



**STARK STATE COLLEGE**  
**ASSESSMENT SUMMARY REPORT**

<b>Department/Division</b> <b>Engineering Technologies Division</b>	<b>Chair/Dean</b> <b>Donald Ball</b>
<b>Degree Program(s)/Major(s)/Certificate(s)</b>  <b><u>Engineering Technology Department:</u></b>  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  <b><u>Industrial Technology Department:</u></b>  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  <b><u>Automotive and Transportation Department:</u></b>  Automotive Technology AAS, GM ASEP AAS <u>One Year Certificates:</u> Automotive, Comprehensive Automotive Cert, ASE Test Prep Cert , Automotive Aftermarket Vehicle Modification, Automotive Detailing, Automotive Maintenance and Light Repair, Automotive Transmission & Driveline, CAT Lift Truck, Honda PACT, Toyota T-TEN, Toyota T-TEN Electrical, Manual Transmission-HVAC, Toyota T-TEN Engine Repair, Engine Control, Automatic Transmission, Toyota T-TEN Electrical, Brakes, Steering & Suspension	<b>Academic Year (20xx/20xx)</b> <b>2016-2017</b>

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 2016-2017 AY the ET Division continued to review course content and assessments for the fall 2017 – spring 2020 assessment cycle. Any achievement level for any evaluation method that fell below the 70% minimum college standard was reassessed during the fall 2016/spring 2017 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 one met the 70% or above GLO outcomes. The course that fell below the 70% margin was the College Credit Plus section of MST Welding Lab course for the Four City Compact. Due to a number of reasons, students within this program failed to complete this portion of the assessment successfully. This course will be assessed again next year in order to determine the needed improvements to increase student success. We will work closer with high schools to make sure that students utilize tutoring, be more vigilant on attendance issues, and increase communication with the high school administration when students are beginning to fall behind.

- 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:	21 FT	4 Adjunct		
Modality:	26 F2F	24 W2	6 W3	0 W4
Campus:	26 Main	28 Satellite	2 College Credit Plus	0 Early College
Time:	60 Day	12 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= 33/52 = 63.5%				
1d. Departments participating in assessment/eligible departments= 3/3 = 100% <b>(To be completed by Deans ONLY)</b> (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			
Classroom Participations	Hands-On Assessment			
Individual Project	Web Training			
				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 – GLO 4			Demonstrate learned knowledge and practice
Performance Based Assessments (lab exercises)	Effective Communication – GLO1 Quantitative Literacy – GLO2 Critical Thinking – GLO4			Working effectively in teams. Demonstrate safety and skill set being developed

	Civic, Professional and Ethical Responsibility – GLO6	
Written Products (including submittal of drawings)	Effective Communication – GLO1 Information Literacy – GLO2 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 Literacy – GLO4 Civic, Professional, and Ethical Responsibility – GLO6	Troubleshooting (heating and cooling) applications Completion of 3G and 6G welding examinations
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.
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);	Capstone Projects

	Global & Diversity Awareness (GLO5); Civic Professional and Ethic Responsibility (GLO6)	
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 2016-2017 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:**

<b>Courses Reassessed – N/A</b>						
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
<b>TOTAL</b>	<b>92%</b>	<b>93%</b>	<b>91%</b>	<b>90%</b>	<b>98%</b>	<b>88%</b>

#### 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:

- There was one course assessment score that fell below the 70% level. In addition, this was the first year of a new three-year assessment cycle (2016-2019). Therefore, this course will be reassessed next school year to see if any of the implemented improvements have increased student success.

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 2016 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 2016 semester. They were instructed to mentor and instruct any adjuncts that were teaching a course that needed to be assessed or reassessed during the 2016-2017 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:

- Course assessment discussions are included within faculty departmental meetings.

- One-on-one face to face mentoring and guidance is available for both FT and PT faculty to assure full understanding and compliance with the required assessment form completion. This process assists faculty in accurate reporting.
- Welding faculty continue to discuss revisions to the curricula in order to assure student success and the latest employment requirements are met by students enrolled within the program.
- Advisory committees meet annually to discuss course offerings, equipment upgrades, etc. in order to keep our programs relevant.
- Document student attendance to help ensure student success through mentoring/faculty interaction with students.
- Faculty have been revising testing procedures to better evaluate student comprehension
- Faculty have been participating in focus groups to evaluate and rearrange classroom activities for better student engagement
- New availabilities to online training have given instructors different opportunities to seek student involvement.
- The automotive advisory committee meet twice a year and has been involved in decision-making opportunities as well as our accreditation process.
- Full time faculty have continued to mentor adjunct faculty in the assessment process and implementation.
- The faculty that completed these evaluations coordinate these courses. They were instructed to include additional feedback if an adjunct or full time faculty taught the same course considering different modalities, different campuses, and different times the course was being offered. Throughout this process, I met with faculty to ensure accuracy and validity of the data being reported. Any identified planned improvements will be discussed during advisory committee meetings and program meetings.

**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
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
As indicated in the above listed data; there were two courses that did not meet the 70% or above student success measures this year.	N/A
As part of our ongoing discussions on how to improve upon our student successes within the welding program... we will be introducing to the curriculum committee in the fall a few program sheet revisions (adding two new welding courses to the program).	Higher Learning Commission approval of submitted program changes

Continue to offer “open lab” for welding students as the grant dollars will allow	Continued formal approval from the business office to offer these open lab hours for the upcoming 2017-18 school year. In addition, hiring of a faculty member who is willing to accept the contract on tutorial pay scales.
Encourage faculty attendance at “Best Practices” workshops and professional development activities	Budgetary allocation that supports these activities
Lab Book review and update	Focus Groups/Curriculum Meetings
PowerPoint review and update	Focus Groups/Curriculum Meetings
Update the LMS system w/ Blackboard	Focus Groups/Curriculum Meetings
Tool and equipment needs assessment	Focus Groups/Curriculum Meetings