



**STARK STATE COLLEGE
ASSESSMENT SUMMARY REPORT**

Department/Division Engineering Industrial & Emerging Technologies	Chair/Dean Donald Ball
Degree Program(s)/Options(s)/Certificates(s) <i>Engineering Department:</i> 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, Fuel Cell One Year Certificate, Pre-Engineering Mechanical Engineering, Pre-Engineering Electrical Engineering, Pre-Engineering Civil Engineering <i>Industrial Technologies Department:</i> <u>2 Yr. Degrees:</u> Applied Industrial, Environmental Health & Safety, HVAC, Industrial Process Operation, Automation & Robotics. <u>Petroleum Technology</u> – Pipeline Technician, Instrumentation and Electronics Technician, Industrial Mechanics Technology, and Production Technician. <u>One Yr. Cert:</u> Oil & Gas Heavy Ind. Mechanic, Industrial Process Operation, Elect. Maintenance, Automation & Robotics, Predictive/Preventative Maintenance, CNC, Sustainable/Alternative Energy, Welding, Wind Turbine, HVAC, Environmental Health & Safety	Academic Year (20xx/20xx) 2013-2014

Administrative Services and Office Applications (ASOA) Department:

Administrative Office Professional (including Management Major and Virtual Office Professional Major and one-year AOT Certificate), Legal Assisting (including one-year Legal Assisting Certificate), Judicial Reporting and Captioning (including Captioning Major, Realtime Transcription Major, and Scopist Major)

Information Security and Digital Media (ISDM) Department:

Computer Graphic Arts (including Digital Photography Major), Computer Network Administration and Security Technology (including Unix/Linux Database Administration Major and CISCO Major), Digital Video Media Technology, 3D Graphics and Animation, Homeland Security Information, Cyber Security and Computer Forensics

Computer Science and Information Systems (CSIS) Department:

Computer Engineering, Computer Science (including Video Game and Mobile Application Development Major), Computer Programming and Database (including Geographic Information Systems major and 1-year Database Systems Certificate), Management Information Systems (Including Help Desk and Medical Informatics majors, and 1-year Computer Maintenance and Desktop Support Certificate), Web Design and Development (including Web Design major and 1-year Web Design Certificate) and all associated CECs.

Automotive Technology Department:

Automotive Technology 2250 / GM ASEP 2251

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 2. Deans will summarize information for the courses assessed in their division and forward their division report to the Provost by June 16. The Provost will prepare an Academic Affairs' assessment report by July 1.

1. Summary of milestones

- a. Courses assessed/total number of eligible courses in your department or division = $113/445 = 25\%$ (ex. $8/45=18\%$)
****Eligible courses reflect all approved courses in your department/division, including courses with an effective date, during this academic year.**

(Please provide numbers, including zero (0), in the blanks below. These numbers reflect all the SECTIONS that have been assessed. If not applicable, indicate with an NA.)

Faculty:	42 FT	30 Adjunct		
Modality:	88 F2F	8 W2	28 W3	2 W4
Campus:	83 Main	28 Satellite	2 Dual Enrollment	0 Early College
Time:	107 Day	18 Evening	1 Weekend	

- b. Courses re-assessed during this past academic year = 5

****Report number of courses as re-assessed only if they fell below the college minimum standard of 70% OVERALL.**

(Please provide numbers, including zero (0), in the blanks below. These numbers reflect all the SECTIONS that have been re-assessed. If not applicable, indicate with an NA.)

Faculty:	2 FT	2 Adjunct		
Modality:	2 F2F	1 W2	4 W3	0 W4
Campus:	7 Main	0 Satellite	0 Dual Enrollment	0 Early College
Time:	5 Day	2 Evening	0 Weekend	

- c. Programs, options, certificates affected by assessment/eligible programs,options,certificates= $52/70 = 74\%$ (ex. $1/3=33\%$)

- a. Departments participating in assessment/eligible departments= $6/6 = 100\%$ (**To be completed by Deans ONLY**) (ex. $4/4=100\%$)

2. Provide a brief summary of the previous year's data that was collected related to the outcomes and the plans for improvement implemented. Did the plans for improvement implemented assist the department in achieving the goals?

Dean Comments:

Fall 2013 began a new three-year assessment cycle. Any achievement level for any evaluation method that fell below the 70% minimum college standard had to be re-assessed in spring 2014. Faculty continue to implement plans for improvement as stated on the course assessment form during the re-assessment semester (spring 2014). 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%.

Engineering:

No improvement strategies were needed this round because all evaluations had a rating above 70%. Fall 2013 began a new three-year assessment cycle. Any achievement level for any evaluation method that fell below the 70% minimum college standard had to be re-assessed in spring 2014.

Industrial:

No improvement strategies were needed this round because all evaluations had a rating above 70%. Fall 2013 began a new three-year assessment cycle. Any achievement level for any evaluation method that fell below the 70% minimum college standard had to be re-assessed in spring 2014.

ASOA:

Fall 2013 began a new three-year assessment cycle. Any achievement level for any evaluation method that fell below the 70% minimum college standard had to be re-assessed in spring 2014. Because this is the beginning of a new three-year cycle, courses are being assessed again to determine if the plans for improvement that were implemented in the previous three-year cycle are still valid. Faculty continue to implement plans for improvement as stated on the course assessment form during the re-assessment semester (spring 2014). Some current course objectives were revised, new textbooks and technology have been considered, and general learning outcomes have been reviewed. While some of the plans for improvement during the re-assessment of the course in spring 2014 still fell below the minimum standard, faculty have reported additional or different plans for improvement to be implemented in fall 2014. In addition, course coordinators will work more closely with those faculty (full-time, part-time, & dual enrollment) who teach sections of courses they coordinate to provide direction and gain feedback on assignments/assessments. Those 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%. Beginning in fall 2014, ASOA department faculty will begin discussion and review of these specific courses that continue to have low

achievement levels for potential re-design of content and/or evaluation methods to assist this department in achieving and supporting student success.

Seven ASOA full-time faculty participated in the assessment of courses for this past academic year; four adjunct also participated in this process. Two full-time faculty and two adjunct faculty participated in the re-assessment of AOT130 - Communication & Transcription Skills, AOT132 – Records Management, IRT131 - Legal Terminology, AOT239 – Legal Transcription, and IRT122 – Realtime Theory II.

CSIS:

This academic year, in the fall, the CSIS Department evaluated CIS221, CPD121, CPD221, CPD222, CSE222, CSE229, CSE230, CSE231, CSE236, SGE121, WDD224, WDD225, WDD226, and WDD227. For Spring, the CSIS Department added CIS122, CIS123, CIS126, CIS223, CPD122, CPD223, CPD224, CPD225, CSE233, WDD122, WDD125, WDD221, WDD222, WDD223, WDD228, WDD229 to the list of accessed courses.

For the courses assessed during the 2013-2014 academic year, 95% of these assessments and student outcome measures fell above the 70% minimum standard for achievement levels. Improvements from the prior assessment period 2010-2013 were made which included revisions to exam, labs, lecture materials, learning tools (i.e. books), redesigned ANGEL master templates (in conjunction with e-learning), course coordination assignments of faculty and reduction of hours in programs (60-63) as well as course retirements. Continual assessment of outcomes pertaining to student success and engagement will be measured with improvements made where student achievement falls below the 70% standard. **Continuous improvement is always considered by my department and Angel environments, books and software are always enhanced to improve student success.**

As of this report, the CSIS department has completed assessment of approximately 28 courses. Considering course retirements and additions, the department has completed around $30/60 = 50\%$.

ISDM:

No courses were re-assessed from previous academic year (2012-2013).

The following courses were assessed Fall 2013 semester: IMT122, IMT245, IMT132, NET137, IMT239 and NET136.

The following courses were assessed Spring 2014 semester: CFS137, IMT256, IMT253, IMT261, NET120 and NET220.

Automotive:

During the 2013-2014 school year the Automotive Technology 2250 and GM ASEP 2051 programs first year courses were all assessed. The Toyota T-TEN Elective Courses were also assessed (AUT141, 142, 143, 251, 252 & 253). The automotive department instructors continue to make themselves available to students outside of class time to review topics that students have struggled with in class. PowerPoint

presentations are made available to the students through the Angel Learning Management System. Practice tests have been developed and placed on Angel for students who would like to take advantage of them. Toyota students are given supplemental information on discs on the first day of class to support topics covered throughout the course.

3. 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)
Written Products (including submitted drawings)	Written products essays	Refrigerant Handling and Lab Assignments
Cap Stone Experience	Homework/Finger drills	Troubleshooting (heating and cooling) applications
Oral Presentation	Accuracy Dictations	Electrical Systems Analyses (Diagramming & Hands on activities)
Warm Air Systems Tests	Discussions	Lab Experiments (Mechanical & Electrical)
Hands on Labs & Testing	Lesson Evaluations Quizzes	Homework Assignments
Performance Based Assessments	Lesson Transcriptions Quizzes	Group & Individual field assignments
Locally Developed Tests	Chapter Lab Work	Knowledge checks of applicable federal, state, and local laws
Circuit Analysis Designed/Class & Lab assignments	iWork Numbers	Working Effectively in teams
Homework Assignments	iMovie	Electrical setup and testing of equipment w/ hands on assignments/labs/ exams/ and presentations
Quizzes and Exams	IWork Keynote	PLOs are being reviewed/updated for all AOP for the 2013-2016 three-year cycle
Chapter Exercises	Research Project	PLOs are being reviewed/updated for all JRC for the 2013-2016 three-year cycle
Chapter Practice	Online Research Assignments	PLOs are being reviewed/updated for all LA for the 2013-2016 three-year cycle
Chapter Tests	In Class Activities	Submitted Computer Science and Engineering APR (Fall 2013)
Unit Exams	Weekly Projects	Submitted Web Design and Development APR (Spring 2014)
Speed Tests	SAM Training	APRs included a review of the SLOs and PLOs for student success and were revised when needed
Midterm	Simulation Findings Tests	Revised Capstone course which is in all CSIS programs
Chapter File Work	Portfolio	NA for academic year, 2010-2011
MAC OS Assignment	Case Brief	NA for academic year, 2011-2012
iPhoto	Quizzes and Assessments	Academic year, 2012-1013 Capstone Projects

iWork Pages	Writing Homework	Standardized Testing (ASE Test)
Final	Final	Performance Based Assessment
Self-Studies	Projects	Follow-Up Studies
Short Answer Assignments	Completion of CBT, WBT, and IDL Assignments	NA for academic year, 2013-2014
Case Study	Effective Communication	
Article Analysis	Information Literacy, Critical Thinking	
Career Project	Global and Diversity Awareness, Critical Thinking, Civic, Professional and Ethical Responsibility	
Simulations	Quantitative Literacy	
Hands-on Labs		

4. What evidence do you have that students achieved or did not achieve the learning outcomes? (Please include evidence of students achieving the learning outcomes.)

Dean Comments:

As evidenced on the course assessment/re-assessment forms for the assessed 2013-2014 courses, faculty reported all achievement levels for all evaluation methods in courses. The minimum college standard of 70% or higher was utilized for the achievement level.

Engineering Department:

The GLO's that were identified on the master syllabus for each course that was assessed were reviewed for accuracy. The course objectives were then identified to support the GLO's. All evaluation methods used to measure and evaluate student success of each GLO were also identified. Based on this information, the level of achievement for each evaluation method was reported using the number of students earning a 70% or higher out of the total number of students who completed the evaluation tool and who completed the course. If the achievement level fell below the 70% minimum college-wide standard, planned improvements were identified to improve student learning in that GLO and to improve overall student success.

Industrial Technologies Department:

The GLOs that were identified on the master syllabus for each course that was assessed were reviewed for accuracy. The course objectives were then identified to support the GLOs. All evaluation methods used to measure and evaluate student success of each GLO were also identified. Based on this information, the level of achievement for each evaluation method was reported, using the number of students earning a 70% or higher out of the total number of students who completed the evaluation tool AND who completed the course. If the

achievement level fell below the 70% minimum college-wide standard, planned improvements were identified to improve student learning in that GLO.

ASOA:

As evidenced on the course assessment/re-assessment forms, faculty reported all achievement levels for all evaluation methods in the courses. The minimum college standard of 70% or higher was used for the achievement level.

Faculty also reviewed the course objectives as they aligned with the specified general learning outcomes for those courses that were assessed. Each specified general learning outcome was supported by at least one course objective, and each course objective was supported by at least one evaluation method.

For the courses assessed this past academic year, 5.81 percent (40/688) of the achievement levels for the evaluation methods fell below the minimum standard of 70% (94.19% were above the minimum standard).

For the five courses (Communication and Transcription Skills, Records Management, Legal Terminology, Legal Transcription, and Realtime Theory II) re-assessed this past academic, year 8.55 percent (29/339) of the achievement levels for the evaluation methods fell below the minimum standard of 70% (91.45% were above the minimum standard). All five of the courses will need to be reassessed in the 2014-2015 AY as they still have some methods of evaluation falling below the 70% minimum standard. Coordinators of these courses will mentor faculty teaching these courses in fall 2015 and continue to monitor the achievement levels of these methods of evaluation and implement additional or different plans for improvement to promote student success. It is also important to note that seven class total needed reassessed based on the fall 2013 assessment process. Out of the seven that needed reassessed only five of the seven courses ran in spring 2014. The other two will be reassessed in a following semester as indicated on the department's Course Assessment Timeline Matrix.

CSIS:

The courses which were assessed in the 2013-2014 academic year demonstrated a level of at least 70% of the students taking each assessment tool and scoring 70% or above. Additional courses were added to the assessment process during the fall semester and in the spring semester from the original plan with the department completing almost 50% of the course evaluations. The department also submitted APRs for Computer Science and Engineering and Web Design and Development programs These included evaluations of the associated SLOs and PLOs.

Using the Master and Class Syllabi as a template and incorporating any needed revisions to the GLOs, the department reviewed the course objectives/outcomes and assessments for areas of improvement. All evaluation methods and grade compositions were evaluated to consider areas where deviation from the course templates was made. Any deviations were noted and the department will be taking corrective actions

by supplying a template for each of the courses and all faculty will be instructed to utilize the template. Based on the GLOs and the feedback from faculty on the GLO forms, the level of achievement was evaluated to determine assignments/assessment methods which fell below the acceptable 70% range. Where the assessment/assignment fell below the 70% consideration was made to determine improvements to the assessment item/method. All actions were taken to improve student success and supply more engaged learning for students. Action plans which are already in place will be evaluated and revised and re-implemented in Fall 2014 and Spring 2015 to continuously improve student outcomes and effectiveness of assessments.

ISDM:

For the courses assessed this past academic year (Fall 2013 – Spring 2014), of the achievement levels for the evaluation methods fell below the minimum standard of 70% (96% were above the minimum standard).

For CFS137 Computer Crime and Investigation and NET120 PC Upgrading and Maintenance, action plans will be implemented for Fall 2014 to improve student learning.

The GLOs that were identified on the master syllabus for each course that was assessed were reviewed for accuracy. The course objectives were then identified to support the GLOs. All evaluation methods used to measure and evaluate student success of each GLO were also identified. Based on this information, the level of achievement for each evaluation method was reported, using the number of students earning a 70% or higher out of the total number of students who completed the evaluation tool AND who completed the course.

Automotive:

Students are evaluated on test scores, homework assignment, and laboratory activities. Those results are reviewed during the assessment process. There is also feedback from the Automotive Department Advisory Committee members during the spring and fall advisory meetings.

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

Dean Comments:

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.

Engineering Department:

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

Industrial Technologies Department:

All of the assessed courses were deemed to have met the 70% or better threshold required.

ASOA:

A variety of planned improvements have been identified: add study guides, live “study” chats for web courses, additional review of material, re-evaluation of test for validity of questions, revising/adding audio lectures, formula review/practice, and virtual flashcards.

CSIS:

For the courses that were assessed during the 2013-2014 academic year, a variety of planned improvements were identified. These included adding videos, revision of timing or method of assessment, pre and post tests or assessments, increasing group work (i.e. discussions, team projects), improving announcements and other communications in ANGEL delivered courses, increased emphasis on attendance and in-class assignments, improved/reenforced emphasis on instructions, revisions to grading scales for assignment categories and grading criteria (increased/improved Rubrics), review of pre-requisites for first level courses (this will improve the level of skills students enter the courses with as well as allow for the improvement/increased quality in the evaluated courses), more emphasis on tutoring and early intervention, increased writing assignments, increased presentations, increased team interaction/group work, review/revision of audio and video lectures/tutorials/etc, reevaluation of alignment of materials (this also included more conformity of faculty to utilizing the course templates that are supplied), and revision/adjustment of course outcomes/objectives.

ISDM:

No improvement strategies were needed for evaluations that had a rating above 70%.

For the courses that will need to be reassessed a variety of planned improvements were identified. These included adding pre-test time, create additional practical exams, increase group work and discussions, increase team interaction on practical labs and increase time for reviewing specific topics in the area of hardware and software operations.

Automotive:

Select students are struggling with our current web based tests.

Instructors will meet to review current test bank questions. The questions that the group determines do not align with our course content will be rewritten or removed from the test bank. Classes will be reassessed in the fall 2014 and spring 2015 semesters to determine if the test results improve.

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

Dean Comments:

At the beginning of Fall 2013 semester, Dept. 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 2013 semester. They were instructed to mentor and instruct any adjuncts that were teaching a course that needed to be assessed or reassessed during the 2013-2014 AY. During this academic year the department chairs met with their faculty to discuss the overall process and the positive implications of continuous improvement. Assessment of additional courses and re-assessment of necessary courses will occur during the next academic year.

Engineering Department:

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.

Industrial Technologies Department:

The faculty that completed these evaluations coordinate these courses. Throughout this process, I have discussed with the coordinators how to assist with on-line coordination efforts. We personally met to discuss and ensure accuracy and validity of the data being reported. Any identified planned improvements will be discussed during advisory committee meetings and program meetings.

ASOA:

At the beginning of Fall 2013 semester, full-time faculty were instructed to evaluate their Fall 2013 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 2013 semester. They were instructed to mentor and instruct any adjuncts that were teaching a course that needed to be assessed or reassessed during the 2013-2014 AY. Finally, they were asked to review their coordinated courses and log courses to be evaluated in the department's Course Assessment Timeline Matrix to ensure all courses in each program are assessed during the new 3-year cycle. All three advisory boards were informed of this process and what courses were being assessed. A department meeting will be scheduled prior to Fall 2014 semester to discuss the planned improvements that faculty recommended, how those planned improvements will be implemented in Fall 2014 semester,

and the possible plans for revision of course content or methods of evaluation for those courses where the methods of evaluation after re-assessment still fell below the minimum standard. Assessment of additional courses and re-assessment of necessary courses will occur during the next academic year.

CSIS:

Using the biweekly meetings and department meetings, discussion and interaction was used to select courses which were appropriate for evaluation during the assessment cycle. Faculty selected the courses for Fall 2013 and for Spring 2014. They conducted all the evaluation of course outcomes/objectives and developed the GLO forms. The fulltime faculty also evaluated (reevaluated) their ANGEL templates for these courses to see where potential improvements may be necessary (prior to this assessment) utilizing the standards supplied by the E-Learning Department. Throughout the process, I met with the fulltime faculty to discuss the process and the implications of this continuous improvement process. All faculty were included in the assessment in order that the department would be better positioned to evaluate satellites, e-learning, and other factors for variation. In meetings with fulltime faculty they gave me the GLO forms which they completed with the general learning outcome mapping and assignment designations.

ISDM:

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.

Automotive:

Communication. The department meets on a regular basis to discuss course material, lab activities, tool and equipment needs, assessment data, and student challenges. Twice a year the department holds advisory meetings in which dealership service managers, parts managers, independent shop owners, technicians, etc. attend. The advisory board makes recommendations on curriculum and program changes base on the performance that they see from current students, graduates, and also based on new needs that are seen in industry.

7. 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
Update/review ALL programs (10) PLOs for this new 3-year cycle to determine they are measurable.	NA
Review of ALL syllabi by course coordinators to ensure alignment of GLOs with course objectives and methods of evaluation	NA

Review of ALL syllabi at the beginning of each semester to ensure consistency in methods of evaluations	NA
Conduct department "best practice" meetings (including adjunct and dual enrollment instructors each semester)	NA
Development of course coordinator checklist and duties to ensure the methods of evaluation align with the GLOs.	NA
Continue to development master courses for key courses in the department.	NA
All web courses are being reviewed through e-StarkState based on a Quality Matters rubric.	NA
Review textbooks/software periodically to ensure the best resources for the department are being used in order to promote student success.	NA
Biweekly department meeting	NA
Fall and spring advisory board meetings	NA
ANGEL/BANNER training	E-Learning/SSC Instructional and videos available, Determination of a new CMS
Software Updates/New Purchases	funds allocated for the purchase of upgrades and new licenses – improvements to lab hardware and keeping current with all software
Revision of assessments/assignments	NA
Research additional/best practices of student engagement	NA
Revisions to General Learning Outcomes	NA
Implement technology in the classroom where possible to increase student success	potential funds for purchasing these tools - improvements to labs, hardware, and software relating to cutting-edge technologies
Include the assessment progress reports and updates on the agenda for department meetings.	NA
Include assessment progress reports and updates on the agenda for fall and spring advisory committee meetings.	NA
Match identified needs and concerns to continuous improvement initiatives.	NA
Include the assessment progress reports and updates on the agenda for department meetings.	NA

Develop a process to better measure student success throughout the semester utilizing Angel grades entered into a tracking spreadsheet. Results will be reviewed throughout the semester at department meetings.	NA
Department Meetings	N/A
Advisory Committee Meetings	N/A
Instructional Equipment	Budget funds allocated for purchasing equipment and software
Professional Development Training	Budget funds allocated for purchasing equipment and software
Addition course objectives to support the GLO's	N/A