



**STARK STATE COLLEGE
ASSESSMENT SUMMARY REPORT**

<p>Department/Division Engineering Technologies Division</p>	<p>Chair/Dean Donald Ball</p>
<p>Degree Program(s)/Major(s)/Certificate(s)</p> <p><u>Engineering Technology Department:</u></p> <p>Civil ET, Civil ET – Architectural Major, Civil ET – Construction Management Major, Electrical ET, Electrical ET – Electro Mechanical Major, Electronic ET, Mechanical ET, Mechanical ET – Fuel Cell Major, Design ET, Pre-Engineering Mechanical Engineering, Pre-Engineering Electrical Engineering, Pre-Engineering Civil Engineering <u>One Year Certificates:</u> Fuel Cell One Year Certificate</p> <p><u>Industrial Technology Department:</u></p> <p>Applied Industrial Technology, Environmental Health & Safety, Heating, Ventilation, Air Conditioning and Refrigeration Technology, Industrial Process Operation Technology, Automation and Robotics Technology, <u>Petroleum Technology</u> – Pipeline Technician, Instrumentation and Electronics Technician, Industrial Mechanics Technology, and Production Technician. <u>One Year Certificates:</u> Oil & Gas Heavy Industrial Mechanic, Industrial Process Operation, Electrical Maintenance, Automation & Robotics, Preventive & Predictive Maintenance, CNC, Sustainable/Alternative Energy, Welding, HVAC, Environmental Health & Safety</p> <p><u>Automotive and Transportation Department:</u></p> <p>Automotive Technology 2250, GM ASEP 2251 <u>One Year Certificates:</u> 1-Year Automotive 2256, Comprehensive Automotive Technology 2257, ASE Test Preparation 2258, Automotive Aftermarket Vehicle Modifications 2259, Automotive Detailing 2260, Automotive Maintenance and Light Repair 2261, Automotive Transmission and Driveline 2262, CAT Lift Truck 2263, Honda PACT 2264, Toyota T-TEN 2266, 2267, & 2268</p>	<p>Academic Year (20xx/20xx) 2015-2016</p>

The annual assessment summary report assists the College in documenting assessment progress and provides department chairs with assessment data needed to complete their academic program review. Department chairs will summarize information for the courses assessed in their department during the academic year. Chairs will forward their department summary report to their dean by June 10. Deans will summarize information for the courses assessed in their division and forward their division report to the Provost by July 1. The Provost will prepare an Academic Affairs' assessment report by July 29.

1. Briefly summarize the data that was collected related to each of the General Learning Outcomes and the plans for improvement if below 70%.

During the 2015-2016 AY the ET Division continued to review course content and assessments for the fall 2013 – spring 2016 assessment cycle. Any achievement level for any evaluation method that fell below the 70% minimum college standard was reassessed during the fall 2015/spring 2016 AY. Courses that have evaluation methods with achievement levels below the minimum standard will continue to be re-assessed each semester and plans for improvement implemented until those achievement levels are above the 70%.

All of the courses that were assessed this academic year except for two met the 70% or above GLO outcomes. The two courses that fell below the 70% margin were MST137 and ENV121. We are evaluating all lab exercises in MST137 to make certain students have appropriate time to progress their welding skills. ENV121 – we had an instructor transition at nearly the middle of the semester due to medical situation. We feel this had a major negative effect on this specific class. We are also reviewing the course curriculum for this course.

1a. Courses assessed/total number of eligible courses in your department or division during this past academic year = 86/ 219 = 39.3%
Eligible courses reflect all approved courses in your department/division, including courses with an effective date, during this academic year. Re-assessed courses should not be included in this section. Report re-assessed courses in 1b below. (Please provide numbers, including zero (0), in the blanks below. If not applicable, indicate with an NA.)

Faculty:	19 FT	33 Adjunct		
Modality:	76 F2F	1 W2	0 W3	0 W4
Campus:	43 Main	34 Satellite	0 College Credit Plus	0 Early College
Time:	52 Day	25 Evening	0 Weekend	

1b. Courses re-assessed/total number of eligible courses in your department or division = 0/0 = 0% (ex. 8/45=18%)
(Please provide numbers, including zero (0), in the blanks below. If not applicable, indicate with an NA.)

Faculty:	0 FT	0 Adjunct		
Modality:	0 F2F	0 W2	0 W3	0 W4
Campus:	0 Main	0 Satellite	0 College Credit Plus	0 Early College

Time:	0 Day	0 Evening	0 Weekend
1c. Programs, options, certificates affected by assessment/eligible programs, majors, certificates= 44/46 = 95.7%			
1d. Departments participating in assessment/eligible departments= 3/3 = 100% (To be completed by Deans ONLY) (ex. 4/4=100%)			
2. List the evaluation methods used to evaluate the GLOs and PLOs. Refer to examples on the course assessment templates and in the assessment handbook available on <i>mystarkstate</i> .			
General Learning Outcomes (GLOs)		Program Learning Outcomes (PLOs)	
Exam	Quiz		
Test	Homework		
Laboratory Assignment	Attendance		
		NA for academic year, 2010-2011	
		NA for academic year, 2011-2012	
Quizzes and Exams	Effective Communication – GLO1; Quantitative Literacy – GLO2; Information Literacy – GLO3; Critical Thinking – GLO4; Civic Professional, and Ethical Responsibility – GLO6	Demonstrate knowledge of theory and practice acquired through lectures, demonstrations, and laboratory practice	
Attendance and Participation	Civic, Professional, and Ethical Responsibility - GLO6	Demonstrate and practice good work/employment habits	
Homework Assignments	Effective Communication - GLO1; Quantitative Literacy - GLO2; Information Literacy - GLO3; Critical Thinking - GLO4	Demonstrate learned knowledge and practice	
Performance Based Assessments (Lab Assignments)	Effective Communication - GLO1; Quantitative Literacy - GLO2; Critical Thinking - GLO4; Civic, Professional and Ethical Responsibility - GLO6	Working Effectively in Teams Demonstrate safety and skill set being developed	
Written Products (including submittal of drawings)	Effective Communication - GLO1; Information Literacy - GLO3; Critical Thinking - GLO4; Civic, Professional, and Ethical Responsibility - GLO6	Demonstrate proficiency in drawing interpretation, utilization, and implementation	

Oral Presentation	Effective Communication - GLO1; Information Literacy - GLO3; Critical Thinking - GLO4	Hands on activities via oral presentations and/or successful demonstrations of learned skill sets
Cap Stone Experience	Effective Communication - GLO1; Quantitative Literacy - GLO2; Critical Thinking - GLO4; Civic, Professional, and Ethical Responsibility - GLO6	Troubleshooting applications Completion of industry recognized certifications
Written Products (including submitted drawings)	Effective Communication (GLO1); Quantitative Literacy (GLO2); Information Literacy (GLO3); Critical Thinking (GLO4);	Capstone Projects
Cap Stone Experience	Effective Communication (GLO1); Quantitative Literacy (GLO2); Information Literacy (GLO3); Critical Thinking (GLO4); Global & Diversity Awareness (GLO5); Civic Professional and Ethic Responsibility (GLO6)	Capstone Projects
Oral Presentation	Effective Communication (GLO1); Quantitative Literacy (GLO2); Information Literacy (GLO3); Critical Thinking (GLO4); Global & Diversity Awareness (GLO5); Civic Professional and Ethic Responsibility (GLO6)	Capstone Projects
Juried Review and Performance	Effective Communication (GLO1); Quantitative Literacy (GLO2); Information Literacy (GLO3); Critical Thinking (GLO4); Global & Diversity Awareness (GLO5); Civic Professional and Ethic Responsibility (GLO6)	Capstone Projects

3. Include evidence of students achieving or not achieving the learning outcomes. List each course assessed and re-assessed with the GLOs for each course including the complete data and percentages.

As evidenced on the course assessment/re-assessment forms for the assessed 2015-2016 courses, faculty reported all achievement levels for all evaluation methods in courses. The percentage of General Learning Outcomes are listed below broken out by department and course. The minimum college standard of 70% or higher was utilized for the achievement level.

ENGINEERING TECHNOLOGIES DIVISION OVERALL ASSESSMENT:						
Courses Reassessed – N/A						
Course Assessed (none needed re-assessed)	GLO1: Effective Communication	GLO2: Quantitative Literacy	GLO3: Information Literacy	GLO4: Critical Thinking	GLO5: Global & Diversity Awareness	GLO6: Civic, Professional, & Ethical Responsibility
TOTAL	97%	97%	96%	96%	95%	99%

4. Outline and summarize the action plans that have been developed to improve student learning based on the evidence for this year.

A variety of planned improvements have been identified by several departments as indicated below. For the courses that will need to be reassessed a variety of planned improvements were identified.

Below is a sample of each unique department’s student learning improvement plan:

- Reevaluate and/or re-write test for validity of questions
- Reinforce key concepts from prior courses to improve student learning outcomes
- Increase group work (i.e. discussion, team projects)
- Fall semester 2016 course improvement will take place in the following courses: MST136, MST137, MST138, and MST139.
- Environmental, Health and Safety program review to increase quality and transferability for students.
- All courses will be assessed on a regular basis for continuous improvement purposes.

Each department continually reviews and monitors each course and program to ensure student learning outcomes are achieved. In addition to improvement plans for the various methods of evaluation, improvement strategies for course sequencing/alignment, tutoring, advising, communication, training of faculty, and early intervention are discussed, reviewed, updated and/or implemented.

5. What steps did you take to ensure shared responsibility from faculty/staff/students/advisory boards/etc. for student learning and assessment of student learning?

At the beginning of Fall 2015 semester, Department Chairs were instructed to assure that their faculty evaluate their course/courses assessment and to review their plans for improvement that they identified on the course assessment forms from previous semesters/cycle. They were also instructed to re-assess any method of evaluation that fell below the minimum standard and report the achievement level at the end of Fall 2015 semester. They were instructed to mentor and instruct any adjuncts that were teaching a course that needed to be assessed or reassessed during the 2015-2016 AY. Assessment of additional courses and re-assessment of necessary courses will occur during the next academic year.

All Master and Class syllabi are housed on the “H” drive for easy access to full and part time faculty. One-on-one sit down mentoring is available for full-time and part-time faculty to assure full understanding and compliance with the required assessment form completion. This aides in accurate reporting. Advisory committees meet annually to discuss course offerings and any proposed changes. Student attendance is documented to help ensure student success through mentor/faculty interaction with students.

Department specific:

- Welding faculty have met on several occasions to align lab activities to assure proper sequencing of student skill development and success.
- Automotive faculty have been working with new web learning tools to better evaluate student comprehension. Students have been assessing new web based learning tools. The automotive advisory committee meets twice a year and has been involved with the decision on which new web learning tools to use.

6. Identify the steps you plan to take to improve the effectiveness of the efforts to assess and improve student learning for next year.

Steps for Improvement	Resource(s) Needed
With only two exceptions all other courses assessed this year met the 70% or higher benchmark for student success on the GLO's.	N/A
As stated above in question #4 we will be discussing lab activities in the welding course sequence in order to streamline required skills for students to progress appropriately and perhaps then impact our student success rate on the actual AWS welding certification tests.	Meetings with full and part time welding faculty to revise necessary changes, as warranted to assist with higher student success pathways.
Continue to offer “Open Lab” tutoring for students enrolled in welding classes at Barberton this coming year. This extra practice time has proven effective in increasing student's skill levels.	Continued formal approval from the business office to offer these services for the 2016-17 academic year.
Encourage faculty attendance at Best Practices workshops and professional development opportunities.	Funding for off-campus professional development opportunities.

Lab book review and update	Focus Group/Curriculum Meeting
PowerPoint review and update	Focus Group/Curriculum Meeting
Update of homework in Angel	Focus Group/Curriculum Meeting
Tool and equipment needs assessment	Focus Group/Curriculum Meeting
Review the outcomes of faculty's student success goals (addressed on Performance Evaluations).	Meet with faculty throughout the year to review the progress they are making on their goals and assess if additional resources are needed.
Encourage faculty attendance at Best Practices workshops and professional development opportunities.	Funding for off-campus professional development opportunities.
Track enrollment and retention data to measure the effectiveness of action plans from current and past assessment periods.	Access to reports in ARGOS.
Make tutoring available for students taking ET courses	Qualified Tutors