

Course Discipline Code & No: ASV 253 Title: Manual Drivetrain and Axles Effective Term Fall 2009Division Code: VCTDepartment Code: AUTD

Org #: _____

Don't publish: ☐ College Catalog ☐ Time Schedule ☐ Web Page

Reason for Submission. Check all that apply.

- ☒ New course approval
☐ Three-year syllabus review/Assessment report
☒ Course change

- ☐ Reactivation of inactive course
☐ Inactivation (Submit this page only.)

Change information: Note all changes that are being made. Form applies only to changes noted.

- ☐ Consultation with all departments affected by this course is required.
☒ Course discipline code & number (was ASV 243)*
 *Must submit inactivation form for previous course.
☐ Course title (was Manual Drivetrain and Axles)
☒ Course description
☒ Course objectives (minor changes)
☐ Credit hours (credits were: _____)
- ☒ Total Contact Hours (total contact hours were: 60)
☒ Distribution of contact hours (contact hours were:
 lecture: 15 lab 45 clinical _____ other _____)
☐ Pre-requisite, co-requisite, or enrollment restrictions
☐ Change in Grading Method
☒ Outcomes/Assessment
☐ Objectives/Evaluation
☐ Other _____

Rationale for course or course change. Attach course assessment report for existing courses that are being changed.

Course is being re-written as part of the overall program update.

Approvals Department and divisional signatures indicate that all departments affected by the course have been consulted.

Department Review by Chairperson

☐ New resources needed ☐ All relevant departments consultedPrint: Allen Day
Faculty/Preparer

Signature

Date: 10/29/2009Print: Russ Ferguson
Department Chair

Signature

Date: 10/29/2009

Division Review by Dean

☐ Request for conditional approvalRecommendation ☒ Yes ☐ No

Dean's/Administrator's Signature

Date: 10/29/09

Curriculum Committee Review

Recommendation

☐ Tabled ☒ Yes ☐ No

Curriculum Committee Chair's Signature

Date: 2/18/10

Vice President for Instruction Approval

Vice President's Signature

Date: 2-19-10Approval ☒ Yes ☐ No ☐ Conditional

Do not write in shaded area.

Log File ☒ Ecopy ☐ Banner ☐ C&A Database ☐ C&A Log File ☐ Basic skills ☐ Contact fee ☐Please return completed form to the Office of Curriculum & Assessment and email an electronic copy to sjohn@wccnet.edu for posting on the website.

***Complete ALL sections which apply to the course, even if changes are not being made.**

Course: ASV 253	Course title: Manual Drivetrain and Axles
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Credit hours: <u>2</u> If variable credit, give range: _____ to _____ credits	Contact hours per semester: <table style="width:100%"> <tr> <th></th> <th style="text-align:center"><u>Student</u></th> <th style="text-align:center"><u>Instructor</u></th> </tr> <tr> <td>Lecture:</td> <td style="text-align:center"><u>30</u></td> <td style="text-align:center"><u>30</u></td> </tr> <tr> <td>Lab:</td> <td style="text-align:center"><u>22.5</u></td> <td style="text-align:center"><u>22.5</u></td> </tr> <tr> <td>Clinical:</td> <td style="text-align:center">-</td> <td style="text-align:center">-</td> </tr> <tr> <td>Practicum:</td> <td style="text-align:center">-</td> <td style="text-align:center">-</td> </tr> <tr> <td>Other:</td> <td style="text-align:center">-</td> <td style="text-align:center">-</td> </tr> <tr> <td>Totals:</td> <td style="text-align:center"><u>52.5</u></td> <td style="text-align:center"><u>52.5</u></td> </tr> </table>		<u>Student</u>	<u>Instructor</u>	Lecture:	<u>30</u>	<u>30</u>	Lab:	<u>22.5</u>	<u>22.5</u>	Clinical:	-	-	Practicum:	-	-	Other:	-	-	Totals:	<u>52.5</u>	<u>52.5</u>	Are lectures, labs, or clinicals offered as separate sections? ☐ Yes - lectures, labs, or clinicals are offered in separate sections ☒ No - lectures, labs, or clinicals are offered in the same section	Grading options: ☐ P/NP (limited to clinical & practica) ☐ S/U (for courses numbered below 100) ☒ Letter grades
	<u>Student</u>	<u>Instructor</u>																						
Lecture:	<u>30</u>	<u>30</u>																						
Lab:	<u>22.5</u>	<u>22.5</u>																						
Clinical:	-	-																						
Practicum:	-	-																						
Other:	-	-																						
Totals:	<u>52.5</u>	<u>52.5</u>																						

Prerequisites. Select one:

☒ College-level Reading & Writing

☐ Reduced Reading/Writing Scores
(Add information at Level I prerequisite)

☐ No Basic Skills Prerequisite
(College-level Reading and Writing is not required.)

In addition to Basic Skills in Reading/Writing:

Level I (enforced in Banner)	Course	Grade	Test	Min. Score	Concurrent Enrollment Can be taken together	Corequisites Must be enrolled in this class also during the same semester
☐ and ☐ or	_____	_____	_____	_____	☐	_____
☐ and ☐ or	_____	_____	_____	_____	☐	_____
☐ and ☐ or	_____	_____	_____	_____	☐	_____

Level II (enforced by instructor on first day of class)

Course	Grade	Test	Min. Score
☐ and ☐ or	_____	_____	_____
☐ and ☐ or	_____	_____	_____

Enrollment restrictions (In addition to prerequisites, if applicable.)

☐ and ☐ or Consent required

☐ and ☐ or Admission to program required
 Program: _____

☒ and ☐ or Other (please specify):
Completion of Automotive Mechanic Certificate or comparable field experience

Please send syllabus for transfer evaluation to:
 Conditionally approved courses are not sent for evaluation.
 Insert course number and title you wish the course to transfer as.

☐ E.M.U. as _____ ☐ U of M as _____ ☐ _____ as _____	☐ _____ as _____ ☐ _____ as _____ ☐ _____ as _____
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Course: ASV 253	Course title: Manual Drivetrain and Axles	
Course description State the purpose and content of the course. Please limit to <u>500</u> characters.	This course is designed to give an understanding of the diagnosis and repair of the automotive drivetrain systems. The course includes manual transmission, manual transaxle, differentials, transfer cases and clutch system diagnosis and repair. This course focuses on removal, service and replacement of major drivetrain components and sub-systems.	
Course outcomes List skills and knowledge students will have after taking the course. Assessment method Indicate how student achievement in each outcome will be assessed to determine student achievement for purposes of course improvement.	Outcomes (applicable in all sections) Read and interpret vehicle service manuals Diagnose basic drivetrain components Replace and/or rebuild axles, transaxles, differentials and manual transmissions Remove, service and replace major drivetrain components	Assessment Methods for determining course effectiveness Common departmental exam; NATEF checklist Common departmental exam; NATEF checklist NATEF Checklist Common departmental exam; NATEF checklist
Course Objectives Indicate the objectives that support the course outcomes given above. Course Evaluations Indicate how instructors will determine the degree to which each objective is met for each student.	Objectives (applicable in all sections) Outcome Outcome #1 and #2 Recognize and apply shop safety practices Recognize and apply proper procedures for diagnosing drivetrain, transaxle and transmission problems Outcome #1 and #3 Perform proper inspection, diagnose and recognize needed repairs on manual transmission including clutch, flywheel and hydraulic over manual Perform proper inspection, diagnose and recognize needed repairs on manual transmission including pilot bearings and synchronizers Perform proper inspection, diagnose and recognize needed repairs on manual transmission including shifters and linkage Outcome #1 and #4 Perform proper inspection, diagnose and recognize needed repairs on transaxles and axles including CV joints and boots Perform proper inspection, diagnose and recognize needed repairs on transaxles and axles including powertrain mounts and drive axle Perform repair and replacement of axle components and differentials using proper tools	Evaluation Methods for determining level of student performance of objectives Quizzes and exams; NATEF checklist Quizzes and exams; NATEF checklist Quizzes and exams; NATEF checklist Quizzes and exams; NATEF checklist Quizzes and exams; NATEF checklist Quizzes and exams; NATEF checklist Quizzes and exams; NATEF checklist Quizzes and exams; NATEF checklist
List all new resources needed for course, including library materials. None		

Student Materials:

List examples of types Texts Supplemental reading Supplies Uniforms Equipment Tools Software	Today's Technician Series; Delmar Publishing; ISBN –	Estimated costs \$ 100.00
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Equipment/Facilities: Check all that apply. (All classrooms have overhead projectors and permanent screens.)

Check level <u>only</u> if the specified equipment is needed for <u>all</u> sections of a course.	☐ Off-Campus Sites
☐ Level I classroom Permanent screen & overhead projector	☐ Testing Center
☐ Level II classroom Level I equipment plus TV/VCR	☒ Computer workstations/lab
☒ Level III classroom Level II equipment plus data projector, computer, faculty workstation	☐ ITV
	☐ TV/VCR
	☐ Data projector/computer
	☐ Other _____

Assessment plan:

Learning outcomes to be assessed (list from Page 3)	Assessment tool	When assessment will take place (semester & year)	Course section(s)/other population	Number students to be assessed
Read and interpret vehicle service manuals	Common departmental exam; NATEF checklist	Fall 2011 and every three years thereafter	All students enrolled	Approximately 30 students
Diagnose basic drivetrain components	Common departmental exam; NATEF checklist	Fall 2011 and every three years thereafter	All students enrolled	Approximately 30 students
Replace and/or rebuild axles, transaxles, differentials and manual transmissions	NATEF Checklist	Fall 2011 and every three years thereafter	All students enrolled	Approximately 30 students
Removal, service and replacement of major drivetrain components	Common departmental exam; NATEF checklist	Fall 2011 and every three years thereafter	All students enrolled	Approximately 30 students

Scoring and analysis of assessment:

- Indicate how the above assessment(s) will be scored and evaluated (e.g. departmentally developed rubric, external evaluation, other). Attach the rubric/scoring guide.
Common departmental exam will be scored using an answer sheet.
NATEF checklist will be scored using the departmentally developed rubric (attached).
- Indicate the standard of success to be used for this assessment.
70% of the students will score an overall average of 70% or higher
- Indicate who will score and analyze the data (data must be blind-scored).
Departmental faculty will blind-score data when possible.
- Explain the process for using assessment data to improve the course.
Assessment data will be evaluated to identify any areas of weakness. Program and course instruction will be reviewed to identify ways to improve student performance.