

CURRICULUM COMMITTEE MEETING

February 10, 2017

Present: Mary Cornelio, Pam Buck, Wendy Bradstreet, Gail Roy, Jan Grieco, Dave Raymond, Dwight Clayton, Jon Blanchard, Leah Buck, Michelle Collins, Nancy Cowett, Eileen McDougal, Bill Egeler Nancy Gagnon and Dottie Martin

Absent: Bob Collins, Tammy Nelson and Betsy Harris

The following curriculum changes were approved by the NMCC Curriculum Committee at the **February 10, 2017** meeting.

NURSING AND ALLIED HEALTH

Nursing Associate in Science Degree Programs

Program Revision

Effective: Fall 2017

Add NUR100 Nursing Program Success to credit given to LPNs entering in Advanced Standing..

ARTS & SCIENCE

Program Revision/Course Number Revision

Effective: Fall 2017

Change BIO120 Anat & Phys I and BIO130 Anat & Phys II to 200 level courses.

***Note:** Numbers should be below 218 as Anatomy & Physiology I & II are prerequisites for the BIO218 Microbiology course.

This will require curriculum adjustments on curriculum sheets for Liberal Studies and all programs in the Nursing and Allied Health Department.

BUSINESS

New Course: ECO2xx Macroeconomics

3 Class Hours

3 Credits

Effective: Fall 2017

Graded Course: Yes

Major Course Designation: No

Social Science Course

Catalog Description: This course is based on a basic theory of macroeconomics which provides a unique textual and visual learning system that presents and reinforces core concepts, then immediately assesses comprehension to ensure understanding highlights the latest information on economic growth, income distribution, federal deficits, environmental issues, and other economic developments while applying concepts to everyday life.

***Note:** Students who have already completed or are enrolled ECO111 Prin of Economics will substitute.

Program Revision: Accounting and Business Administration

Effective: Fall 2017

Delete ECO111 Principles of Economics from third semester curriculum

Add ECO2xx Macroeconomics to third semester curriculum

TRADE TECHNOLOGY

Automotive Technology AAS Program

New Course: AUT1xx Suspension and Steering

1.5 Class Hours/4.5 Lab Hours

3 Credits

Effective: Fall 2017

Graded Course: Yes

Major Course Designation: Yes

This is a 6 week course.

Catalog Description: Exposes students to the underside of cars and light trucks.

Suspension systems: Theory and operation of tires, tire pressure monitoring systems, tire changing, wheel balancing, suspension systems (conventional and McPherson strut) will be discussed in detail. Diagnosis and repair of these systems will also be covered.

Steering systems: Theory and operation of conventional and rack and pinion steering systems will be covered, along with how to properly diagnose and repair these systems.

Wheel alignment: Theory of front-end geometry including purpose of caster, camber, steering axis inclination, scrub radius, turning radius and toe-in, toe-out will be discussed in detail; techniques of performing thrust angles and four wheel alignments; actual alignments will be done on operational vehicles.

New Course: AUT1xx Brakes

1.5 Class Hours/4.5 Lab Hours

3 Credits

Effective: Fall 2017

Graded Course: Yes

Major Course Designation: Yes

This is a 6 week course.

Catalog Description: Exposes students to the automotive brake system and covers in detail the theory, operation, diagnosis, and repair of these systems. Students will have the opportunity to learn about drum brakes, disc brakes, and combinations of the two, along with parking brake systems and power assist. Principles of hydraulics will be discussed as it pertains to the brake system. The various switches, valves and electronic components related to the standard brake system and Anti-lock brake system will be discussed and diagnosed.

New Course: AUT1xx Engine Repair

3 Class Hours/9 Lab Hours

6 Credits

Effective: Fall 2017

Graded Course: Yes

Major Course Designation: Yes

Catalog Description: Theory and operation of the four-stroke engine will be discussed along with diagnosis of engine problems. Disassembly and care of reusable parts, cleaning and storage of engine parts, measurements of wear, replacement of parts and adjustments of parts; lubrication and lubricating clearances, temperature effects and cooling systems, cylinder heads, valves, replacing and/or reconditioning cylinders, pistons, rings, cam shafts and hydraulic filters.

New Course: AUT2xx Manual Drive Train and Axles

1.5 Class Hours/4.5 Lab Hours 3 Credits

Effective: Fall 2017

Graded Course: Yes

Major Course Designation: Yes

This is a 7.5 week course.

Catalog Description: Consists of theory and operation of the manual transmission along with diagnosis, removal, repair and replacement of the clutch, manual shift transmissions (conventional and transaxle), drive line and final drive assembly. Transfer cases, four-wheel drive and all-wheel drive systems will be diagnosed and repaired along with drive shafts and related parts.

New Course: AUT2xx Automatic Transmissions

1.5 Class Hours/4.5 Lab Hours 3 Credits

Effective: Fall 2017

Graded Course: Yes

Major Course Designation: Yes

This is a 7.5 week course.

Catalog Description: The history of the automatic transmission along with construction, theory and operation of the torque convertor, planetary gears, clutches, bands and their applications will be discussed. Emphasis on diagnosing and repair along with adjustments of the automatic transmission will be performed. Students will have the chance to diagnose and repair concerns on and off the vehicle.

New Course: WEI1xx Welding for Automotive Technology

2 Class Hours/2 Lab Hours

3 Credits

Effective: Fall 2017

Graded Course: Yes

Major Course Designation: No

Catalog Description: This is an introductory welding course that helps students develop a basic knowledge of welding processes. An introduction to gas welding techniques include oxy-acetylene welding, cutting and plasma cutting is provided. Students also develop a basic knowledge of the gas metal arc welding (GMAW) process. Discussion of equipment and materials used is also provided. Lab activities provide practice in developing an understanding of the equipment, proper selection of the welding process determined by materials being joined, and the differences in technique necessary for welding in different positions. Safe handling of welding equipment and supplies is strongly emphasized as is overall shop safety.

Automotive Technology AAS Program

Program Revision

Effective Fall 2017

| | | C | L | CR |
|---------------------------------|---|----------|----------|-----------|
| First Semester Changes: | Delete AUT113 Susp/Steering/Brakes | 3 | 9 | 6 |
| | Delete WEI101 Intro to Welding | 2 | 2 | 3 |
| | Add AUT1xx Suspension and Steering | 1.5 | 4.5 | 3 |
| | Add AUT1xx Brakes | 1.5 | 4.5 | 3 |
| | Add WEI1xx Welding for Auto Tech | 2 | 2 | 3 |
| Second Semester Changes: | Delete AUT123 Electrical Systems | 3 | 9 | 6 |
| | Add AUT1xx Engine Repair | 3 | 9 | 6 |
| Fourth Semester Changes: | Delete AUT224 Engine/Transmission | 3 | 9 | 6 |
| | Add AUT2xx Manual Drive Train and Axles | 1.5 | 4.5 | 3 |
| | Add AUT2xx Automatic Transmissions | 1.5 | 4.5 | 3 |

Structural Welding Certificate Program

Program Revision

Effective Fall 2017

Second Semester Change: Allow students to take either SAE119 Construction Safety **OR** SAE121 Industrial Safety

Wind Power Technology Certificate Program

New Course: WPT1xx Wind Turbine Drive Systems 2 Class Hours/3 Lab Hours 3 Credits

Effective: Fall 2017

Graded Course: Yes Major Course Designation: Yes

Catalog Description: This course provides an understanding of mechanical systems utilized in wind turbine systems. Discussion topics include: mechanical drive systems, shafts and sealing devices, gear systems, and bearings. The course will also cover hydraulic principles necessary to control modern wind turbines such as pumps, actuators, fluid control devices and ancillary systems. Discussion will focus on preventative maintenance practices which include lubrication requirements, fastener technology, component alignment and vibration testing and monitoring. Some discussions will focus on the use or preventative maintenance data analysis that may be utilized for process improvements through predictive maintenance planning.

Program Revision

Effective Fall 2017

| | | C | L | CR |
|--------------------------------|---|----------|----------|-----------|
| First Semester Changes: | Delete WPT210 Wind Turbine Mech Systems | 2 | 3 | 3 |
| | Add WPT1xx Wind Turbine Drive Systems | 2 | 3 | 3 |
| Second Semester Change: | Delete WPT216 Intro to SCADA Systems | 2 | 3 | 3 |
| | Add WPT213 Wind Power Control Systems | 2 | 3 | 3 |

In addition to the approved changes Ryan Bugbee presented a new program request for an Automotive Technology II certificate program. The program was presented as a result of advisory committee members suggesting that this would be a way for people working in the field to upgrade their skills or for students who might benefit from having the option to receive a credential other than the associate degree. After much discussion and a show of hands (approve 4; not approve 4 and abstained 4) the program request was tabled pending further information.

Information was disseminated on another program currently being developed, Water Treatment Technology. Chuck Kelley was on hand to talk about the program need, development and content. Currently being developed are: an associate degree, a drinking water certificate and a waste water certificate. An advisory committee has been established and has been very involved in the process. The Department of Environmental Protection approached the college about developing the program due to changes in technology, aging workforce and the need for skilled workers. Chuck explained that the program delivery format would be a combination of hybrid, online and some hands-on activities on campus. This program will prepare individuals to take the tests – Class 2 and Class 3. Program capacity will be driven by resources: equipment, faculty, etc.

There was a motion to accept the concept as presented, seconded and approved.