



**Associate in Science (AS)
Program Level Assessment Plan
June 8, 2017**

Associate in Science (AS) Mission Statement

The Associate in Arts (AS) degree program is designed for students who expect to complete a degree at a four-year institution in such disciplines as biology, engineering, mathematics, or physical science. The curriculum gives students a broad educational background in liberal arts with emphasis on mathematics and the natural sciences. The AS degree assures competency in the general education core while providing flexibility for customization to meet the individual student's educational goals and the requirements of the receiving institution.

Associate in Science Program Outcomes

Upon completion of this program, graduates will be able to:

1. Apply basic principles of biological and physical sciences and mathematics in junior and senior level courses required for majors related to science and mathematics
2. Use mathematic and scientific principles in problem solving
3. Conduct basic research and evaluate electronic and traditional sources
4. Apply the scientific method in designing, conducting, and analyzing experiments
5. Communicate effectively and work collaboratively
6. Examine issues from a global perspective

Assessment of Associate in Science Goals and Outcomes

The assessment of general education core courses is imperative and the key to curriculum improvement. Targeted courses include:

1. CIS 114: Introduction to Computer Applications and Concepts
2. ENL 100: Transitional Composition
3. ENL 101: English Composition I
4. MTH 103: Transitional Math Level C
5. MTH 121: College Math for General Education
6. MTH 123: Intermediate Algebra
7. SPH 101: Speech Fundamentals
8. BIO 101 and 101L: General Biology I and Lab
9. BIO 102 and 102L: General Biology II and Lab
10. BIO 124 and 124L: Human Anatomy and Physiology I and Lab
11. BIO 125 and 125L: Human Anatomy and Physiology II and Lab

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12. GSC 109 and 109L: General Physical Science I and Lab
13. GSC 110 and 110L: General Physical Science II and Lab

Elective courses in the humanities, social sciences, general education, math, natural sciences, and the student's chosen concentration will be assessed on a cyclical basis based on the program implementation schedule and the Assessment Committee's Course Report Tracker.

A focus on curriculum improvements and revisions based on assessment data will help overcome traditional barriers to conducting meaningful assessment and improve student learning.

Therefore, the following assessment instruments and standards will be used to determine student academic achievement and course effectiveness in meeting program-level and course-level learning outcomes:

Completion Rate/Course Level – At least 75% of students enrolling in AS core and elective courses will successfully complete their courses. This metric will be determined at the end of each semester based on final grades beginning in Fall 2017. Courses to be assessed in subsequent semesters will be based on the program implementation schedule.

Drop Rate – Beginning in Fall 2017, drop rates in AS core and elective courses will not exceed 30%.

Course-Level Effectiveness – Course outcomes for targeted AS courses will be assessed on a cyclical basis based on the program implementation schedule and the Assessment Committee's Course Report Tracker. At least four learning outcomes will be assessed in each Course Assessment report and unmet learning outcomes (below 75%) will be monitored and reassessed in subsequent reports.

Graduation Rate – At minimum, 75% of students enrolling in the AS program will successfully complete their degree within four years.

Syllabus Analysis – Syllabus analyses for all AS courses will be conducted each semester to ensure current learning outcomes are included on all syllabi and that all syllabi are consistent across the program.

Transcript Analysis - Transcript analysis will be conducted as triggered by deficiencies in course level assessment activities.

Enrollment Patterns – Enrollment trends will be monitored on a yearly basis. Shifts in targeted courses and enrollment numbers will trigger a detailed assessment review as defined above. IDEA course surveys will be used as an indirect assessment measure of student success and satisfaction. IDEA survey questions will provide student feedback on the quality of learning acquired throughout the program including an understanding of intended course outcomes and overall student satisfaction with instruction and course effectiveness.

Summary of Assessment Model and Utilization for Program Improvement

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Eastern's overall assessment plan consists of three levels: entry level assessment (ACCUPLACER, SAT, ACT), active enrollment assessment (course and program assessment, student satisfaction surveys, etc.), and post-graduation assessment (employment satisfaction survey, alumni survey, employment and salary data, etc.). AS students participate in the ETS Proficiency Profile, which tests four core skill areas – reading, writing, mathematics, and critical thinking. It is a test that the Voluntary System of Accountability (VSA) has selected as a gauge of general education outcomes. Course completion rates and student tracking studies are used as a measure of overall program success. All general education courses are assessed on a cyclical basis, and recommendations for improvements are funneled into the feedback loop so that future Course Assessment reports will address any course shortcomings.

Data Collection

As previously discussed, multiple methods will be used to collect appropriate data to assess student learning and success. Primary data will be analyzed to determine course level effectiveness. A secondary analysis of student records will be conducted to track student success, engagement, and goal attainment. Student records selected for the secondary analysis include enrollment patterns in AS programs, course grades, drop rates, and job attainment rates. Future AS program reviews will extrapolate and assess data to help improve program deficiencies. Additionally, course evaluations will be conducted to address students' perceptions of success and satisfaction. These self-reports will provide a qualitative perspective of the students' "lived experience" in targeted program courses.

Data Analysis and Recommendations

The Division Chair for General Studies and faculty members will prepare assessment reports and recommendations. These reports will be provided to the Dean for Teaching and Learning, Assessment Committee, and the Learner Outcomes Team (LOT). Reports will address student outcomes, methods of assessment, results of assessment activities and recommendations. Course Assessment reports are distributed to all AS faculty members. Any suggestions or comments from faculty members will also be considered for any possible changes to the course.

Effectiveness of Assessment Plan

Additional methods of assessment will be added to determine student success and the effectiveness of the curriculum. The Higher Learning Commission (HLC) identifies six questions, which serve as prompts for dialog in utilization of assessment data for improvement of student learning. As trends in student academic achievement are monitored, the need for additional assessment activities or change in focus will become evident by applicability of results in curriculum revision.

Below are HLC's six fundamental questions to guide discussions for the review of assessment in support of student learning:

1. How are your stated learning outcomes appropriate to your mission, programs, degrees, and students?
2. What evidence do you that students achieve your stated learning outcomes?

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3. In what ways do you analyze and use evidence of student learning?
4. How do you ensure shared responsibility for student learning and for assessment of student learning?
5. How do you evaluate and improve the effectiveness of your efforts to assess and improve student learning?
6. In what ways do you inform the public and other stakeholders about what students are learning – and how well?

See Attachments for Program Matrix