

**DEPARTMENT OF MECHANICAL ENGINEERING, IUPUI
FACULTY FEEDBACK FORM FOR COURSE OUTCOMES SURVEYS**

Note: This form must be completed and submitted to the department by instructors at the end of each semester based on the survey results of courses taught. It is designed to monitor student learning, keep track of progress and changes made in the program, and allow faculty reflect upon the results. The survey results may be viewed from the department's survey database at <http://www.engr.iupui.edu/me/assessment/fsurveys.shtml>. The completed form may be sent to the assessment database of the department via e-mail at: **hakay@iupui.edu**.

Course: ENGR 197	Year: 2005	Semester: Spring
Instructor: Nancy Lamm	Survey Average: 4.08/4.23 (Out of 5)	

1. List the outcomes that did not meet the Department's current threshold of 3.75 out of 5.0 and explain the reasons. If all or most outcomes in your course are equal to or above 3.75, please reflect upon on the lowest two or three. Please state the outcomes as fully as possible, as in the course outcomes list, with the numbers same as on the list.

1. Develop algorithms using a step-by-step process. (4.04, 4.07) Although all programming assignments required algorithmic thinking, the teaching of algorithmic development was not emphasized as a discipline in itself. Although flow charts and pseudocode were introduced, perhaps more work in these areas would be helpful. More classroom exercises could also focus on algorithm apart from language. It seems that there are many approaches to teaching programming skills, and not just one method will work for every student.

3. Use loops, selection structures, arrays, and input/output. commands in MATLAB programs. (4.04, 4.27)

6. Use loops, selection structures, arrays, and input/output commands in structured C programs. (3.92, 4.20)

It appears that in one section, students claimed a better mastery of basic programming commands in MATLAB and in the other section, students claimed a better mastery of these commands in C. Teaching two languages in the same course continues to be a problem.

2. Were there any changes made to the course during the semester? If so, explain.

A new text for C programming was introduced: A Structured Programming Approach Using C by Forouzan and Gilberg. This text was well received by students and instructors.

3. Are there any recommendations for improvement?

Using MATLAB to ease the transition to C rather than teaching the efficient way to program in MATLAB does not take advantage of the power of MATLAB. Moving MATLAB to a separate course later in the curriculum will help to alleviate this problem.

4. Additional reflections/suggestions for assessment?

In the fall of 2006, MATLAB will become a stand-alone course following C programming taught in ENGR 197. This will alter the current practice of teaching MATLAB as a bridge to C. Hopefully with only one language in ENGR 197, there will be a better mastery of commands and applications to problems without having to keep track of the syntax of two languages.

Please e-mail to: hakay@iupui.edu. Thanks.