

Current 120 SU ChE Curriculum

Math 1A	Math 1B	Math 53	Math 54	ChE 141	ChE 157	Sci elec	Eng elec
English comp	Phys 7A	Phys 7B	E77	ChE 185	ChE 142	ChE elec	Eng elec
breadth	breadth	ChE 140	ChE 150A	ChE 150B	EECS 100	ChE 154	ChE 160
Chem 4A	Chem 4B	Chem 112A	Bio 1A	Chem 120A or Phys 137A	E45	ChE 162	breadth
ChE 96						breadth	
17 units	16 units	17 units	15 units	13 units	13 units	16 units	14 units

1. Phys 7C/Chemistry & Adv Tech dropped
2. Eng 77 moves to spring of sophomore year
3. Bio 1A replaces MCB 102 (not for bio-option)

UGCC Charge 2006/07

[Radke (chair), Wallman, Iglesia(F)/Katz(Sp)]

1. Monitor progress on E7(77). Examine best way to implement computation into the curriculum (e.g. establish our own course?).
2. Develop plan to combine 154 and 157 laboratories
3. Monitor progress of bio-option teaching committee.
4. Participate in upcoming ABET review and provide support as requested by chair.
5. Conduct usual ABET reporting reviews (Honor's Tea, AIChE luncheon etc).
6. Do anything else I ask.

J Reimer

August 1, 2006

7. Please review process control course (JAR; November 07, 2006)
8. Please again, review process control course (JAR; March 22, 2007)

Charge 2: Plan to Combine 154/157

- UGCC and AIChE met on October 30, 2006 to discuss a plan by Segalman and Wallman to combine 154/157 laboratories.
- Based on that meeting and feedback from students, UGCC recommended against combining 154 and 157 (see November 02, 2006 report).
- UGCC's recommendation was approved by the faculty at a fall lunch meeting.

Charge 5: Student Feedback

AIChE Student Chapter (F); Honor's Tea (Sp); Senior Survey; Advising

1. There is general consensus that the new curriculum is working well and is appreciated.
2. Non-honors students continue to emphasize the importance of a Coop experience. They complain about lack of support to acquire a Coop.
(Was there not a faculty subcommittee assigned this year to look into Coops?)
3. Preparation in computation is inadequate with current E77. Students avoid programming exercises. They would appreciate more training by MatLab integration and instruction in later courses. Further, they feel that their math education is poor (e.g., no DE in Math 54). They would like the Math Decal course continued.
4. Keep the ChE 154/157/162 labs! Here is where engineering becomes real to students. The 154 lab fee is greeted with resignation.
5. Reducing plagiarism is the responsibility of the faculty.

Charge 5: Student Feedback

AIChE Student Chapter (F); Honor's Tea (Sp); Senior Survey; Advising

Selected results from UCUES (UC Undergrad Experience Summary)

Overall Academic Experience

	Disat	Sat	Vsat
UC	6%	37%	56%
CoE	8	41	51
CoC	11	38	51
ChE	12	40	48

UC gpa

	Disat	Sat	Vsat
UC	23%	43%	34%
CoE	28	46	26
CoC	28	45	27
ChE	42	26	16

Charge 4: Status of ABET

- Thanks to the Herculean effort of Chairs Bell and Reimer, the Fall 2007 ABET review went well.
- On March 23, 2007 CoE finally received ABET's evaluations. Chemical engineering had one program concern and one program weakness (must respond). The program concern was lack of university support to maintain computation facilities and updated software. The program weakness was lack of quantitative measure of student success of in achieving program outcomes.
- UGCC developed quantitative program-outcome templates for each course. These, along with a completed template for ChE 157 (Segalman) were submitted to ABET on April 10, 2007 as the department response for relieving the program weakness. To date, no feedback has been forthcoming from ABET.
- Faculty are reminded that at the beginning of each semester they must set and implement the specific measure gauges for each course.
- How to evaluate, collate, update, and disseminate ABET-collected data remains a challenge.

Charge 7,8: Status ChE

The basic issue is how to staff 162L

- UGCC and others met on November 30, 2006 to discuss 162. That subcommittee recommended combining 162 with 154 (see December 01, 2006 report). The faculty did not approve this recommendation.
- UGCC and others again met on April 12, 2007. That subcommittee did not make a specific recommendation. Rather, 3 alternatives were presented (see April 12, 2007 report):
 1. Nonladder-rank teaching resources are committed to 162L
 - 2 162L and 154 are combined, along with remainder 162L as demonstration.
 3. 162L is demonstration only.

The faculty reached no decision on 162L in Spring 2007.

- Laboratory and design courses will be discussed further today

Charge 1: Computation in the Curriculum

(This slide is verbatim from last year's faculty retreat!)

- After a full year of confusion by the CoE, it appears that starting Fall 07, CoE freshmen will take E7, a MatLab-based introduction to programming. This course will likely suffer the same complaints we have with the current E77. The fate of E77 remains unknown.
- Because of the continuing CoE confusion, UGCC did not tackle the CS 4/E7/E77 computation issue.
- There remains a major issue of how to integrate computation into the curriculum, specifically MatLab.
- In Spring 2007, the faculty approved E7 to be taken in the freshman year.
- Alex Katz has further items for discussion on computation.

UGCC Accomplishments 2006/07

- UGCC continues to meet its set charges and to document them (All reports were sent to faculty).
- Specific accomplishments in 2006/2007 were fewer because of the large curricular changes made last year, and because the assigned issues are long-standing and difficult to resolve. Broad faculty consensus is needed.