

Teaching and Assessing Life- long Learning Workshop

Notes and Handouts

Teaching and Assessing Life-long Learning

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Purpose:

This workshop provides an overview of the ABET terms and criteria for engineering program outcomes, defines Life-long Learning, and describes how to incorporate program learning outcomes into more effective course and teaching methods.

Agenda:

The intended time for this workshop is 90 minutes.

Topics for this workshop include:

- ABET terms
- Moving from outcomes to course and teaching methods
- Definition of Lifelong Learning

Goals:

- 1. Expand participants' conceptual framework of Life-long Learning**
 - 2. Participants leave with something helpful**
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ABET Criterion 3. Program Outcomes

Engineering programs must demonstrate that their students attain the following outcomes:

- (a) an ability to apply knowledge of mathematics, science, and engineering
- (b) an ability to design and conduct experiments, as well as to analyze and interpret data
- (c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- (d) an ability to function on multidisciplinary teams
- (e) an ability to identify, formulate, and solve engineering problems
- (f) an understanding of professional and ethical responsibility
- (g) an ability to communicate effectively
- (h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- (i) a recognition of the need for, and an ability to engage in life-long learning
- (j) a knowledge of contemporary issues
- (k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Program outcomes are outcomes (a) through (k) plus any additional outcomes that may be articulated by the program. Program outcomes must foster attainment of program educational objectives.

There must be an assessment and evaluation process that periodically documents and demonstrates the degree to which the program outcomes are attained.

Teaching and Assessing Life-long Learning Bibliography

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