

**Rose-Hulman Institute of Technology**  
**EE 207 Baseline Service Course Assessment**  
**Spring/Summer 2001**

Faculty from the ECE department have received a grant to develop a course that will enhance ME students' understanding of EE concepts. The course will be delivered in studio format and EE concepts taught in the context of ME. The project is expected to enhance ME students' knowledge of EE concepts, increase their confidence in applying EE concepts, and improve their attitude toward learning about and applying EE concepts. The anticipated outcomes will be assessed using several source instruments and information to provide a comprehensive assessment of the students' progress and the project's effectiveness, and to identify areas that may need improvement.

**Project Contact:** *Ed Wheeler*

**Assessment Contacts:** *Gloria Rogers and Gwen Lee-Thomas*

<b>Source Instrument</b>	<b>Source Information</b>	<b>Contact Person</b>	<b>Date</b>	<b>Comments</b>
Test items	Questions from past tests and exams to provide baseline information on student cognitive skills. .	Ed Wheeler		Test items will be identified that provide baseline information on the students' cognitive skills related to anticipated course outcomes. Items that test over the same cognitive skills will be developed by faculty who are not instructing in the pilot course and be given during the implementation of the new course. Results will be analyzed to see if there is any variance in student responses between the two student groups (traditional vs. pilot)
Course Evaluation Forms	Items that provide insight into students' perception of the course.	IRPA & Ed Wheeler		Identify items that would provide insight student perceptions of the course (e.g., under "Course", item 5, "The course had no relevance outside of a grade and credit hours.")
Myers-Briggs Type Indicator	Identify students' personality type preference that may inform pedagogical and learning preferences.	IRPA & Ed Wheeler		IRPA review the literature to document the relationship between MBTI and learning styles and the relationship between learning styles and pedagogy.
Computerized problem-solving.	<ul style="list-style-type: none"> <li>• Track student iterative process when solving problems or answering questions.</li> <li>• Examine relationship between student performance on computerized homework and learning style and pedagogical methods.</li> </ul>	IRPA & Ed Wheeler	On-going as students participate in computerized assessment	<p>Formative assessment process to identify if there is a relationship between solving problems/answering questions and pedagogy and learning styles.</p> <p>Work with Ed over the summer as they develop the software to be sure that appropriate tracking/monitoring capabilities are in place.</p>

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Pre & Post Surveys	Items to assess students' levels of confidence and attitude toward the course. Other student attributes to be studied: *perceived preparation for specific skills needed in senior design *perception of workload	IRPA & Ed Wheeler	End of term	Both baseline and pilot group
Focus Groups / Interviews	Students in pilot group	IRPA & Ed Wheeler	mid-term?	Pilot study for the purpose of formative assessment