentation, persuasion, creativity, setting goals/objectives. Students apply strategies/tools in a variety of situations. (Prerequisite: Accuplacer-Sentence Skills= 60 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 10-838-105, Intro to Reading & Study Skills or 10-831-103, Intro to College Writing w/ a "C" or better OR equivalent)

For more information, please contact: The General Studies Department, (920) 498-5421 or (800) 422-NWTC, extension 5421,or contact Enrollment Services at 888-385-NWTC.

# CAD (Computer Aided Drafting) Certificate Certificate Number 906061

# **Description**

The CAD Certificate is designed for a person seeking introductory Auto CAD and Mechanical Design skills.

The certificate comprises 16 credits that may be applied toward the Mechanical Design Technology program.

# **Certificate Completers will be able to**

- Perform the functions of a CAD operator.
- Apply dimensions to mechanical drawings per ANSI standards.
- Create orthographic mechanical drawings.

Completers will be able to apply credits toward the following programs:

• 106061, Mechanical Design Technology

# **Requirements for Certificate Entry:**

- High school background in mathematics, science, and industrial education.
- High school diploma or equivalent.
- High school algebra or equivalent.
- Competency in Windows, Word and Excel.

# Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-614-113	2D Essentials	2
10-614-136	3D Modeling with Inventor	1
10-606-113	Computer Aided Drafting	2
10-606-122	CAD - Fabrication & Assembly	2
10-606-126	Geometric Dimensioning/Toleran	2
10-804-118	Intermediate Algebra with Appl	4
10-606-162	Solidworks Fundamentals	1
10-606-164	Solidworks-Assemblies/Drawings	1
10-606-163	Solidworks-Intermediate	1
	CERTIFICATE TOTAL	16

#### Note

- 10-606-122, CAD-Fabrication & Assembly is offered in the Spring semester only.
- Please note that enrollment in some courses requires an Academic Skills Assessment (Accuplacer) with appropriate benchmark scores. See course descriptions for detail; equivalent assessment scores are acceptable. To learn more about these assessments and benchmark scores, please contact an advisor at (920) 498-5444 or (888) 385-6982.

# **COURSE DESCRIPTIONS**

10-614-113 2D Essentials... an introduction to technical communication, annotation, geometric construction, model, orthographic and pictorial, section and auxiliary views and dimensioning.

10-614-136 3D Modeling with Inventor... develop the knowledge and skills, to create Solid Models using Autodesk Inventor; creating and editing 3D drawings; rapid prototyping; manipulating data.

10-606-113 CAD...computer aided drafting using AutoCAD software focusing on template settings; creating and manipulating layers; basic drawing, editing, and inquiry commands; blocks and attributes; and plotting. (Corequisites: 10-607-119, Intro to Civil Engineering Technology OR 10-606-119, Technical Sketching OR 10-614-113, 2D Essentials)

10-606-122 CAD-Fabrication & Assembly... sheet metal drawings as applied to brackets, enclosures & guarding; welding drawings; threads & fasteners; stock components; working drawing documentation. (Prerequisite: 10-606-113, CAD)

10-606-126 Geometric Dimension/Toleran... review of standard dimensioning, datums, material condition symbols, tolerances of form and profile, tolerances of orientation and run out, location tolerances and virtual condition. [Prerequisites: 10-606-113, CAD; OR 10-606-157, Solidworks Fund and Drawings OR (10-606-162, Solidworks Fundamentals; and 10-606-163, Solidworks Intermediate; and 10-606-164, Solidworks Assemblies/Draw)]

10-804-118 Interm Algebra w Apps... 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. (Prerequisites: Accuplacer-Algebra=61 or ACT-Math 21 or 10-834-110, Elem Alg w/ Apps with "C" or better or equivalent AND Accuplacer-Reading=55 or ACT Reading=15 or 10-838-105, Intro to Reading & Study Skills with "C" or better OR equivalent)

10-606-162 Solidworks Fundamentals... terminology, software operation and interface, creating basic models, casting and forging models. (Corequisite: 10-606-119, Sketching-Technical OR 10-614-113 2D Essentials; familiarity with Windows file management)

10-606-164 Solidworks-Assemblies/ Draw...manipulate configurations, create assemblies, and create dimensioned orthographic drawings using SolidWorks software. (Prerequisite: 10-606-163, SolidWorks Intermediate)

10-606-163 Solidworks-Intermediate... creating and manipulating intermediate models using SolidWorks software. Course content includes models requiring the use of revolved and swept features, equations, and thin walled parts. (Prerequisite: 10-606-162, Solidworks Fundamentals)

For more information, please contact: The Trades & Engineering Technologies Department, (920) 498-5461 or (800) 422-NWTC, extension 5461,or contact Enrollment Services at 888-385-NWTC.

# Central Service Technician Certificate Certificate Number 905121

# **Description**

The Central Service Technician certificate prepares individuals to work within the central service department of health care facilities. The certificate provides training in inventory control, the prevention of infection and sterilization, the assembly of supplies, equipment, and instruments according to prescribed procedures and techniques to support multiple patient care areas.

# **Certificate Completers will be able to**

- Apply aseptic technique, sterilization and disinfection principles.
- Apply methods of decontamination and use standard precautions.
- Classify surgical instruments.
- Prepare, package, and process items using various methods of sterilization.
- Apply guidelines for sterile storage.
- Distribute and inventory supplies and equipment.
- Write the national certification exam offered by the National Institute for Certification of Health Care Sterile Processing and Distribution Personnel.

# **Requirements for Certificate Entry:**

- High school diploma, GED or equivalent.
- Must be able to reach, bend, and stand for long periods of time (two to four hours), as well as lift, push, and pull (50 pounds).

# **Wisconsin Caregiver Law**

NWTC is required to comply with the Wisconsin Caregiver Law (1997 WISCONSIN ACT 27). The completion of a caregiver background check includes the review of criminal records for convictions of serious crimes or a history of improper behavior. Students accepted into this program must complete a background check through www.CertifiedBackground.com. Information regarding this process is provided to students immediately upon acceptance into the program. Students with a criminal history may be denied access to placement at the discretion of the clinical or practicum site. Consequently, should a student have a history of convictions of serious crimes or a history of improper behaviors, NWTC cannot guarantee clinical/practicum placement or guarantee graduation within typical program timing.

## Curriculum

CATALOG NO. 31-512-336 31-512-335 10-501-101 31-512-326	DESCRIPTION Central Service Tech Clinical Central Service Tech Theory Medical Terminology ST: Infection Control	CREDITS 3 3 3 2
	CERTIFICATE TOTAL	11

#### Note

- No final grade lower than "C" is acceptable in any courses. Courses with grades lower than "C" must be repeated in order to continue in, or complete this certificate.
- ST: Infection Control and Central Service Technician Theory are offered only online.
- Medical Terminology is offered in a variety of formats (i.e. online, in person, etc.)
- 31-512-335, Central Service Technician Theory is offered only in the Fall semester.
- 31-512-336, Central Service Technician Clinical is offered only in the Spring semester.
- Students currently employed in a Central Service department will have an opportunity to apply work experience toward clinical hours. Clinical hours total 152 hours (19 eight-hour days).

The following courses will transfer into the Surgical Technologist technical diploma program:

- 31-512-326, ST: Infection Control
- 10-501-101, Medical Terminology

## **Clinical Experience**

- Students will be required to complete a caregiver background check. A fee is charged for this service. Additional information will be provided upon acceptance into the certificate.
- Students will be required to submit immunization documentation. A fee is charged for this service. Additional information will be provided upon acceptance into the certificate.
- Students will be required to show proof of an annual flu vaccine.

#### **COURSE DESCRIPTIONS**

31-512-336 Central Service Tech Clinical... provides the opportunity to apply knowledge of the responsibilities of a Central Service Technician. Skills include infection control, aseptic technique, decontamination, instrumentation, sterilization, and inventory control. Student will participate in providing quality patient care. (Prerequisite: 31-512-335, Central Service Technician Theory)

31-512-335 Central Service Tech Theory... provides the knowledge needed to implement the responsibilities of a Central Service Technician. Areas addressed include introduction to Central Service, anatomy and physiology, infection control, aseptic technique, decontamination, instrumentation, sterilization, and inventory control. (Corequisites: 31-512-326, ST: Infection Control; 10-501-101, Medical Terminology)

10-501-101 Medical Terminology... focuses on the component parts of medical terms: prefixes, suffixes, and root words. Students practice formation, analysis and reconstruction of terms. Emphasis on spelling, definition and pronunciation. Introduction to operative, diagnostic, therapeutic and symptomatic terminology of all body systems, as well as systemic and surgical terminology.

31-512-326 ST: Infection Control...covers the structure, general classification, reproduction and transmission of microorganisms. Emphasis will be placed on the practice of sterile technique and its impact on infection control in the health care setting.

For more information, please contact: The Health Sciences Department, (920) 498-5543 or (800) 422-NWTC, extension 5543, or contact Enrollment Services at 888-385-NWTC.

# Clay Certificate Certificate Number 903062

# **Description**

The Clay Certificate will give students the opportunity to learn new skills or expand their existing skills in the area of hand-building techniques, wheel throwing and materials and procedures, as well as the development of ideas, methods of critique, and running a contemporary clay studio. The NWTC Artisan Center on Cedar Street includes an inviting clay studio including a variety of pottery wheels, ample work space, and kilns. Students in the certificate will not need any prior training or art classes; however, courses should be taken in the order listed.

# **Certificate Completers will be able to**

- Create coiled pots, pinched bowls, plates, and other distinct forms.
- Throw several forms, including; a bowl, plate, and cup.
- Apply texture to a form while on the wheel.
- Throw a pitcher form, add or pull a spout and attach a handle.

# **Curriculum**

CATALOG NO.	DESCRIPTION	CREDITS
10-306-200	Ceramics 1: Hand-Bldg Tech-Beg	3
10-306-201	Ceramics 2: Wheel Throwing	3
10-306-202	Ceramics 3: Wheel Throw-Interm	3
10-306-203	Ceramics 4: Material/Procedure	3
	CERTIFICATE TOTAL	12

- Recreate a simple form from a contemporary or historic wheel thrown vessel.
- Create lidded forms.
- Glaze work and produce a series of work from found materials and developed glazes.

#### **COURSE DESCRIPTIONS**

10-306-200 Ceramics 1: Hand-Bldg Tech-Beg...major techniques used to work with clay. Preparing clay, joining, pinch pots, slab building and coiling methods. Studio safety and basic knowledge about firing process.

10-306-201 Ceramics 2: Wheel Throwing... beginning skills needed to create and develop pottery thrown on a wheel. Preparing clay, centering, opening, throwing, collaring, shaping and trimming. Glaze application and adding handles/spouts.

10-306-202 Ceramics 3: Wheel Throw-Interm...continuing work from Ceramics 1 and 2. Practicing the basic techniques of throwing and attaching elements, exploring formal elements. Methods of critique will also be expanded upon.

10-306-203 Ceramics 4: Material/ Procedure...run a contemporary studio. Locating and testing clays, creating glazes, and studying ceramic materials. Load and fire contemporary electric kilns; build and fire primitive kilns. For more information, please contact: The NWTC Artisan and Business Center, (920) 544-5018, or contact Enrollment

(920) 544-5018, or contact Enro Services at 888-385-NWTC.

# Computer Support Certificate Number 901542

# **Description**

The Computer Support Certificate is designed for individuals interested in developing the support skills necessary to provide a wide range of end-user support to the computer user. Online delivery of many of the courses in this certificate allows the learner to progress at his/her own pace. All credits from this certificate can be applied to meet requirements in the Computer Support Specialist associate degree program.

# **Certificate Completers will be able to**

- Provide end-user support in various environments.
- Design hardware and software documentation.
- Train end users to use their systems more efficiently.
- Design effective documents, spreadsheets, and presentations using application software.

Completers will be able to apply credits toward the following programs:

- 101543, Computer Support Specialist IT
- 311546, Computer Support Technician IT

# Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-107-194	IT:Documentation	2
10-150-174	IT:Network:Client Op Sys	3
10-154-157	IT:Support:Advanced Projects	3
10-154-150	IT:Support:Hardware-Intro	3
10-154-190	IT:Support:Help Desk/User Sup	2
10-154-160	IT:Support:Software-Intro	3
10-107-195	IT:Training	2
	CERTIFICATE TOTAL	18

# **Requirements for Certificate Entry:**

• A strong knowledge in microcomputer applications, to include MS-Word, PowerPoint, Excel and Access.

# **COURSE DESCRIPTIONS**

10-107-194 IT:Documentation...plan documentation content and delivery methods; develop online, context-sensitive written documentation, become familiar with ISO 9000 standards, package PDF files, and create compiled help modules. Proficiency using Word required. (Prerequisite: 10-801-136, English Composition 1 or equivalent)

10-150-174 IT:Network:Client Op Sys... basic OS functions; memory, CPU, device/file management techniques, OS installation/configuration; configuration of I/O and storage devices; basic network connectivity; standard system maintenance procedures; command line introduction and batch file writing.

10-154-157 IT:Support:Advanced Projects... PC hardware, software, O.S. configuration, maintenance, I.T. resources, malware, bootable and unattended install media, data backups, disaster recovery plans, troubleshooting, virtualization, RAID storage, server farm build, emerging technologies. (Prerequisites: 10-150-174, IT:Network:Client Op Sys;10-154-150, IT:Support:Hardware-Intro)

10-154-150 IT:Support:Hardware-Intro...computer network terminology, component identification, POST, computer/ peripheral configuration and maintenance, basic operating systems concepts and installations, basic networking concepts and configurations and troubleshooting using the Cisco IT Essentials curriculum.

10-154-190 IT:Support:Help Desk/User Sup...describe the role of the help desk in technology support, use terminology, processes, and tools, and demonstrate the use of business, technical, communication, and self-management skills required for help desk support professionals.

10-154-160 IT:Support:Software-Intro...an introductory course for the Computer Support Specialist program and covers the fundamental capabilities and functions of Word, PowerPoint, Excel, Email correspondence, Internet search engines, and file compression.

10-107-195 IT: Training...effective presentation skills, plan training content and delivery methods, write lesson plans, provide training materials, conduct training sessions, and assess learners' grasp of stated objectives. (Prerequisites: 10-154-160, IT:Support:Software-Intro AND 10-154-150, IT:Support:Hardware-Intro)

For more information, please contact: The Business & Information Technology Department, (920) 498-5435 or (800) 422-NWTC, extension 5435,or contact Enrollment Services at 888-385-NWTC.

# Contact Center Certificate Certificate Number 9010411

# **Description**

The Contact Center Certificate will develop learner's knowledge and skills to serve customers through a variety of contact center technologies. The program is offered on a flexible, part-time schedule to accommodate the needs of employees in contact center occupations. Some courses may be completed through credit for work experience, interactive television, online or in an accelerated format. The Certificate is designed for completion in one or more semesters.

# **Certificate Completers will be able to**

- Use effective communication skills to develop positive customer relationships.
- Utilize positive telephone skills and techniques to manage calls.
- Utilize positive e-mail communications with customers.
- Resolve customer issues efficiently and effectively.
- Describe the technology functions and operations of a contact center.

## **Curriculum**

CATALOG NO.	DESCRIPTION	CREDITS
10-104-150	Contact Center Processes	3
10-104-151	Contact Center Technology	3
10-104-191	Customer Service	3
10-104-101	Selling Principles	3
	CERTIFICATE TOTAL	12

- Develop processes for reporting and monitoring performance.
- Utilize technology to support, monitor, and improve operations.
- Apply database technology to manage customer services and satisfaction.

Completers will be able to apply credits toward the following programs:

• 101043, Marketing

## **COURSE DESCRIPTIONS**

10-104-150 Contact Center Processes... contact center careers, representative skills/ abilities, equipment operation, call planning/ training, managing the contact process, telephone/voice mail/e-mail etiquette, conflict resolution, stress/time management, performance measurement/support.

10-104-151 Contact Center Technology... evolution of contact center technologies, customer relationship management, basic operations layout, telephone network services, computer-telephone integration (CTI), operations reporting, quality monitoring, data analysis, process improvement management.

10-104-191 Customer Service...develop professional telephone etiquette, explore customer service work environments, identify and analyze customer service failures, resolve problems cost effectively, set complaint policies, and develop communication techniques to handle complaining customers.

10-104-101 Selling Principles...selling as a career; success factors in selling; personality development; product knowledge; and the sales process involving preparation, approach, presentation-demonstration, handling objections, and closing the sale successfully.

For more information, please contact: The Business & Information Technology Department, (920) 498-5435 or (800)

Department, (920) 498-5435 or (800) 422-NWTC, extension 5435,or contact Enrollment Services at 888-385-NWTC.

# Criminal Justice Law Enforcement-Advanced Standing Certificate Certificate Number 905044

# **Description**

The Criminal Justice Law Enforcement-Advanced Standing Certificate is designed for individuals who are seeking certifiability as a Law Enforcement Officer. The courses in this certificate will meet the Law Enforcement certifiability criteria set forth by Wisconsin Department of Justice - Training and Standards Bureau along with classes identified in the Associate Degree Criminal Justice - Law Enforcement program. In addition this certificate contains coursework which enhances employability.

# **Certificate Completers will be able to**

• Meet the entry requirements for: Police Officer, Deputy Sheriff, DNR Officer.

## **Certification**

Students must obtain a "C" or better in all certificate classes.

# Curriculum

DESCRIPTION Driving Operations Law Enforcement Internship Public Safety - Job Interviews Police Traffic Radar Scenario Assessment Tactical Operations	CREDITS 4 2 1 2 1 3
Tactical Operations CERTIFICATE TOTAL	3 13
	Driving Operations Law Enforcement Internship Public Safety - Job Interviews Police Traffic Radar Scenario Assessment Tactical Operations

# **Requirements for Certificate Entry:**

• Requires a minimum of 12 core credits from the Criminal Justice-Law Enforcement Program. Student folders must be complete prior to enrolling in this certificate.

### **COURSE DESCRIPTIONS**

10-504-158 Driving Operations...an interdisciplinary course covering SFST, Vehicle Contacts and EVOC skills. The learner will develop skills in traffic operations and emergency driving. (Prerequisites: 10-504-173, Tactical Operations; 10-504-908, Traffic Theory; 10-504-903, Professional Communications)

10-504-176 Law Enforcement Internship..."hands-on" law enforcement phases, monitored by an agencyapproved police officer and college instructor. (Corequisite: 10-504-900, Intro to Criminal Justice)

10-504-128 PS-Job Interviews & Resume Wri... Students will learn about the criminal justice hiring process from application and resume writing, oral interviews and the background investigation. (Corequisite: 10-504-900, Intro to Criminal Justice)

10-504-182 Police Traffic Radar...radar speed and enforcement, history and theory, stationary operation, moving operation, anomalies, visual speed and range determination, case law, field exercises, moot court, testimony/demeanor, and operation. (Prerequisite: 10-504-158, Driving Operations)

10-504-157 Scenario Assessment...a capstone course to assess the learner's cumulative knowledge through the use of scenarios. (Prerequisites: 10-504-176, Law Enforcement Internship; 10-504-128, PS-Job Interviews & Resume Writing; 10-504-182, Police Traffic Radar; 10-504-173, Tactical Operations; 10-504-158, Driving Operations; all 10-504-9XX courses and 10-531-101, Emergency Response from the Criminal Justice - Law Enforcement associate degree program)

10-504-173 Tactical Operations...combines basic Defensive and Arrest Tactics, Oleoresin Capsicum (OC), Firearms, Long Gun Familiarization, Intro to Taser, Deadly Force and Integrated Use of Force to meet the mandated requirements of the State of Wisconsin for Law Enforcement Officer certification. (Prerequisites: 10-504-901, Constitutional Law; 10-504-128, PS-Job Interviews & Resume Writing; 30 credits from the Criminal Justice-Law Enforcement Program; CBC and student folder completion)

For more information, please contact: The Public Safety Department, (920) 498-5485 or (800) 422-NWTC, extension 5485,or contact Enrollment Services at 888-385-NWTC.

# Customer Service Certificate Certificate Number 901049

# **Description**

The Customer Service Certificate is designed for the person who is required to deliver professional service in a customer oriented environment.

# **Certificate Completers will be able to**

- Identify, analyze, and resolve customer service problems.
- Develop and implement communication to customers.
- Apply marketing concepts and service standards.

Completers will be able to apply credits toward the following programs:

• 101043, Marketing

Curriculum		
CATALOG NO.	DESCRIPTION	CREDITS
10-104-191	Customer Service	3
10-104-107	Marketing Communications-Integ	3
10-104-110	Marketing Principles	3
10-103-141	Micro: Access-Intro	1
10-103-131	Micro: Excel-Intro	1
10-103-121	Micro: Word-Intro	1
10-104-101	Selling Principles	3
10-104-176	Social Media Consumer Behavior	3
	CERTIFICATE TOTAL	18

#### **COURSE DESCRIPTIONS**

10-104-191 Customer Service...develop professional telephone etiquette, explore customer service work environments, identify and analyze customer service failures, resolve problems cost effectively, set complaint policies, and develop communication techniques to handle complaining customers.

10-104-107 Marketing Comm-Integrated... creating, coordinating and integrating advertising, public relations and marketing activities for a specific customer or audience. A campaign will be developed and presented.

10-104-110 Marketing Principles...marketing management, market segmentation, market research, consumer behavior, product decisions and management of distribution, pricing, promotional decisions for strategy planning.

10-103-141 Micro: Access-Intro...creating/modifying database tables, compacting a database, managing records, defining table relationships, creating queries, calculations, and aggregate functions, sorting, and using form/report wizards. Windows experience improves success; consider 10-103-111, Windows/Computer Basics.

10-103-131 Micro: Excel-Intro...creating a worksheet, enhancing worksheet appearance, moving and copying data, using formulas and functions, creating charts and using clip art. Windows experience improves success; consider 10-103-111, Windows/Computer Basics.

10-103-121 Micro: Word-Intro...word processing basics including creating, revising, formatting, printing; sections, tabs, multiple-page numbering; manipulating text; creating headers/footers; creating/formatting tables, graphics; and merging documents. Windows experience improves success; consider 10-103-111, Windows/Computer Basics.

10-104-101 Selling Principles...selling as a career; success factors in selling; personality development; product knowledge; and the sales process involving preparation, approach, presentation-demonstration, handling objections, and closing the sale successfully.

10-104-176 Social Media Consumer Behavior...identify technology trends that impact media usage and its effectiveness.

#### For more information, please contact:

The Business & Information Technology Department, (920) 498-5435 or (800) 422-NWTC, extension 5435, or contact Enrollment Services at 888-385-NWTC.

# Digital Photography Certificate Certificate Number 902031

# **Description**

The Digital Photography Certificate will develop learner's skills in digital still photography, studio photography, image editing, image rating, organizing and archiving, system setup, and file handling skills on a Macintosh computer graphic workstation.

# **Certificate Completers will be able to**

- Capture digital images.
- Operate a Macintosh workstation.
- Communicate effectively with images.
- Setup and operate professional digital cameras.
- Direct photo shoots.
- Organize files and data.
- Edit images.
- Rate, organize, and archive images.

Completers will be able to apply credits toward the following programs:

• 312031, Photography

# Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-111-101	Macintosh-Image Editing	3
10-203-104	Photography-Digital	3
10-203-178	Photography-Digital Advanced	3
10-203-187	Photography-Digital Editing	3
10-203-180	Photography -Digital Workflow	3
	CERTIFICATE TOTAL	15

# **Requirements for Certificate Entry:**

• High school diploma or equivalent.

# **COURSE DESCRIPTIONS**

10-111-101 Macintosh-Image Editing... (Adobe Photoshop + Adobe Acrobat) scanning, editing, color correcting and creating composite montage photographs. Prepare images for publication in print. An introduction to manipulating bitmap images.

10-203-104 Photography-Digital...capturing digital images, exposure, shutter speed, aperture, composition, camera operations, lenses, lighting, camera accessories, types of photography, photo challenges, importing, editing and storing images. Access to a digital camera required.

10-203-178 Photography-Digital Advanced...advanced camera operations, lighting techniques, portraiture and posing, post editing production, location and studio photography, critique images, web based portfolio. You must have access to an SLR digital camera. (Prerequisite: 10-203-104 Photography-Digital)

10-203-187 Photography-Digital Editing... (Adobe Photoshop) digital editing through advanced tool usage and masking. Non-destructive editing through RAW and smart objects. Color adjustments, advanced retouching, automation, photorealism, creating reusable presets/compositions. (Prerequisite: 10-111-101 Macintosh Image Editing)

10-203-180 Photography-Digital Workflow... (Apple Aperture) photo editing, image retouching, proofing, publishing, archiving. Techniques for sorting, ranking, organizing images, display images for client review, apply metadata, keep up-to-date online portfolio, color manage your workflow.

For more information, please contact:

The Business & Information Technology Department ,(920) 498-5435 or (800) 422-NWTC, extension 5435, or contact Enrollment Services at 888-385-NWTC.

# Digital Photography-Advanced Certificate Certificate Number 902032

# **Description**

The Digital Photography Advanced Certificate is designed for the person who wants to pursue a career in photography as an entrepreneur or as an employee in a photography studio. The student will learn advanced image editing techniques and increase their knowledge in photography specialty areas, as well as learn the business skills needed to run a successful photography business.

# **Certificate Completers will be able to**

- Capture professional digital images in diverse specialty areas of photography.
- Critique and effectively communicate with images.
- Construct a professional photo shoot.
- Produce mixed media slideshows.
- Edit images effectively and efficiently using advanced techniques.
- Edit images at a professional level with commercial quality.
- Plan and present a business plan.
- Manage finances for a small business.

Completers will be able to apply credits toward the following programs:

• 312031, Photography

Curriculum		
<b>CATALOG NO.</b> 10-145-185 10-203-189	<b>DESCRIPTION</b> Organizing Your Small Business Photography-Digital Editing Ad	<b>CREDITS</b> 3  3
10-145-189 CHOOSE FIVE OI 10-203-123	Writing a Business Plan-Small  F THE FOLLOWING COURSES: Photography-Commercial	3
10-203-120 10-203-125	Photography-Landscape/Nature Photography-Night/Low Light	1
10-203-127 10-203-122 10-203-126	Photography-Print & Color Mgmt Photography-Sports/Events Photography-DSLR Video	1 1 1
10-203-121 10-203-124	Photography-Portrait Photography-Wedding CERTIFICATE TOTAL	1 1 14

# **Requirements for Certificate Entry:**

- Strong computer skills. Macintosh platform preferred.
- Completion of Digital Photography Certificate recommended.

#### **COURSE DESCRIPTIONS**

10-145-185 Organizing Your Small Business...the components of small business ownership; examining a variety of small business startup and operation scenarios. Assesses your own readiness to begin the entrepreneurial adventure.

10-203-123 Photography-Commercial... photograph consumer products to meet layout specifications for promotions and publications. Techniques include set design, lighting three-dimensional objects. Topics include tabletop photography, food, and digital enhancement. You must have access to an SLR digital camera. (Prerequisite: 10-203-178, Digital Photography Advanced)

10-203-120 Photography-Landscape/ Nature...photograph landscapes, wildlife, plant, waterways, close-ups of natural scenes and textures emphasizing aesthetic value. Techniques involved depth-of-field, shutter speed, lenses, lighting, HDR, editing. Topics include equipment, focal length, and ethics. You must have access to an SLR digital camera. (Prerequisite: 10-203-104, Photography Digital)

10-203-125 Photography-Night/Low Light... photograph outdoor and indoor low-light situations and at night, including start trails, painting with light, street scenes, fireworks, parties, lightning. Techniques involved filters, exposure, color temperature, editing, and special effects. You must have access to an SLR digital camera. (Prerequisite: 10-203-104, Photography Digital)

10-203-127 Photography-Print & Color Mgmt...visual and digital color, gamut and color spaces, calibration and profiling techniques, color management workflow for photographers, choosing a printer, paper, printing labs, preparing and printing images.

10-203-122 Photography-Sports/Events... photograph a variety of sports and events for editorial and advertising purposes. Techniques involved aperture, shutter speed, lighting, focal lengths, bursting. Topics include equipment, location, storytelling, photojournalism, vernacular photography, etiquette. You must have access to an SLR digital camera. (Prerequisite: 10-203-104, Photography Digital)

10-203-126 Photography-DSLR Video... video resolution and frame rates, DSLR video camera functions, achieving correct exposure and white balance, achieving good audio, composition and story development, video editing, creating a movie, movie delivery formats.

10-203-189 Photography-Digital Editing Ad...this course will cover advanced functions of Adobe Photoshop image editing. (Prerequisite: 10-203-187, Photography-Digital Editing)

10-203-121 Photography-Portrait... photograph individuals, couples, and groups of all ages. Techniques and topics include lighting, flattering posing, directing subjects, portraiture styles. You must have access to an SLR digital camera. (Prerequisite: 10-203-178, Digital Photography Advanced)

10-203-124 Photography-Wedding... photograph weddings in a digital world. Techniques include lighting, posing, photographic elements, traditional versus photojournalistic. Topics include equipment, indoor and outdoor locations, wedding day workflow, etiquette, and post-even workflow. You must have access to an SLR digital camera. (Prerequisite: 10-203-178, Digital Photography Advanced)

10-145-189 Writing a Business Plan-Sm Bus...as a necessary component to beginning a small business, from addressing facets of the business plan, observing various types of plans, to realizing readiness to begin. Plan preparation/presentation are required.

For more information, please contact: The Business & Information Technology Department, (920) 498-5435 or (800) 422-NWTC, extension 5435, or contact Enrollment Services at 888-385-NWTC.

# ECE: Autism Certificate Certificate Number 9030713

# **Description**

The Autism Certificate is designed for child care teachers, instructional assistants, teachers, parents, relatives and caregivers will learn how to support individuals with autism spectrum disorder. Learn strategies and techniques to promote educational and social success in individuals who have been diagnosed with Autism Spectrum Disorder (ASD) and the related diagnosis of Social Communication Disorder (SCD).

# **Certificate Completers will be able to**

- Discriminate between the various diagnoses collectively known as ASD and SCD.
- Analyze the impact of early intervention on children with ASD and SCD.
- Examine strategies in reducing negative behaviors in persons with ASD and SCD.

# Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-307-200	ECE: Autism: Spectrum Disorder	3
10-307-201	ECE: Autism: Teaching Methods	3
10-307-202	ECE: Autism: Transition & Beyond	3
	CERTIFICATE TOTAL	9

- Foster play and friendship for persons with ASD and SCD.
- Explore a variety of effective teaching methods, adaptations, and modifications for learners with ASD and SCD.
- Examine functional living skills and vocational support for persons with ASD and SCD.

## **COURSE DESCRIPTIONS**

10-307-200 ECE: Autism: Spectrum Disorder...terminology, genetic and brain structure differences, types of autism, diagnostics and treatment touching on supports.

10-307-201 ECE: Autism: Teaching Methods...learning styles, adaptations and modifications and structured teaching methods.

10-307-202 ECE: Autism: Transition/ Beyond...vocational support, functional living skills and methods for supporting adults with ASD and SCD.

#### For more information, please contact:

# Early Childhood: Child Care Administration Certificate Number 903071

# **Description**

The Early Childhood: Child Care Administration Certificate prepares participants with administrative and supervision skills needed by early child care administrators: roles and responsibilities, financial management and planning, operations management, external factors affection operation, and best practices for children and families in early childhood programs. Courses can be taken in any order and concurrently, as long as ECE: Child Care-Admin Seminar (10-307-165) is taken last. Completion of all six courses will prepare learners to receive The Wisconsin Child Care Administration Credential from The Registry-Wisconsin's Recognition System for the Childhood Care and Education Profession.

# **Certificate Completers will be able to**

- Establish program policies.
- Prepare a financial plan.
- Examine legal issues.
- Implement a teaching and learning system.
- Utilize the community system to address needs of parents, staff and children.

# Curriculum

CATALOG NO.	DESCRIPTION	REDITS
10-307-204	Supervision/Administration of ECE Program	s 3
10-307-162	ECE: Child Care-Operations Mgmt	3
10-307-161	ECE: Child Care-Financial Mgmt	3
10-307-163	ECE: Child Care-External Environments	3
10-307-164	ECE: Child Care-Best Practices	3
10-307-165	ECE: Child Care-Admin Seminar	3
	CERTIFICATE TOTAL	18

- Advocate for child care funding.
- Commission with The Registry for the Wisconsin Administration Credential.

# **Requirements for Certificate Entry:**

• The certificate is designed for administrators of child care programs including program directors and program administrators as identified in State licensing rules.

## **COURSE DESCRIPTIONS**

10-307-163 ECE: CC-External Environ... external factors affecting operation of early care and education programs: community child care needs, marketing, laws and regulations, working with government and community agencies, political and societal issues and trends.

10-307-162 ECE: CC-Operations Mgmt...scheduling, staffing, facilities management, equipment acquisition and maintenance, services delivery, recordkeeping, communication.

#### 10-307-165 ECE: CHILD CARE-ADMINISTRATION SEMINAR

...culminating experience in the credential course sequence. Individual projects are required with a focus on the integration of program aspects in developing strategic planning for change. (Prerequisites: 10-307-204, Supervision/Administration of ECE Programs; 10-307-162, ECE: CC-Operations Management; 10-307-161, ECE: Child Care-Financial Management; 10-307-163, ECE: CC-External Environments; 10-307-164, ECE: Child Care-Best Practices)

10-307-164 ECE: Child Care-Best Practices...establishing and maintaining quality programs based on professional standards and the best available information on child growth and development. 10-307-161 ECE: Child Care-Financial Mgmt...principles and practices in budget planning and preparation and fiscal management, including hands-on experience with program applications.

10-307-204 Supervise/Admin ECE Programs...roles and responsibilities of directors, coordinators, supervisors and other administrators in early childhood programs.

### For more information, please contact:

# Early Childhood: Infant Toddler Certificate Certificate Number 903073

# **Description**

The Infant Toddler Certificate is designed for family child care providers, infant toddler teachers, child care administrators, directors, Birth to 3 aides/teachers, certified providers and anyone considering entering early childhood care and education of children in the first three years of life. Completion of the four courses in this credential, along with preparation of a portfolio, permits the student to apply for and attain the Wisconsin Infant Toddler Professional Credential from The Registry. Courses can be taken in any order and concurrently, as long as Infant/Toddler-Capstone (10-307-115) is taken last.

# **Certificate Completers will be able to**

- Apply principles related to the care and education of children three and under.
- Care for infants and toddlers in group settings.
- Establish partnerships with parents and in the community.
- Provide evidence of additional education beyond the minimum requirements for teachers of children under 3.
- Become a more effective caregiver.

# Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-307-151	ECE: Infant & Toddler Dev	3
10-307-113	ECE: Infant/Toddler-Group Care	3
10-307-195	ECE: Family & Community Rel	3
10-307-115	ECE: Infant/Toddler-Capstone	3
	CERTIFICATE TOTAL	12

- Become more marketable to prospective child care center employers.
- Have specialized knowledge and understanding of the development, needs and interests of children in the first three years of life.
- Increase your professional qualification your level on The Registry.

Completers will be able to apply credits toward the following programs:

• 103071, Early Childhood Education

#### **COURSE DESCRIPTIONS**

10-307-195 ECE: Family & Community Relationships...relationships with family/community in early childhood. Diversity and anti-bias perspectives in families and community; family patterns, trends, relationships; communication strategies; relationships with families; advocate for children/families; community resources.

10-307-151 ECE: Infant & Toddler Dev... infant and toddler development in an early childhood education setting. Development of infants/toddlers; prenatal conditions and development; child development theories; heredity and the environment; culturally and developmentally appropriate environments.

10-307-115 ECE: Infant/Toddler-Capstone... encompass and integrate the theory, practice, and reflections related to Courses 1, 2, 3. Supervised demonstration in the learner's own infant/toddler setting. Student portfolio development is required. Student must be in an early childhood setting with infants or toddlers (birth to 35 months) during this course. THIS COURSE MUST BE TAKEN LAST. (Prerequisites: 10-307-151 ECE: Infant & Toddler Dev; 10-307-113 ECE: Infant/Toddler-Group Care; 10-307-195 ECE: Family & Community Relationships)

10-307-113 ECE: Infant/Toddler-Group Care...elements of quality, philosophical foundation, respect, relationships, culturally sensitive care, diversity in group care, brain development, assessment and planning in a variety of settings for young children.

For more information, please contact: The Community & Regional Learning Services Department, (920)

498-6255, or (800) 422-NWTC, extension 6255, or contact Enrollment Services at 888-385-NWTC.

# Early Childhood: Licensing Basic Ages 0-2 Certificate Certificate Number 903070

# **Description**

The Early Childhood Licensing Basic Ages 0-2 Years Certificate is designed for individuals wishing to satisfy the State of Wisconsin Licensing Code, DCF 251, Licensing Rules for Group Child Care Centers. All courses in this certificate will transfer into the Early Childhood Associate Degree program.

Important: These courses do not satisfy Wisconsin Department of Public Instruction (DPI) licensing requirements.

# **Certificate Completers will be able to**

- Analyze development of infants and toddlers (conception to three years).
- Examine culturally and developmentally appropriate environments for infants and toddlers.
- Follow governmental regulations and professions standards as they apply to health, safety, and nutrition.
- Analyze the role of heredity and environment.

# **Curriculum**

CATALOG NO.	DESCRIPTION	CREDITS
10-307-167	ECE: HIth Safety & Nutrition	3
10-307-151	ECE: Infant & Toddler Dev	3
10-307-180	ECE: WI Model Early Learning Stds	1
10-307-195	ECE: Family & Community Relationships	3
	CERTIFICATE TOTAL	10

- Apply Wisconsin Model Early Learning Standards in early childhood environments.
- Have specialized knowledge and understanding of the development, needs and interests of children in the first three years of life.
- Establish partnerships with parents and in the community.

Completers will be able to apply credits toward the following programs:

• 103071, Early Childhood Education

# **COURSE DESCRIPTIONS**

10-307-195 ECE: Family & Community Relationships...relationships with family/community in early childhood. Diversity and anti-bias perspectives in families and community; family patterns, trends, relationships; communication strategies; relationships with families; advocate for children/families; community resources.

10-307-167 ECE: Hlth Safety & Nutrition... health, safety, and nutrition in early childhood settings. Anti-bias perspectives; governmental regulations and professional standards; safe, healthy, and nutritionally sound early childhood programs; child abuse/neglect mandates; SIDS risk reduction; Shaken Baby Syndrome.

10-307-151 ECE: Infant & Toddler Dev... infant and toddler development in an early childhood education setting. Development of infants/toddlers; prenatal conditions and development; child development theories; heredity and the environment; culturally and developmentally appropriate environments.

10-307-180 ECE: W.M.E.L.S....enhances the student's ability to analyze the guiding principles and the five developmental domains related to the WI Early Learning Standards, apply the WMELS to various developmentally appropriate curriculum models, activities and assessments, integrate the WI Early Learning Standards into the program's teaching cycle (ongoing assessment, planning and curriculum goals, and implementation).

For more information, please contact: The Community & Regional

# Early Childhood: Licensing Basic Ages 3-5 Certificate Certificate Number 9030710

# **Description**

The Early Childhood Licensing Basic Ages 3-5 Years Certificate is designed for individuals wishing to satisfy the State of Wisconsin Licensing Code, DCF 251, Licensing Rules for Group Child Care Centers. All courses in this certificate will transfer into the Early Childhood Associate Degree program.

Important: These courses do not satisfy Wisconsin Department of Public Instruction (DPI) licensing requirements.

# **Certificate Completers will be able to**

- Provide a respectful, diverse and inclusive program.
- Provide a safe program for children ages three to eight.
- Adhere to child abuse and neglect mandates.
- Develop activity plans that promote child development and learning.
- Analyze the development of children ages three to eight.

# Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-307-167	ECE: HIth Safety & Nutrition	3
10-307-179	ECE: Child Development	3
10-307-180	ECE: WI Model Early Learning S	1
10-307-178	ECE: Art Music & Lang Arts	3
	CERTIFICATE TOTAL	10

- Create developmentally appropriate language, literature, and literacy activities.
- Apply Wisconsin Model Early Learning Standards in early childhood environments.

Completers will be able to apply credits toward the following programs:

• 103071, Early Childhood Education

## **COURSE DESCRIPTIONS**

10-307-178 ECE: Art Music & Lang Arts...beginning curriculum development in art, music, and language arts. Role of play; developmentally appropriate environment; promote child development; caregiving routines as curriculum; language, literature, and literacy activities, art/music, movement activities.

10-307-179 ECE: Child Development... child development in the early childhood education setting. Social, cultural, and economic influences on child development; child development theories; development of children age three to eight; child development research; heredity and environment.

10-307-167 ECE: Hlth Safety & Nutrition... health, safety, and nutrition in early childhood settings. Anti-bias perspectives; governmental regulations and professional standards; safe, healthy, and nutritionally sound early childhood programs; child abuse/neglect mandates; SIDS risk reduction; Shaken Baby Syndrome.

10-307-180 ECE: W.M.E.L.S....enhances the student's ability to analyze the guiding principles and the five developmental domains related to the WI Early Learning Standards, apply the WMELS to various developmentally appropriate curriculum models, activities and assessments, integrate the WI Early Learning Standards into the program's teaching cycle (ongoing assessment, planning and curriculum goals, and implementation).

#### For more information, please contact:

# **Early Childhood Professional Development One Certificate** Certificate Number 9030714

# **Description**

The Early Childhood Professional Development One Certificate consists of courses especially designed to fit into the topics covered in the YoungStar indicators. These online, one-credit courses allow you to complete coursework when it's most convenient for you, and in shorter segments than typical 3-credit courses. Guided discussion and online web links supplement course textbooks. Course outlines and due dates help you stay on track. For those working in childcare settings, assignments and projects are relevant to and immediately useful on the job. Take as many or as few courses as you are comfortable with within a semester.

# **Certificate Completers will be able to**

- Plan menus for children including children with special needs.
- Develop strategies for working with school-age children.
- Communicate effectively and form partnerships with families.
- Apply Wisconsin Model Early Learning Standards in early childhood environments.
- Plan and carry out learning activities with specific goals in mind.
- Assess young childrens' behavior and skills using the portfolio method.

#### Note

With the successful completion of the Early Childhood Professional Development One and Two Certificates (12 credits), students may apply for advanced standing in the Early Childhood Program. If you have two years of documented work experience in a licensed child care center in the State of Wisconsin and proof of introductory non-credit courses that include infant and toddler development (Wisconsin Child Care licensing requirement), you are eligible for 15 credits of advanced standing.

Can this certificate help your center achieve a higher YoungStar rating?

## Curriculum

10-307-108 ECE: Food/Nutrition Issues 10-307-225 ECE: Intentional Teaching 10-307-210 ECE: Portfolio-Individualized Child 10-307-109 ECE: School Age 10-307-110 ECE: Teacher/Family Communication 10-307-180 ECE: WI Model Early Learning Stds CERTIFICATE TOTAL	1 1 1 1 1 1 6
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In order for a child care program/family child care provider to achieve 3 or more Stars in YoungStar, lead teaching staff, program directors and family child care providers are required to complete credit based instruction to gain targeted competencies related to high quality programming.

These one credit classes allow you to stack 1 credit training options to reach these requirements and to move towards degree pathways. For example, completion of Wisconsin Model Early Learning Standards class can lead to a program earning a point when 50% of 100% of staff have completed this training.

Completion of NWTC credit based coursework such as improving environments or teacher/family communication will support the competencies of the teacher/provider and when put into practice will be observed during a YoungStar technical rating and/or YoungStar formal rating and the program can then possibly receive YoungStar points.

Completion of early childhood and school age credits by group center lead teaching staff/family child care providers will help the program earn points in YoungStar.

## **COURSE DESCRIPTIONS**

10-307-108 ECE: Food/Nutrition Issues...allergies, breast-bottle, poverty-nutrition, environmental factors, nutrition guidelines, food pyramid. Will help early care workers meet 25 hours per year requirement for education while earning 1-credit towards associate degree.

10-307-225 ECE: Intentional Teaching... define and understand intentional teaching, identify and analyze learning experiences/ activities and recognize teaching strategies used to support the learning experiences.

10-307-210 ECE: Portfolio-Individualized Child...explore the purpose of an individualized child portfolio, recognize assessment methods, assess child development and organize and use a portfolio.

10-307-109 ECE: School Age...working with school age children. The learner will explore school age childcare including developmental characteristics, discipline and guidance, daily routine and environments.

10-307-110 ECE: Teacher/Family Communication...relationships between early childhood professionals and families they work with. Competencies include: analyze contemporary family patterns, trends, relationships; utilize effective communication strategies; implement strategies that support diversity and anti-bias perspectives. 10-307-180 ECE: W.M.E.L.S....enhances the student's ability to analyze the guiding principles and the five developmental domains related to the WI Early Learning Standards, apply the WMELS to various developmentally appropriate curriculum models, activities and assessments, integrate the WI Early Learning Standards into the program's teaching cycle (ongoing assessment, planning and curriculum goals, and implementation).

For more information, please contact: The Community & Regional Learning Services Department, (920) 498-6255, or (800) 422-NWTC, extension 6255, or contact Enrollment Services at 888-385-NWTC.

# **Early Childhood Professional Development Two Certificate** Certificate Number 9030715

# **Description**

The Early Childhood Professional Development Two Certificate consists of courses especially designed to fit into the topics covered in the YoungStar indicators. These online, one-credit courses allow you to complete coursework when it's most convenient for you, and in shorter segments than typical 3-credit courses. Guided discussion and online web links supplement course textbooks. Course outlines and due dates help you stay on track. For those working in childcare settings, assignments and projects are relevant to and immediately useful on the job. Take as many or as few courses as you are comfortable with within a semester.

# **Certificate Completers will be able to**

- Develop a curriculum to get children active and moving throughout the day.
- Implement appropriate tracking methods in early childhood settings in the state of Wisconsin.
- Communicate with and involve families in your classroom or center.
- Use the environmental rating scale in your early childhood environment.
- Evaluate and then appropriately modify your early childhood learning environment.
- Improve the work environment in your child care center.

#### Note

With the successful completion of the Early Childhood Professional Development One and Two certificates (12 credits), students may apply for advanced standing in the Early Childhood Program. If you have two years of documented work experience in a licensed child care center in the State of Wisconsin and proof of introductory non-credit courses that include infant and toddler development (Wisconsin Child Care licensing requirement), you are eligible for 15 credits of advanced standing.

# Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-307-206	ECE: Family Involvement	1
10-307-208	ECE: Improving Environments	1
10-307-209	ECE: Model Work Standards	1
10-307-203	ECE: Physical Activity-Child	1
10-307-207	ECE: Rating Scales/Environment	1
10-307-205	ECE: Supervision Tracking and Rptg	1
	CERTIFICATE TOTAL	6

Can this certificate help your center achieve a higher YoungStar rating?

In order for a child care program/family child care provider to achieve 3 or more Stars in YoungStar, lead teaching staff, program directors and family child care providers are required to complete credit based instruction to gain targeted competencies related to high quality programming.

These one credit classes allow you to stack 1 credit training options to reach these requirements and to move towards degree pathways. For example, completion of Wisconsin Model Early Learning Standards class can lead to a program earning a point when 50% of 100% of staff have completed this training.

Completion of NWTC credit based coursework such as improving environments or teacher/family communication will support the competencies of the teacher/provider and when put into practice will be observed during a YoungStar technical rating and/or YoungStar formal rating and the program can then possibly receive YoungStar points.

Completion of early childhood and school age credits by group center lead teaching staff/family child care providers will help the program earn points in YoungStar.

#### **COURSE DESCRIPTIONS**

10-307-206 ECE: Family Involvement... identify parent involvement with early childhood programs, demonstrate family communication techniques, develop ways to invite parent input into the early childhood program.

10-307-208 ECE: Improving Environments...examine a quality early childhood environment.

10-307-209 ECE: Model Work Standards... recognize the importance of an effective workforce, build/sustain an effective workforce through the Model Work Standards, meet YoungStar indicators, and share decision making for goal setting and action planning

10-307-203 ECE: Physical Activity-Child... discuss benefits of physical activity for children, assess a child's motor skills, develop a curriculum plan incorporating physical movement and motor skill activities.

10-307-207 ECE: Rating Scales/ Environment...investigate the environmental rating scale, summarize how the scale is used and identify the progression of elements in each subscale of the Environmental Rating Scale.

10-307-205 ECE: Supervision Tracking/ Reporting...improve the methods in childhood center to ensure safety. Design tracking methods for classrooms, as well as entire center. Accept responsibility for reporting incidences.

#### For more information, please contact:

# Early Childhood: The Inclusion Certificate Certificate Number 9030712

# **Description**

The Early Childhood: The Inclusion Certificate is designed to help you build the skills, knowledge, resources and attitudes to successfully work with ALL children in your centers and programs. Working with children who have special needs can present unique challenges and opportunities to the child care industry and early childhood education field in Wisconsin. Even experienced practitioners have felt intimidated in serving this population due to a lack of up-to-date information and a well thought out service approach. Courses can be taken in any order and concurrently, as long as ECE: Capstone Family/Team Centered Practice Course (10-307-173) is taken last. Completion of all four courses will prepare learners to receive The Wisconsin Inclusion Credential from The Registry-Wisconsin's Recognition System for the Childhood Care and Education Profession.

# **Certificate Completers will be able to**

- Provide inclusive programs for young children utilizing legal and ethical requirements.
- Differentiate between typical and exceptional development by analyzing physical, cognitive, health/medical, communication, and/or behavioral/emotional behaviors and disorders.

# Curriculum

CATALOG NO.	DESCRIPTION CR	EDITS
10-307-187	ECE: Children w Diff Abilities	3
10-307-171	ECE: Behavior/Emotional Challe	3
10-307-172	ECE: Special Health Care Needs	3
10-307-173	ECE: Capstone Family/Team Centered Practic	e 3
	CERTIFICATE TOTAL	12

- Utilize specific discipline and guidance strategies and individualized intensive interventions based on the CSEFEL Curriculum.
- Understand medical issues and specialized health care needs of individuals with disabilities.
- Examine and learn care of altered body systems function and provide special health care needs.
- Know how to connect with community resources regarding medical issues and professionals.
- Commission with The Registry for the Wisconsin Inclusion Credential.

# **COURSE DESCRIPTIONS**

10-307-171 ECE: Behavior/Emotional Chall...build rapport, create supportive environments; demonstrate/define social-emotional teaching/guidance strategies; assess challenging behaviors; describe diagnoses; develop individualized guidance plans; communicate team approaches including all children.

10-307-173 ECE: Capstone Family/Team Prac...historical/current roles of families with disabilities; impact of disabilities; build rapport; daily issues; NAEYC code of conduct; assemble inclusive child care portfolio. The student will volunteer in an ECE program with a child who has special needs and spend time (30 hours) with that child's family at home and in the community. Students will have the opportunity to participate with a child and a family in daily routines and community settings. (Prerequisites: 10-307-187, ECE: Children w/Differing Abilities; 10-307-171, ECE: Behavior/Emotional Challenges; 10-307-172, ECE: Special Health Care Needs)

10-307-187 ECE: Children w Diff Abilities... differing abilities in early childhood settings. Anti-bias perspectives, inclusion, ADA/IDEA, typical and exceptional development; physical, cognitive, health/medical, communication, and/or behavioral/emotional disorders; community and professional resources; IEP/IFSP, adapt curriculum, cultivate partnerships.

10-307-172 ECE: Special Health Care Needs...recognize family as expert; roles of health care professionals/program staff; community resources; educational implications/adaptive strategies; health promotion; care of individuals with altered body systems; emergency management.

#### For more information, please contact:

# Early Childhood: The Preschool Certificate Certificate Number 9030711

# **Description**

The Preschool Certificate is designed for individuals working with children ages three to five. This might include family childcare providers, day care teachers, nursery school teachers, certified providers, or anyone wishing to provide a quality environment and learning activities for children in this critical age group. Courses can be taken in any order and concurrently, as long as ECE: Preschool Capstone (10-307-102) is taken last. Completion of all six courses will prepare learners to receive The Wisconsin Preschool Credential from The Registry-Wisconsin's Recognition System for the Childhood Care and Education Profession.

# **Certificate Completers will be able to**

- Integrate strategies that support diversity and anti-bias perspective.
- Explore early childhood curriculum models.
- Provide a health, safe, and nutritionally sound early childhood environment.
- Incorporate health, safety, and nutrition concepts into the children's curriculum.
- Practice positive guidance strategies.

# Curriculum

CATALOG NO.	DESCRIPTION 505	CREDITS
10-307-148	ECE: Foundations of ECE	3
10-307-167	ECE: Health Safety & Nutrition	3
10-307-178	ECE: Art Music & Language Arts	3
10-307-179	ECE: Child Development	3
10-307-188	ECE: Guiding Child Behavior	3
10-307-102	ECE: Preschool Capstone	3
	CERTIFICATE TOTAL	18

- Create a guidance philosophy.
- Analyze the development of children age three through age eight.
- Create developmentally appropriate language, literature, and literacy activities.

Completers will be able to apply credits toward the following programs:

• 103071, Early Childhood Education

## **COURSE DESCRIPTIONS**

10-307-178 ECE: Art Music & Language Arts...beginning curriculum development in art, music, and language arts. Role of play; developmentally appropriate environment; promote child development; caregiving routines as curriculum; language, literature, and literacy activities, art/music, movement activities.

10-307-179 ECE: Child Development... child development in the early childhood education setting. Social, cultural, and economic influences on child development; child development theories; development of children age three to eight; child development research; heredity and environment.

10-307-148 ECE: Foundations of ECE... integrate strategies that support diversity and anti-bias perspectives; summarize early childhood education settings; identify components of a quality program; summarize responsibilities of early childhood professionals; explore early childhood curriculum models.

10-307-188 ECE: Guiding Child Behavior... strategies to guide children's behavior in the early childhood setting. Anti-bias perspectives, guidance principles, factors affecting behavior, guidance strategies, individual needs, guidance philosophy.

10-307-167 ECE: Health Safety & Nutrition...health, safety, and nutrition in early childhood settings. Anti-bias perspectives; governmental regulations and professional standards; safe, healthy, and nutritionally sound early childhood programs; child abuse/neglect mandates; SIDS risk reduction; Shaken Baby Syndrome.

10-307-102 ECE: Preschool Capstone... synthesizing the information and demonstrating mastery of the competencies through the completion of a portfolio. Capstone is the last course students take prior to completing the Preschool Credential. Student must be in an early childhood setting with preschool age children (3 to 5 years) during this course. (Prerequisites: 10-307-178 ECE: Art Music & Lang Arts; 10-307-179 ECE: Child Development; 10-307-148 ECE: Foundations of ECE; 10-307-188 ECE: Guiding Child Behavior; 10-307-167 ECE: Hlth Safety & Nutrition)

#### For more information, please contact:

# Echocardiography Certificate Certificate Number 905262

# **Description**

The Echocardiography certificate is offered to prepare the learner for meeting the work standards required for performing high quality cardiac ultrasound procedures in the community at clinics, offices, and hospitals. Certificate completers will be able to work with other members of the healthcare team in providing cardiac care.

# **Certificate Completers will be able to**

- Provide patient care and education.
- Apply principles of physics and instrumentation to sonography.
- Apply principles of anatomy and pathophysiology to sonography.
- Obtain high quality diagnostic sonographic images.
- Adhere to the professional code of ethics for sonographers.
- Communicate with members of the healthcare team.
- Adhere to universal precautions.
- Model professional behaviors and appearance.

# **Requirements for Certificate Entry:**

• Completed and graduated from an accredited ultrasound program at the associate or bachelors level.

-or

• Successfully become a registrant in ultrasound with the American Registry of Diagnostic Medical Sonographers (ARDMS) or

# Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-526-121	Cardiac Anatomy & Physiology	3
10-526-125	Echocardiography Clinical Perf	3
10-526-124	Echocardiography Pathology & C	2
10-526-122	Echocardiography Physics & Ins	3
10-526-120	Echocardiography 1	4
10-526-123	Echocardiography 2	3
	CERTIFICATE TOTAL	18

The American Registry of Radiologic Technologists (ARRT) through the respective registry examination process.
-and-

 Actively and currently employed as a sonographer with the opportunity to collect personal experience in performing echocardiography under the supervision of a cardiologist or interpreting provider.

## **Board/Certification Examinations**

Individuals completing this certificate will be eligible to apply for candidacy to the ARDMS Echocardiography exam for the RDCS credential.

# **COURSE DESCRIPTIONS**

10-526-121 Cardiac Anatomy & Physiology...study of the human heart in cross-sectional planes and as a three-dimensional anatomical structure with mechanical and hemodynamic characteristics. Learners will explore the physiology of the heart and common methods of physiologic assessment. (Prerequisite: accepted into Echocardiography certificate)

10-526-125 Echo Clinical Performance... this assessment is designed to observe the sonographer in the active echocardiography lab, assess competencies learned throughout the certificate journey, and coach the sonographer on opportunities for success. (Prerequisites: 10-526-120, Echocardiography 1; 10-526-121, Cardiac Anatomy & Physiology; 10-526-122, Echo Physics & Instrumentation)

10-526-124 Echo Pathology & Case Review...explores cause and features of pathologies of the heart, commonly seen on echocardiography and prepares the sonographer for better appreciation of heart disease. (Prerequisites: 10-526-120, Echocardiography 1; 10-526-121, Cardiac Anatomy & Physiology; 10-526-122, Echo Physics & Instrumentation)

10-526-122 Echo Physics & Instrumentation...echocardiography physics and instrumentation is an essential background study of the creation of ultrasound waves and their use in making medical prepared images of the heart and related conditions. The learner becomes prepared to analyze acoustic properties of the image and make improvement in quality through adjustments made on the ultrasound device. (Prerequisite: accepted into Echocardiography certificate)

10-526-120 Echocardiography 1... this course includes an introduction to heart disease with the principles of echocardiographic technique, Doppler theory, instrumentation, and artifacts of the cross-sectional views, preparing the learner to perform echocardiograms. (Prerequisite: Accepted into Echocardiography certificate)

10-526-123 Echocardiography 2...prepares the cardiac sonographer to participate and practice more advanced techniques in echocardiography including TEE, stress echo, use of echo contrast, 3D, and other current applications. (Prerequisites: 10-526-120, Echocardiography 1; 10-526-121, Cardiac Anatomy & Physiology; 10-526-122, Echo Physics & Instrumentation)

For more information, please contact: The Health Sciences Department, (920) 498-5543 or (800) 422-NWTC, extension 5543, or contact Enrollment Services at 888-385-NWTC.

# Emergency Dispatch Certificate Number 905048

# **Description**

Upon completion, the student can take a national exam that if successfully passed, will certify and credential the student in the Fundamentals of Emergency Dispatching. The student will learn the basic tools, technology and protocols involved in emergency dispatching. The certificate will involve both lecture and hands-on exercises to familiarize the student with the skills necessary to succeed in this field. Professional dispatchers will be assisting the students in learning the competencies required to complete the course.

# **Certificate Completers will be able to**

 perform the required skills needed to effectively peform in a telecommunication center.

Completers will be able to apply credits toward the following programs:

Criminal Justice Law Enforcement

## **Curriculum**

CATALOG NO.	DESCRIPTION	CREDITS
10-801-136	English Composition 1	3
10-504-162	Fundamentals of Emergency Disp	3
10-504-900	Intro to Criminal Justice	3
10-504-903	Professional Communications	3
10-504-905	Report Writing	3
	CERTIFICATE TOTAL	15

#### Note

Please note that enrollment in some courses requires an Academic Skills Assessment (Accuplacer) with appropriate benchmark scores. See course descriptions for detail; equivalent assessment scores are acceptable. To learn more about these assessments and benchmark scores, please contact a counselor at (920) 498-5444 or (888) 385-6982.

### **COURSE DESCRIPTIONS**

10-801-136 English Composition 1...learners develop knowledge/skills in planning, organizing, writing, editing. Students will also analyze audience/purpose, use elements of research, format documents using standard guidelines, and develop critical reading skills. (Prerequisite: Accuplacer-Sentence Skills =75 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 77-851-759; BE Communication Prep IIB OR 10-831-103, Intro to College Writing with "C" or better OR equivalent)

10-504-162 Fund of Emergency Dispatch...fundamentals of dispatching for public safety agencies. 10-504-900 Intro to Criminal Justice... criminal justice, crime picture, criminal law, theories of crime, history of policing, police management, legal aspects, courts, corrections, correction facilities.

10-504-903 Professional Communications... process of criminal justice interviewing using basic skills model; use of nonverbal and verbal communication; security admissible confessions that preserve individual's constitutional rights; ethics in criminal justice interviewing. (Corequisite: 10-504-900, Intro to Criminal Justice)

10-504-905 Report Writing...rationale and methods of law enforcement reporting, principles of effective report writing, organizing reports, writing operational law enforcement reports based on case studies. (Prerequisite: 10-801-136, English Comp 1; Corequisite: 10-504-900, Intro to Criminal Justice)

For more information, please contact:

The Public Safety Department, (920) 498-5485 or (800) 422-NWTC, extension 5485, or contact Enrollment Services at 888-385-NWTC.

# **Employee Benefits, Relations, and Development Certificate** Certificate Number 901163

# **Description**

The Employee Benefits, Relations, and Development Certificate is designed for people who wish to acquire and improve their skills in human resources, specifically with the factors that affect employee development, compensation, and relations. These three-credit courses also apply toward the 64 credits necessary to earn the Human Resources associate degree. Courses are offered in alternative delivery formats.

# **Certificate Completers will be able to**

- Examine compensation systems and the role they play in organizations.
- Discuss legally-required benefits.
- Analyze laws applicable to the National Labor Code.
- Create and evaluate contractual and handbook language.
- Integrate the history of labor relations into the present day workplace.
- Analyze the growth, decline, and subsequent evolution of unions in the U.S.
- Analyze the role of training in organizations.
- Develop instructional materials and training media to support instruction.

# Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-116-112	Compensation/Benefits Admin	3
10-196-169	Diversity in the Workplace	3
10-116-113	Labor Relations & Negotiations	3
10-116-114	Training for Organizations	3
	CERTIFICATE TOTAL	12

- Evaluate training effectiveness.
- Evaluate the effectiveness of diversity management strategies in an organization.

Completers will be able to apply credits toward the following programs:

• 101161, Human Resources

# **Requirements for Certificate Entry:**

• High school diploma or equivalent.

## **COURSE DESCRIPTIONS**

10-116-112 Compensation/Benefits Admin...applies the skills and tools necessary to design, implement and manage a compensation and benefits program as a tool for recruitment, retention and performance management of employees.

10-196-169 Diversity in the Workplace... analyze the effect of perceptions, attitudes, biases, and organization culture on diversity, dealing with barriers, measuring progress, and celebrating success.

10-116-113 Labor Relations & Negotiations...introduces the participant to the history of the labor movement and includes the legal collective bargaining processes while applying the learned skills with case studies, a mock negotiation of a realistic collective bargaining contract, and the simulation of a grievance arbitration.

10-116-114 Training for Organizations... applies the skills and tools necessary to implement the training cycle of assessment, design, implementation and evaluation. Each learner will develop and present a complete training project based upon adult learning theory and instructional design techniques.

#### For more information, please contact:

The Business & Information Technology Department, (920) 498-5435 or (800) 422-NWTC, extension 5435, or contact Enrollment Services at 888-385-NWTC.

# **Energy Management** Certificate Number 904811

# **Description**

Explore energy management technology used in analysis and measurement of energy in today's building systems.

# **Certificate Completers will be able to**

- Discuss and promote the benefits of energy efficiency.
- Evaluate the energy use patterns for commercial buildings.
- Recommend energy efficient and alternative energy solutions for high-energy consuming buildings.

Completers will be able to apply credits toward the following programs:

• 104831, Energy Management Technology

# **Curriculum**

CATALOG NO. 10-481-109 10-481-111 10-480-101 10-481-114	DESCRIPTION Commercial HVACR Systems Analy Energy Control Strategies Energy-Intro Renewable & Susta Intro to Energy Management	3 3 4 3
10-481-114 10-481-106	Intro to Energy Management Introduction to Water Resource	3 2
10-481-115	Lighting Fundamentals CERTIFICATE TOTAL	3 <b>18</b>

#### **COURSE DESCRIPTIONS**

10-481-109 Commercial HVACR Analysis... identify commercial HVAC system types and the general energy use impact of each type. Calculations of system equipment efficiencies will be used to determine EER, SEER, AFUE, COP, combination and seasonal efficiency in boilers, balance point partial efficiency, BIN analysis. (Prerequisites: 10-481-114, Intro to Energy Management)

10-481-111 Energy Control Strategies... topics include building system control concepts and devices; including electric, pneumatic and digital controls, emphasis is placed on identifying and understanding control strategies related to energy using systems and methods to estimate energy savings. (Prerequisite: 10-481-114, Intro to Energy Management)

10-480-101 Energy-Intro Renew & Sustain... an overview of various renewable energy technologies and sustainable design practices and their current applications. Emphasis will be placed on policies, renewable energy production, green products and jobs.

10-481-114 Intro to Energy Management... introduces the basic concepts of energy, utility systems and utility rate structures; defines the need for energy management as an integral part of society at all levels. The course will present the various opportunities available to energy management students.

10-481-106 Intro to Water Resources... properties of water, basic hydrology, water quality; water consumption standards related to energy; stormwater, wastewater and drinking water; water supply and demand management as well as emerging issues. (Prerequisites: 10-481-114, Intro to Energy Management)

10-481-115 Lighting Fundamentals... light sources, luminaries, lighting controls, manufacturer lamp and ballast specifications, lighting power density, lighting-HVAC interactions, retrofit opportunities, cost savings analysis and lighting codes/regulations. Students will critically evaluate lighting systems, luminaries and associated components. Understand and perform various types of lighting calculations. (Prerequisite: 10-481-114, Intro to Energy Management)

## For more information, please contact:

The Trades & Engineering Technologies Department, (920) 498-5461 or (800) 422-NWTC, extension 5461, or contact Enrollment Services at 888-385-NWTC.

# Entrepreneurship Certificate Number 901451

# **Description**

The Entrepreneurship Certificate is a series of credit courses targeted to educate learners about the opportunities and essence of entrepreneurship and how to start, run, and manage profitable businesses.

# **Certificate Completers will be able to**

- Assess readiness to begin the entrepreneurial adventure.
- Emphasize the importance of good financial recordkeeping systems, reports, and records.
- Develop a marketing plan including components for product/service, price, place, and promotion.
- Strategically service customers.
- Prepare and present a business plan.

# **Curriculum**

CATALOG NO.	DESCRIPTION	CREDITS
10-145-188	Entrepreneurial Service Manage	3
10-145-186	Financial Management-Small Bus	3
10-145-187	Marketing Your Small Business	3
10-145-185	Organizing Your Small Business	3
10-145-189	Writing a Business Plan-Small	3
	CERTIFICATE TOTAL	15

Completers will be able to apply credits toward the following programs:

• 101023, Business Management-Entrepreneurship Sub-Plan

### **COURSE DESCRIPTIONS**

10-145-188 Entrepreneurial Service Mgmt... the elements of your successful business with a strategic plan that focuses on servicing your customer with a winning attitude, performance, teamwork, and competition.

10-145-186 Financial Management-Small Bus...the importance of good recordkeeping systems, reports, and the records necessary for a small business. Financial analysis techniques are explored through hands-on Income statements and cash flow projections for small businesses. 10-145-187 Marketing Your Small Business... implement and evaluate a marketing plan for their small business. Students will develop a marketing plan for a selected small business. Components of the plan include market research, customer focus, quality, pricing, and advertising.

10-145-185 Organizing Your Small Business...the components of small business ownership; examining a variety of small business startup and operation scenarios. Assesses your own readiness to begin the entrepreneurial adventure.

10-145-189 Writing a Business Plan-Sm Bus...as a necessary component to beginning a small business, from addressing facets of the business plan, observing various types of plans, to realizing readiness to begin. Plan preparation/presentation are required.

### For more information, please contact:

The Business & Information Technology Department, (920) 498-5435 or (800) 422-NWTC, extension 5435, or contact Enrollment Services at 888-385-NWTC.

# Ethical Leadership Certificate Certificate Number 901962

# **Description**

The Ethical Leadership Certificate is designed for people who wish to acquire and improve their skills in creating and maintaining a legal, ethical, and diverse work environment. These three-credit courses apply toward the 69 credits necessary to earn the Leadership Development Associate Degree. Courses are offered in alternative delivery formats.

# **Certificate Completers will be able to**

- Recommend methods of balancing employees' rights with employers' rights.
- Recommend methods of balancing "reasonable" consumer safety with a producer's profit motive.
- Analyze corporate social responsibility.
- Recommend a framework for dealing with different cultures, morals/ethics.

# **Curriculum**

CATALOG NO.	DESCRIPTION	CREDITS
10-196-199	Business Ethics	3
10-196-169	Diversity in the Workplace	3
10-196-134	Legal Issues-Supervisors	3
	CERTIFICATE TOTAL	9

• Critique the identification, analysis, and recommend action/solution to business-related ethical dilemmas.

Completers will be able to apply credits toward the following programs:

• 101961, Leadership Development

## **COURSE DESCRIPTIONS**

10-196-199 Business Ethics...ethical points-of-view, morality/ethical theory, utilitarianism, Kantian ethics, justice and the market system, whistle-blowing, trade secrets/conflict of interest, privacy, advertising, product safety, corporate social responsibility, international business.

10-196-169 Diversity in the Workplace... analyze the effect of perceptions, attitudes, biases, and organization culture on diversity, dealing with barriers, measuring progress, and celebrating success.

10-196-134 Legal Issues-Supervisors... legal practices of recruiting, interviewing, hiring, selection, evaluation/promotion, employee discipline, firing, EEOC and nondiscrimination, employee privacy, workplace harassment, FMLA, ADA and unions.

#### For more information, please contact:

The Business & Information Technology Department, (920) 498-5435 or (800) 422-NWTC, extension 5435, or contact Enrollment Services at 888-385-NWTC.

# General Studies Transfer Certificate UW-Green Bay Certificate Number 908902

## **Description**

The General Studies Transfer Certificate - UW Green Bay includes a 32-33 credit core of courses designed to meet specific general education requirements at UWGB. These courses will allow students who have a 2.5 overall Grade Point Average to qualify for sophomore status at UWGB. Additional admission requirements may apply. For more information, go to the UW Green Bay Admissions Office Web site: www.uwgb.edu/admissions

# **Requirements for Certificate Entry:**

- Students who are interested in applying to the General Studies Transfer certificate must meet with an NWTC Counselor or Advisor to complete the necessary application paperwork and review the requirements for the General Studies Transfer certificate. To schedule an appointment please contact Enrollment Services at (920) 498-5444.
- High school transcript or equivalent. (For a list of equivalents, go to www.nwtc.edu/gettingstarted.)
- Please note that enrollment in some courses requires an Academic Skills Assessment (Accuplacer) with appropriate benchmark scores. See course descriptions for detail; equivalent assessment scores are acceptable. To learn more about these assessments and benchmark scores, please contact a counselor at (920) 498-5444 or (888) 385-6982.

#### Note

- Accelerate Your Learning:
   Are some of the classes that you had wanted to take full? Are you short of credits? Undecided about your major? Take classes at Northeast Wisconsin Technical College to expedite your degree by maximizing the number of credits you can earn each semester.
- Create a Flexible Schedule:
   Some classes can be taken Online, Technical College of the Air, or in an Accelerated format to fit your lifestyle.
   Accelerated classes typically only meet one evening a week for seven weeks. Some classes are even offered on weekends.

# Curriculum

CATALOG NO.	DESCRIPTION	CREDITS	
10-806-189	Basic Anatomy	3	
10-809-197	Contemporary American Society	3	
OR			
10-809-199	Psychology Of Human Relations	3	
10-480-101	Energy-Intro Renewable & Susta	4	
10-801-136	English Composition 1	3	
10-806-154	General Physics 1	4	
OR			
10-806-134	General Chemistry	4	
OR			
10-806-112	Principles of Sustainability	3	
10-804-118	Intermediate Algebra with Appl	4	
10-809-172	Intro to Diversity Studies	3	
10-809-166	Intro to Ethics: Theory & App	3	
Complete two cour	ses (six credits) from the following:		
10-809-188	Developmental Psychology	3	
10-809-122	Intro to Amer Government	3	
10-809-198	Intro to Psychology	3	
10-809-196	Intro to P sychology	3	
10-003-130	CERTIFICATE TOTAL	32 OR 33	
	CENTIFICATE TOTAL	32 UN 33	

- Available Online Classes:
- English Composition 1, Basic Anatomy, Intro to Psychology, Developmental Psychology, Intro to Sociology, Intro to Amer Government, Contemporary American Society, Psychology of Human Relations, Intermediate Algebra with Applications, Intro to Ethics, Intro to Diversity Studies, Principles of Sustainability, Energy-Intro Renew & Sustain.
- Technical College of the Air Classes: Intro to Psychology, Intro to Sociology, Developmental Psychology, Intro to Diversity Studies and English Composition 1.
- Accelerated Classes:
   English Composition 1, Contemporary American Society, Psychology of Human Relations, Intro to Ethics and Intro to Diversity Studies.

# **COURSE DESCRIPTIONS**

10-806-189 Basic Anatomy...examines concepts of anatomy and physiology as they relate to health careers. Learners correlate anatomical and physiological terminology to all body systems. (Prerequisite: Accuplacer-Reading=55 OR ACT-Reading=15 OR 10-838-105, Intro to Reading and Study Skills OR equivalent)

10-809-197 Contemporary Amer Society... the major social institutions within the American society: government, family, education, religion, and economic system. (Prerequisite: Accuplacer-Sentence Skills= 60 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 10-838-105, Intro to Reading & Study Skills or 10-831-103, Intro to College Writing w/ a "C" or better OR equivalent)

10-809-199 Psychology Of Human Relations...decision making, motivation, conflict resolution, learning strategies, growth and adjustment, diversity, psychological theories, relationships, psychological disorders, stress, career analysis, social psychology, and lifespan development. (Prerequisite: Accuplacer-Sentence Skills= 60 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 10-838-105, Intro to Reading & Study Skills or 10-831-103, Intro to College Writing w/ a "C" or better OR equivalent)

10-809-188 Developmental Psychology... defines human development; examines theories; heredity and environmental effects; prenatal development and birth; evaluates biosocial, cognitive psychosocial development through the life span; aging, death, and dying. (Prerequisite: Accuplacer-Sentence Skills= 60 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 10-838-105, Intro to Reading & Study Skills or 10-831-103, Intro to College Writing w/ a "C" or better OR equivalent)

10-809-122 Intro to Amer Government... introduces American political processes and institutions: focusing on rights/ responsibilities of citizens and the process of participatory democracy. Examines separation of powers and checks/balances & the roles of different groups. (Prerequisite: Accuplacer-Sentence Skills= 60 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 10-838-105, Intro to Reading & Study Skills or 10-831-103, Intro to College Writing w/ a "C" or better OR equivalent)

10-809-198 Intro to Psychology...survey of theoretical foundations of human behavior such as sensation and perception, motivation, emotions, learning, personality, psychological disorders, therapy, stress, and human diversity in personal, social and vocational settings. (Prerequisite: Accuplacer-Sentence Skills= 60 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 10-838-105, Intro to Reading & Study Skills or 10-831-103, Intro to College Writing w/ a "C" or better OR equivalent)

10-809-196 Intro to Sociology...the nature and variety of groups; inequality, race and ethnicity; family, population, social integration, and change; collective behavior; politics, economics, religion, education, and the effects of technology. (Prerequisite: Accuplacer-Sentence Skills= 60 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 10-838-105, Intro to Reading & Study Skills or 10-831-103, Intro to College Writing w/ a "C" or better OR equivalent)

10-480-101 Energy-Intro Renew & Sustain... an overview of various renewable energy technologies and sustainable design practices and their current applications. Emphasis will be placed on policies, renewable energy production, green products and jobs.

10-801-136 English Composition 1...learners develop knowledge/skills in planning, organizing, writing, editing. Students will also analyze audience/purpose, use elements of research, format documents using standard guidelines, and develop critical reading skills. (Prerequisite: Accuplacer-Sentence Skills =75 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 77-851-759; BE Communication Prep IIB OR 10-831-103, Intro to College Writing with "C" or better OR equivalent)

10-806-154 General Physics 1...applications/ theory of basic physics principles: problemsolving, laboratory investigation, and applications including unit conversion and analysis, vectors, translational and rotational kinematics/dynamics, heat/temperature, and harmonic motion and waves. (Prerequisites: Accuplacer-Reading = 80 OR ACT-Reading = 17 OR 10-838-105, Intro to Reading and Study Skills AND Accuplacer Arithmetic=65 OR ACT Math=15 OR 10-834-109, Pre-Algebra w "C" or better or equivalent)

10-806-134 General Chemistry... covers chemistry fundamentals. Topics: metric system, problem-solving, periodic relationships, chemical reactions, chemical equilibrium, properties of water; acids, bases, and salts; and gas laws. (Prerequisites: Accuplacer-Arithmetic score=65 or ACT-Math score=15 or 10-834-109, Pre Algebra AND Accuplacer-Reading=55 or ACT-Reading=15 or 10-838-105, Intro to Reading & Study Skills with "C" or better OR equivalent)

10-806-112 Principles of Sustainability... 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 wellbeing, 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. (Prerequisite: Accuplacer-Reading=55 OR ACT-Reading =15 OR 10-838-105, Intro to Reading and Study Skills with "C" or better or equivalent)

10-804-118 Interm Algebra w Apps... 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. (Prerequisites: Accuplacer-Algebra=61 or ACT-Math 21 or 10-834-110, Elem Alg w/ Apps with "C" or better or equivalent AND Accuplacer-Reading=55 or ACT Reading=15 or 10-838-105, Intro to Reading & Study Skills with "C" or better OR equivalent)

10-809-172 Intro to Diversity Studies... basic American values of justice and equality by teaching vocabulary, history of immigration/conquest, transcultural communication, legal liability, multicultural majority/minority relations, ageism, sexism, gender, sexual orientation, the disabled/ ADA. (Prerequisite: Accuplacer-Sentence Skills= 60 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 10-838-105, Intro to Reading & Study Skills or 10-831-103, Intro to College Writing w/ a "C" or better OR equivalent)

10-809-166 Intro to Ethics: Theory & App...basic understanding of theoretical foundations of ethical thought; analyze/ compare relevant issues using diverse ethical perspectives; critically evaluate individual, social/professional standards of behavior-applying a systematic decision-making process. (Prerequisite: Accuplacer-Sentence Skills= 60 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 10-838-105, Intro to Reading & Study Skills or 10-831-103, Intro to College Writing w/ a "C" or better OR equivalent)

For more information, please contact: The General Studies Department, (920) 498-5421 or (800) 422-NWTC, extension 5421, or contact Enrollment Services at 888-385-NWTC.

# **Description**

The General Studies Transfer Certificate - UW Oshkosh includes a 31-32 credit core of courses designed to meet specific general education requirements at UW Oshkosh. These courses will allow students who have a 2.5 overall Grade Point Average to qualify for sophomore status at UW Oshkosh. Additional admission requirements may apply. For more information, go to the UW Oshkosh Admissions Office Web site: http://admissions.uwosh.edu

# **Requirements for Certificate Entry:**

- Students who are interested in applying to the General Studies Transfer certificate must meet with an NWTC Counselor or Advisor to complete the necessary application paperwork and review the requirements for the General Studies Transfer certificate. To schedule an appointment please contact Enrollment Services at (920) 498-5444.
- High school transcript or equivalent. (For a list of equivalents, go to www.nwtc.edu/gettingstarted.)
- Please note that enrollment in some courses requires an Academic Skills Assessment (Accuplacer) with appropriate benchmark scores. See course descriptions for detail; equivalent assessment scores are acceptable. To learn more about these assessments and benchmark scores, please contact a counselor at (920) 498-5444 or (888) 385-6982.

## Note

- Accelerate Your Learning:
- Are some of the classes that you had wanted to take full? Are you short of credits? Undecided about your major? Take classes at Northeast Wisconsin Technical College to expedite your degree by maximizing the number of credits you can earn each semester.
- Create a Flexible Schedule:
   Some classes can be taken Online, Technical College of the Air, or in an Accelerated format to fit your lifestyle.

   Accelerated classes typically only meet one evening a week for seven weeks. Some classes are even offered on weekends.
- Available Online Classes:
   Intro to Psychology, Developmental Psychology, Economics, Intro to Sociology, Contemporary American Society, Intro to Amer Government, English Composition 1, English Composition 2, Oral/Interpersonal Comm, Intermediate Algebra with

CATALOG NO. 10-801-136 10-801-185 10-801-198 OR	DESCRIPTION CR English Composition 1 English Composition 2 Speech	3 3 3
10-801-196 10-804-118 OR	Oral/Interpersonal Comm Intermediate Algebra with Apps	3 4
10-804-195 OR	College Algebra with Apps	3
10-804-189 10-806-154 OB	Introductory Statistics General Physics 1	3 4
10-806-134 10-809-166 10-809-172	General Chemistry Intro to Ethics: Theory & App Intro to Diversity Studies	4 3 3
Complete three cou	urses (nine credits) in at least two areas of the fo	llowing:
AREA ONE: 10-809-159 10-809-188 10-809-198 10-809-199	Abnormal Psychology Developmental Psychology Intro to Psychology Psychology Of Human Relations	3 3 3 3
<b>AREA TWO:</b> 10-809-195	Economics	3
AREA THREE:		

Curriculum

10-809-196

10-809-197

10-809-122

Applications, Intro to Ethics, Psychology of Human Relations, Abnormal Psychology and Intro to Diversity Studies.

• Technical College of the Air Classes: Economics, Intro to Psychology, Intro to Sociology, Developmental Psychology, Abnormal Psychology, Intro to Diversity Studies, English Composition 1, Oral/Interpersonal Comm.

Intro to Sociology

Contemporary Amer Society

Intro to Amer Government

**CERTIFICATE TOTAL** 

Accelerated Classes:
 Economics, Contemporary American Society, Intro to Ethics,
 Intro to Diversity Studies, Psychology of Human Relations,
 English Composition 1, Speech, Oral/Interpersonal Comm.

# **COURSE DESCRIPTIONS**

10-809-159 Abnormal Psychology... surveys features, causes, assessment and treatment of abnormal behavior through major theoretical perspectives. Introduces the diagnosis system of the DSM-IV, the history, cultural/social differences, current perspectives, diagnosis criteria/treatments. (Prerequisite: Accuplacer-Sentence Skills= 60 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 10-838-105, Intro to Reading & Study Skills or 10-831-103, Intro to College Writing w/ a "C" or better OR equivalent)

10-809-188 Developmental Psychology... defines human development; examines theories; heredity and environmental effects; prenatal development and birth; evaluates biosocial, cognitive psychosocial development through the life span; aging, death, and dying. (Prerequisite: Accuplacer-Sentence Skills= 60 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 10-838-105, Intro to Reading & Study Skills or 10-831-103, Intro to College Writing w/ a "C" or better OR equivalent)

10-809-198 Intro to Psychology...survey of theoretical foundations of human behavior such as sensation and perception, motivation, emotions, learning, personality, psychological disorders, therapy, stress, and human diversity in personal, social and vocational settings. (Prerequisite: Accuplacer-Sentence Skills= 60 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 10-838-105, Intro to Reading & Study Skills or 10-831-103, Intro to College Writing w/ a "C" or better OR equivalent)

10-809-199 Psychology Of Human Relations...decision making, motivation, conflict resolution, learning strategies, growth and adjustment, diversity, psychological theories, relationships, psychological disorders, stress, career analysis, social psychology, and lifespan development. (Prerequisite: Accuplacer-Sentence Skills= 60 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 10-838-105, Intro to Reading & Study Skills or 10-831-103, Intro to College Writing w/ a "C" or better OR equivalent)

10-804-195 College Algebra w Apps...skills needed for success in Calculus and many application areas on a baccalaureate level. Topics include the real and complex number systems, polynomials, exponents, radicals, solving equations and inequalities (linear and nonlinear), relations and functions, systems of equations and inequalities (linear and nonlinear), matrices, graphing, conic sections, sequences and series, combinatories, and the binomial theorem. (Prerequisites: Accuplacer-CM=63 or ACT-Math 24 or 10-804-118, Intermediate Alg w/ Apps with "C" or better AND Accuplacer Reading=55 or ACT Reading=15 or 10-838-105, Introduction to Reading & Study Skills with "C" or better OR equivalent)

10-809-195 Economics...scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment, and global economic issues. (Prerequisite: Accuplacer-Sentence Skills= 60 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 10-838-105, Intro to Reading & Study Skills or 10-831-103, Intro to College Writing w/ a "C" or better OR equivalent)

10-801-136 English Composition 1...learners develop knowledge/skills in planning, organizing, writing, editing. Students will also analyze audience/purpose, use elements of research, format documents using standard guidelines, and develop critical reading skills. (Prerequisite: Accuplacer-Sentence Skills =75 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 77-851-759; BE Communication Prep IIB OR 10-831-103, Intro to College Writing with "C" or better OR equivalent)

10-801-185 English Composition 2... advanced course: learners develop research, argument, critical thinking skills; read/analyze persuasive media; form critical perspectives (supported by documented primary/secondary research) apply logic, audience analysis, and the writing process. (Prerequisite: 10-801-136, English Composition I OR 10-801-195, Written Communication with "C" or better)

10-806-154 General Physics 1...applications/theory of basic physics principles: problemsolving, laboratory investigation, and applications including unit conversion and analysis, vectors, translational and rotational kinematics/dynamics, heat/temperature, and harmonic motion and waves. (Prerequisites: Accuplacer-Reading = 80 OR ACT-Reading = 17 OR 10-838-105, Intro to Reading and Study Skills AND Accuplacer Arithmetic=65 OR ACT Math=15 OR 10-834-109, Pre-Algebra w "C" or better or equivalent)

10-806-134 General Chemistry... covers chemistry fundamentals. Topics: metric system, problem-solving, periodic relationships, chemical reactions, chemical equilibrium, properties of water; acids, bases, and salts; and gas laws. (Prerequisites: Accuplacer-Arithmetic score=65 or ACT-Math score=15 or 10-834-109, Pre Algebra AND Accuplacer-Reading=55 or ACT-Reading=15 or 10-838-105, Intro to Reading & Study Skills with "C" or better OR equivalent)

10-804-118 Interm Algebra w Apps...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. (Prerequisites: Accuplacer-Algebra=61 or ACT-Math 21 or 10-834-110, Elem Alg w/ Apps with "C" or better or equivalent AND Accuplacer-Reading=55 or ACT Reading=15 or 10-838-105, Intro to Reading & Study Skills with "C" or better OR equivalent)

10-809-172 Intro to Diversity Studies... basic American values of justice and equality by teaching vocabulary, history of immigration/conquest, transcultural communication, legal liability, multicultural majority/minority relations, ageism, sexism, gender, sexual orientation, the disabled/ ADA. (Prerequisite: Accuplacer-Sentence Skills= 60 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 10-838-105, Intro to Reading & Study Skills or 10-831-103, Intro to College Writing w/ a "C" or better OR equivalent)

10-809-166 Intro to Ethics: Theory & App...basic understanding of theoretical foundations of ethical thought; analyze/ compare relevant issues using diverse ethical perspectives; critically evaluate individual, social/professional standards of behavior-applying a systematic decision-making process. (Prerequisite: Accuplacer-Sentence Skills= 60 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 10-838-105, Intro to Reading &

Study Skills or 10-831-103, Intro to College Writing w/ a "C" or better OR equivalent)

10-809-196 Intro to Sociology...the nature and variety of groups; inequality, race and ethnicity; family, population, social integration, and change; collective behavior; politics, economics, religion, education, and the effects of technology. (Prerequisite: Accuplacer-Sentence Skills= 60 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 10-838-105, Intro to Reading & Study Skills or 10-831-103, Intro to College Writing w/ a "C" or better OR equivalent)

3

3

31 OR 32

10-809-197 Contemporary Amer Society... the major social institutions within the American society: government, family, education, religion, and economic system. (Prerequisite: Accuplacer-Sentence Skills= 60 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 10-838-105, Intro to Reading & Study Skills or 10-831-103, Intro to College Writing w/ a "C" or better OR equivalent)

10-809-122 Intro to Amer Government... introduces American political processes and institutions: focusing on rights/ responsibilities of citizens and the process of participatory democracy. Examines separation of powers and checks/balances & the roles of different groups. (Prerequisite: Accuplacer-Sentence Skills= 60 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 10-838-105, Intro to Reading & Study Skills or 10-831-103, Intro to College Writing w/ a "C" or better OR equivalent)

10-804-189 Introductory Statistics... 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. (Prerequisites: Accuplacer-CM=63 or ACT-Math 24 or 10-804-118, Intermediate Alg w/ Apps with "C" or better AND Accuplacer Reading=55 or ACT Reading=15 or 10-838-105, Introduction to Reading & Study Skills with "C" or better OR equivalent)

10-801-198 Speech...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 the listening process. (Prerequisite: Accuplacer- Reading =55 and Accuplacer Sentence Skills=60 OR ACT Reading =15 and ACT English=16 OR 10-838-105, Intro to Reading & Study Skills or 10-831-103, Intro to College Writing with "C" or better OR equivalent)

10-801-196 Oral/Interpersonal Comm... the communication process, perception and self-concept, language, listening, nonverbal communication, interpersonal relationships, communication in groups and public communication; prepare and deliver an oral presentation. (Prerequisite: Accuplacer- Reading =55 and Accuplacer Sentence Skills=60 OR ACT- Reading =15 and ACT English=16 OR 10-838-105, Intro to Reading & Study Skills or 10-831-103, Intro to College Writing with "C" or better OR equivalent)

For more information, please contact: The General Studies Department, (920) 498-5421 or (800) 422-NWTC, extension 5421,or contact Enrollment Services at 888-385-NWTC.

# Greenhouse Growers Certificate Certificate Number 900012

# **Description**

The Greenhouse Grower Certificate is designed to provide courses with learning activities that will teach the necessary job skills and knowledge to grow quality plants in a greenhouse environment. Each course will include lecture, demonstrations, discussion, and hands on work experience. Some of the activities will be scheduled using the resources of the Green Bay Botanical Garden.

# **Certificate Completers will be able to**

- Communicate within the greenhouse industry.
- Prepare soil media for optimum plant performance.
- Seed and propagate plants from cuttings.
- Describe plant functions concerning germination, vegetative growth and flowering as it relates to reproduction.
- Understand the effect of all cultural, chemical, and environmental processes on greenhouse crops.
- Identify all major insects, understand their life cycles, and recommend control measures.

# Curriculum

CATALOG NO. 10-001-159 10-001-111 10-001-112 10-001-110 10-001-170 10-001-130 10-001-108	DESCRIPTION Flowers-Herbaceous Greenhouse Grower I Greenhouse Grower II Horticulture-Introduction Integrated Pest Management Plant Interior Plant Propagation	CREDITS 3 2 2 3 3 2 3 2 3 2 2 3 2
	Plant Propagation CERTIFICATE TOTAL	

- Identify major disease organisms and apply the most effective prevention and eradication measures available.
- Maintain the proper greenhouse environment concerning light, temperature, and humidity.

Completers will be able to apply credits toward the following programs:

• 100014, Landscape Horticulture

# **COURSE DESCRIPTIONS**

10-001-159 Flowers-Herbaceous... annuals/perennials/roses; using flowers/ foliage effectively in the landscape; care of each flower emphasizing selection/tips to best utilize each flower; groundcover/ vines included. (Corequisite: 10-001-110, Horticulture-Intro)

10-001-111 Greenhouse Grower I... examine greenhouse structures and environmental systems used in growing crops; focus will be on various factors that influence plant health and quality.

10-001-112 Greenhouse Grower II... explore management factors affecting the production sales and marketing of greenhouse crops; emphasis will be on hands-on learning activities. (Prerequisite: 10-001-111 Greenhouse Grower 1)

10-001-110 Horticulture-Intro... explore the horticulture industry, plant culture, identification, propagation, physiology, selected aspects of horticulture industry including fruits, vegetables, ornamentals, greenhouse systems, landscape techniques, home gardens, and turf.

10-001-170 Integrated Pest Management... various methods to combat plant pests in an environmentally responsible manner; using biorational techniques and strategies. (Prerequisite: 10-001-110, Intro to Horticulture)

10-001-130 Plant Interior...how to identify indoor tropical plants and blooming plants that are used in interior plantscaping. Includes identification, plant varieties, pests, diseases, and cultural requirements. Also designing with houseplants. (Prerequisite: 10-001-110, Intro to Horticulture)

10-001-108 Plant Propagation... plant propagation and production techniques. (Prerequisite: 10-001-110, Intro to Horticulture)

For more information, please contact: The Trades & Engineering Technologies Department, (920) 498-5461 or (800) 422-NWTC, extension 5461, or contact Enrollment Services at 888-385-NWTC.

# Health Care Business Services Certificate Certificate Number 901041

# **Description**

The Health Care Business Services Certificate is designed to be an introduction to anyone interested in exploring various business positions in the growing medical field. All courses transfer to the Health Care Business Services Associate Degree. Courses are delivered online.

# **Certificate Completers will be able to**

- Provide excellent customer service in healthcare and insurance.
- Solve basic health insurance reimbursement problems.
- Analyze and explain insurance benefits.
- Schedule and admit patients.
- Analyze and process health insurance claims.

# **Requirements for Certificate Entry:**

- Basic math (whole numbers, fractions, decimals, percents, measurements).
- Students are expected to have entry-level computer and keyboarding skills. It is recommended that students complete basic computer and keyboarding skills coursework if deficient in this area.

#### Note

Enrollment in some courses requires an Academic Skills Assessment (Accuplacer) with appropriate benchmark scores.

## Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-801-136	English Composition 1	3
10-530-172	Healthcare Delivery Systems	2
10-160-161	Insurance Health Principles	3
10-804-123	Math w Business Applications	3
10-501-101	Medical Terminology	3
10-103-111	Micro: Windows/Computer Basics	1
10-103-121	Micro: Word-Intro	1
	CERTIFICATE TOTAL	16

#### **CURRICULUM NOTE**

No final grade lower than a "C" is acceptable in any courses marked with an asterisk (\*). Courses with grades lower than a "C" must be repeated in order to continue in, or complete this certificate.

See course descriptions for detail; equivalent assessment scores are acceptable. To learn more about these assessments and benchmark scores, please contact a counselor at (920) 498-5444 or (888) 385-6982.

Completers will be able to apply credits toward the following programs:

• 101601, Health Care Business Services

#### **COURSE DESCRIPTIONS**

10-801-136 English Composition 1...learners develop knowledge/skills in planning, organizing, writing, editing. Students will also analyze audience/purpose, use elements of research, format documents using standard guidelines, and develop critical reading skills. (Prerequisite: Accuplacer-Sentence Skills =75 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 77-851-759; BE Communication Prep IIB OR 10-831-103, Intro to College Writing with "C" or better OR equivalent)

10-530-172 Healthcare Delivery Systems...examines the organization, financing, regulation, and delivery of health care services. Includes the study of healthcare professionals.

10-160-161 Insurance Health Principles...this course presents common health insurance terminology. Students are introduced to various insurance programs including: private health insurance, Workers' Compensation, disability insurance, hospital insurance, government plans including: Medicare, Medicaid and TriCare. (Corequisite: 10-530-172, Healthcare Delivery Systems)

10-804-123 Math w Business Apps...real numbers; basic operations; proportions/ one variable; percents, simple/compound interest; annuity; apply math concepts to purchasing/buying process, selling process; and basic statistics with business/consumer applications. (Prerequisites: Accuplacer-Arithmetic score=65 or ACT-Math score=15 or 10-834-109, Pre Algebra AND Accuplacer-Reading=55 or ACT-Reading=15 or 10-838-105, Intro to Reading & Study Skills with "C" or better OR equivalent)

10-501-101 Medical Terminology... focuses on the component parts of medical terms: prefixes, suffixes, and root words. Students practice formation, analysis and reconstruction of terms. Emphasis on spelling, definition and pronunciation. Introduction to operative, diagnostic, therapeutic and symptomatic terminology of all body systems, as well as systemic and surgical terminology.

10-103-111 Micro: Windows/Computer Basics...Windows desktop elements, help features, folder and file management (create, delete, move, find file), and Search strategies. Blackboard, internet, and e-mail usage.

10-103-121 Micro: Word-Intro...word processing basics including creating, revising, formatting, printing; sections, tabs, multiple-page numbering; manipulating text; creating headers/footers; creating/formatting tables, graphics; and merging documents. Windows experience improves success; consider 10-103-111, Windows/Computer Basics.

For more information, please contact: The Health Sciences Department, (920) 498-5543 or (800) 422-NWTC, extension 5543, or contact Enrollment Services at 888-385-NWTC.

# Health Care Leadership Advanced Certificate Certificate Number 9019610

#### **Description**

The Advanced Health Care Leadership Certificate is designed to prepare a person to take the next step in leadership within health care settings. It includes budgeting and finance, legal issues in the workplace, working with a diverse population of employees, and either safety in the workplace or the human resource function.

## **Certificate Completers will be able to**

- Establish and monitor a budget.
- Understand and work with finance terminology and financial statements.
- Work with employment law to keep their organization out of court.
- Work effectively with a diverse workforce and help employees work with each other.
- Analyze the safety requirements in the workplace.
- Hire, train, develop employees and conduct performance appraisals.

Completers will be able to apply credits toward the following programs:

• 101961, Leadership Development

#### Curriculum

CATALOG NO. 10-101-106 10-196-169 10-196-193 OR	DESCRIPTION Accounting-for Non-Accountants Diversity in the Workplace Human Resource Mgmt	3 3 3 3
10-196-136 10-196-134	Safety-Workplace Legal Issues-Supervisors CERTIFICATE TOTAL	3 3 12

# **Requirements for Certificate Entry:**

• It is recommended that learners complete the Health Care Leadership Certificate before moving on to the Health Care Leadership Advanced Certificate.

#### **COURSE DESCRIPTIONS**

10-101-106 Accounting-for Non-Accountants...teaching non-accountants to read, analyze, and interpret financial information for making informed business decisions. This class de-emphasizes the use of debits, credits, journal entries and other accounting procedures.

10-196-169 Diversity in the Workplace... analyze the effect of perceptions, attitudes, biases, and organization culture on diversity, dealing with barriers, measuring progress, and celebrating success.

10-196-193 Human Resource Mgmt... impacts of EEOC, writing job descriptions, recruitment, selection, conducting job interviews, orientation, developing policies and procedures, training, performance, counseling and development, and compensation and benefit strategies.

10-196-136 Safety-Workplace...safety awareness, federal/state/local compliance, inspections, risk analysis, workplace violence, substance abuse, health hazards, first aid, CPR, fire and electrical safety, and emergency preparedness.

10-196-134 Legal Issues-Supervisors... legal practices of recruiting, interviewing, hiring, selection, evaluation/promotion, employee discipline, firing, EEOC and nondiscrimination, employee privacy, workplace harassment, FMLA, ADA and unions.

For more information, please contact: The Business & Information Technology Department, (920) 498-5435 or (800) 422-NWTC, extension 5435, or contact Enrollment Services at 888-385-NWTC.

# Healthcare Customer Service Representative Certificate Certificate Number 905012

#### **Description**

Today's health care consumers are expecting excellent customer service. This certificate will prepare current or potential healthcare front line employees in excellent customer service. Learn how to not only meet but exceed customer needs.

### **Certificate Completers will be able to**

- Provide excellent customer service in a health care setting.
- Be the first contact for customers seeking health care services.

## **Requirements for Certificate Entry:**

- A high school diploma or equivalent.
- Basic computer knowledge.
- Must be able to speak, read, and write fluently in the English language.
- Excellent interpersonal skills.

#### Note

Student must achieve a grade of "C" or better in each course to complete this certificate. In the event a "C" is not achieved, the course must be repeated.

#### **Curriculum**

CATALOG NO.	DESCRIPTION	CREDITS
*10-501-104	Healthcare Customer Serv.	2
*10-501-107	Introduction to Health Care Co	2
*10-501-101	Medical Terminology	3
	CERTIFICATE TOTAL	7

#### **CURRICULUM NOTE**

\*Student must achieve a grade of "C" or better in each course to complete this certificate. In the event a "C" is not achieved, the course must be repeated.

Completers will be able to apply credits toward the following programs:

- 315091, Medical Assistant
- 315161, Ophthalmic Assistant

#### **COURSE DESCRIPTIONS**

10-501-104 Healthcare Customer Serv.... is designed as an introduction to customer service for learners interested in working in various healthcare settings. The learner investigates healthcare systems, safety standards, and the workforce. The learner examines professionalism, interpersonal and written communication skills, and confidentiality as they relate to customer service in healthcare.

10-501-107 Intro to Health Care Computing...provides an introduction to basic computer functions and applications utilized in contemporary healthcare settings. Students are introduced to the hardware and software components of modern computer systems.

10-501-101 Medical Terminology...focuses on the component parts of medical terms: prefixes, suffixes, and root words. Students practice formation, analysis and reconstruction of terms. Emphasis on spelling, definition and pronunciation. Introduction to operative, diagnostic, therapeutic and symptomatic terminology of all body systems, as well as systemic and surgical terminology.

For more information, please contact: The Health Sciences Department, (920) 498-5543 or (800) 422-NWTC, extension 5543, or contact Enrollment Services at 888-385-NWTC.

# Health Care Leadership Certificate Certificate Number 901967

#### **Description**

The Health Care Leadership Certificate is designed to prepare a person for a leadership role within health care settings. It includes learning the skills of supervision, team building and problem solving, leadership, and managing quality in a health care environment.

## **Certificate Completers will be able to**

- Plan, organize, staff, lead and control a work environment
- Interact appropriately on a team
- Facilitate a problem solving team meeting
- Develop a flexible leadership style
- Coach the performance of others
- Use data analysis to identify opportunities to improve quality

#### Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-196-190	Leadership Development	3
10-196-192	Managing-Quality	3
10-196-191	Supervision	3
10-196-189	Team Building/Prob Solve	3
	CERTIFICATE TOTAL	12

Completers will be able to apply credits toward the following programs:

• 101961, Leadership Development

#### **COURSE DESCRIPTIONS**

10-196-190 Leadership Development... leadership effectiveness and organization requirements, individual and group motivation strategies, vision, mission and goals, ethical behavior, leadership style and adaptation, impacts of power and influence, employee development, coaching, managing change, and conflict resolution. (Prerequisite: 10-801-136, English Composition 1)

10-196-192 Managing-Quality...developing a personal philosophy of quality, identifying all stakeholder relationships, meeting/exceeding customer expectations, managing a quality improvement project, measuring effectiveness, lean thinking, Six Sigma, and systems thinking.

10-196-191 Supervision...front-line leadership including teamwork, setting goals, planning, delegation, controlling, communication, motivation, performance management, staffing, training, problem solving, and conflict management.

10-196-189 Team Building/Prob Solve... benefits and challenges of group work, necessary roles in a team, stages of team development, meeting facilitation, different approaches to problem solving, consensus, data acquisition, analysis, developing alternative solutions, implementation and evaluation.

#### For more information, please contact:

# Hotel & Restaurant Management Certificate Certificate Number 901095

#### **Description**

The Hotel & Restaurant Management Certificate is an 18-credit certificate designed to prepare students for a variety of midmanagement positions in lodging operations, food service operations, and tourism services. The program is offered on a flexible, part-time schedule to accommodate the needs of employees in the hospitality industry. Some courses may be completed through credit by examination, credit for work experience, Interactive Television or Online. The certificate is designed for completion in two or more semesters.

# **Certificate Completers will be able to**

- Plan a conference or special event.
- Manage cleaning/sanitation operations in the food service and lodging industry.
- Maximize facility productivity.
- Understand preventative maintenance and equipment service.
- Manage quality customer service systems.
- Apply product presentation principles in the hospitality industry.

Completers will be able to apply credits toward the following programs:

• 101092, Hotel & Restaurant Management

#### Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-104-125	Event Marketing	3
10-109-127	Hospitality Facilities Mgmt	3
10-109-126	Hospitality Finance	3
10-109-114	Hotel Management	3
10-104-110	Marketing Principles	3
10-109-168	Restaurant Management	3
	CERTIFICATE TOTAL	18

#### Note

- 10-109-168, Restaurant Management is offered only in the Spring.
- 10-109-126, Hospitality Management is offered only in the Spring.
- 10-109-114, Hotel Management is offered only in the Fall.
- 10-109-127, Hospitality Facilities Management is offered only in the Fall.

#### **COURSE DESCRIPTIONS**

10-104-125 Event Marketing...planning, promotion execution, and evaluation of special events (entertainment, industry, meeting/convention). Students will work toward the actual staging of an event (will require time outside of the classroom setting).

10-109-127 Hospitality Facilities Mgmt... staffing housekeeping operations, facilities safety and security, cleaning routines, material selection, laundry operations, controlling costs in housekeeping and maintenance departments, facility systems.

10-109-126 Hospitality Finance... purchasing/receiving controls, storing/issuing controls, production controls, monitoring activities, sales controls, beverage controls, labor controls.

10-109-114 Hotel Management...lodging classification, ownership/affiliation, hotel/front office organization, equipment, reservations, registration, guest services, guest accounting, credit monitoring, check-out/settlement, night audit, management functions, room statistics, yield management, staffing.

10-104-110 Marketing Principles...marketing management, market segmentation, market research, consumer behavior, product decisions and management of distribution, pricing, promotional decisions for strategy planning.

10-109-168 Restaurant Management... food/beverage industry, product classifications, responsible service; bar/kitchen equipment/organization; maintaining clean/sanitary facilities; staffing, training, supervising food/beverage employees; promotions planning; budgeting/cost controls of food/beverage operations.

#### For more information, please contact:

# Human Resource Compliance Certificate Certificate Number 901161

#### **Description**

The Human Resources Compliance Certificate is designed for people who wish to acquire and improve their skills in human resources, specifically with overall employment law compliance and recordkeeping. These three-credit courses also apply toward the 64 credits necessary to earn the Human Resources associate degree. Courses are offered in alternative delivery formats.

# **Certificate Completers will be able to**

- Articulate the various human resource challenges in operating in a global environment.
- Analyze legal recruiting and hiring practices.
- Analyze employment laws in the U.S. and their impact on employers and employees.
- Analyze Human Resource responsibilities in coordinating workplace policies, procedures, and work rules.
- Evaluate key legislation affecting employee rights.
- Evaluate laws affecting employee and labor relations.

## Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-196-193	Human Resource Mgmt	3
10-116-115	Legal Issues & Compliance-Adv	3
10-196-134	Legal Issues-Supervisors	3
	CERTIFICATE TOTAL	9

Completers will be able to apply credits toward the following programs:

• 101161, Human Resources

#### **Requirements for Certificate Entry:**

• High school diploma or equivalent.

#### **COURSE DESCRIPTIONS**

10-196-193 Human Resource Mgmt... impacts of EEOC, writing job descriptions, recruitment, selection, conducting job interviews, orientation, developing policies and procedures, training, performance, counseling and development, and compensation and benefit strategies.

10-116-115 Legal Issues & Compliance Adv...advanced legal issues compliance and recordkeeping; detailed overview and analysis of major employment laws. Learners will analyze and practice recordkeeping and compliance with the laws in the workplace such as FMLA, ADA, EEOC, OSHA, and other current relevant employment laws. (Pre-requisite: 10-196-134, Legal Issues-Supervisors)

10-196-134 Legal Issues-Supervisors... legal practices of recruiting, interviewing, hiring, selection, evaluation/promotion, employee discipline, firing, EEOC and nondiscrimination, employee privacy, workplace harassment, FMLA, ADA and unions.

For more information, please contact:

# Industrial Maintenance Certificate Certificate Number 904621

#### **Description**

Courses are designed for maintenance technicians providing skills and understanding of the preliminary fundamentals of PLC's, motors and drives, pneumatics, hydraulics and mechanics.

#### **Certificate Completers will be able to**

Troubleshoot industrial machinery utilizing basic skills in PLC's, drives, motors, hydraulics, pneumatics and mechanics.

Completers will be able to apply credits toward the following programs:

- 106641, Automation Engineering Technology
- 106201, Electro Mechanical Technology

Curriculum		
CATALOG NO.	DESCRIPTION	CREDITS
10-664-100	Automation 1: Control Logic	1
10-664-101	Automation 2: Motor Control	1
10-664-102	Automation 3: PLC	1
10-664-103	Automation 4: PLC	1
10-664-104	Automation 5: PLC	1
10-664-105	Automation 6: PLC	1
10-620-100	Fluids 1: Basic Pneumatics	1
10-620-101	Fluids 2: Basic Hydraulics	1
10-620-140	Machine Wiring and Safety	1
10-620-121	Mechanics 1: Basic	1
10-620-122	Mechanics 2: Intermediate	1
10-620-161	Power Electricity 1: Motors	1
10-605-158	Power Electronics 2: Drives	1
10-620-105	Rigging Systems 1	1
	CERTIFICATE TOTAL	14

#### **COURSE DESCRIPTIONS**

10-664-100 Automation 1: Control Logic... electric motor control components such as switches, relays, starters, transformers; and safely mount and install motor and motor control components and perform related wiring and troubleshooting of motor control circuits.

10-664-101 Automation 2: Motor Control... electric motor control components such as sensors, timers and counters. (Corequisite: 10-664-100, Automation 1: Control Logic)

10-664-102 Automation 3: PLC... basic programmable logic controller programming and troubleshooting.

10-664-103 Automation 4: PLC... troubleshooting a PLC system, applying Event Sequencing, developing PLC applications, applying timer instructions and counter instructions. (Corequisite: 10-664-102, Automation 3: PLC)

10-664-104 Automation 5: PLC... application, troubleshooting, and implementation of program control, math and data move instructions, analog I/O modules, and producing a PLC program from specification. (Corequisite: 10-664-103, Automation 4: PLC)

10-664-105 Automation 6: PLC... programming a PLC system to operate a discrete and analog process adhering to a functional specification or timing diagram. (Prerequisite: 10-664-104, Automation 5: PLC)

10-620-100 Fluids 1: Basic Pneumatics... what fluid power is, differentiate between hydraulics and pneumatics, implement basic pneumatic circuits, utilize schematics, apply Pascal's Law, define properties of fluids, implement airflow control and hydraulics cylinder circuits.

10-620-101 Fluids 2: Basic Hydraulics... hydraulic pumps, basic hydraulics actuator circuits, hydraulic schematics, apply Pascal's Law, summarize the effects of fluids friction, define properties of hydraulic energy, design hydraulic circuits with directional control valves. (Corequisite: 10-620-100, Fluids 1: Basic Pneumatics)

10-620-140 Machine Wiring and Safety... introduction to machine wiring, including basic documentation, labeling, and wiring practices; an overview of NFPA 70 machinery, safety and installation standards.

10-620-121 Mechanics 1: Basic...mechanical drive system components related to V-belt drives, chain drives, and gear drives.

10-620-122 Mechanics 2: Intermediate... mechanical drive system components related to multiple shaft drives, heavy-duty V-belt drives, synchronous belt drives, lubrication, and alignment. (Corequisite: 10-620-121, Mechanics 1: Basic)

10-620-161 Power Electricity 1: Motors... DC motors and generator configuration, shunt, compound, and permanent magnet DC motor performance and characteristics.

10-605-158 Power Electronics 2: Drives... power circuitry of AC and DC drives and basic setup and application of an industrial DC and AC drives to DC and AC motors.

10-620-105 Rigging Systems 1...the basic skills of rigging, employment of hoists, slings, lifts, wire rope, and chain slings as part of rigging system.

For more information, please contact:

The Trades & Engineering Technologies Department, (920) 498-5461 or (800) 422-NWTC, extension 5461, or contact Enrollment Services at 888-385-NWTC.

# Industrial Safety Certificate Certificate Number 904491

#### **Description**

The Industrial Safety Certificate provides on line courses to prepare individuals to work with supervisors and employees to ensure a safe & healthy work environment.

#### **Certificate Completers will be able to**

Contribute to a safety and health program in any size organization.

Curriculum		
CATALOG NO.	DESCRIPTION	CREDITS
10-449-100	Safety Management	3
10-449-101	Regulatory Compliance	3
10-449-102	Accident Investigation	3
10-449-103	Industrial Hygiene-Intro	3
10-449-104	Audits and Inspections	3
	CERTIFICATE TOTAL	15

#### **COURSE DESCRIPTIONS**

10-449-102 Accident Investigation... determine cause, uncover indirect accident causes, prevent similar accidents from occurring, document facts, provide information on costs and promote safety. The student will learn how to train first line supervisors in the area of accident/incident investigation, and train employees how to report accidents/incidents. OSHA record keeping and corrective action will also be addressed within this course.

10-449-104 Audits/Inspections...examine the process that takes place during the planning, design and operational phases of the safety system. The student will learn how to conduct the monitoring function in an organization to locate and report existing and potential hazards having the capacity to cause accidents in the workplace; also how to locate and interpret past injury and illness data and compare to current data.

10-449-103 Industrial Hygiene-Intro... fault finding, emphasizing on criticism and fact-finding, with the emphasis on locating potential hazards that can adversely affect safety and health will be analyzed. The course will also evaluate and assess safety and health risks associated with equipment, material, processes and activities.

10-449-101 Regulatory Compliance... overview of occupational safety/health compliance procedures emphasizing areas such as hazard communication, lockout/tagout, confined space entry, personnel protective equipment, machine guarding, hand/portable tools, fire safety.

10-449-100 Safety Management... occupational health and safety management principles, systems and supporting techniques to initiate and/or improve an organization's safety management system. Included is a focus on job safety analysis and fault tree.

For more information, please contact: The Trades & Engineering Technologies

Department, (920) 498-5461 or (800) 422-NWTC, extension 5461, or contact Enrollment Services at 888-385-NWTC.

# Internet Broadcasting Certificate Certificate Number 902061

#### **Description**

The Internet Broadcasting Certificate will develop learner skills in digital media content production, editing and delivery of audio, video and graphics for Internet distribution. Podcast creation including capture, transfer, compression and web formatting for business, education and entertainment.

#### **Certificate Completers will be able to**

- Create multimedia components for the Internet.
- Produce commercially viable digital media.
- Operate a Macintosh Graphic Workstation.
- Manage internet productions and projects.
- Communicate effectively using digital media.
- Output to personal, commercial and user generated web sites.
- Solve technical problems.

Completers will be able to apply credits toward the following programs:

• 102065, Digital Media Technology

#### Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-206-100	Digital Audio Overview	3
10-206-107	Internet Broadcasting	3
10-206-108	Internet Broadcasting-Advanced	3
10-206-154	Macintosh Video Editing	3
10-111-101	Macintosh-Image Editing	3
10-152-185	Website Coding	3
	CERTIFICATE TOTAL	18

# **Requirements for Certificate Entry:**

- A high school diploma or equivalent.
- Proficiency on Internet browser applications on Mac or PC.

# **COURSE DESCRIPTIONS**

10-206-100 Digital Audio Overview... concept of analog to digital audio conversion; audio production with software including editing, processing, mixing and exporting. Creating radio imaging and advertising; producing various length content for distribution through multiple medium.

10-206-107 Internet Broadcasting... plan, prepare and organize digital media content for online distribution and access. Pre- through post-production techniques including technical and commercial aspects of digital media content for internet delivery.

10-206-108 Internet Broadcasting-Advanced...advanced pre- through postproduction techniques including technical/ commercial aspects of digital media content for internet delivery. Business fundamentals, target marketing, copy writing, commercial distribution, user-generated content (UGC) service/s. (Prerequisites: 10-206-107, Internet Broadcasting; 10-801-136, English Composition 1)

10-206-154 Macintosh Video Editing... media types including audio, video and graphics to create original commercial, educational and entertainment productions for delivery to broadcast, CD/DVD and web. Final Cut Pro, LiveType and Photoshop software. (Prerequisite: 10-111-101, Macintosh-Image Editing)

10-111-101 Macintosh-Image Editing... (Adobe Photoshop + Adobe Acrobat) scanning, editing, color correcting and creating composite montage photographs. Prepare images for publication in print. An introduction to manipulating bitmap images.

10-152-185 Website Coding...create code for generating the structure, function, and design of static websites using standards-based HTML5 and CSS3; validate code; test multi-browser and multi-device functionality.

#### For more information, please contact:

# Introduction to the Instructional Assistant Careers Certificate Certificate Number 905222

#### **Description**

This certificate is designed for anyone with an interest in an introduction to the roles of instructional assistants or educational paraprofessionals working with ages preschool through grade twelve. Courses provide an overview of the variety of duties assisting teachers in implementing instructional programs for individuals or small groups of students. The coursework in this certificate program provides a basic foundation in theory and practical application of how children learn, teaching strategies, developing positive relationships with students, supporting the classroom teacher with classroom management, and addressing the needs of special needs students. All courses transfer to the Instructional Assistant Associate Degree.

# **Certificate Completers will be able to**

- Demonstrate problem-solving skills within a group setting.
- Incorporate learning styles into instructional strategies.
- Engage culturally diverse students.
- Summarize brain development in young children.

#### **Curriculum**

CATALOG NO. 10-522-106 10-522-111 10-522-103 10-522-107 OR	DESCRIPTION  IA: Child & Adolescent Devel  IA: Guiding and Managing Behav  IA: Intro to Educ Practices  IA: Overview of Special Educat	3 3 3 3 3
10-522-124 10-522-101	IA: Support Students w Disab IA: Teamwork in School Setting CERTIFICATE TOTAL	3 3 15

- Recommend program adaptations and accommodations for children with exceptionalities.
- Demonstrate the use of strategies for managing student behavior.

Completers will be able to apply credits toward the following programs:

• 105222, Instructional Assistant

## **COURSE DESCRIPTIONS**

10-522-106 IA: Child & Adolescent Devel...growth and development birth through adolescence. Acquaints the learner with the fundamental tasks of physical, motor, perceptual, cognitive social/ emotional and language development.

10-522-111 IA: Guiding & Mnging Behavior...proactive, preventive classroom management, research-based concepts and strategies used to prevent behavior problems, creating positive classroom climate, building student relationships, enhancing motivation, responding to inappropriate behavior will be emphasized. 10-522-103 IA: Intro to Educ Practices... fundamentals of teaching methodologies, history of education, issues in trends, learning styles, instructional cycle, characteristics of diverse classroom, questioning techniques and assessment practices.

10-522-107 IA: Overview of Special Ed... overview of the Special Education Law; special education classifications and associated causes and characteristics will be explored as well as state and federal qualification criteria will be examined. Societal responses to students with disabilities as well as the impact of a student with special needs on family dynamics will also be covered in this course.

10-522-124 IA: Support Students w Disab...services delivered to students with special education needs, supportive and related services, law, individual educational programs, various instructional formats, and alternative instructional techniques and programs. (Corequisite: 10-522-107, IA: Overview of Special Education)

10-522-101 IA: Teamwork in School Setting...working together is paramount in helping all children learn. This introductory course will define the role and responsibilities of the instructional assistant. School and educational policies, ethical and moral responsibilities, group dynamics and Wisconsin tribal rights will also be explored. Emphasis placed on collaborating with a team comprised of diverse members. Service Learning hours will be required for this course.

#### For more information, please contact:

The Community & Regional Learning Services Department, (920) 498-6255, or (800) 422-NWTC, extension 6255, or contact Enrollment Services at 888-385-NWTC.

# Intro to MIG Welding Certificate Certificate Number 904426

#### **Description**

The Intro to MIG Welding Certificate prepares students for an entry level welding position for a company that uses the Gas Metal Arc Welding process.

#### **Certificate Completers will be able to**

- Apply math concepts to work with whole numbers, integers, fractions, decimals, measurement, trigonometry, algebraic equations and practical plane geometry.
- Understand Orthographic projection, sketching, dimensioning, section and auxiliary views, structural shapes, metric conversion and interpretation of fabrications from prints.
- Understand welding symbols AWS and ISO, weld joint nomenclature, and welding joint geometry.
- Demonstrate the safe use and set up of GMAW equipment
- Demonstrate the ability to weld in flat, horizontal, vertical and overhead positions, fillet and groove welds, pipe to plate, with and without backing on plain carbon steel.

Completers will be able to apply credits toward the following programs:

• 314421, Welding

#### **Curriculum**

CATALOG NO.	DESCRIPTION	CREDITS
31-421-335	Blueprint Reading for Welders 1	1
31-442-348	Gas Metal Arc Welding 1	1
31-442-356	Gas Metal Arc Welding 2	2
31-442-301	Material Cutting Applications	1
10-804-101	Math 1-Trades	2
31-421-336	Weld Symbols	1
	CERTIFICATE TOTAL	8

#### Note

Enrollment in some courses requires an Academic Skills Assessment (Accuplacer) with appropriate benchmark scores. See course descriptions for detail; equivalent assessment scores are acceptable. To learn more about these assessments and benchmark scores, please contact a counselor at (920) 498-5444 or (888) 385-6982.

#### **COURSE DESCRIPTIONS**

31-421-335 Blueprint Reading for Welders1...course provides the opportunity for the learner to develop the knowledge and understanding of orthographic projection, sketching, dimensioning, section and auxiliary views, structural shapes, metric conversation and interpretation of fabrications from prints (Prerequisite: Accepted into Welding or Marine Construction program)

31-442-348 Gas Metal Arc Welding 1... course provides the opportunity for the learner to develop the knowledge, skills, process and understanding of welding in the flat and horizontal positions, fillet, pipe to plate and groove welds on plain carbon steel. (Corequisite: 31-442-301, Material Cutting Applications)

31-442-356 Gas Metal Arc Welding 2... course provides the opportunity for the learner to develop the knowledge, skills, process and understanding of welds in the vertical and overhead positions, fillet, pipe to plate and groove welds with and without backing on plain carbon steel. (Corequisites: 31-442-301, Material Cutting Applications; 31-442-348, Gas Metal Arc Welding 1)

31-442-301 Material Cutting Applications... visual inspection of weld and cut edges, manual and machine oxy fuel gas cutting, air carbon arc cutting, plasma arc cutting, and mechanical cutting methods. (Prerequisite: Accepted into Welding or Marine Construction program)

10-804-101 Math 1-Trades...provides the opportunity for the learner to develop the knowledge skills process and understanding of whole numbers, fractions, decimals, measurement, trigonometry, integers, algebraic equations, word problems, and practical plane geometry. (Prerequisites: Accuplacer-Arithmetic score =34 or ACT-Math score=13 or 10-834-109, Pre Algebra AND Accuplacer-Reading=55 or ACT-Reading=15 or 10-838-105, Intro to Reading & Study Skills with "C" or better OR equivalent)

31-421-336 Weld Symbols...course provides the opportunity for the learner to develop the knowledge and understanding of welding symbols AWS and ISO, weld joint nomenclature and welding joint geometry. (Prerequisite: Accepted into Welding or Marine Construction program)

For more information, please contact: The Trades & Engineering Technologies Department, (920) 498-5461 or (800) 422-NWTC, extension 5461, or contact Enrollment Services at 888-385-NWTC.

# Jail and Juvenile Detention Certificate Certificate Number 905047

## **Description**

The Criminal Justice Jail and Juvenile Detention Certificate is designed for individuals enrolled in the Criminal Justice - Corrections Associate Degree program who are seeking certifiability as a jail officer or secure detention office in the state of Wisconsin. These courses help the learner meet the requirements set by the Wisconsin Department of Justice for these positions. The coursework will allow learner to apply learning in simulations, enhance the learning experience and improve employability. Participants must be eligible for certifiability as a jail officer and juvenie detention officer by the Department of Justice, pass a criminal background check, and complete necessary documentation before enrolling in the certificate.

## **Certificate Completers will be able to**

Meet some state requirements for certifiability as a jail or secure juvenile detention officer.

#### Certification

Students must obtain a "C" or better in all certificate classes.

#### **Curriculum**

CATALOG NO.	DESCRIPTION	CREDITS
10-504-931	Communication Skills	3
10-504-171	Corrections Internship	2
10-504-935	Corrections Summary Assessment	1
10-504-936	Emergency Procedures	3
10-504-128	Public Safety - Job Interviews	1
	CERTIFICATE TOTAL	10

## **Requirements for Certificate Entry:**

 Requires a minimum of 12 core credits from the Criminal Justice - Corrections program. Student folders must be complete prior to enrolling in this certificate.

#### **COURSE DESCRIPTIONS**

10-504-931 Communication Skills...apply correctional professional skills including mediation, arbitration, and crisis intervention in a correctional setting. (Corequisite: 10-504-900, Intro to Criminal Justice)

10-504-171 Corrections Internship... training in criminal and juvenile justice settings under supervised observation and participation. (Corequisite: 10-504-900, Intro to Criminal Justice)

10-504-935 Corrections Summary
Assessment...refine previously learned
skills and abilities by applying them
to various case studies and simulated
situations. (Corequisites: 10-504-900,
Intro to Criminal Justice;10-504-171,
Corrections Internship; 10-504-930, Security
Procedures; Prerequisites: all other 10504-XXX Corrections program courses)

10-504-936 Emergency Procedures...covers the conceptual and legal basis and physical skills for POSC (Principles of Subject Control), use of OC (oleoresin capsicum), use of impact weapons, ground defense, close quarter defense, use of improvised tools, emerging technologies and techniques, and fire safety in a correctional setting. Learners will articulate use of force actions and practice skills learned in static, isolation, and imulation exercises. (Prerequisites: Enrollment in the Jail and Juvenile Detention Certificate; 10-504-931, Communication Skills; 10-504-128, PS Interview & Resume Writing; 12 credits completed in the Criminal Justice Corrections program; CBC, student folder completion; Corequisite: 10-504-900, Intro to Criminal Justice)

10-504-128 PS-Job Interviews & Resume Wri... Students will learn about the criminal justice hiring process from application and resume writing, oral interviews and the background investigation. (Corequisite: 10-504-900, Intro to Criminal Justice)

For more information, please contact: The Public Safety Department, (920) 498-5485 or (800) 422-NWTC, extension 5485, or contact Enrollment Services at 888-385-NWTC.

# Landscape Design-Advanced Certificate Certificate Number 900016

#### **Description**

The Landscape Design-Advanced Certificate prepares learners for marketplace entry as a designer/salesperson in the landscape industry. This certificate will focus on the job skills and knowledge specific to project programming, compiling site information, budgeting, design development, planting design, construction documentation, customer service, ethics, and cost estimation. Coursework will include lecture, demonstration, discussion, research, and laboratory practice.

# **Certificate Completers will be able to**

- Direct clientele in establishing accurate design guidelines.
- Compile documentation for existing site conditions.
- Develop site base maps.
- Produce various scaled landscape plans.
- Draft perspectives and construction details.
- Create digital and graphic presentations.
- Perform project bidding.

Curriculum		
<b>CATALOG NO.</b> 10-001-187	DESCRIPTION Engineering for Landscape Desi	CREDITS 2
10-001-186	Graphics/Presentations for Des	2
10-001-190 10-001-188	Landscape Budgeting/Cost Estim Landscape Design Process	1 3
10-606-125 10-606-127	Landscape Design Technology Landscape Dsgn Studio Intro	2 1
10-000-127	Landscape Installation Intro	2
10-001-185 10-001-189	Landscape Inventory & Evaluati Planting Design	2
	CERTIFICATE TOTAL	18

#### **COURSE DESCRIPTIONS**

10-001-187 Eng for Landscape Designers... vignette problems dealing with the comprehension and modification of the earth's surface including land form design, preparation of grading plans, earthwork calculations, and development of construction details. (Prerequisites: 10-001-186, Graph/Presen for Designers; 10-606-127, Landscape Design Studio-Intro)

10-001-186 Graph/Presen for Designers... principles of graphic communication media; development of practical graphic skills to enhance the student's abilities to communicate with lay and professional audiences. Emphasizes perspective designs, conceptual development, color rendering and model building. (Prerequisite: 10-606-127, Landscape Design Studio-Intro)

10-001-190 Landscape Budgeting/ Estimation...survey in budget analysis and evaluating landscape plans for material and labor costs. Focus on calculating volumes, determining accurate material quantities and proper installation time, compiling data and discussing contract administration procedures.

10-001-188 Landscape Design Process... explore the design process related to the residential and commercial landscape process. Focus on conceptual design, site circulation, ADA, design development, and master planning. (Prerequisite: 10-606-127, Landscape Design Studio-Intro)

10-606-125 Landscape Design Technology... using computer and computer aided design software as tools for design communication. It is intended to be an introduction to the fundamental components of CAD in landscape design. Property lines, topography, site planning, hardscapes, planting plans, and section view graphics will be covered. (Prerequisite: 10-606-127, Landscape Design Studio; Recommendation: 10-606-112, Computer Apps for Technicians)

10-606-127 Landscape Dsgn Studio Intro... introduction to the techniques of hand drafting and rendering through studio exercises; drafting and sketching techniques include architectural lettering, isometric drawing, section and elevation views, using scales, rendering procedures, etc.

10-001-180 Landscape Installation Intro... investigate techniques used in landscape construction practices. These include the use of specific landscape tools, plan implementation methods, preliminary site survey methods, proper planting, equipment operations & installations of basic landscape features (Prerequisite: 10-606-127, Landscape Design Studio Introduction.)

10-001-185 Landscape Inventory & Eval... inventory and evaluation of physical, biological, and cultural site resources to determine potential for enhancement of human activities and sensitivities to use-impact. Emphasize information sources, data gathering methods, site survey procedures, and analysis techniques. (Prerequisite: 10-606-127, Landscape Design Studio-Intro)

10-001-189 Planting Design... fundamentals of planting composition with emphasis on aesthetics, planting combinations, ecology, sustainable practices, and utilitarian aspects. Exploration of matrix planting, native planting design, and integration of plant layering techniques. (Prerequisite: 10-606-127, Landscape Design Studio-Intro; Recommendation: 10-001-158, Plant-Woody Ornamental; 10-001-159, Flowers-Herbaceous)

For more information, please contact: The Trades & Engineering Technologies Department, (920) 498-5461 or (800) 422-NWTC, extension 5461, or contact Enrollment Services at 888-385-NWTC.

# Library Assistant Certificate Certificate Number 905223

#### **Description**

This certificate is designed to be an introduction to anyone with an interest in library science. Courses provide an overview of library management, the roles and responsibilities of a library assistant, celebrating children and young adult literary resources, strategies to support children and young adults with literature, supporting independent strategic readers and working with children and young adults in reading and language arts. Courses are delivered online.

## **Certificate Completers will be able to**

- Identify roles and responsibilities of librarian assistant.
- Use activities to support students in the library.
- Use media and technology in the library.
- Communicate effectively with students and staff.

#### **Curriculum**

CATALOG NO.	DESCRIPTION	CREDITS
10-522-108	IA: Library Science-Introducti	3
10-522-110	IA: Literary Resources-Childre	3
10-522-104	IA: Technology/Media Resources	3
	CERTIFICATE TOTAL	9

- Model research strategies for students.
- Use drama to reinforce literature.
- Support classroom teachers with literature.
- Conduct storytelling with children.
- Use multicultural literature.
- Celebrate library awareness.

#### **COURSE DESCRIPTIONS**

10-522-108 IA: Library Science-Intro... overview of the library and roles of librarian assistant. Introduces learner to library services/resources, current practices, media and technology, activities to support students, research strategies, communication, and library management.

10-522-110 IA: Literary Resources-Child...learners use literature genres to support student learning in a library setting. Literature supported with drama, author studies, motivational activities, and storytelling. Supporting classroom teachers and literature awareness also incorporated.

10-522-104 IA: Technology/Media Rsrces... develop knowledge and skills in the area of media and computer resources as it relates to the instructional assistant. Students will gain experience creating and using web tools including electronic portfolios.

#### For more information, please contact:

The Community & Regional Learning Services Department, (920) 498-6255, or (800) 422-NWTC, extension 6255, or contact Enrollment Services at 888-385-NWTC.

# Maintenance Electricity Certificate Certificate Number 904132

#### **Description**

The Maintenance Electricity Certificate is designed for a person working in an industrial maintenance position seeking knowledge and skills in electrical maintenance. Most of the courses in the certificate will transfer into the Electricity technical diploma program offered on the Green Bay campus.

#### **Certificate Completers will be able to**

Perform basic installation, maintenance and service of electrical equipment in an industrial environment.

#### **Requirements for Certificate Entry:**

 A math background is needed for this certificate. Students should have mastered high school algebra skills.

#### Note

Enrollment in some courses requires an Academic Skills Assessment (Accuplacer) with appropriate benchmark scores. See course descriptions for detail; equivalent assessment scores are acceptable. To learn more about these assessments and benchmark scores, please

## Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-413-334	AC Circuits	2
31-413-381	Controls 1-Maintenance	3
31-413-382	Controls 2 - Maintenance	3
10-413-314	DC Circuits	2
10-413-303	Industrial Controls	2
31-804-312	Math-Algebra/Trades	1
10-413-328	Motors and Transformers	2
31-413-315	National Electric Code-Mainten	1
10-449-112	OSHA 30	1
	CERTIFICATE TOTAL	17

contact a counselor at (920) 498-5444 or (888) 385-6982.

Completers will be able to apply credits toward the following programs:

• 314131, Electricity

#### **COURSE DESCRIPTIONS**

10-413-334 AC Circuits...AC theory, inductance, capacitance, impedance, series ad parallel AC circuits, AC power, power factor corrections, rectification of AC, diodes and silicon controlled rectifiers. (Corequisites: 10-413-314, DC Circuits, 31-804-312, Math-Algebra Trades)

31-413-381 Controls 1-Maintenance... provides the student with knowledge of manual and event driven control systems and PLC characteristics. Laboratory work includes wiring manual control systems, simulation of control systems and PLC operations.

31-413-382 Controls 2 - Maintenance... provides the student with knowledge of PLC setup, programming and controls system control operation, "Smart" plant operating systems and motor speed controllers. PLCs and motor controls will be wired in lab.

10-413-314 DC Circuits...electron theory, electromotive force sources, voltage, current, resistance, power, Ohm's Law, series-parallel circuits and test equipment. (Corequisites: 31-804-312, Math-Algebra/Trades; 10-413-317, Fundamentals of Electricity)

10-413-303 Industrial Controls... electrical symbols, wiring diagrams, ladder diagrams, control logic, pilot devices, solenoids, relays, and time delay control (Corequisite: 10-413-345, Industrial Code)

31-804-312 Math-Algebra/Trades...signed numbers, order of operations, scientific notation, metric units/measurement, calculator operations, algebra, introductory trigonometry, Pythagorean theorem, solving right triangles. (Prerequisites: Accuplacer-Arithmetic score=65 or ACT-Math score=15 or 10-834-109, Pre Algebra AND Accuplacer-Reading=55 or ACT-Reading=15 or 10-838-105, Intro to Reading & Study Skills with "C" or better OR equivalent)

10-413-328 Motors/Transformers... magnetism, electromagnetism, transformers, DC generators and motors, AC single-phase and three-phase motors, and an introduction to AC drives. (Corequisite: 10-413-334, AC Circuits)

31-413-315 NEC-Maintenance... National Electric Code requirements for industrial applications.

10-449-112 OSHA 30...addresses OSHA 29CFR1926 rules and is approved by OSHA for construction workers, foremen, job supervisors, and anyone involved in construction trades. Successful participants receive 30-hour card from OSHA.

For more information, please contact: The Marinette Campus,

(715) 732-3870 or (800) 422-NWTC, extension 3870, or contact Enrollment Services at 888-385-NWTC.

# Medical Coding Specialist Certificate Certificate Number 905306

#### **Description**

The Medical Coding Specialist Certificate is designed to prepare students for employment in all types of healthcare organizations, insurance companies, or government agencies associated with medical coding, reimbursement, health services research, and health care planning. Most of the credits from this certificate can be applied to the Health Information Technology Associate Degree.

#### **Certificate Completers will be able to**

- Understand and apply coding principles using brief diagnostic and procedure statements, medical records, and case scenarios.
- Code diagnoses and surgical procedures using ICD and/or CPT/HCPCS.
- Apply anatomy and physiology, pathophysiology, and pharmacology to obtain correct codes.
- $\bullet$  Use a computerized encoder and the traditional coding manuals.
- Apply various reimbursement methodologies and insurance principles as they relate to coding.
- Gain an appreciation of other classification systems.
- Differentiate coding principles in different types of health care settings (hospital, clinic, long-term, insurance companies, etc.).
- Experience coding work life prior to program completion.
- Adhere to security/privacy/confidentiality policies.
- Model professional behaviors, ethics and appearance.

Completers will be able to apply credits toward the following programs:

• 105301, Health Information Technology

#### **Curriculum**

CATALOG NO.	DESCRIPTION	CREDITS
10-530-195	Applied Coding	2
10-806-189	Basic Anatomy	3
10-530-184	CPT Coding	3
10-530-176	Health Data Management	2
10-530-185	Healthcare Reimbursement	2
10-530-182	Human Diseases for the Health	3
10-530-197	ICD Diagnosis Coding	3
10-530-199	ICD Procedure Coding	2
10-530-181	Intro to the Health Record	1
10-501-101	Medical Terminology	3
10-103-111	Micro: Windows/Computer Basics	1
10-103-121	Micro: Word-Intro	1
	CERTIFICATE TOTAL	26

# **Requirements for Certificate Entry:**

- High school graduate or equivalent.
- Students are expected to have entry-level computer and keyboarding skills. It is recommended that students complete basic computer and keyboarding skills coursework if deficient in this area.

#### Note

- No final grade lower than a "C" is acceptable in any of the courses. A student must repeat the particular course to achieve a "C" or better final grade in order to continue in or complete the certificate.
- This certificate will take a minimum of four semesters to complete.

#### **COURSE DESCRIPTIONS**

10-530-195 Applied Coding...assign ICD and CPT/HCPCS codes supported by medical documentation at intermediate level. Prepare appropriate physician queries in accordance with compliance guidelines and assign codes to optimize appropriate reimbursement. (Prerequisites: 10-530-184, CPT Coding; 10-530-185, Healthcare Reimbursement; 10-530-197, ICD Diagnosis Coding; 10-530-199, ICD Procedure Coding)

10-806-189 Basic Anatomy...examines concepts of anatomy and physiology as they relate to health careers. Learners correlate anatomical and physiological terminology to all body systems. (Prerequisite: Accuplacer-Reading=55 OR ACT-Reading=15 OR 10-838-105, Intro to Reading and Study Skills OR equivalent)

10-530-184 CPT Coding...assign CPT codes supported by medical documentation at entry level; apply CPT instructional notations, conventions, rules, and official coding guidelines; case studies and actual medical record documentation. (Prerequisites: Accepted in the Health Information Technology program or Medical Coding Specialist certificate10-501-101, Medical Terminology; 10-806-189, Basic Anatomy; Corequisites: 10-530-181, Intro to Health Records; 10-530-182, Human Diseases for Health Professions)

10-530-176 Health Data Management... introduces the use and structure of health care data elements, data sets, data standards, their relationships to primary and secondary record systems and health information processing. (Corequisite: 10-530-181, Intro to Health Record)

10-530-185 Healthcare Reimbursement... compare and contrast health care payers, illustrate the reimbursement cycle, comply with regulations for fraud and abuse. Assign Diagnosis Related Groups, Ambulatory Payment Classifications, and Resource Utilization Groups at entrylevel. (Prerequisites: 10-501-101, Medical Terminology; 10-530-176, Health Data Management; 10-530-182, Human Diseases for Health Professions; 10-806-189, Basic Anatomy; Corequisites: 10-530-181, Intro to Health Records; 10-530-197, ICD Diagnosis Coding; 10-530-199, ICD Procedure Coding; 10-530-184, CPT Coding)

10-530-182 Human Diseases for Hlth Profes...this course focuses on the common diseases of each body system as encountered in all types of health care settings by health information professionals. Emphasis is placed on understanding the etiology (cause), signs and symptoms, diagnostic tests, and treatment (including pharmacologic) of each disease. (Prerequisites: 10-501-101, Medical Terminology; 10-806-189, Basic Anatomy)

10-530-197 ICD Diagnosis Coding... prepares students to assign ICD diagnosis codes supported by medical documentation with entry level proficiency. Students apply instructional notations, conventions, rules, and official coding guidelines when assigning ICD diagnosis codes to case studies and actual medical record documentation. (Prerequisites: 10-501-101, Medical Terminology; 10-806-189, Basic Anatomy; Corequisites: 10-530-181, Intro to Health Records; 10-530-182, Human Diseases for Health Professions; accepted in Health Information Technology program or Medical Coding Specialist certificate)

10-530-199 ICD Procedure Coding... prepares students to assign ICD procedure codes supported by medical documentation with entry level proficiency. Students apply instructional notations, conventions, rules, and official coding guidelines when assigning ICD procedure codes to case studies and actual medical record documentation. (Prerequisites: 10-501-101, Medical Terminology; 10-806-189, Basic Anatomy; 10-530-182, Human Diseases for Health Professions; 10-530-181, Intro to Health Records)

10-530-181 Intro to the Health Record... illustrate the flow of health information in various health care delivery systems and within the health information department; retrieve data from health records; professional ethics; confidentiality and security of information.

10-501-101 Medical Terminology... focuses on the component parts of medical terms: prefixes, suffixes, and root words. Students practice formation, analysis and reconstruction of terms. Emphasis on spelling, definition and pronunciation. Introduction to operative, diagnostic, therapeutic and symptomatic terminology of all body systems, as well as systemic and surgical terminology.

10-103-111 Micro: Windows/Computer Basics...Windows desktop elements, help features, folder and file management (create, delete, move, find file), and Search strategies. Blackboard, internet, and e-mail usage.

10-103-121 Micro: Word-Intro...word processing basics including creating, revising, formatting, printing; sections, tabs, multiple-page numbering; manipulating text; creating headers/footers; creating/formatting tables, graphics; and merging documents. Windows experience improves success; consider 10-103-111, Windows/Computer Basics.

For more information, please contact: The Health Sciences Department, (920) 498-5543 or (800) 422-NWTC, extension 5543, or contact Enrollment Services at 888-385-NWTC.

# Mold and Stamping Die Design Certificate Number 904204

## **Description**

The Mold and Stamping Die Design certificate is an advanced certificate for CNC Technician program students interested in acquiring mold and stamping die design skills.

#### **Certificate Completers will be able to**

Design a mold and stamping die using SolidWorks 3D design software.

Completers will be able to apply credits toward the following programs:

• Tool and Die Apprenticeship program

#### Curriculum

CATALOG NO.DESCRIPTIONCREDITS32-420-302Mold Die Design232-420-304Stamping Die Design2CERTIFICATE TOTAL4

#### **COURSE DESCRIPTIONS**

32-420-302 Mold Die Design...interpret mold die prints, types of mold dies; identify mold plates, ejector pins, return pins, sprues, slides, cavities, runners, gates, leader pins/ bushings; select material to be molded and design a mold die. (Prerequisites: Acceptance in the CNC program or completion of the Machine Tool Operation program; 31-420-357, Machine Shop 4; 31-420-340, Intro to G-Code & CAM 2; Corequisite: 32-420-335, CNC Turning Operation)

32-420-304 Stamping Die Design... interpret stamp die prints, types of stamp dies; identify die blocks, punches, punch plates, gages, stops, strippers, die shoes; design stamp die. (Prerequisites: Acceptance in the CNC program or completion of the Machine Tool Operation program; 31-420-357, Machine Shop 4; 31-420-340, Intro to G-Code & CAM 2; Corequisite: 32-420-335, CNC Turning Operation)

For more information, please contact: The Trades & Engineering Technologies Department, (920) 498-5461 or (800) 422-NWTC, extension 5461, or contact

Enrollment Services at 888-385-NWTC.

# Networking Certificate Certificate Number 901502

#### **Description**

The Networking Certificate is designed for individuals interested in developing basic skills in designing, installing, configuring, and maintaining computer networks. All credits from this certificate can be applied to meet requirements in the Network Specialist associate degree program. Some of the courses meet requirements in the Computer Support Specialist associate degree program.

### **Certificate Completers will be able to**

- Design a local area network (LAN) per specifications and using required physical components.
- Install network hardware including routers, interface cards, and cabling.
- Install and configure network and desktop operating system software.
- Design, implement, and maintain a secure network environment.

Completers will be able to apply credits toward the following programs:

• 101502, Network Specialist - IT

#### **Curriculum**

CATALOG NO.	DESCRIPTION	CREDITS
10-150-163	IT:Network:Cisco 1	3
10-150-168	IT:Network:Cisco 2	3
10-150-174	IT:Network:Client Op Sys	3
10-150-165	IT:Network:Microsoft Server 1	3
10-150-157	IT:Network:UNIX/LINUX-Intro	3
10-150-182	IT:Network:Virtualization	3
	CERTIFICATE TOTAL	18

#### **Requirements for Certificate Entry:**

- Experience using a computer system to include a keyboard and mouse.
- Ability to keyboard at 20 wpm.
- User level familiarity with one or more computer operating systems.

#### **COURSE DESCRIPTIONS**

10-150-163 IT:Network:Cisco 1... cable characteristics and termination, structured cabling systems, OSI reference model, IP addressing and subnetting, network architectures and basic protocols, Ethernet switches, basic router operation and configuration.

10-150-168 IT:Network:Cisco 2... basic routing and packet-forwarding concepts; understanding, configuring and troubleshooting dynamic routing protocols; IP addressing with VLSM; static routes. (Prerequisite: 10-150-163, IT:Network: Cisco 1)

10-150-174 IT:Network:Client Op Sys... basic OS functions; memory, CPU, device/ file management techniques, OS installation/ configuration; configuration of I/O and storage devices; basic network connectivity; standard system maintenance procedures; command line introduction and batch file writing.

10-150-165 IT:Network:Microsoft Server
1...Microsoft Server OS administration and implementation. Learner will install and configure the OS, Active Directory, Group Policies, IIS and security. (Prerequisite: 10-150-174, IT:Network:Client Operating Systems)

10-150-157 IT:Network:UNIX/LINUX-Intro...an introductory look at Unix/Linux administration and implementation. The learner will install, configure, and administer a Unix/Linux server, populate the system with users/groups, write scripts, and troubleshoot system failures. (Prerequisites: 10-150-163, IT:Network:Cisco 1 and 10-150-174, IT:Network:Client Operating Systems)

10-150-182 IT:NETWORK: VIRTUALIZATION ...designing, implementing, and securing aspects of virtualization environments including, but not limited to, storage technologies, virtual network infrastructure, and virtual machine installation, configuration, and migration. (Prerequisites: 10-150-163, IT:Network:Cisco 1; 10-150-174, IT: Network: Client Operating Systems)

For more information, please contact: The Business & Information Technology Department, (920) 498-5435 or (800) 422-NWTC, extension 5435, or contact Enrollment Services at 888-385-NWTC.

# Organizational Safety and Health Certificate Certificate Number 901162

#### **Description**

The Organizational Safety and Health Certificate is designed for people who wish to acquire and improve their own workplace and human resources skills, specifically with safety programs, organizational wellness initiatives, and assetiveness, time management, and stress management skills. These three-credit courses also apply toward the 64 credits necessary to earn the Human Resources associate degree.

#### **Certificate Completers will be able to**

- Examine the impact of organizational health and wellness programs and initiatives.
- Analyze various organizational approaches to implementing health and wellness programs and the decision processes utilized.
- Analyze the financial impact of organizational health and wellness programs.
- Measure compliance with all federal, state, local and company safety and health regulations and policies.
- Use effective human relations techniques with regards to safety.
- Organize employee orientation/training programs.
- Organize safety inspections.
- Minimize the risk of chemical, physical, ergonomic and biological hazards in the workplace.
- Develop personal skills strategies in relation to the workplace.
- Demonstrate emotional intelligence appropriate for the workplace.

#### Curriculum

CATALOG NO. 10-809-198 10-116-110	DESCRIPTION Intro to Psychology Organizational Health and Well	CREDITS 3 3
10-196-136	Safety-Workplace	3
10-196-164	Supervisors-Personal Skills CERTIFICATE TOTAL	3 <b>12</b>

• Use principles of motivation and learning.

Completers will be able to apply credits toward the following programs:

• 101161, Human Resources

#### **Requirements for Certificate Entry:**

• High school diploma or equivalent.

#### Note

Please note that enrollment in some courses requires an Academic Skills Assessment (Accuplacer) with appropriate benchmark scores. See course descriptions for detail; equivalent assessment scores are acceptable. To learn more about these assessments and benchmark scores, please contact a counselor at (920) 498-5444 or (888) 385-6982.

#### **COURSE DESCRIPTIONS**

10-809-198 Intro to Psychology...survey of theoretical foundations of human behavior such as sensation and perception, motivation, emotions, learning, personality, psychological disorders, therapy, stress, and human diversity in personal, social and vocational settings. (Prerequisite: Accuplacer-Sentence Skills= 60 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 10-838-105, Intro to Reading & Study Skills or 10-831-103, Intro to College Writing w/ a "C" or better OR equivalent)

10-116-110 Organizational Health/ Wellness...introduces the student to the concepts involved in organizational wellness programs and the impact from a financial and human asset standpoint. Learners will research wellness programs, develop proposed systems for district-based organizations, and calculate projected cost savings from the implementation of these programs. Insurance principles will also be examined by the learner.

10-196-136 Safety-Workplace...safety awareness, federal/state/local compliance, inspections, risk analysis, workplace violence, substance abuse, health hazards, first aid, CPR, fire and electrical safety, and emergency preparedness.

10-196-164 Supervisors-Personal Skills...time management and personal planning, emotional intelligence, effective communication, assertiveness and stress management related to the challenges of a supervisor.

For more information, please contact: The Business & Information Technology Department, (920) 498-5435 or (800) 422-NWTC, extension 5435, or contact Enrollment Services at 888-385-NWTC.

## **Description**

A Legal Assistant or Paralegal is a person qualified by education, training, or work experience who is employed or retained by a lawyer, law office, corporation, governmental agency, or other entity who performs specifically designated substantive legal work for which a lawyer is responsible. Paralegals are not authorized to practice law. Paralegals perform work under the supervision of a lawyer in a variety of settings. A graduate may be employed by a private law firm, insurance company, corporation, bank, private business, legal clinic, government agency, legal aid office, law department, special interest group, public defender's office, prosecutor's office, service company, or consulting firm.

# **Certificate Completers will be able to**

- Communicate effectively orally and in writing within the context of a legal environment.
- Work collaboratively while demonstrating professionalism, individual initiative and responsibility.
- Apply ethical principles and critical thinking skills to solve problems in a legal environment.
- Effectively organize legal information.
- Conduct accurate, effective and efficient legal research using both traditional and computerized research techniques.
- Generate work product in various fields of law, using computer software applications typical in a modern legal environment.

## **Requirements for Certificate Entry:**

- Bachelor's degree or higher from an accredited institution (transcript to be submitted with enrollment form).
- Ability to use Microsoft Word and Windows proficiently.

### **Credentials**

The Paralegal Program is approved by the American Bar Association (ABA) and is also a member of the American Association for Paralegal Education. American Bar Association 541 North Fairbanks Ct. Chicago, IL 60611 Phone: (312) 988-5617

#### Note

- Paralegal Intro/Legal Ethics, 10-110-101, is a corequisite for 10-110-XXX courses in the Post Baccalaureate Certificate only. Legal Research, 10-110-104, is a prerequisite for Legal Writing, 10-110-105, and Civil Litigation 1, 10-110-102, is a prerequisite for Civil Litigation 2, 10-110-103, in the Paralegal Post Baccalaureate Certificate.
- The American Bar Association (ABA) requires each learner to take a minimum of four legal specialty courses in a live, synchronous "real time" format (face-to-face). NWTC requires you to take Civil Litigation 1 (10-110-102), and three other legal specialty courses of your choice, from NWTC in a live, synchronous, "real time" format (face-to-face).

NWTC has designated the following courses as legal specialty courses:

- 10-110-102, Civil Litigation 1
- 10-110-103, Civil Litigation 2
- 10-110-106, Law-Family

#### Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-110-101	Paralegal Intro/Legal Ethics	3
10-110-102	Civil Litigation 1	3
10-110-104	Legal Research	3
10-110-105	Legal Writing	3
Choose three selec	ctive courses from the list below:	
10-110-115	Administrative Law	3
10-110-103	Civil Litigation 2	3
10-110-165	Contracts & Insurance Law	3
10-110-122	Creditor/Debtor Relations	3
10-110-160	Employment Law	3
10-110-114	Estates and Probate	3
10-110-106	Family Law	3
10-110-169	Indian Law	3
10-110-162	International Law and Immigration	3
10-110-168	Paralegal Criminal Procedures	3
10-110-110	Real Estate Law	3
	CERTIFICATE TOTAL	21

#### CURRICULUM NOTE

10-110-106, Law-Family is offered only in the fall.
10-110-110, Real Estate Law is offered only in the spring.
10-110-114, Estates and Probate is offered only in the fall.
10-110-115, Administrative Law is offered only in the fall.
10-110-122, Creditor/Debtor Relations is offered only in the spring.
10-110-160, Law-Employment is only offered in the fall.
10-110-162, International Law & Immigration is offered only in the spring.
10-110-165, Contracts and Insurance Law is offered only in the spring.
10-110-168, Paralegal Criminal Procedures is offered only in the spring.
10-110-169, Indian Law is offered only in the fall.

Course Sequence for Students Starting in the Fall

#### **SEMESTER ONE: 12 CREDITS**

10-110-101 Paralegal Intro/Legal Ethics 10-110-104 Legal Research 10-110-XXX Selective Course 10-110-XXX Selective Course

#### SEMESTER TWO: 9 CREDITS 10-110-102 Civil Litigation I

10-110-105 Legal Writing 10-110-XXX Selective Course

Course Sequence for Students Starting in the Spring

#### **SEMESTER ONE: 12 CREDITS** 10-110-101 Paralegal Intro/Legal Ethics

10-110-101 Paralegal Intro/Legal Ethi 10-110-104 Legal Research 10-110-102 Civil Litigation I 10-110-XXX Selective Course

# **SEMESTER TWO: 9 CREDITS** 10-110-105 Legal Writing

10-110-XXX Selective Course 10-110-XXX Selective Course

- 10-110-107, Legal Aspects/Business Org
- 10-110-110, Real Estate Law
- 10-110-114, Estates and Probate
- 10-110-115, Administrative Law
- 10-110-122, Creditor/Debtor Relations
- 10-110-160, Law-Employment
- 10-110-162, International Law & Immigration
  10-110-165, Contracts and Insurance Law
- 10-110-168, Paralegal Criminal Procedures
- 10-110-169, Indian Law

# **COURSE DESCRIPTIONS**

10-110-102 Civil Litigation 1...civil procedure in state and federal courts, the litigation process with emphasis on the paralegal function in investigating and gathering information, and preparing pleadings and motions. (Prerequisite FOR PROGRAM ONLY: 10-110-101, Paralegal Intro/Legal Ethics with a "C" or better. Corequisite FOR CERTIFICATE ONLY: 10-110-101, Paralegal Intro/Legal Ethics)

10-110-103 Civil Litigation 2...civil litigation including discovery, settlement, trial, and appellate procedure. (Prerequisites: 10-801-136, English Composition 1; 10-110-101, Paralegal Intro/Legal Ethics with a "C" or better; 10-110-102, Civil Litigation 1)

10-110-115 Administrative Law... the paralegal's role in preparation and representation of cases before administrative agencies, structure and authority of administrative agencies, procedures, and substantive state and federal administrative law. (Prerequisite FOR PROGRAM ONLY: 10-110-101, Paralegal Intro/Legal Ethics with "C" or better. Corequisite FOR CERTIFICATE ONLY: 10-110-101, Paralegal Intro/Legal Ethics)

10-110-165 Contracts and Insurance Law... explore contract formation, breach of contract, defenses to contract, parol evidence rule, statue of frauds, and warranties. Examine insurance law including insurable interests, insurer's duty to defend, subrogation, and bad faith claims. (Prerequisite FOR PROGRAM ONLY: 10-110-101, Paralegal Intro/Legal Ethics with "C" or better. Corequisite FOR CERTIFICATE ONLY: 10-110-101, Paralegal Intro/Legal Ethics)

10-110-114 Estates and Probate...
property classification; property ownership; succession; wills: modification, revocation, drafting, execution; client contact; probate courts; trust classification; estate planning; ethics; personal representatives; formal probate; summary proceedings; informal probate. (Prerequisite FOR PROGRAM ONLY: 10-110-101, Paralegal Intro/Legal Ethics with "C" or better. Corequisite FOR CERTIFICATE ONLY: 10-110-101, Paralegal Intro/Legal Ethics)

10-110-169 Indian Law...Wisconsin Indians, tribal sovereignty, federal/Indian relations, tribal governments, tribal courts, treaty making, removal/reservation life, assimilation, reorganization, termination, self-determination, gaming, and other contemporary issues. (Prerequisite FOR PROGRAM ONLY: 10-110-101, Paralegal Intro/Legal Ethics with "C" or better.

Corequisite FOR CERTIFICATE ONLY:

10-110-101, Paralegal Intro/Legal Ethics)

10-110-162 Intl Law and Immigration... develop the knowledge, skills, process and understanding of international law and immigration including international organizations, treaties and courts; student and worker visas; citizenship, residency and removal; and legal systems throughout the world. (Prerequisite FOR PROGRAM ONLY: 10-110-101, Paralegal Intro/Legal Ethics with "C" or better. Corequisite FOR CERTIFICATE ONLY: 10-110-101, Paralegal Intro/Legal Ethics)

10-110-160 Law-Employment...analyze federal and state laws governing employment relationships, job discrimination, sexual harassment, work place privacy, labor standards, and human resource management. (Prerequisite FOR PROGRAM ONLY: 10-110-101, Paralegal Intro/Legal Ethics with "C" or better. Corequisite FOR CERTIFICATE ONLY: 10-110-101, Paralegal Intro/Legal Ethics)

10-110-107 Legal Aspects/Business Org... formation, operation, and dissolution of types of business organizations, and substantive and procedural law involving business organizations. (Prerequisite FOR PROGRAM ONLY: 10-110-101, Paralegal Intro/Legal Ethics with "C" or better. Corequisite FOR CERTIFICATE ONLY: 10-110-101, Paralegal Intro/Legal Ethics)

10-110-168 Paralegal Criminal Proc... substantive and procedural criminal law, the role of paralegals in both the prosecution and defense of criminal actions, emphasis on investigations and preparation of legal documents. (Prerequisite FOR PROGRAM ONLY: 10-110-101, Paralegal Intro/Legal Ethics with "C" or better. Corequisite FOR CERTIFICATE ONLY: 10-110-101, Paralegal Intro/Legal Ethics)

10-110-110 Real Estate Law...law of real property, forms of ownership, land description methods, public and private encumbrances, real estate contracts, deeds, financing sources, title evidence, and the closing process. (Prerequisite FOR PROGRAM ONLY: 10-110-101, Paralegal Intro/Legal Ethics with "C" or better. Corequisite FOR CERTIFICATE ONLY: 10-110-101, Paralegal Intro/Legal Ethics)

10-110-122 Creditor/Debtor Relations...legal rights of creditors and debtors, collection of outstanding debts, execution of judgments, small claims court, bankruptcy procedures, and filing bankruptcy petitions and schedules. (Prerequisite FOR PROGRAM

ONLY: 10-110-101, Paralegal Intro/Legal

Ethics with "C" or better. Corequisite

FOR CERTIFICATE ONLY: 10-110-

101, Paralegal Intro/Legal Ethics)

10-110-106 LAW-FAMILY ...this course is designed to familiarize the student with basic legal concepts involved in the area of family relations. The primary emphasis will be in the field of divorce. (Prerequisite FOR PROGRAM ONLY: 10-110-101, Paralegal Intro/Legal Ethics with "C" or better. Corequisite FOR CERTIFICATE ONLY: 10-110-101, Paralegal Intro/Legal Ethics)

10-110-104 Legal Research...research terminology; sources of law; primary/ secondary authority; mandatory/persuasive authority; citation form; factual/legal issues; effective research strategies; validating and updating results; computer-assisted legal research; Internet research. (Prerequisite FOR PROGRAM ONLY: 10-110-101, Paralegal Intro/Legal Ethics with a "C" or better. Corequisite FOR CERTIFICATE ONLY: 10-110-101, Paralegal Intro/Legal Ethics)

10-110-105 Legal Writing...process writing; writing fundamentals; proofreading; inhouse documents; legal correspondence; analytical writing; synthesizing cases/authorities; briefing cases; legal memoranda; persuasive writing; drafting pleadings, motions, legal briefs; drafting discovery documents. (Prerequisites: 10-801-136, English Composition 1; 10-110-101, Paralegal Intro/Legal Ethics with a "C" or better; 10-110-104, Legal Research)

10-110-101 Paralegal Intro/Legal Ethics...introduction to the legal profession: ethics, court system, legal research, and roles of the paralegal.

For more information, please contact: The Business & Information Technology Department, (920) 498-5435 or (800) 422-NWTC, extension 5435, or contact Enrollment Services at 888-385-NWTC.

# Parametric Modeling Certificate Certificate Number 906062

#### **Description**

The Parametric Modeling Certificate introduces the student to 3D parametric modeling using SolidWorks software and Autodesk Inventor. Topics covered include extruded, revolved, swept and lofted features, fully dimensioned orthographic drawings of models, special drawing views, surfacing and Autodesk Inventor.

## **Certificate Completers will be able to**

Create parametric models, assemblies and twodimensional drawings using SolidWorks software.

Completers will be able to apply credits toward the following programs:

• 106061, Mechanical Design

#### Curriculum

CATALOG NO. 10-614-113 10-614-136 10-606-166 10-606-162 10-606-165 10-606-164 10-606-163	DESCRIPTION 2D Essentials 3D Modeling with Inventor SolidWorks Loft/Surface SolidWorks Fundamentals SolidWorks Sheet Metal SolidWorks-Assemblies/Drawings SolidWorks-Intermediate CERTIFICATE TOTAL	CREDITS  2  1  1  1  1  1  8
	CERTIFICATE TOTAL	8

## **Requirements for Certificate Entry:**

• Competency in Windows Operating System.

#### **COURSE DESCRIPTIONS**

10-614-113 2D Essentials... an introduction to technical communication, annotation, geometric construction, model, orthographic and pictorial, section and auxiliary views and dimensioning.

10-614-136 3D Modeling with Inventor... develop the knowledge and skills, to create Solid Models using Autodesk Inventor; creating and editing 3D drawings; rapid prototyping; manipulating data.

10-606-166 SolidWorks Loft/Surface... necessary to create and manipulate lofted and surface component parts using SolidWorks software. Course content includes lofting, sweeping complex contours, and surfaces. (Prerequisite: 10-606-163, SolidWorks-Intermediate)

10-606-162 SolidWorks Fundamentals... terminology, software operation and interface, creating basic models, casting and forging models. (Corequisite: 10-606-119, Sketching-Technical OR 10-614-113 2D Essentials; familiarity with Windows file management)

10-606-165 SolidWorks Sheet Metal...create and manipulate sheet metal parts using SolidWorks software. Course content includes basic sheet metal commands, forming tools, sheet metal drawings, designing sheet metal parts in the flat state, and top-down sheet metal assemblies. (Prerequisite: 10-606-164, SolidWorks Assembly/Drawing)

10-606-164 SolidWorks-Assemblies/ Draw...manipulate configurations, create assemblies, and create dimensioned orthographic drawings using SolidWorks software. (Prerequisite: 10-606-163, SolidWorks Intermediate)

10-606-163 SolidWorks-Intermediate... creating and manipulating intermediate models using SolidWorks software. Course content includes models requiring the use of revolved and swept features, equations, and thin walled parts. (Prerequisite: 10-606-162, SolidWorks Fundamentals)

#### For more information, please contact:

The Trades & Engineering Technologies Department, (920) 498-5461 or (800) 422-NWTC, extension 5461, or contact Enrollment Services at 888-385-NWTC.

# Personal Care Worker Certificate Certificate Number 905013

## **Description**

Emphasizes aspects of providing personal and supportive/ rehabilitative in-home and facility based health care including client's rights, communication, rehabilitation, positioning and transfer skills, infection control, and safety. This is a 34-hour in person course combining lecture with laboratory practice of learned skills. All skill competencies will be assessed under the guidance of a registered nurse.

## **Certificate Completers will be able to**

- Display a caring attitude toward ill clients and their families
- Be flexible, empathetic, and nonjudgmental
- Be emotionally stable
- Adjust to diverse personalities, backgrounds, and home environments

#### **Curriculum**

CATALOG NO. DESCRIPTION CREDITS
30-501-100 Personal Care Worker 1
CERTIFICATE TOTAL 1

#### **Requirements for Certificate Entry:**

- Well developed interpersonal communication skills
- Effective problem-solving skills

#### Note

Special Features

This course allows students to learn the course content through written course work and by practicing skills learned with the guidance of an instructor. The course emphasizes core abilities for the workplace.

#### **COURSE DESCRIPTIONS**

30-501-100 Personal Care Worker... emphasizes aspects of providing personal and supportive/rehabilitative in-home and facility based health care including clients' rights, communication, rehabilitation, positioning and transfer skills, infection control, and safety. This is a 34-hour, in-person course combining lecture with laboratory practice of learned skills. All skill competencies will be assessed under the guidance of a registered nurse.

#### For more information, please contact:

The Health Sciences Department, (920) 498-5543 or (800) 422-NWTC, extension 5543, or contact Enrollment Services at 888-385-NWTC.

#### **Description**

The Phlebotomy Certificate teaches blood-collecting techniques that include venipuncture, and skin punctures to provide samples necessary for lab analysis. Students also learn techniques and procedures needed to assist with various lab procedures, including specimen processing. The phlebotomist must recognize any conditions that might alter collections, correlate types of lab tests to the written diagnosis, and communicate with both the laboratory and the patients to provide the best care possible and assure specimen integrity.

### **Certificate Completers will be able to**

- Collect blood samples by venous and capillary techniques.
- Use methods that comply with OSHA Needlestick Safety Standards.
- Process and prepare specimens for testing.
- Take a national exam to become a certified Phlebotomy Technician.

## **Requirements for Certificate Entry:**

- High School Diploma or equivalent.
- As a requirement for certificate entry, an Academic Skills Assessment (Accuplacer) with appropriate benchmark scores or ACT individual scores of Math: 15, Reading: 20, English: 20 is necessary. Program Benchmarks are: Reading Comprehension: 75; Arithmetic: 65; Sentence Skills: 84. Remediation options are available to reach scores. Equivalent assessment scores are acceptable. To learn more about these assessments and program benchmark scores please contact a Counselor, (920) 498-5444 or (888) 385-6982 ext. 5444.

#### **Wisconsin Caregiver Law**

NWTC is required to comply with the Wisconsin Caregiver Law (1997 WISCONSIN ACT 27). The completion of a caregiver background check includes the review of criminal records for convictions of serious crimes or a history of improper behavior. Students accepted into this program must complete a background check through www.CertifiedBackground.com. Information regarding this process is provided to students immediately upon acceptance into the program. Students with a criminal history may be denied access to placement at the discretion of the clinical or practicum site. Consequently, should a student have a history of convictions of serious crimes or a history of improper behaviors, NWTC cannot guarantee clinical/practicum placement or guarantee graduation within typical program timing.

#### Note

A maximum of 16 students will be accepted to the Certificate in each Spring and Fall semester.

# **Clinical Experience**

- Students will be required to purchase a uniform, pay for liability insurance, provide their own transportation to assigned sites, and cover any other expenses related to clinical experiences. Students may be required to travel distances.
- Students are required to complete an American Heart Association Health Care Provider CPR course prior to clinical experiences.
   Students are required to maintain a current CPR card on a one-year renewal cycle to comply with affiliating agency requirements.
- Students are required to submit immunization documentation. A fee is charged for this service. Additional information will be provided upon acceptance into the certificate.
- Students must complete a caregiver background check. A fee is charged for this service. Additional information will be provided upon acceptance into the certificate.
- Students are required to attend a clinical orientation prior to initiating the clinical experience.

#### Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
*10-513-110	Basic Lab Skills	1
31-801-386	Communicating Effectively	1
10-501-107	Introduction to Health Care Co	2
*31-509-309	Medical Law, Ethics & Profess	2
*10-501-101	Medical Terminology	3
*10-513-111	Phlebotomy	2
*10-513-155	Phlebotomy Clinical	3
	CERTIFICATE TOTAL	14

#### **CURRICULUM NOTE**

No final grade lower than a "C" is acceptable in any course marked with an asterisk (\*). A student may repeat that particular course to achieve a "C" or better final grade in order to continue in or complete this certificate.

- Student must take Phlebotomy Clinical within one year of completing Basic Lab Skills and Phlebotomy.
- Students will be required to show proof of an annual flu vaccine.

#### **PETITION TO CLINICAL**

- Students submitting the Petition to Clinical must have completed or be enrolled in all clinical pre-requisite course work.
- Students wishing to complete Phlebotomy Clinical in the summer semester must submit a petition to the Health Sciences Department by March 30th.
- Students wishing to complete Phlebotomy Clinical in the fall semester must submit a petition to the Health Sciences Department by April 30th.
- Students wishing to complete Phlebotomy Clinical in the spring semester must submit a petition to the Health Sciences Department by October 31st.

#### **Board/Certification Examinations**

 Certificate completers are eligible to take the Phlebotomy Technician certification examination through the American Society for Clinical Pathology (ASCP).

#### Note

The following courses will transfer into the Medical Laboratory Technician Associate Degree Program:

- 10-513-110, Basic Lab Skills
- 10-513-111, Phlebotomy
- 10-501-101, Medical Terminology

The following courses will transfer into the Medical Assistant Technical Diploma Program:

- 10-501-107, Intro to Healthcare Computing
- 10-501-101, Medical Terminology
- 31-509-309, Medical Law Ethics/Professionalism
- 31-801-186, Communicating Effectively
- 10-513-150, Phlebotomy for Healthcare Personnel may be taken in place of 10-513-111, Phlebotomy.
- Students interested in transitioning into the Medical Laboratory Technician program should complete Oral/Interpersonal Communication in place of Communicating Effectively.

Completers will be able to apply credits toward the following programs:

- 315091, Medical Assistant
- 105131, Medical Laboratory Technician

#### **COURSE DESCRIPTIONS**

10-513-110 Basic Lab Skills...explores health career options and the fundamental principles and procedures performed in the clinical laboratory. Learners will utilize medical terminology and basic laboratory equipment. Learners will follow required safety and infection control procedures and perform simple laboratory tests. (Prerequisite: Accepted into Medical Laboratory Technician program or Phlebotomy certificate)

31-801-386 Communicating Effectively... interpersonal communication, including the function of interpersonal communication, listening techniques, perception, nonverbal communication, language, self-concept, conflict resolution and customer service. (Prerequisite: Accuplacer-Sentence Skills=60 AND Accuplacer-Reading=55 OR ACT-English=16 AND ACT Reading=15 OR 10-831-103, Intro to College Writing with a "C" or better OR 10-838-105, Intro to Reading & Study Skills with a "C" or better OR equivalent)

10-501-107 Intro to Health Care Computing...provides an introduction to basic computer functions and applications utilized in contemporary healthcare settings. Students are introduced to the hardware and software components of modern computer systems.

31-509-309 Medical Law, Ethics & Profess...prepares students to display professionalism and perform within ethical and legal boundaries in the health care setting. Students maintain confidentiality, examine legal aspects of the medical record, perform quality improvement procedures, examine legal and bioethical issues, and demonstrate awareness of diversity.

10-501-101 Medical Terminology...focuses on the component parts of medical terms: prefixes, suffixes, and root words. Students practice formation, analysis and reconstruction of terms. Emphasis on spelling, definition and pronunciation. Introduction to operative, diagnostic, therapeutic and symptomatic terminology of all body systems, as well as systemic and surgical terminology.

10-513-111 Phlebotomy...this course provides opportunities for learners to perform routine venipuncture, routine capillary puncture and special collection procedures. (Corequisite: 10-513-110, Basic Lab Skills)

10-513-155 Phlebotomy Clinical...blood specimen collection and processing in clinical setting. It prepares the learner to take national phlebotomy certification examinations. (Prerequisites: 10-501-101, Medical Terminology; 10-513-110, Basic Lab Skills; 10-513-111, Phlebotomy; 31-509-309, Medical Law, Ethics & Professionalism; 31-801-386, Communicating Effectively; 10-501-107, Intro to Healthcare Computing)

For more information, please contact: For more information, please contact: The Health Sciences Department, (920) 498-5543 or (800) 422-NWTC, extension 5543, or contact Enrollment Services at 888-385-NWTC.

# Plant Engineer Mechanical Maintanence Certificate Certificate Number 904231

### **Description**

The Plant Engineering Mechanical Maintenance Certificate is designed for the person seeking an entry-level position in an industrial environment or additional training in an existing mechanical maintenance position. This certificate is offered at the Marinette Campus only. For more information, please contact the Marinette Campus at (715) 732-3870 or (800) 422-NWTC, extension 3870.

#### **Certificate Completers will be able to**

- Employ the use of measuring devices to industrial standards.
- Demonstrate weight estimation calculations and properly perform rigging operations.
- Identify pipe and pipe fitting types and sizes to industrial standards.
- Remove and install gear drives.
- Perform maintenance of small power tools.

#### **Curriculum**

CATALOG NO.	DESCRIPTION	CREDITS
31-462-305	Mech Maint 1-Safety & Layout	1.4
31-462-306	Mech Maint 2-Rigging & Fastene	1.4
31-462-307	Mech Maint 3-Pipe, Valves & Se	1.4
31-462-308	Mech Maint 4-Mech Systems	1.4
31-462-356	Mech Maint 5-Hydraulics	1.4
31-462-306	Mech Maint 6-Sheetmetal	1.4
	CERTIFICATE TOTAL	8.4

Completers will be able to apply credits toward the following programs:

• 314755, Mechanical Systems

#### **COURSE DESCRIPTIONS**

31-462-305 Mech Maint 1-Safety & Layout...mechanical calculators, instruments, safe shop practices, safety of operation of shop machinery, and layout techniques.

31-462-306 Mech Maint 2-Rigging & Fastenr...mechanical fasteners, rigging and lifting, structural steel.

31-462-307 Mech Maint 3-Pipe, Valves & Se...pipe and pipe fittings, valve types and functions, pumps and packing, and seal.

31-462-308 Mech Maint 4-Mech Systems... mechanical driven systems and bearings.

31-462-356 Mech Maint 5-Hydraulics... pressure controls, directional flow controls, fluids, filters and reservoirs, hydraulic pumps, actuators, positive displacement pumps and troubleshoot pumps.

31-462-306 Mech Maint 6-Sheetmetal... heat treatment of metals, sheet metal, layout, tool maintenance, and repair.

For more information, please contact: The Marinette Campus, (715) 732-3870 or (800) 422-NWTC, extension 3870, or contact Enrollment Services at 888-385-NWTC.

# Plant Healthcare Management Certificate Certificate Number 900015

#### **Description**

The concepts of plant health care management focuses on trees and shrubs; and the management of insects, diseases, and a biotic disorder. Plant health care operations in the private and public sector will be examined as it would function during an actual growing season. Control options and strategies in pest control, soil management, and a biotic disorder will be emphasized. The course is designed for a student to have the foundation knowledge to enter into a plant health care technician position.

### **Certificate Completers will be able to**

- Understand the principles of plant health care management.
- Understand tree biology.
- Apply urban tree maintenance knowledge and application.
- Develop diagnostic and management skills for tree health disorders.
- Manage insects and diseases that affect tree health.
- Know how to manage/control for tree health.

#### Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-001-122	Fundamentals Plant Nutrition	1
10-001-110	Horticulture-Introduction	3
10-001-170	Integrated Pest Management	2
10-001-172	Landscape Maintenance	2
10-001-123	Plant Health Care Management	2
10-001-153	Plant and Soil Science	3
10-001-158	Plant-Woody Ornamental	3
	CERTIFICATE TOTAL	16

- Manage PHC route.
- Maintenance of PHC route client cards.

Completers will be able to apply credits toward the following programs:

• 100014, Landscape Horticulture

#### **COURSE DESCRIPTIONS**

10-001-122 Fundamentals Plant Nutrition...fundamentals of plant nutrition, identification and analysis of the nutritional needs of plants; covers the selection of appropriate materials and application rates & methods. (Prerequisite: 10-001-110, Horticulture-Introduction)

10-001-110 Horticulture-Intro... explore the horticulture industry, plant culture, identification, propagation, physiology, selected aspects of horticulture industry including fruits, vegetables, ornamentals, greenhouse systems, landscape techniques, home gardens, and turf.

10-001-170 Integrated Pest Management... various methods to combat plant pests in an environmentally responsible manner; using biorational techniques and strategies. (Prerequisite: 10-001-110, Intro to Horticulture)

10-001-172 Landscape Maintenance... identifying problems and cultural challenges in the landscape; pruning techniques, insect/disease problems, weed identification; soil fertility; resolve situations in the field. (Prerequisites: 10-001-110, Horticulture-Introduction; 10-001-153, Plant and Soil Science; 10-001-122, Fundamentals of Plant Nutrition)

10-001-123 Plant Health Care Management...management focusing on trees and shrubs in their management of insects, diseases and abiotic disorders, control options and strategies in pest control, soil management. (Prerequisite: 10-001-172 Landscape Maintenance)

10-001-153 Plant and Soil Science... addresses the unique interactions of healthy plants & soils; examines the physical, chemical, organic & biological characteristics of soils and how they impact the structure & functions of plants. (Prerequisite: 10-001-110, Intro Horticulture)

10-001-158 Plant-Woody Ornamental... physiology, culture, identification, and use of primarily temperate woody plant materials appropriate for landscapes in northeastern Wisconsin. (Corequisite: 10-001-110, Horticulture-Intro)

For more information, please contact:

The Trades & Engineering Technologies Department, (920) 498-5461 or (800) 422-NWTC, extension 5461, or contact Enrollment Services at 888-385-NWTC.

# Power Generator Certificate Certificate Number 904121

## **Description**

The Power Generator Certificate is designed for Diesel program students who wish to enhance their degree in specialty areas of servicing and repairing power generators.

#### **Certificate Completers will be able to**

- Service and repair home standby generators.
- Service and repair commercial standby generators.

#### Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-412-108	Internal Combustion Engine Tec	1
10-412-146	Power Generation 1	2
10-412-147	Power Generation 2	2
	CERTIFICATE TOTAL	5

#### **COURSE DESCRIPTIONS**

10-412-108 Inte Combust Eng Tech-Intro to...basic internal combustion (IC) engine types, IC engine classifications and applications, IC engine theory and operation, IC engine construction and careers in IC engine service and repair.

10-412-146 Power Generation 1...this course is designed to familiarize diesel technician students with the basics of home standby and commercial generators. Electrical fundamentals, alternators, permanent magnet generators, circuit breakers, generator switchgear, auto transfer switches and automatic voltage regulators will be covered emphasizing home standby and commercial use generators.

10-412-147 Power Generation 2...this course is designed to familiarize diesel technician students who have already completed Power Generation 1 with the basics of home standby and commercial generators in regard to governor fundamentals, control and monitoring systems, Fuel systems both gaseous and diesel, generator and system grounding, generator applications and interconnection of on-site synchronous generation with electric power system. (Prerequisite: 10-412-146 Power Generation 1)

For more information, please contact Enrollment Services at 888-385-NWTC.

# Professional Sales Certificate Certificate Number 9010412

## **Description**

The Professional Sales Certificate provides students with the consultative selling skills needed to be a successful, professional sales person. Learners who complete this certificate will be able to sell products in both the consumer and business markets as well as gain insight into the responsibilities of sales managers.

## **Certificate Completers will be able to**

- Evaluate customer needs.
- Determine appropriate product/service solutions.
- Create effective sales presentations.
- Uncover and handle objections.
- Provide customer service to build long-lasting relationships.

#### Note

It is recommeded that courses be taken in the order listed.

#### Curriculum

CATALOG NO.	DESCRIPTION CRED	ITS
10-104-154	Professional Sales: Consultative Selling Overview	1
10-104-156	Professional Sales: Strategy/Prep	1
10-104-158	Professional Sales: Approach Strategies	1
10-104-161	Professional Sales: Customer Needs Assessment	1
10-104-163	Professional Sales: Prod Solutions	2
10-104-168	Professional Sales: Negotiating Cust Resistance	1
10-104-167	Professional Sales: Closing Techniques	1
10-104-169	Professional Sales:	
	Building Long-Term Partnerships	1
10-104-189	Sales Mgmt	3
	CERTIFICATE TOTAL	12

#### **COURSE DESCRIPTIONS**

10-104-154 Consultative Selling Overview... an overview of the consultative selling process with focus on delivering value to customers through problemsolving and long-term relationships.

10-104-168 Negotiate Customer Resistance...create a win-win with strategies to uncover customer resistance and apply techniques to overcome objections.

10-104-167 Prof Sales: Closing Techniques...identify, select and apply techniques to effectively close sales.

10-104-161 Prof Sales: Cust Needs Assess... assess customer needs with effective listening techniques and asking the right questions.

10-104-169 Prof Sales: Long Term Partner...utilize post-sale service efforts and communication skills to build long-lasting customer relationships.

10-104-163 Prof Sales: Prod Solutions... develop solutions that meet customer needs and deliver in a smooth and engaging presentation.

10-104-156 Prof Sales: Strategy/Prep... prepare to sell with deep knowledge of the product, industry and competition.

10-104-158 Prof Sales: Approach Strategies... students will learn how to create a good first impression and choose the approach strategy that best fits the selling situation.

10-104-189 Sales Management... sales-force organization, staffing, and operations; recruiting and processing applicants; training programs; motivating; compensation; forecasting and budgeting; territories and routing; quotas; evaluating performance; and decision-making through case study analysis. (Prerequisite: 10-801-136, English Composition 1)

For more information, please contact: The Business & Information Technology Department, (920) 498-5435 or (800)

422-NWTC, extension 5435, or contact Enrollment Services at 888-385-NWTC.

# Promotions & Events Management Certificate Certificate Number 901047

#### **Description**

The Promotions & Event Management Certificate is designed for people who plan, promote, and service meetings, conferences, conventions, entertainment, and other special events. Learners who complete this certificate may become consultants or obtain employment as meeting planners, marketing specialists, sales personnel, convention service managers and event coordinators in lodging and food service operations, casinos, visitor and convention bureaus, a Chamber of Commerce, and nonprofit organizations.

# **Certificate Completers will be able to**

- Conduct a conference or special event.
- Design a promotion plan.
- Implement promotional strategies.

#### Curriculum

CATALOG NO. 10-104-125 10-104-107 10-104-110 10-196-188 10-104-101 10-104-119	DESCRIPTION Event Marketing Marketing Communications-Integ Marketing Principles Project Mgmt Fundamentals Selling Principles Social Media Marketing	CREDITS 3 3 3 3 3 3 3 10
	CERTIFICATE TOTAL	18

Completers will be able to apply credits toward the following programs:

- 101043, Marketing
- 101023, Business Management

#### **COURSE DESCRIPTIONS**

10-104-125 Event Marketing...planning, promotion execution, and evaluation of special events (entertainment, industry, meeting/convention). Students will work toward the actual staging of an event (will require time outside of the classroom setting).

10-104-107 Marketing Comm-Integrated... creating, coordinating and integrating advertising, public relations and marketing activities for a specific customer or audience. A campaign will be developed and presented.

10-104-110 Marketing Principles...marketing management, market segmentation, market research, consumer behavior, product decisions and management of distribution, pricing, promotional decisions for strategy planning.

10-196-188 Project Mgmt Fundamentals... the role of project management, developing a project proposal, demonstration of relevant software, working with project teams, sequencing tasks, charting progress, dealing with variations, budgets and resources, implementation, and assessment.

10-104-101 Selling Principles...selling as a career; success factors in selling; personality development; product knowledge; and the sales process involving preparation, approach, presentation-demonstration, handling objections, and closing the sale successfully.

10-104-119 Social Media Marketing... understand the social media revolution. This course will provide students with the practical knowledge and insights needed to successfully plan, implement, manage and measure social media marketing efforts.

#### For more information, please contact:

# Quality Improvement & Innovation Certificate Certificate Number 901968

#### **Description**

The Quality Improvement & Innovation Certificate is designed for people who are interested in applying specific methods of innovative thinking in order to continuously increase customer value of their products and services. Projects and simulations will be customized to the learner's own work environment and will apply the principles of innovation, quality and continuous improvement, lean thinking, Six Sigma, systems thinking, and project management.

Certificate completers may apply nine credits to the Leadership Development program.

## **Certificate Completers will be able to**

- Demonstrate innovation skills in a workplace environment.
- Apply the tools of continuous quality improvement and lean thinking.

## **Curriculum**

CATALOG NO.	DESCRIPTION	CREDITS
10-196-192	Managing-Quality	3
10-196-188	Project Mgmt Fundamentals	3
10-196-145	Workplace Innovation	3
	CERTIFICATE TOTAL	9

- Understand the principles of Six Sigma and systems thinking.
- Demonstrate project management skills.

Completers will be able to apply credits toward the following programs:

• 101961, Leadership Development

#### **COURSE DESCRIPTIONS**

10-196-192 Managing-Quality... developing a personal philosophy of quality, identifying all stakeholder relationships, meeting/exceeding customer expectations, managing a quality improvement project, measuring effectiveness, lean thinking, Six Sigma, and systems thinking.

10-196-188 Project Mgmt Fundamentals... the role of project management, developing a project proposal, demonstration of relevant software, working with project teams, sequencing tasks, charting progress, dealing with variations, budgets and resources, implementation, and assessment.

10-196-145 Workplace Innovation...use of inventive thinking techniques and innovative methods to improve work processes in multiple workplace environments; research and analyze the use of technology in businesses to promote innovation in the workplace; develop an innovative, entrepreneurial, and intrepreneurial mindset.

#### For more information, please contact:

# Renewable Energy-Solar Electric (Photovoltaic) Certificate Certificate Number 904821

#### **Description**

Explore renewable energy generation systems with a focus on solar electric (photovoltaic) and solar thermal systems.

#### **Certificate Completers will be able to**

- Discuss and promote the benefits of alternative energy systems.
- Assess, design, assemble, install and operate photovoltaic energy systems.
- Collect and distribute data generated by alternative energy systems.

Curriculum			
CATALOG NO.	DESCRIPTION	CREDITS	
10-660-107	AC 1: Properties	1	
10-660-104	DC 1: Introduction	1	
10-660-105	DC 2: Circuits	1	
10-480-101	Energy-Intro Renewable & Susta	4	
10-482-126	Introduction to Solar	4	
10-482-133	Photovoltaics-Advanced	4	
10-482-132	Photovoltaics-Design & Site	3	
	CERTIFICATE TOTAL	18	

#### **COURSE DESCRIPTIONS**

10-660-107 AC 1: Properties...introduction to the properties of capacitors and inductors including types and behavior in switching circuits. Inductor basics include a study of magnetic fields. (Prerequisite: 10-660-105, DC 2: Circuits; Corequisite: 10-804-196, Trigonometry w Apps)

10-660-104 DC 1: Introduction... introduction to the concepts of DC electricity and simple series circuits. Voltage, current, resistance, Ohm's Law, power and Kirchoff's Voltage Law are defined.

10-660-105 DC 2: Circuits...analysis of parallel and series-parallel circuits. Application of Kirchoff's Current Law to parallel circuit combinations. Introduction of current sources and source conversions. (Corequisites: 10-804-118, Interim Algebra w Apps OR equivalent; 10-660-104, DC 1: Intro)

10-480-101 Energy-Intro Renew & Sustain... an overview of various renewable energy technologies and sustainable design practices and their current applications. Emphasis will be placed on policies, renewable energy production, green products and jobs.

10-482-126 Intro to Solar...an overview of the use of sunlight to produce heat and electricity and the practical and economical use of solar power and solar thermal systems. Learn the importance of energy efficiency and the economics of solar hybrid designs.

10-482-133 Photovoltaics-Advanced...topics include batteries, wiring configurations, system diagramming, National Electrical code, component selection, wiring, safety and system maintenance. (Prerequisites: 10-482-126 Intro to Solar; 10-660-104, DC 1: Intro; 10-660-105, DC 2: Circuits; 10-620-107, AC 1: Properties)

10-482-132 Photovoltaics-Design & Site... learn steps to performing a site audit prior to installation of a PV system. Focus on defining the solar window, system site placement, system sizing and design, load analysis and energy efficiency concepts. (Corequisite: 10-482-126, Intro to Solar)

For more information, please contact Enrollment Services at 888-385-NWTC.

# Renewable Energy-Solar Thermal Certificate Number 904822

#### **Description**

Explore renewable energy with a focus on solar thermal systems.

#### **Certificate Completers will be able to**

- Discuss and promote the benefits of renewable energy systems.
- Assess, design and operate solar thermal energy systems.
- Collect and distribute data generated by renewable energy systems.

Completers will be able to apply credits toward the following programs:

• 104824, Solar Energy Technology

#### Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-480-101	Energy-Intro Renewable & Susta	4
10-482-126	Introduction to Solar	4
10-483-107	Solar Thermal Design & Site	3
10-483-108	Solar Thermal-Advanced	4
	CERTIFICATE TOTAL	15

#### **COURSE DESCRIPTIONS**

10-480-101 Energy-Intro Renew & Sustain... an overview of various renewable energy technologies and sustainable design practices and their current applications. Emphasis will be placed on policies, renewable energy production, green products and jobs.

10-482-126 Intro to Solar...an overview of the use of sunlight to produce heat and electricity and the practical and economical use of solar power and solar thermal systems. Learn the importance of energy efficiency and the economics of solar hybrid designs.

10-483-107 Solar Thermal Design & Site...learn steps to performing a site audit prior to installation of a solar thermal system. Focus on defining the solar window, system site placement and sizing, lead analysis and energy efficiency. (Prerequisite: 10-482-126, Intro to Solar)

10-483-108 Solar Thermal-Advanced... topics include safety, system design and layout, component selection, mounting collectors, plumbing and insulation copper pipe, storage tank installation, heat exchanger and circulation pump. (Prerequisite: 10-482-126, Intro to Solar)

#### For more information, please contact:

The Trades & Engineering Technologies Department, (920) 498-5461 or (800) 422-NWTC, extension 5461, or contact Enrollment Services at 888-385-NWTC.

# Service Writer Certificate Certificate Number 906021

#### **Description**

The Service Writer Certificate is designed for people who are interested in working as a Service Writer in a new or used car dealership, truck dealership or an independent vehicle repair shop.

#### **Certificate Completers will be able to**

- Apply current legal regulations governing the vehicle repair industry.
- Apply applicable computer skills.
- Apply professional written and oral communication skills.
- Apply retail and customer service management skills.
- Apply automotive technology and terminology.

#### Note

Enrollment in some courses requires an Academic Skills Assessment (Accuplacer) with appropriate benchmark scores. See course descriptions for detail; equivalent assessment scores are acceptable.

#### **Curriculum**

CATALOG NO. 10-602-107 10-104-191 10-106-145 10-801-196 10-809-199 10-104-101	DESCRIPTION Automotive Service Fundamental Customer Service Keyboarding Oral/Interpersonal Comm Psychology Of Human Relations Selling Principles	2 3 1 3 3 3 3
	CERTIFICATE TOTAL	15

To learn more about these assessments and benchmark scores, please contact a counselor at (920) 498-5444 or (888) 385-6982.

Completers will be able to apply credits toward the following programs:

• 106023, Automotive Technology

#### **COURSE DESCRIPTIONS**

10-602-107 Auto Service Fundamentals... safety and the use of basic hand/power tools in accordance with industry standards. Introduced to the automotive service industry and learn to use both comprehensive and manufacturer's service information to perform basic under-hood and under-car services. (Prerequisite: Accepted into the Automotive Technology and/or Automotive Technician program)

10-104-191 Customer Service...develop professional telephone etiquette, explore customer service work environments, identify and analyze customer service failures, resolve problems cost effectively, set complaint policies, and develop communication techniques to handle complaining customers.

10-106-145 Keyboarding...keyboarding at a personal productivity level, correct posture, touch typing on the alpha-numeric keyboard using an interactive software package running on a microcomputer. No experience required.

10-801-196 Oral/Interpersonal Comm... the communication process, perception and self-concept, language, listening, nonverbal communication, interpersonal relationships, communication in groups and public communication; prepare and deliver an oral presentation. (Prerequisite: Accuplacer- Reading =55 and Accuplacer Sentence Skills=60 OR ACT- Reading =15 and ACT English=16 OR 10-838-105, Intro to Reading & Study Skills or 10-831-103, Intro to College Writing with "C" or better OR equivalent)

10-809-199 Psychology Of Human Relations...decision making, motivation, conflict resolution, learning strategies, growth and adjustment, diversity, psychological theories, relationships, psychological disorders, stress, career analysis, social psychology, and lifespan development. (Prerequisite: Accuplacer-Sentence Skills= 60 AND Accuplacer-Reading =55 OR ACT-English =16 AND ACT Reading =15 OR 10-838-105, Intro to Reading & Study Skills or 10-831-103, Intro to College Writing w/ a "C" or better OR equivalent)

10-104-101 Selling Principles...selling as a career; success factors in selling; personality development; product knowledge; and the sales process involving preparation, approach, presentation-demonstration, handling objections, and closing the sale successfully.

For more information, please contact Enrollment Services at 888-385-NWTC.

# Small Business Bookkeeping Certificate Certificate Number 901011

#### **Description**

This certificate is designed for the person seeking new or additional training in the area of managing the accounting records for a small business. All courses in this certificate are delivered Self-paced, TCA (Technical College of the Air video course), or Online in addition to on-campus classes.

#### **Certificate Completers will be able to**

- Manage accounting records on the computer using Quickbooks software.
- Create spreadsheets.
- Prepare payroll.
- Manage receivables and payables.

#### Note

Enrollment in some courses requires an Academic Skills Assessment (Accuplacer) with appropriate benchmark scores. See course descriptions for detail; equivalent assessment scores are acceptable. To learn more about these assessments and benchmark scores, please contact a counselor at (920) 498-5444 or (888) 385-6982.

Curriculum			
<b>CATALOG NO.</b> 10-101-101	<b>DESCRIPTION</b> Accounting Principles	CREDITS 3	
OR 10-101-110 10-101-105	Accounting 1 Accounting-Computer Ledger	4 2	
10-101-151 10-101-190	Accounting-Payroll Accounting-QuickBooks	3 1	
OR 10-101-189 10-804-123	Accounting-Applying Quickbooks Math w Business Applications	3	
10-103-131 10-103-132	Micro: Excel-Intro Micro: Excel-Part 2	1	
10-103-121	Micro: Word-Intro CERTIFICATE TOTAL	1 15	

Completers will be able to apply credits toward the following programs:

- 101011, Accounting
- 311011, Accounting Assistant

#### **COURSE DESCRIPTIONS**

10-101-101 Accounting Principles... accounting fundamentals, recording of business transactions, preparation of financial statements, cash basis and accrual business accounting for service enterprises, and merchandising businesses with a manual system.

10-101-110 Accounting 1...accounting principles, financial statements, business transactions, accounting cycles/systems, specialized journals, accounting for cash and receivables for sole proprietorships in service or merchandising businesses.

10-101-105 Accounting-Computer Ledger... applications on calculators or keypad such as addition, subtraction, multiplication, division, percent, and computers using Microsoft Excel. (Prerequisites: 10-101-110, Accounting 1 OR 10-101-101, Accounting Principles; 10-103-131, Micro: Excel-Intro; 10-103-132, Micro: Excel-Part 2)

10-101-151 Accounting-Payroll... payroll and personnel records, social security, withholding tax, unemployment compensation, time sheets and time-keeping records, and legal aspects of payroll. (Prerequisite: 10-101-110, Accounting 1 OR 10-101-101, Accounting Principles)

10-101-190 Accounting-QuickBooks...an introductory course in using QuickBooks to create vendor/employee accounts, invoices, budgets, profit/loss statements, balance sheets, A/R, A/P, journals, graphs.

10-101-189 Accounting-Applying Quickbooks...learners will be introduced to basic and advanced features of Quickbooks and will apply skills in realistic business simulations including creating accounts, invoicing, budgeting, preparing statements, journalizing and graphing. (Prerequisite: 10-101-110, Accounting 1)

10-804-123 Math w Business Apps...real numbers; basic operations; proportions/ one variable; percents, simple/compound interest; annuity; apply math concepts to purchasing/buying process, selling process; and basic statistics with business/consumer applications. (Prerequisites: Accuplacer-Arithmetic score=65 or ACT-Math score=15 or 10-834-109, Pre Algebra AND Accuplacer-Reading=55 or ACT-Reading=15 or 10-838-105, Intro to Reading & Study Skills with "C" or better OR equivalent)

10-103-131 Micro: Excel-Intro...creating a worksheet, enhancing worksheet appearance, moving and copying data, using formulas and functions, creating charts and using clip art. Windows experience improves success; consider 10-103-111, Windows/Computer Basics.

10-103-132 Micro: Excel-Part 2...advanced formatting techniques and functions, working with templates, collaborating with multiple Excel users, creating macros, Excel's database features and analysis tools. (Corequiste: 10-103-131, Micro: Excel-Intro)

10-103-121 Micro: Word-Intro...word processing basics including creating, revising, formatting, printing; sections, tabs, multiple-page numbering; manipulating text; creating headers/footers; creating/formatting tables, graphics; and merging documents. Windows experience improves success; consider 10-103-111, Windows/Computer Basics.

For more information, please contact: The Business & Information Technology Department, (920) 498-5435 or (800) 422-NWTC, extension 5435, or contact Enrollment Services at 888-385-NWTC.

# Social Media Marketing Certificate Certificate Number 9010410

## **Description**

The Social Media Marketing Certificate is designed for people who desire to incorporate cutting-edge marketing techniques into an organization's new and existing marketing activities. Learners who understand new media techniques and complete this certificate may become social media planners, project managers, marketing specialists, public relations coordinators, promotional planners, or marketing analysts. Completers can expect to pursue employment in these positions in an extremely wide range of business to consumer (B2C) and business to business (B2B) organizations.

## **Certificate Completers will be able to**

- Define marketing and promotional objectives.
- Create and manage Web Content.
- Utilize Social Media applications to engage customers and build relationships.

#### **Curriculum**

CATALOG NO.	DESCRIPTION	CREDITS
10-104-174	Social Media Analytics	3
10-104-176	Social Media Consumer Behavior	3
10-104-172	Social Media Content Managemen	3
10-104-175	Social Media Engagement Strate	3
10-104-119	Social Media Marketing	3
	CERTIFICATE TOTAL	15

- Build and manage a brand using digital media.
- Utilize analytical tools for measurement and to maximize Return on Investment (ROI).
- Identify consumer behavior as it relates to new media consumption.

#### **COURSE DESCRIPTIONS**

10-104-174 Social Media Analytics... utilize analytical tools to optimize campaign effectiveness to deliver Return on Investment (ROI).

10-104-176 Social Media Consumer Behavior...identify technology trends that impact media usage and its effectiveness. 10-104-172 Social Media Content Mgmt...create and manage web content to engage target audiences that meet marketing objectives.

10-104-175 Social Media Engagement Strat...utilize social media applications such as Facebook or Twitter to retain/grow customers and expand into new markets. 10-104-119 Social Media Marketing... understand the social media revolution. This course will provide students with the practical knowledge and insights needed to successfully plan, implement, manage and measure social media marketing efforts.

#### For more information, please contact:

# Software Level 1 Certificate Certificate Number 901031

#### **Description**

Courses in this certificate are delivered through structured format, online or blended delivery. For a comparison of delivery modes for these classes, visit www.nwtc.edu, click on Ways of Learning, and follow the self-paced links for the Green Bay credit classes.

## **Certificate Completers will be able to**

- Keyboard at 20 wpm using proper technique.
- Use the Windows operating system.
- Create and revise database.
- Create and revise word processing documents.
- Create and revise electronic presentations.
- Create and revise spreadsheets.

Completers will be able to apply credits toward the following programs:

- 101066, Administrative Professional
- 311061, Office Professional

#### **Curriculum**

CATALOG NO. 10-106-145 10-103-141 10-103-131 10-103-151 10-103-111 10-103-121	DESCRIPTION Keyboarding Micro: Access-Intro Micro: Excel-Intro Micro: PowerPoint-Intro Micro: Windows/Computer Basics Micro: Word-Intro CERTIFICATE TOTAL	CREDITS  1 1 1 1 1 1 1 6
	CERTIFICATE TOTAL	6

#### Note

Many of the courses are in several programs or may be used as electives. Completion of each Introductory Office 2010 course assists in preparing you for the Microsoft Office Specialist exam at the Specialist level for that particular software.

#### **COURSE DESCRIPTIONS**

10-106-145 Keyboarding...keyboarding at a personal productivity level, correct posture, touch typing on the alpha-numeric keyboard using an interactive software package running on a microcomputer. No experience required.

10-103-141 Micro: Access-Intro...creating/modifying database tables, compacting a database, managing records, defining table relationships, creating queries, calculations, and aggregate functions, sorting, and using form/report wizards. Windows experience improves success; consider 10-103-111, Windows/Computer Basics.

10-103-131 Micro: Excel-Intro...creating a worksheet, enhancing worksheet appearance, moving and copying data, using formulas and functions, creating charts and using clip art. Windows experience improves success; consider 10-103-111, Windows/Computer Basics.

10-103-151 Micro: PowerPoint-Intro... presentation skills using: graphics, diagrams, design themes, sounds, animations, slide transitions, and integration with other software. Windows experience improves success; consider 10-103-111, Windows/Computer Basics. (Corequisite: 10-103-121, Micro: Word-Intro)

10-103-111 Micro: Windows/Computer Basics...Windows desktop elements, help features, folder and file management (create, delete, move, find file), and Search strategies. Blackboard, internet, and e-mail usage.

10-103-121 Micro: Word-Intro...word processing basics including creating, revising, formatting, printing; sections, tabs, multiplepage numbering; manipulating text; creating headers/footers; creating/formatting tables, graphics; and merging documents. Windows experience improves success; consider 10-103-111, Windows/Computer Basics.

#### For more information, please contact:

# Software Level 2 Certificate Certificate Number 901032

#### **Description**

Courses in this certificate are delivered through structured format, online or blended delivery. For a comparison of delivery modes for these classes, visit www.nwtc.edu, click on Ways of Learning, and follow the self-paced links for the Green Bay credit classes.

## **Certificate Completers will be able to**

- Use advanced word processing features.
- Use advanced spreadsheet features.
- Use advanced database features.
- Create and revise publications.
- Create and revise web pages.

Completers will be able to apply credits toward the following programs:

• 101066, Administrative Professional

## **Curriculum**

CATALOG NO. 10-103-142 10-103-132 10-103-163 10-103-165	DESCRIPTION Micro: Access-Part 2 Micro: Excel-Part 2 Micro: Expression Web Micro: Publication Software	CREDITS  1 1 1 1
10-103-165	Micro: Publication Software Micro: Word-Part 2 CERTIFICATE TOTAL	1 5

#### Note

Many of the courses are in several programs or may be used as electives. Completion of each Part 2 Office 2010 course assists in preparing you for the Microsoft Office Specialist exam at the Expert level for that particular software.

#### **COURSE DESCRIPTIONS**

10-103-142 Micro: Access-Part 2...creating advanced queries, custom forms, multipage forms, custom reports, pivot tables, pivot charts, and labels. (Corequisite: 10-103-141, Micro: Access-Intro)

10-103-132 Micro: Excel-Part 2...advanced formatting techniques and functions, working with templates, collaborating with multiple Excel users, creating macros, Excel's database features and analysis tools. (Corequisite: 10-103-131, Micro: Excel-Intro)

10-103-163 Micro: Expression Web...create a website, customize, manage pages and images; create interactive forms using CSS style sheets; publish web pages to a web server. Windows experience improves success; consider 10-103-111, Windows/Computer Basics.

10-103-165 Micro: Publication Software... create and edit newsletters, brochures, flyers, forms, business cards, emails, e-commerce websites, and other business publications using publication layout software. Windows experience improves success; consider 10-103-111, Windows/Computer Basics.

10-103-122 Micro: Word-Part 2... advanced word processing features including working with headers/footers, inserting quick parts, themes, styles, sort and select; footnotes/endnotes, images, shapes, shared documents; specialized tables and indexes; forms; and sharing data. (Corequisite: 10-103-121, Micro: Word-Intro)

#### For more information, please contact:

# Special Education Certificate Certificate Number 905224

## **Description**

The Special Education Certificate is a twelve-credit certificate designed in conjunction with the Instructional Assistant Associate Degree. The Special Education certificate is applicable for both new learners and people currently working in the field with persons with exceptionalities. Courses provide an overview to special education and persons with exceptionalities, practical classroom strategies to support learning for a variety of disability areas as well as techniques for guiding and managing behavior. Courses are delivered online.

## **Certificate Completers will be able to**

- Model inclusion and classroom strategies.
- Create learning support materials for teachers.
- Develop social skills and peer relationships.
- Support student transitions.
- Work with children with behavior challenges.

#### Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-522-111	IA: Guiding and Managing Behav	3
10-522-107	IA: Overview of Special Educat	3
10-522-109	IA: Special Education: Educati	3
10-522-124	IA: Support Students with Disa	3
	CERTIFICATE TOTAL	12

- Discuss causes and characteristics of students with a variety of exceptional needs.
- Participate in individualized education program (IEP) meetings.
- Work with students with exceptional needs.

Completers will be able to apply credits toward the following programs:

• 105222, Instructional Assistant

#### **COURSE DESCRIPTIONS**

10-522-111 IA: Guiding & Mnging Behavior...proactive, preventive classroom management, research-based concepts and strategies used to prevent behavior problems, creating positive classroom climate, building student relationships, enhancing motivation, responding to inappropriate behavior will be emphasized.

10-522-107 IA: Overview of Special Ed... overview of the Special Education Law; special education classifications and associated causes and characteristics will be explored as well as state and federal qualification criteria will be examined. Societal responses to students with disabilities as well as the impact of a student with special needs on family dynamics will also be covered in this course.

10-522-109 IA: Special Ed: Educate Child...learners support communication, social, physical, occupational, transition and community needs of students with exceptionalities. Inclusive classroom strategies, differentiating instruction, working with challenging students, and creating teacher learning support materials. (This course requires 10 hours of observation in a special education classroom).

10-522-124 IA: Support Students w Disab...services delivered to students with special education needs, supportive and related services, law, individual educational programs, various instructional formats, and alternative instructional techniques and programs. (Corequisite: 10-522-107, IA: Overview of Special Education)

#### For more information, please contact:

The Community & Regional Learning Services Department, (920) 498-6255, or (800) 422-NWTC, extension 6255, or contact Enrollment Services at 888-385-NWTC.

# Supervision Certificate Certificate Number 901961

# **Description**

The Supervision Certificate is designed for people who wish to acquire and improve their skills in a modern leadership role. These three-credit courses also apply toward the 66 credits necessary to earn the Leadership Development associate degree. Courses are offered in alternative delivery formats.

# **Certificate Completers will be able to**

- Analyze the role and duties of a supervisor.
- Handle interpersonal conflict.
- Create a motivating environment.
- Analyze the characteristics of an effective leader.
- Facilitate effective meetings.

# **Curriculum**

CATALOG NO.	DESCRIPTION	CREDITS
10-196-193	Human Resource Mgmt	3
10-196-191	Supervision	3
10-196-189	Team Building/Prob Solve	3
	CERTIFICATE TOTAL	9

- Hire, train, and coach employees.
- Utilize fact-based problem solving.

Completers will be able to apply credits toward the following programs:

• 101961, Leadership Development

#### **COURSE DESCRIPTIONS**

10-196-193 Human Resource Mgmt... impacts of EEOC, writing job descriptions, recruitment, selection, conducting job interviews, orientation, developing policies and procedures, training, performance, counseling and development, and compensation and benefit strategies.

10-196-191 Supervision...front-line leadership including teamwork, setting goals, planning, delegation, controlling, communication, motivation, performance management, staffing, training, problem solving, and conflict management.

10-196-189 Team Building/Prob Solve... benefits and challenges of group work, necessary roles in a team, stages of team development, meeting facilitation, different approaches to problem solving, consensus, data acquisition, analysis, developing alternative solutions, implementation and evaluation.

#### For more information, please contact:

# Supply Chain Management Certificate Certificate Number 901825

# **Description**

The Supply Chain Management Certificate is designed for a person seeking introductory or advanced positions with a carrier or shipper. Courses are offered on an accelerated and interactive television basis and apply towards the associate degree in Supply Chain Management.

# **Certificate Completers will be able to**

- Utilize terminology in the area of transportation.
- Apply methodologies and techniques to process flow of goods.
- Integrate the area of supply chain management for low total cost and improved service.
- Optimize utilization of modes of transportation.
- Utilize computerized applications of logistics.

Completers will be able to apply credits toward the following programs:

• 101821, Supply Chain Management

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CATALOG NO.	DESCRIPTION	CREDITS
10-182-120	Enterprise Resource Plan/Contr	3
10-182-162	Import/Export Compliance	3
10-182-110	Lean Operations Management	3
10-182-157	Logistics/Supply Chain Managem	3
10-182-131	Negotiations	3
10-182-127	Purchasing	3
	CERTIFICATE TOTAL	18

# **Requirements for Certificate Entry:**

• Previous work experience in transportation, logistics, or supply chain management areas is preferred, but not required.

### **COURSE DESCRIPTIONS**

10-182-120 Enterprise Resource Plan/ Cont...enterprise resource planning (ERP), benefits of ERP implementation in an organization, business process alignment, value chain process, technology and international considerations, successful change management, and ERP project management. (Prerequisite: 10-801-136, English Composition 1)

10-182-162 Import/Export Compliance... develop import/export-related documentation, examine import/export controls and licenses, and explore import/export related security. Examine compliance requirements related to importing/exporting goods in support of global operations and in response to case studies. (Prerequisite: 10-182-160, Global Supply Chain Management)

10-182-110 Lean Operations Mgmt... lean operating concepts, total quality management, Six Sigma methodologies, continuous improvement tools/techniques, process mapping, 5S principles, statistical process control/pull signals, cellular manufacturing, mixed-model production, human resource development.

10-182-157 Logistics/Supply Chain Mgmt...integrated logistics supply chain, dimensions of logistics and supply chain management, demand management and customer service, procurement and supply management, global logistics, inventory management, warehousing, transportation and third-party logistics.

10-182-131 Negotiations...techniques and skills used in bargaining to maximize a company's profits and competitiveness. Appropriate for learners in any Business and Information Technology program as well as for non-program students. (Prerequisite: 10-801-136, English Composition 1)

10-182-127 Purchasing...role of purchasing in business, industry, and the community; legal and ethical aspects of purchasing including systems, staffing, price/cost analysis, contract administration, and dealing with vendors.

#### For more information, please contact:

# Supporting Children's Learning Certificate Certificate Number 905221

# **Description**

This certificate is designed to further the professional development needs of anyone preparing for, or already engaged in, an instructional assistant or educational paraprofessional position. The coursework in this certificate program addresses methods for assisting in the instruction, guidance, and classroom management of students by performing a variety of instructional support activities related to grade level curriculum. Integrating current technology into the learning environment is also introduced. All courses transfer to the Instructional Assistant Associate Degree.

# **Certificate Completers will be able to**

- Summarize the important components of each step of the writing process.
- Use scaffolding to increase student independence.
- Describe ways to create healthy classroom environments conducive to learning.
- Demonstrate the inquiry process in science.

# Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-522-111	IA: Guiding and Managing Behav	3
10-522-118	IA: Techniques for Math	3
10-522-120	IA: Techniques for Science	3
10-522-102	IA: Techniques/Reading/Languag	3
10-522-104	IA: Technology/Media Resources	3
	CERTIFICATE TOTAL	15

- Prepare an instructional bulletin board.
- Develop a learning center.
- Use a gradebook software program.

Completers will be able to apply credits toward the following programs:

• 105222, Instructional Assistant

#### **COURSE DESCRIPTIONS**

10-522-111 IA: Guiding & Mnging Behavior...proactive, preventive classroom management, research-based concepts and strategies used to prevent behavior problems, creating positive classroom climate, building student relationships, enhancing motivation, responding to inappropriate behavior will be emphasized.

10-522-118 IA: Techniques for Math... techniques for the Instructional Assistant in assisting the classroom teacher in group and individual tutoring activities in math; current practice including manipulatives, problem solving and assessment will be covered within the framework of state and national standards.

10-522-120 IA: Techniques for Science... introduction to the content and processes of science. Strategies of teaching science will be studied and practiced and will prepare you in assisting the classroom teacher in group and individual activities in science. Current science processes, strategies, procedures, assessment options and factors affecting science learning will be explored.

10-522-102 IA: Techniques/Readg/Lang Art...focus on best practices in working with children in their development of reading and language arts as well as the roles of the teacher and the instructional assistant. The student will gain an understanding of how to work with all children and reinforce instruction individually and in groups through questioning, listening and guiding, and scaffolding techniques. Current classroom materials plus enrichment and support activities will be examined and created.

10-522-104 IA: Technology/Media Rsrces... develop knowledge and skills in the area of media and computer resources as it relates to the instructional assistant. Students will gain experience creating and using web tools including electronic portfolios.

For more information, please contact: The Community & Regional Learning Services Department, (920) 498-6255, or (800) 422-NWTC,

extension 6255, or contact Enrollment Services at 888-385-NWTC.

# Organic Agriculture Practices Certificate Certificate Number 900901

### **Description**

Discover the skills, science and art of producing crops, livestock and foods using organic and sustainable principles. Create a new business, transition toward organic, become certified, join a growing field.

### **Certificate Completers will be able to**

- Apply organic systems principles to their farm or land.
- Appraise and manage soil health.
- Practice organic animal husbandry.
- Apply organic practices to field crops and horticultural crops.
- Create a simple agricultural business plan, with marketing options.
- Evaluate alternative crops and livestock.
- Compose an on-going operation and management plan for an enterprise.
- Plan the transition of a conventional enterprise into an organic one.
- Complete forms necessary to document organic or conservation program status.
- Access financial, technical and service program resources.
- Model a balanced sustainable-organic ag system.

#### Note

- Earn credentials that show your expertise to lenders, employers or customers.
- Learn how to manage a farm or test the feasibility of your product or business idea.

### Curriculum

<b>CATALOG NO.</b> 10-090-116 10-090-106 OR	<b>DESCRIPTION</b> Organic Soils, Nutrients, Comp Organic Specialty Animals	<b>CREDITS</b> 3 1
10-090-128 OR	Managed Grazing	2
10-090-120 OR	Organic Livestock Practices	2
10-090-113 10-090-103 OR	Organic Poultry Mgmt Organic Field Crops	1 1
10-090-122 OR	Fruits, Nuts, Berries	1
10-090-121 10-090-134 OR	Organic Gardening Sustainable Ag & Food Business	2
10-090-135 10-090-111 OR	Edible Landscape, Permaculture Sustainable Ag: Issues & Pract	2 2
10-090-117	World Food & Agriculture CERTIFICATE TOTAL	2 10

• Choose individual courses or the complete series, based on your needs.

Completers will be able to apply credits toward the following programs:

• 10-090-3, Sustainable Food and Agriculture Systems

### **COURSE DESCRIPTIONS**

10-090-116 Org Soils, Nutrients, Compost... Healthy soil is the foundation of sustainable farming and gardening. Build robust soil through organic matter, cultivating beneficial microorganisms, and nutrient cycling. Explore composting techniques and organic fertilizer sources.

10-090-106 Org Specialty Animals... Compare sustainable agricultural production methods for sheep, goats, hogs, and horses. Do individual research and evaluate production practices and ideas. Create a budget; determine if an enterprise is feasible.

10-090-128 Managed Grazing... examine pasture plants and livestock in a rotational grazing system. Build a fence. Evaluate watering systems, fertilizers, yields and environmental impacts. Meet experienced graziers. Create a grazing plan and budget.

10-090-120 Organic Livestock Practices... students learn how organic farmers manage livestock successfully. Principles covered include organic health care, strategies for reproduction, feeding, housing, and young stock. Review rules and organic certification standards.

10-090-113 Organic Poultry Mgmt... explore poultry for backyards or commercial enterprises. Create feed rations, housing plans, processing plans and budgets. Compare organic and conventional management.

10-090-103 Organic Field Crops... Evaluate organic practices for fertilizing, planting, weed and pest control in corn, soybeans and small grains. Create an organic transition plan, qualify for certification. Evaluate yields, markets, rotations, and cover crops.

10-090-122 Fruits, Nuts, Berries...explore practices used by sustainable, organic and conventional farmers of these crops. Discussion of what works, costs, and how one can grow a saleable product and run a viable enterprise.

10-090-121 Organic Gardening...whether gardening on a small scale or using commercial greenhouses and fields, plan seedings, control pests, diseases, and weeds, all using best organic practices. Review rules and organic certification standards.

10-090-134 Sustainable Ag & Food Business...define your goals. Research expenses and potential income for a small food-related enterprise. Outline a budget. Compare markets. Develop a brand identity. Review financial terminology. Draft a business plan. 10-090-135 Edible Landscape, Permaculture...design an edible landscape for your homestead, no matter its size or location. Use permaculture concepts of zones, layers, energy flow, water features, perennial plants, beauty, recycling, compost, and self-sufficiency.

10-090-111 Sustainable Ag: Issues & Pract... use critical thinking skills to compare organic & sustainable agricultural practices with industrial agriculture. Explore food production issues including antibiotics, herbicides, hormones, GMOs, animal welfare, crop yields, nutrients, and pollution.

10-090-117 World Food & Agriculture... explore the climate, soils, and food of other ecosystems and cultures around the world. Examine the relationships between people and the diversity of their land, food, animals and local traditions.

For more information, please contact Enrollment Services at 888-385-NWTC.

# Therapeutic Massage Certificate Number 905371

### **Description**

The Therapeutic Massage certificate offers an entry-level training program for individuals interested in becoming a licensed massage therapist, or for existing health care professionals looking to enhance their range of clinical skills and knowledge. During their training, students will gain a comprehensive understanding of the human body and a high degree of professional technical skill with an emphasis on personal and professional development, increased self-awareness and sensitivity. Career opportunities for licensed massage therapists exist in sports clinics, salons, spas, wellness or other health care centers, or as an entrepreneur.

# **Certificate Completers will be able to**

- Use effective and professional communication skills.
- Think critically.
- Apply universal safety and sanitation techniques related to a massage facility
- Apply assessment criteria of diverse clients in order to adapt massage to specialized populations.
- Apply appropriate therapeutic massage techniques according to a client's demonstrated needs.
- Demonstrate the knowledge of human anatomy, pathology, and kinesiology in massage practice.
- Educate clients on post-massage care.
- Practice personal wellness techniques in order to maintain a healthy lifestyle.
- Develop and manage a business plan in order to generate professional income.
- Demonstrate the ability to work ethically with others in a diverse population.
- Demonstrate knowledge of Wisconsin state laws and administrative rules governing massage therapy and bodywork therapy.
- Practice within the scope of a licensed massage therapist within the State of Wisconsin.

### **Curriculum**

30-537-101       Therapeutic Massage 1       3         30-537-102       Therapeutic Massage 2       3         10-546-105       Wellness Kinesiology & Patholo       4	CATALOG NO. 10-806-177 30-537-112	DESCRIPTION Gen Anatomy & Physiology Massage Clinic and Business Pr	CREDITS 4 3
10-546-105 Wellness Kinesiology & Patholo 4			3
CERTIFICATE TOTAL 20		,	4 20

### **Requirements for Certificate Entry:**

 Complete an American Heart Association Health Care Provider CPR course. Students are required to maintain a current CPR card to comply with affiliating agency requirements.

### **Board/Certification Examinations**

Individuals completing the Therapeutic Massage certificate will be able to sit for the National Certification Examination for Therapeutic Massage and Bodywork. Upon graduation and successful completion of the national exam, students can apply to the Wisconsin Department of Regulation and Licensing to sit for the state exam.

#### Note

Please note that enrollment in some courses requires an Academic Skills Assessment (Accuplacer) with appropriate benchmark scores. See course descriptions for detail; equivalent assessment scores are acceptable. To learn more about these assessments and benchmark scores, please contact an advisor at (920) 498-5444 or (888) 385-6982.

# **Requirements for Program Application**

Applicants must have completed General Anatomy & Physiology (10-806-177) with a grade "C" or better.

### **COURSE DESCRIPTIONS**

10-806-177 Gen Anatomy & Physiology... overview of the human anatomy/physiology using a body-systems approach, emphasizing the interrelationships between form/ function at the gross and microscopic levels. (Prerequisite: Accuplacer-Reading = 80 OR ACT-Reading = 17 OR 10-838-105, Intro to Reading and Study Skills AND 10-806-134, Gen Chem or other labbased chemistry w "C" or better. Health Sciences programs may require a higher grade; refer to your plan for details.)

30-537-112 Massage Clinic & Business Prac...provides students the opportunity to be involved in all aspects of running a massage clinic. In the business section, topics covered include: ethics and legal requirements, national and state certification and licensing requirements; business startup and management; marketing and financial management. (Prerequisite: 30-537-102, Therapeutic Massage 2)

30-537-111 Specialized Therapeutic Massag...students will develop techniques, including neuromuscular and proprioceptive, for treatment of special populations such as athletes, mother and infant, elderly, end-of-life, and chronic pain. Students will have exposure to modalities and spa therapies, eastern and energetic approaches. (Prerequisite: 30-537-102, Therapeutic Massage 2)

30-537-101 Therapeutic Massage 1... students will learn the history of massage, the environmental considerations and equipment necessary to provide treatment, hygiene and safety, and legal requirements of therapeutic massage. Students will begin hands on training by mastering foundational skills such as draping and positioning, self-care and body mechanics, and basic massage techniques. (Corequisite: 10-546-105, Wellness Kinesiology & Pathology)

30-537-102 Therapeutic Massage 2... Students will develop skills in assessment, medical terminology, record keeping and documentation necessary to provide therapeutic massage. Students will expand their knowledge of massage techniques to include myofascial and deep tissue. Students will begin their clinical experience on assigned dates. Students must hold a current American Heart Association Health Care Provider CPR card.(Corequisite: 10-546-105, Wellness Kinesiology & Pathology)

10-546-105 Wellness Kinesiology...this course studies the musculoskeletal system and major muscle groups and their response to movement and exercise. Also introduces disorders that can occur in major body systems and their signs and symptoms. (Prerequisite: 10-806-177, General Anatomy & Physiology with a "B" or better)

For more information, please contact: The Health Sciences Department, (920) 498-5543 or (800) 422-NWTC, extension 5543, or contact Enrollment Services at 888-385-NWTC.

# Utility Management Certificate Certificate Number 901969

# **Description**

The Utility Management certificate is designed for people who are interested in pursuing a management position within the electrical power distribution and gas utility fields. Appropriate candidates are currently working in the utility industry or are pursuing a credential in the utility field. The courses in this certificate emphasize an understanding of the utility business, supervision skills, team facilitation and team concepts, personal tools for time and stress management, assertiveness and how to manage a project effectively.

Certificate completers may apply 12 credits of this certificate to the Leadership Development program.

# **Certificate Completers will be able to**

- Demonstrate an understanding and appreciation of the utility industry.
- Apply the skills of the supervisor/manager.
- Demonstrate team facilitation and team building skills.

### **Curriculum**

CATALOG NO. 10-196-188 10-196-191 10-196-164 10-196-189	DESCRIPTION Project Mgmt Fundamentals Supervision Supervisors-Personal Skills Team Building/Prob Solve	3 3 3 3 3
10-196-189	Team Building/Prob Solve	3
10-469-101	Utility Management Overview CERTIFICATE TOTAL	3 <b>15</b>

- Develop time management, assertiveness and stress management skills.
- Demonstrate project management skills.

Completers will be able to apply credits toward the following programs:

• 101961, Leadership Development

#### **COURSE DESCRIPTIONS**

10-196-188 Project Mgmt Fundamentals... the role of project management, developing a project proposal, demonstration of relevant software, working with project teams, sequencing tasks, charting progress, dealing with variations, budgets and resources, implementation, and assessment.

10-196-191 Supervision...front-line leadership including teamwork, setting goals, planning, delegation, controlling, communication, motivation, performance management, staffing, training, problem solving, and conflict management.

10-196-164 Supervisors-Personal Skills...time management and personal planning, emotional intelligence, effective communication, assertiveness and stress management related to the challenges of a supervisor.

10-196-189 Team Building/Prob Solve... benefits and challenges of group work, necessary roles in a team, stages of team development, meeting facilitation, different approaches to problem solving, consensus, data acquisition, analysis, developing alternative solutions, implementation and evaluation.

10-469-101 Utility Management Overview...demonstrate understanding and appreciation of the utility business. Learn about the vision, mission, purpose of public utilities. Organization and management, marketing and competition, delivery of utility services, accounting, finance, rates.

For more information, please contact: The Business & Information Technology Department, (920) 498-5435 or (800) 422-NWTC, extension 5435, or contact Enrollment Services at 888-385-NWTC.

# Vineyard Management Certificate Certificate Number 903201

# **Description**

Learn year-round vineyard operations and how to establish and maintain vineyards through online classes and field practicums.

# **Certificate Completers will be able to**

- Manage vineyard workers.
- Maintain records of vineyard operation activities.
- Monitor the vineyard for grape diseases, insects, fungus, weeds, and other pests.
- Practice IPM (Integrated Pest Managment).

Completers will be able to apply credits toward the following programs:

• 103201, Vineyard Management (Viticulture)

# **Curriculum**

CATALOG NO.	DESCRIPTION	CREDITS
10-320-101	Intro to Viticulture	3
10-320-122	Botanical Viticulture	4
10-320-102	Winter Viticulture Technology	2
10-320-103	Spring Viticulture Technology	2
10-320-104	Summer/Fall Viticulture Techno	2
10-320-106	Integrated Pest Management	2
	CERTIFICATE TOTAL	15

# **Requirements for Certificate Entry:**

• Must be at least 21 years old.

### **COURSE DESCRIPTIONS**

10-320-101 VIN111-Intro to Viticulture... learn about viticulture and vineyard establishment. Topics include: cultivar selection, site preparation, equipment, site selection, first season establishment, vine development and training, trellis systems, weed control, vine disease control, and pruning. Students partner with approved vineyards for field experience.

10-320-122 VIN112-Botanical Viticulture... This course is a survey of the plant kingdom, including plant cells and tissues, the ecology, morphology, physiology and life cycles of representative plants of each division. It will also focus communication on grapevine biology, vine structures and their functions.

10-320-102 VIN113-Winter Viticulture Tech...practical experience in winter vineyard operations. Students partner with approved vineyards for required field experience which will serve as work experience for those seeking employment in commercial viticulture. (Prerequisite: VIN 111, Introduction to Viticulture and Vineyard Establishment or permission)

10-320-103 VIN114-Spring Viticulture Tech...practical experience in spring vineyard operations. Students are required to partner with approved vineyards for field experience which will serve as work experience for those seeking employment in commercial viticulture. (Prerequisite: VIN 111, introduction to Viticulture and Vineyard Establishment or permission.)

10-320-104 VIN115-Sum/Fall Vit Tech... practical experience in summer/fall vineyard operations. Students are required to partner with approved vineyards for field experience which will serve as work experience for those seeking employment in commercial viticulture. (Recommendation: VIN 111, Introduction to Viticulture and Vineyard Establishment or consent of the instructor or VIN 113, Winter/Spring Viticulture Technology)

10-320-106 VIN211-Integrated Pest Mgmt...learn how to manage normal cultural practices such as planting, fertility, harvesting, and pruning as well as managing the insect, disease, and weed programs that occur either regularly or sporadically.

For more information, please contact: The Trades & Engineering Technologies Department, (920) 498-5461 or (800) 422-NWTC, extension 5461, or contact Enrollment Services at 888-385-NWTC.

# Web Application Programming Certificate Certificate Number 901522

### **Description**

Web Application Programming is designed for individuals interested in developing database skills necessary to integrate web technologies. All credits from this certificate can be applied to meet requirements in the Web Development associate degree program.

# **Certificate Completers will be able to**

- Develop, build, and configure a dynamic and interactive website or application.
- Create a database design and effective interface to support a web application.
- Understand the infrastructure required to support a robust website or application.

Completers will be able to apply credits toward the following programs:

- 101522, Web Development
- 311523, Web Application Programming Technician

### Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-150-144	IT:Network:Operating Sys Fund	3
10-154-125	IT:Web:Database Development	3
10-152-184	IT:Web:Programming-SQL	3
10-152-183	IT:Web:Scripting-ASP.Net	3
10-152-180	IT:Web:Scripting-JavaScript	3
10-152-182	IT:Web:Scripting-PHP	3
10-152-185	Website Coding	3
	CERTIFICATE TOTAL	21

# **Requirements for Certificate Entry:**

- A strong computer background.
- A minimum keyboarding skill of 30 WPM.

#### **COURSE DESCRIPTIONS**

10-150-144 IT:Network:Operating Sys Fund...installation of Windows client, Windows Server and Linux Server operating systems. Basic networking topologies and protocol fundamentals. Application installation including Simple Mail Transport Protocol, File Transfer Protocol, and Web server technologies.

10-154-125 IT:Web:Database Development... database uses, database terminology, analyzing information requirements, data models, database design phases, entity relationships, normalization processes, database management systems, database objects, development environments, creating tables, writing queries using SQL, testing.

10-152-184 IT:Web:Programming-SQL... write queries in a relational database: creating tables, setting primary/foreign keys, populating tables, manipulating data and reporting. Explore join types, stored procedures, functions, and database administration SQL statements. (Prerequisite: 10-154-125, IT:Web:Database Development)

10-152-183 IT:Web:Scripting-ASP.Net... build interactive, database-driven websites with ASP.NET and C# with Visual Studio, handling web form events, using ASP.NET controls, designing master pages, managing state, and interacting with databases with ASP.NET data-bound controls. (Prerequisites: 10-154-125, IT:Web:Database Development; 10-152-180, IT:Web:Client Script-Javascript)

10-152-180 IT: Web: Scripting-JavaScript... integrate JavaScript into interactive HTML5 pages, create user-defined functions, complete form validation, use objects within the Document Object Model, debug code, and test browser compatibility. (Prerequisite: 10-152-185, Website Coding)

10-152-182 IT:Web:Scripting-PHP...use PHP, MySQL, HTML5, CSS3 and Apache to create standards based websites. PHP is used to connect to a MySQL database and retrieve site content. PHP is also used to organize the HTML5. (Prerequisite: 10-154-125, IT:Web:Database Development)

10-152-185 Website Coding...create code for generating the structure, function, and design of static websites using standards-based HTML5 and CSS3; validate code; test multi-browser and multi-device functionality.

# For more information, please contact:

# Web Design Certificate Certificate Number 901352

# **Description**

The Web Design Certificate will provide learners the ability to develop websites by learning how to design and code functional graphics, interfaces, navigation, page formatting, and styles. The student will also learn to upload and manage websites and test website usability. All credits from this certificate can be applied to meet requirements in the Web Development Associate Degree program.

# **Certificate Completers will be able to**

- Design and develop dynamic websites.
- Code website formatting styles.
- Develop interactive web graphics.
- Create functional website navigation.
- Test website usability.
- Upload and manage websites.

Completers will be able to apply credits toward the following programs:

# Curriculum

CATALOG NO. 10-111-101 10-135-155 10-135-150 10-152-185 10-135-151	DESCRIPTION Macintosh-Image Editing Web Content Management Systems Web Graphic Design Website Coding Website Design CERTIFICATE TOTAL	CREDITS 3 3 3 3 3 45
	CERTIFICATE TOTAL	15

- 101522, Web Development
- 311522, Web Design Technician Technical Diploma

# **Requirements for Certificate Entry:**

- A strong computer background.
- Minimum typing speed of 30 wpm.

### **COURSE DESCRIPTIONS**

10-111-101 Macintosh-Image Editing... (Adobe Photoshop + Adobe Acrobat) scanning, editing, color correcting and creating composite montage photographs. Prepare images for publication in print. An introduction to manipulating bitmap images.

10-135-155 Web Content Management Sys...(WordPress CMS) install, configure and customize using themes and plugins. Analyze security, user management, blog usage and mobile development. Develop using HTML5, CSS3, PHP and MySQL. (Prerequisite: 10-135-150, Web Graphic Design)

10-135-150 Web Graphic Design... (Adobe Photoshop) design and prepare graphics for the web including graphics for backgrounds, rollover effects, navigation, and badges. Also includes techniques for optimization and transparency. (Prerequisites: 10-111-101, Macintosh Image Editing; 10-152-185, Website Coding)

10-152-185 Website Coding...create code for generating the structure, function, and design of static websites using standards-based HTML5 and CSS3; validate code; test multi-browser and multi-device functionality.

10-135-151 Website Design...(Adobe Dreamweaver) use standards based HTML5 and CSS3 to design, develop and deploy websites; including: browser compatibility, FTP, forms, multi-media, RSS, and site management. (Prerequisite: 10-135-150, Web Graphic Design; 10-804-133, Math & Logic)

#### For more information, please contact:

# Weld Inspection Certificate Certificate Number 904425

# **Description**

The Weld Inspection Certificate prepares students to understand destructive and nondestructive methods used to inspect weldments as determined by required code.

# **Certificate Completers will be able to**

- Conduct visual, destructive and nondestructive tests.
- Read documents governing weld inspection, terminology, geometry, weld symbols and applicable code.

#### Note

This certificate will prepare learners to take the AWS/Certified Weld Inspector Examination.

With additional education and/or work experience, certificate holders may find other opportunities for employment as:

### Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
30-442-387	Weld Inspection Code	2
30-442-385	Weld Inspection Fundamentals 1	2
30-442-386	Weld Inspection Practical I	1
	CERTIFICATE TOTAL	5

- Certified Weld Inspectors.
- State Registered Welder.
- Certified Welder.
- This course requires the purchase of the most current version of the AWS D1.1 Code. Please check with the NWTC Bookstore for pricing.

#### **COURSE DESCRIPTIONS**

30-442-387 Weld Inspection Code...Weld specification interpretation; visual inspection techniques; procedure/welder qualification; destruction and nondestructive examination of welds; and use of inspection tools.

30-442-385 Weld Inspection Fundamentals 1...documents governing inspection, joint geometry, terminology, welding and NDT symbols; mechanical/chemical properties of metals; welding, brazing, and cutting process; weld/base metal discontinuities; destructive and nondestructive testing.

30-442-386 Weld Inspection Practical I...Weld specification interpretation; visual inspection techniques; procedure/ welder qualification; destruction and nondestructive examination of welds; and use of inspection tools.

For more information, please contact Enrollment Services at 888-385-NWTC.

# Winemaking Certificate Certificate Number 903202

# **Description**

Learn beginning winemaking skills for yourself or to become a winery employee.

# **Certificate Completers will be able to**

- Make wine.
- Identify wine faults.
- Analyze wine and grape juice.

Completers will be able to apply credits toward the following programs:

• 103202, Winemaking (Enology)

# **Requirements for Certificate Entry:**

• Must be at least 21 years old.

### Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-320-121	VIN105-Molecular Principles in	4
10-320-109	VIN146-Introduction to Enology	3
10-320-112	VIN210-Intro to Wine Microorganisms	3
10-320-117	VIN266-Sensory Evaluation	3
10-320-116	VIN268-Wine and Must Analysis	3
	CERTIFICATE TOTAL	16

### **COURSE DESCRIPTIONS**

10-320-121 VIN105-Molec Prin Grape/ Wine...emphasis on chemical fundamentals of winemaking. This course includes organic, biochemistry, and applications with a focus on the grape and wine industry.

10-320-109 VIN146-Intro to Enology... learn the basic science and technology of winemaking. Make wine from a kit, track fermentation, make various chemical measurements and provide one bottle of finished wine for evaluation. (Students must be 21 years of age to enroll in this course.)

10-320-112 VIN210-Intro to Wine Microorgs...learn about the variety of microorganisms frequently encountered in the wine-making process both beneficial and harmful including identification, physiology, morphology, and biochemistry of various wine microorganisms.

10-320-117 VIN266-Sensory Evaluation... develop an understanding of the principles of sensory evaluation used in commercial wine making. Students will utilize sensory kits and workshops to further sensory evaluation skills and techniques. Students must be 21 years of age to enroll in this course. (Prerequisite: VIN 146, Introduction to Enology or permission)

10-320-116 VIN268-Wine/Must Analysis... analysis regarding grape juice and wine are chosen for laboratory exercises and demonstrate various chemical, physical, and biochemical methods. Students will participate in workshops and hands-on experiences at participating wineries. (Prerequisites: VIN146, Intro to Enology; CHM105, or permission.)

#### For more information, please contact:

The Trades & Engineering Technologies Department, (920) 498-5461 or (800) 422-NWTC, extension 5461, or contact Enrollment Services at 888-385-NWTC.

# Winemaking-Advanced Certificate Certificate Number 903203

# **Description**

Students will learn advanced wine-making skills with an opportunity for an internship at a local winery.

# **Certificate Completers will be able to**

- Make wine on a commercial scale.
- Practice sanitary winery operation.
- Operate winery machinery.
- Understand general legal concepts relating to creation and operation of a winery.

Completers will be able to apply credits toward the following programs:

• 103202, Winemaking (Enology).

Curr	icu	lum

CATALOG NO.	DESCRIPTION	CREDITS
10-320-123	Intro to Winery Law	3
10-320-123	Winery Sanitation	3
	,	-
10-320-111	Winery Equipment Operation	2
10-320-113	Intermediate Enology	2
10-320-114	Fall Wine Production Intern	3
10-320-115	Cellar Operations Technology	2
	CERTIFICATE TOTAL	15

### **COURSE DESCRIPTIONS**

10-320-123 VIN 200-Intro to Winery Law...this course will explain general legal concepts, outline business formation and operation concepts, discuss governmental agencies and regulation and describe legal issues and areas specifically related to the operation of a winery.

10-320-110 VIN148-Winery Sanitation... covers methods used for sanitizing the premises, tanks, pumps, filters, oak barrels, and sampling equipment, including chemical agents, reagents, and thermal treatments leading to sterile bottling. Environmental issues and compliance also addressed. (Recommendation: VIN 146, Introduction to Enology or permission)

10-320-111 VIN160-Winery Equip Operation...overview of winemaking including operations and equipment, barrel aging and management, membrane separation processes, workplace safety, and specialized contacting, cleaning, sanitation, process control, refrigeration, air conditioning, humidity, electrical, wastewater, solid waste handling systems. (Recommendation: VIN 146, Introduction to Enology or permission)

10-320-113 VIN246-Intermediate Enology... the science and technology of winemaking intended for experienced intermediate winemaker or winery employee interested in career development, or advanced home winemaker seeking new challenges. Basic organic chemistry, microbiology, and some mathematics familiarity are recommended. (Prerequisite: VIN 146, Introduction to Enology or permission)

10-320-114 VIN257-Fall Wine Prod Intern... hands-on instruction for the individual anticipating a career in the wine industry who has completed major course sequences. Experience an intense level of practical and realistic winery operation during crush season. (Prerequisites: VIN146, Intro to Enology; VIN148, Winery Sanitation; VIN160, Winery Equipment; VIN246, Intermediate Enology, or permission)

10-320-115 VIN259-Cellar Ops Technology...get onsite experience learning techniques associated with finished wine production. Learn wine transfer, wine fining, cold stabilization, wine clarification, blending of wines, and bottling. (Prerequisite: VIN257, Wine Production Internship or permission)

### For more information, please contact:

The Trades & Engineering Technologies Department, (920) 498-5461 or (800) 422-NWTC, extension 5461, or contact Enrollment Services at 888-385-NWTC.

# Woodturning Certificate Certificate Number 903061

### **Description**

Students in the new woodturning courses will have the opportunity to learn new skills or expand their knowledge in the area of safe lathe operation, wood stock selection, spindle turning, bowl turning, design, form and balance, banding of pieces of wood together, and bowl finishing. In addition, students will be exposed to principles of business skill development as they apply to the creative economy and setting up a business as a craftsperson.

# **Certificate Completers will be able to**

- Select appropriate wood stock and prepare it for turning on a lathe.
- Explore wood lathe accessory equipment as it relates to product development.
- Demonstrate safety behaviors and best practices in woodturning.

### Curriculum

CATALOG NO.	DESCRIPTION	CREDITS
10-306-100	Woodturning 1: Introduction	3
10-306-101	Woodturning 2: Basic	3
10-306-102	Woodturning 3: Intermediate	3
10-306-103	Woodturning 4: Advanced	3
	CERTIFICATE TOTAL	12

- Produce wooden spindles and bowls.
- Evaluate finished products for design, form, balance, and the marketplace.
- Develop strategies for rough log and wood blank selection.
- Appropriately sand and finish turned items.

### **COURSE DESCRIPTIONS**

10-306-100 Woodturning 1: Introduction... course provides the opportunity for the learner to develop the knowledge, skills, and processes of motivation, safety policies, woodturning stock, wood lathe, accessory equipment, cutting tools, catch/dig-in cuts, spindle turning setup, and product development.

10-306-101 Woodturning 2: Basic... woodturning lathe, shop safety practices, woodturning stock, cutting tools, bandsaw, sharpening, chucking, bowl turning setup and product development. (Prerequisite: Woodturning 1: Introduction, 10-306-100)

10-306-102 Woodturning 3: Intermediate... turning bowls, tool use, wood blanks, rough-turning profile, rough-hollowing, completing the profile, completing the inside, completing the base, sanding, and finishing the product. (Prerequisite: Woodturning 2: Basic, 10-306-101)

10-306-103 Woodturning 4: Advanced... safety/shop arrangements, product choices, equipment use, wood selection, gluing, spindle turning, faceplate turning, sanding/finishes, and overview of American Association of Woodturners and the marketplace. (Prerequisite: Woodturning 3: Intermediate, 10-306-102)

For more information, please contact: The NWTC Artisan and Business Center, (920) 544-5018, or contact Enrollment Services at 888-385-NWTC.