



## Additions to the 2017-2018 NMC Catalog

The information contained in this catalog addendum is provided as an update and in addition to the Academic Catalog effective April 2017.

### Program Updates:

#### New Certificate!

- **Certificate Name: Culinary Arts – Baking – Certificate of Achievement – Level I**
  - **NMC Code: 037**

#### Correction to Computer Studies – Assistant Developer – Certificate of Achievement – Level I:

- The NMC code should be **095**.

#### Correction to Computer Studies – Assistant Web Developer – Certificate of Achievement – Level I:

- The NMC code should be **053**.

#### Correction to Computer Studies – Associate Web Developer – Certificate of Achievement – Level II:

- The NMC code should be **054**.

#### Correction to Office Administration – Certificate of Achievement – Level II:

- The NMC code should be **044**.

#### Correction to Welding Technology – Certificate of Achievement – Level II:

- The NMC code should be **038**.

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### New Courses:

#### **ANI 101 – Elementary Anishinaabemowin I.....4.0 (4)**

*Recommended prerequisite(s): You will need to read, write, listen and speak in Anishinaabemowin. You will need a minimal ability using technology to take advantage of outside of class requirements.*

This course represents a comprehensive introduction to the Anishinaabemowin language for the true beginner. Students will develop the ability to communicate in Anishinaabemowin in everyday practical situations while acquiring some of the necessary skills for reading, writing, listening, and speaking. Cultural topics are integrated into each unit. **Group 2 course.** (5/3/2017)

#### **ANI 102 – Elementary Anishinaabemowin II.....4.0 (4)**

*Required prerequisite(s): ANI 101 with a minimum grade of 2.0 or instructor permission*

*Recommended prerequisite(s): You will need to read, write, listen and speak in Anishinaabemowin. You will need a minimal ability using technology to take advantage of outside of class requirements.*

ANI 102 is a continuation of ANI 101 and focuses on the expansion of the communication skills of reading, writing, listening, and speaking. Cultural topics are integrated into each unit. **Group 2 course.** (5/3/2017)

**MFG 219 – CNC Mill Operations.....4.0 (5)**

*Required prerequisite(s): MFG 113 with a minimum grade of 2.0 or industry experience*

*Recommended prerequisite(s): Print reading, precision measurement, basic machining knowledge and skills, competencies in Communications equal to ENG 99/ENG 108 and math equal to MTH 23. Students will greatly benefit from having competency up to MTH 111.*

This course includes the operation of CNC (Computer Numerical Control) mills including calling up programs, loading and unloading parts, part inspection, and monitoring tool wear. This course will provide an introduction to planning and writing programs for CNC mills and using standard G and M codes. Learners will set up work pieces in machines, enter programs, set tool offsets, enter work offsets, and complete part projects. **Group 2 course.** (7/31/17)

**PHL 203 – Environmental Ethics.....3.0 (3)**

*Recommended prerequisite(s): Completion of ENG 11/111 or placement into ENG 111*

Environmental Ethics is an introduction to the major approaches to environmental ethics, including anthropocentrism, biocentrism, deep ecology, and ecofeminism, as well as several others based on both Western and non-western philosophical and religious traditions. Since environmental ethics draws on a variety of disciplines, some of the perspectives presented will draw heavily on scientific arguments which emphasize methods based on reason, logic, objectivity, and repeatability. Other perspectives will draw on intuition, emotion, imagination, artistic, historic, and religious views, as well as everyday experience. A variety of perspectives will be examined for the purpose of both forming and informing one's own environmental ethic. **Group 1 course.** (5/8/17)

**RUS 100 – Intro to Russian Lang/Culture.....4.0 (4)**

This class includes both classroom work in Russian language and culture as well as excursions and cultural experiences in Russia. The cultural component is designed to provide students with a context through which they will be able to understand and process new cultural information. Students will gain practical language skills that will be utilized during the time in Russia. The approach is interdisciplinary and will include units on economics, politics, history, music, architecture, and literature. **Group 2 course.** (3/17/2017)

**WPT 111 – Welding Theory I.....3.0 (3)**

*Co-requisite: WPT 112*

First level lecture for all students enrolled in a Welding Technology Degree or Certificate Program. Course will cover theory and technique for Shielded Metal Arc Welding, Gas Metal Arc Welding, and Oxy Fuel Processes for welding, brazing, and cutting. **Group 2 course.** (3/20/2017)

**WPT 112 – Welding Lab I.....4.0 (8)**

*Co-requisite: WPT 111*

First level lab for all students enrolled in a Welding Technology Degree or Certificate Program. Course will cover theory and technique for Shielded Metal Arc Welding, Gas Metal Arc Welding, and Oxy Fuel Processes for welding, brazing, and cutting. Welds will be performed in all positions and subjected to destructive quality testing. **Group 2 course.** (3/20/2017)

**WPT 113 – Welding Theory II.....3.0 (3)**

*Required prerequisite(s): WPT 111*

*Co-requisite: WPT 114*

Second level lecture for all students enrolled in a Welding Technology Degree or Certificate Program. Course will cover theory and technique for Pulsed Gas Metal Arc Welding, Flux Cored Arc Welding, Gas Tungsten Arc Welding, and Arc Cutting Processes. **Group 2 course.** (6/20/2017)

**WPT 114 – Welding Lab II.....4.0 (8)**

*Required prerequisite(s): WPT 111 and WPT 112*

*Co-requisite: WPT 113*

Second level lab for all students enrolled in a Welding Technology Degree or Certificate Program. Practical application of Shielded Metal Arc Welding, Pulsed Gas Metal Arc Welding, Gas Tungsten Arc Welding and Arc Cutting Processes. Welds will be performed in all positions and subjected to destructive quality testing. **Group 2 course.** (6/20/2017)

**WPT 211 – Welding Fabrication I.....3.0 (5)**

*Required prerequisite: WPT 113 and WPT 114*

First level fabrication class for all students enrolled in a Welding Technology A.A.S. program. Students will learn to apply manufacturing principles and techniques in order to complete assemblies to print specifications. Proper use of common industrial tools and machinery, including CNC cutting table, will be stressed. **Group 2 course.** (6/20/2017)

**WPT 212 – Welding Fabrication II.....3.0 (5)**

*Required prerequisite: WPT 211 and WPT 260*

Second level fabrication class for all students enrolled in a Welding Technology A.A.S. program. Students will take control of a fabrication project from the planning to finishing stages. Emphasis on design, project planning, and efficient execution. **Group 2 course.** (6/20/2017)

**WPT 213 – Weld Quality Testing.....3.0 (5)**

*Required prerequisite: WPT 211*

Class to cover theory and practical use of common methods of non-destructive examination. Processes include dye penetrant, ultrasonic, magnetic particle, and radiographic testing. Familiarity with prevalent codes and standards will be emphasized. **Group 2 course.** (6/20/2017)

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## **Course Changes – Credits, Contacts, Required Prerequisites, Course Description or Course Title (effective Fall 2017)**

### **PHY 221 – Problems & Principles of Physics I.....4.0 (5)**

*Required prerequisite(s): MTH 141, may be taken concurrently*

*Recommended prerequisite(s): ENG 111, may be taken concurrently*

*Co-requisite(s): PHY 221L and PHY 221R*

This course is the first semester of a two-semester course sequence primarily intended for those students preparing for engineering, science, or math careers. Topics include kinematics, Newton's Laws, conservation of momentum, conservation of energy, rotational motion, oscillations, and fluids. The development of conceptual understanding and problem-solving skills are emphasized. Computers are used for data acquisition and analysis. The laboratory covers the preceding topics in parallel with the lecture whenever possible. **Group 1 lab course.**

***Change: added to required prerequisite of MTH 141 “may be taken concurrently”, added recommended prerequisite of ENG 111, course description updated. (3/22/17)***

### **WSI 315 – Advanced Marine Survey & Data.....3.0 (4)**

*Required prerequisite(s): PHY 121-may be taken concurrently and WSI 215*

***Change: added to required prerequisite PHY 121 “may be taken concurrently”. (3/16/17)***

### **WSI 400 – Marine Technology Capstone.....4.0 (4)**

*Required prerequisite(s): WSI 200, WSI 210, WSI 215, WSI 240, WSI 310, WSI 433; WSI 300, WSI 315, may be taken concurrently*

This course requires the synthesis and integration of knowledge and skills acquired across the Marine Technology curriculum for completion of a team oriented project and will require significant written, oral and visual deliverables including a final presentation. These field based projects will demonstrate a comprehensive approach to mission planning, technical equipment competency, budgeting, data collection/processing and dissemination to an audience. Group 2 course.

***Change: added WSI 433 as a required prerequisite, course description updated. (4/12/17)***

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