

ABET Certification Project: Possible Metrics

Course Metrics

- Number of students
 - Trends over time
 - Fall vs. spring semester
 - Year by year
 - Professor
- Grades
 - Average score over time
 - Fall vs spring semester
 - Year by year
 - Professor
 - Average likert-scale score over time
 - Fall vs spring semester
 - Year by year
 - Professor
 - % of students achieving outcome adequately over time
 - Fall vs spring semester
 - Year by year
 - Professor
- Content
 - Textbooks
 - Textbooks requiring change as a function of time
 - Prerequisites
 - Pre-reqs requiring change as a function of time
 - Changes
 - # topics to be dropped over time

- # topics needing to be added over time
 - Both of these could offer insight as to what the department or field is placing value on as the years progress

Professor Metrics

- Students
 - Number of, year by year
- Grades
 - Average likert-scale value
 - % of students achieving adequate performance
- Courses
 - Frequency of teaching each course
 - 'Best' course - highest percentage of students meeting standards
 - Extension: program to optimize course teachers based on effectiveness

Department

- Students
 - Number of students enrolled in courses each year
 - Fall vs spring semester as well
 - Total average % achieving adequate performance in courses in dept.
- Professors
 - Number of professors in the department over time
 - Highest scoring professors based on quality and effectiveness
 - Compare to professor enrollment so see trends of students making choices based on this metric
 - Professors showing best/worst changes in quality over time
 - Overall slope of curve
- Courses

- Number of courses offered by department over time
- Average likert-scale value for ALL of the courses
- Number of professors per course since beginning
 - Does this correlate to average success?
- Highest/lowest percentages of students meeting standards
 - Gives insight into hardest/easiest courses
- Materials
 - Number of textbook changes per year
 - Number of courses that needs additional topics
 - Number of courses that need topics removed