Outcome D. Graduates will have an ability to function on multidisciplinary teams.

Course	Performance indicators
MAE 211, 471	Use of various areas/disciplines in engineering problem formulation and/or solution.
MAE 211, 471	Use of team organizational tools for planning, task distribution, reporting, monitor team effort.
MAE 211, 471	Grade distribution.

Tools used:	Course assessment by faculty, Alumni survey, Employer survey.
Data Collection:	The data are collected every semester based on the course offerings.
Frequency of data collection:	The data are collected every time courses are taught.
Data Analysis:	The data obtained are analyzed every year.
Closing the loop:	This outcome is subject to review every year based on performance criteria and metrics and specific action items are developed, if necessary, to revise the content of the courses. The analyzed data are presented separately to the following groups in meetings. a) Feedback to students on all assignments b) Feedback to faculty, particular from majors.

Outcome and Performance Indictor		Performance Indicator Rubric				
Assessment Outcome D. "Graduates will have an ability to function on multidisciplinary teams."		**Poor**	**Fair**	**Good**	**Very Good**	**Excellent**
PI1	Use of various areas/disciplines in engineering problem formulation and/or solution	Use of only one discipline	A second discipline mentioned	Two disciplines equally used	Two or more disciplines Used well	Various disciplines used and explained
PI2	Use of team organizational tools for planning, task distribution, reporting, monitor team effort.	No organizational tools used	Some team organization plans	Task/time charts used	Task/time charts used with team effort	Task/Time/ Effort with follow up
PI3	Grade distribution	1 (F)	2 (D)	3 (C)	4 (B)	5 (A)

Explanations:

Performance Indicator 1. (PI1). "Use of various areas/disciplines in engineering problem formulation and/or solution" Engineering problems often require the use of methods, concepts and techniques of various disciplines or sub-disciplines in an engineering field. Some exercises are typically offered to students in which they can use the various disciplines with which they are familiar. The following rubrics are used to assess this indicator:

- **Poor.** This rubric is used when only one discipline or area is used on a problem that offers the opportunity to integrate other disciplines or sub-disciplines within the field.
- **Fair**. This rubric is used when at least two disciplines or areas are used on a problem that offers the opportunity to integrate other disciplines or sub-disciplines within the field. In this case, the first discipline is emphasized and the second discipline is addressed minimally.
- **Good.** This rubric is used when at least two disciplines or areas are used on a problem that offers the opportunity to integrate other disciplines or sub-disciplines within the field. In this case, both disciplines are given similar importance and the issues are clearly connected.
- **Very Good.** This rubric is used when at least two disciplines or areas are used on a problem that offers the opportunity to integrate other disciplines or sub-disciplines within the field. In this case, both disciplines are given appropriate importance and the issues are clearly connected.
- **Excellent.** This rubric is used when in addition to the previous rubric, the procedures are well described, explained, illustrated and documented.

Performance Indicator 2. (PI2). "Use of team organizational tools for planning, task distribution, reporting, monitor team effort" Engineering problems often require the use of organizational tools and techniques to, plan monitor, review and assess the progress towards reaching the objectives. The following rubrics are used to assess this indicator:

- **Poor.** This rubric is used when an assignment requiring group work and multiple tasks does not provide evidence of simple organizational tools or techniques being used.
- **Fair**. This rubric is used when an assignment requiring group work and multiple tasks provides some evidence of simple organizational tools including at least an activity timeline and task distribution.
- **Good.** This rubric is used when an assignment requiring group work and multiple tasks provides evidence of organizational tools including a timeline charts, task-effort distribution, and means to monitor progress activity.
- **Very Good.** This rubric is used when an assignment requiring group work and multiple tasks provides clear evidence of organizational tools including a Gantt charts, task-effort distribution, means to monitor tasks progress and effort spent on tasks, including progress reports.
- **Excellent.** This rubric is used when in addition to the previous rubric; there is evidence of organizational tools being used to produce follow-up activity.

Performance Indicator 3. (PI3). Grade distribution from class on applicable assignments or exercises. A, B, C, D ,F