

Course Outcome-based Curriculum Assessment

FOEE Theme: Innovation in Curriculum

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Objectives:

1. Demonstrate that a department's undergraduate curriculum meets the objectives of the department, college, university, and those defined by the accrediting body (ABET).
2. Develop and implement policies that help improve the effectiveness of every required undergraduate course.

Approach:

We developed systematic processes where:

1. Instructors develop course outcomes, assess the achievement of those outcomes by determining results that compare student performance on an assessment instrument to a performance criterion, write action plans to address deficiencies, use these plans to improve their teaching, and use follow-up to document these improvements.
2. The department demonstrates that the achievement of these outcomes satisfies the objectives of the department, college, and university, as well as those of the accrediting body, by mapping the learning outcomes to the broader objectives.

Key Concepts:

Course outcome: a statement of some knowledge, skills, abilities, or values students should acquire in the course.

Result: a determination of whether a performance criterion has been met.

Assessment instrument: student work used by an instructor to determine the extent to which a course outcome is being achieved.

Performance criterion: defines a performance threshold that determines whether an outcome has been met over all students in a section of the course.

Action plan: a specific change in a course to help improve the achievement of a course outcome in every section of a course.

Follow-up: determination of whether each action plan was implemented.

Mapping: a determination that achievement of a specific lower-level goal (e.g. a course outcome) helps achieve a higher-level goal (e.g. a college, university, or ABET goal).