STARK STATE COLLEGE
ASSESSMENT SUMMARY REPORT

Department/Division	Chair/Dean
Engineering Technologies Division	**Donald M. Ball**
Degree Program(s)/Major(s)/Certificate(s)	**Academic Year (20xx/20xx)**
Engineering Technology Department: Civil ET, Civil ET – Architectural Major, Civil ET – Construction Management Major, Civil ET – Architectural Drafting CEC, Civil ET – Civil/Surveying CEC, Civil ET – Civil/Surveying Drafting CEC, Civil ET – Construction Materials Inspection CEC, Civil ET – Construction Technician CEC, Civil ET – Transportation Construction Inspection Level I CEC, Civil ET – Transportation Construction Inspection Level II CEC, Electrical/Electronic ET, Electrical/Electronic ET – Electro Mechanical Major, Electrical/Electronic ET – Electrical/Electronic Troubleshooting CEC, Electrical/Electronic ET – Industrial Controls CEC, Electrical/Electronic ET – Industrial Electricity and Electronics CEC, Mechanical ET, Mechanical ET – Design Major, Mechanical ET – Machine Design CEC, Mechanical ET – Mechanical Power CEC, Mechanical ET – Design Major – Advanced CAD CEC, Mechanical ET – Design Major – AutoCAD CEC, Mechanical ET – Design Major – Precision Gauging and Inspection CEC, Pre-Engineering Mechanical Engineering, Pre-Engineering Electrical Engineering, Pre-Engineering Civil Engineering, Electric Power Utility **Industrial Technology Department:** Industrial Technology, Industrial Technology – Industrial Maintenance Major, Industrial Technology – Advanced Manufacturing Major, Environmental Water and Wastewater Technology, HVAC, Industrial Process Operation, Automation and Robotics, Electrical Maintenance Technology Petroleum Technology – Industrial Process Operation Technology, Petroleum Technology - Pipeline Technician Major, Petroleum Technology – Production Technician Major, Petroleum Technology - Instrumentation and Electronics Technician, Industrial Mechanics Technology, Petroleum Technology – Measurement and Mechatronics Technology One Yr. Cert: Petroleum Industrial Mechanics Technology, Industrial Process Operation, ShaleNET Pipeline Technician, Petroleum Instrumentation and Electronics Technology,	**2020-2021**

Production Technician, Automation & Robotics, Predictive/Preventative Maintenance, CNC, Welding Technology, HVAC, INDUSTRIAL TECHNOLOGY – CAD/CAM SPECIALIST (COMPUTER-AIDED DRAFTING/COMPUTER-AIDED MACHINING), INDUSTRIAL TECHNOLOGY – MECHANICAL DRIVE SYSTEMS, INDUSTRIAL TECHNOLOGY – PRECISION MACHINING AND CNC PROGRAMMING, GENERAL MIG, TIG, ALUMINUM, AND OXYFUEL WELDING, INDUSTRIAL TECHNOLOGY – 3G WELDING CERTIFICATION EXAM PREPARATION, INDUSTRIAL TECHNOLOGY – 6G WELDING CERTIFICATION EXAM PREPARATION, INDUSTRIAL TECHNOLOGY – TITANIUM/STAINLESS STEEL WELDING, ENVIRONMENTAL, HEALTH, AND SAFETY TECHNOLOGY – SAFETY – HEAVY INDUSTRY, INDUSTRIAL TECHNOLOGY – BASIC INDUSTRIAL MAINTENANCE, ENVIRONMENTAL, HEALTH AND SAFETY TECHNOLOGY – ENVIRONMENTAL REMEDIATION TECHNICIAN, ENVIRONMENTAL, HEALTH AND SAFETY TECHNOLOGY – OSHA 40-HOUR HAZWOPER, ENVIRONMENTAL HEALTH AND SAFETY – DEPARTMENT OF TRANSPORTATION (DOT) SAFETY CERTIFICATE, HEATING, VENTILATION, AIR CONDITIONING, AND REFRIGERATION TECHNOLOGY – HVACR TECHNICIAN (LEVEL 1), HEATING VENTILATION, AIR CONDITIONING, AND REFRIGERATION TECHNOLOGY – HVACR TECHNICIAN (LEVEL II), INDUSTRIAL TECHNOLOGY – BASIC ROBOTICS, INDUSTRIAL TECHNOLOGY – AUTOMATION AND ROBOTICS SPECIALIST, ENVIRONMENTAL, HEALTH AND SAFETY TECHNOLOGY – GREEN TECHNOLOGY ESSENTIALS, ENVIRONMENTAL, HEALTH AND SAFETY TECHNOLOGY – ENVIRONMENTAL TECHNICIAN SUPERVISOR, PETROLEUM BASIC INDUSTRIAL CORE, PETROLEUM BASIC INDUSTRIAL PROCESS CONTROLS, OIL AND GAS TECHNOLOGY – PETROLEUM BASIC INDUSTRIAL PROCESS OPERATION CORE, OIL AND GAS TECHNOLOGY – RIGGING OIL AND GAS INDUSTRY, OIL AND GAS TECHNOLOGY – WELDING TECHNOLOGY FOR GAS & OIL PRODUCTION, OIL AND GAS TECHNOLOGY – LEASE OPERATOR, SHALENET INSTRUMENTATION AND MEASUREMENT TECHNICIAN, NATURAL GAS AND OIL TECHNOLOGY SHALENET C1 **<u>Automotive and Transportation Department:</u>** Automotive Technology AAS, GM ASEP AAS, One Year Certificate 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	

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 5. Deans will summarize information for the courses assessed in their division and forward their division report to the Provost by June 25. The Provost will prepare an Academic Affairs' assessment report by July 23.

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 2020 - 2021 AY the ET Division continued to review course content and assessments for the fall 2019 – spring 2023 assessment cycle. Faculty were provided training and/or refresher training to make sure they understood the process in order to determine areas of improvements for student learning. Any achievement level for any evaluation method that fell below the 70% minimum college standard was reassessed during the fall 2020/spring 2021 AY. All of the courses that were assessed this academic year met the 70% or above GLO outcomes.

1a. Courses assessed/total number of eligible courses in your department or division during this past academic year = 117/298 = 39% (ex. 8/45=18%)

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	25 Adjunct		
Modality:	90 F2F	2 W2	11 W3	14 W4
Campus:	49 Main	66 Satellite	3 College Credit Plus	0 Early College
Time:	69 Day	34 Evening	5 Weekend	

1b. Courses re-assessed/total number of eligible courses in your department or division = 0/0 = 100% (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= 63/80 = 79% (ex. 1/3=33%)

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 *mystarkstate*.

General Learning Outcomes (GLOs)		Program Learning Outcomes (PLOs)
Exams and Quizzes	Effective Communication - GLO1; Quantitative Literacy - GLO2; 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 Assignments (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 Presentations	Effective Communication - GLO1; Information Literacy - GLO3; Critical Thinking - GLO4;	Hands-on activities containing oral presentations and interactions demonstrating acquired skill sets
Capstone Experience	Effective Communication - GLO1; Information Literacy - GLO3;	Understanding and Diagnosis applications in coursework. Completion of certifications.

	Critical Thinking - GLO4; Civic, Professional, and Ethical Responsibility - GLO6	
Exam	Quiz	
Test	Homework	
Laboratory Assignment	Attendance	
Classroom Participations	Hands-On Assessment	
Individual Project	Web Training	
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.

Course Assessed or Re-Assessed	GLO1: Effective Communication	GLO2: Quantitative Literacy	GLO3: Information Literacy	GLO4: Critical Thinking	GLO5: Global & Diversity Awareness	GLO6: Civic, Professional, & Ethical Responsibility
TOTAL	96%	96%	95%	96%	93%	98%

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

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.

No improvement strategies were needed this round because all evaluations had a rating above 70%.

All course offerings for the academic year that were assessed exceeded the criteria for student learning outcomes. Although we have exceeded the requirement, we will continue to improve learning outcomes by following the guidelines below.

- Course assessment instructions and reminders are given to both fulltime and adjunct faculty members each semester.
- All Master and Class syllabi are housed on the "G" drive for easy access to full and part time faculty.
- Mentoring available for fulltime and adjunct faculty to assure understanding and compliance with the required assessment form completion, assuring accurate reporting.
- Advisory committees meet annually to review course competencies and any proposed changes aligning with industry needs.
- Documented student attendance to ensure student success through mentor/faculty interaction with students.

Based on current student outcomes, there is no plan to reassess these particular courses. Courses will continue to be reassessed on a regular basis for continuous improvement purposes.

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?

We are continuing the practice of Department Chairs requiring faculty to 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 are also instructed to re-assess any method of evaluation that fell below the minimum standard and report the achievement level. Chairs were asked to mentor and instruct any adjuncts that were teaching a course that needed to be assessed or reassessed during the 2020-2021 AY.

All Master and Class syllabi are housed on the "G" 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

aids in accurate reporting. Advisory committees meet 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:

- Full-time faculty have continued to mentor adjunct faculty in the assessment process and implementation.
- Course assessment instructions and reminders are given to both full-time and adjunct-faculty each semester.
- All Master and Class syllabi are housed on the "G" drive for easy access to full and part time faculty.
- One-on-one sit down mentoring is available for fulltime and adjunct faculty to assure full understanding and compliance with the required assessment form completion. This aids in accurate reporting.
- Documented student attendance to help ensure student success through mentor/faculty interaction with students.
- Faculty have been implemented new 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.

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.	Continued 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
PowerPoint review and update	Department Faculty Focus Groups/Curriculum Review Meetings
Tool and equipment assessment	Department Faculty Focus Groups/Curriculum Review Meetings
New book implementation	Department Faculty Focus Groups/Curriculum Exploration Meetings
Course accessibility. Review all course modality options	Department Faculty Focus Groups/Curriculum Review Meetings
Review of course content on a yearly basis	Department Faculty Focus Groups/Curriculum Review Meetings