

Recommendations for Administering ENGR 310

Committee Charge:

Review the current needs and structure of ENGR 310, and make comprehensive recommendations on:

1. Long-term course oversight, and
2. Instructional staffing.

Committee Membership:

CE – A. Larsson
CHBE – R. Larsen

CS – J. Paxton
Dean's office – C. Plumb

ECE – R. Maher
IE – D. Sobek (chair)

ME – V. Cundy
MET – R. Larson

Course Oversight Alternatives:

	<i>Pros</i>	<i>Cons</i>
1. Dean	+ Symbolic importance + Unified vision	- Less department buy-in - Inability to give course sufficient attention
2. COE Curriculum Committee	+ Existing body where all departments already represented	- Would create a conflict of interest with cmte's current charge - Committee too far removed from course
3. New ENGR 310 advisory committee	+ Interested members with stake in course's success + Continuity with prior work + Department representation	- More work load for faculty - Instructor may feel micromanaged
4. Academic Council	+ Symbolic importance + DH's invested in course's success	- DH workload precludes giving course due attention - Communication bandwidth
5. Industrial advisory group	+ Strong feedback to keep course relevant to engineering practice	- Non-faculty oversight of curricular issues - Separation from faculty
6. One of the academic departments	+ Strong instructor support	- Department self-interest - Conflicts with interdisciplinary aims of course

Bold statements indicate the committee's primary concern for that alternative.

Recommendations:

- Create a standing ENGR 310 Advisory Committee before the close of the current semester, with representation from each participating degree program, to oversee the content, development and evolution of the course.
- Committee reports to the College Dean, and has a chair to lead the committee's work.
- The committee is responsible for:
 - Selecting instructors and coordinating with appropriate department heads for teaching release.
 - Ensuring that course logistics are taken care of, such as meeting rooms and times, # of sections taught, instructor of record, TA appointments, instructor evaluations, etc.
 - Ensuring that course content meets the original intent through a minimum topical coverage list.
 - Ensuring that course content supports the needs of College programs.
 - Facilitating communication with programs regarding ENGR 310 issues.
 - Course assessment.
 - Submitting an annual report to the Dean at the end of each AY.
- Department heads are responsible for appointing representatives from their department's programs. Committee members should have an interest in the course (e.g., capstone design instructors) and be willing to advocate for the course among their faculty peers.

To: Dean Marley
From: ENGR 310 Ad Hoc Cmte.
Date: 18 April 2008

Instructional Alternatives:

Criteria:	1-2 current COE faculty w/ buyout (baseline)	Rotate Instructors among existing COE faculty	New Tenure-track position	New Adjunct Instructor (long-term)	Team Teach
Faculty Buy-in	0	+	0	0	0
Effective Oversight	0	+	0	0	0
Instructor accountability	0	–	0	0	–
Positive student experience	0	0	0	+ / –	–
Sustainability	0	0	+	0	–
Resource intensity	0	–	–	0	–

Key: + better than, 0 same as, – worse than baseline



The strongest faculty support is for a single-instructor model, where:

- The College secures additional instructional talent through new-to-the-College funds, and
- Departments do not have to find instructors for bought-out teaching assignments.

Recommendations:

- Establish a new, privately funded endowment account dedicated to the instruction of multidisciplinary design.
 - IF the endowment account is sufficient, establish an endowed chair (likely tenure-track) in multidisciplinary design. The individual holding the professorship would:
 - Develop and evolve the course in cooperation with the ENGR 310 Advisory Committee to serve the programmatic needs within the College, incorporate best practices from industry, and increasingly involve majors from outside COE.
 - Treat programs' capstone instructors as customers, soliciting and responding to feedback.
 - Make recommendations to the ENGR 310 Advisory Committee at least once per semester on course developments.
 - Reside in one of the College's programs.
 - Have research expectations in one or more areas of multidisciplinary design, engineering design practice, design pedagogy, or other complimentary area of inquiry.
 - IF the College is unable to secure sufficient external-to-MSU funds for an endowed chair, recruit an adjunct instructor with industrial experience to assume course instructor responsibility.
 - Similar teaching responsibilities as the endowed chair per above, but without research expectation.
 - Appointed by the Dean, but resides in one of the College's programs.
 - Department head responsible for individual's performance evaluation will solicit input from the ENGR 310 Advisory Committee.
 - Obtain commitment to teach and develop ENGR 310 for multiple years.
- While the committee recommendations are being acted upon, rotate ENGR 310 instructors among existing COE faculty, starting with F08 semester.
 - Develop more people who can easily pick up the course if needed.
 - Build stronger shared understanding of the course content, intent, and nuances of administration.
 - Bring in broader perspectives.
- Continue using graduate student and other suitably qualified persons as project advisors / recitation instructors, funded by the Dean's office. ENGR 310 Advisory Committee will review all GTA appointments with the instructor.
- Dean's office responsible to provide logistical support for the course, either directly or through supplemental funding to an appropriate College program.