

Attendees: Emmanuel Dada (Chair), Michael Gyamerah, Sheena Reeves, Lealon Martin, Keisha Antoine (Interim Secretary), Safwat Shakir

Meeting goals:

1. To review each course and determine the appropriate pre-requisites and specific topics that students should learn in a given course.

NOTES

1. It would be good if the CHEM 1043 or 1034 had a better knowledge of atomic structure. There is a gap where students cannot link bonding to the atomic structure. Dr. Gyamerah will generate the pre-requisite list for the courses.
2. MEB and Thermo I are currently offered as co-requisite courses. The faculty decided to make MEB a pre-requisite of Thermo I. We will begin advising the students to take MEB in the Fall semester.
3. GNEG needs to be removed from the course catalog as it is no longer to be offered. Spring 2019 was the last semester that this course was offered.
4. Thermo I is taught every semester. Thermo II should be offered in the Spring semesters.
5. We may need to have CHEG students take CHEM I, II and not Chem for engineers. There is a concern that CHEM 1013 is watered down. Dr. Gyamerah to review content for freshman chemistry. Dr. Reeves to evaluate/review student performance for the Chem for engineers and the other Chemistry offerings to help with Dr. Gyamerah's determination.
6. First semester junior year is the last time a student should take a 2000 level course.
7. Dr. Reeves recommended the website www.LearnChemE.com as a resource.

Course ID	Course Name	Committee-recommended changes
CHEG 2013	Materials Science (3 cr)	It would be good if the CHEM 1043 or 1034 had a better knowledge of atomic structure. There is a gap where students cannot link bonding to the atomic structure.
CHEG 2043	Chemical Engineering Thermodynamics I (3 cr)	Pre-requisite of CHEM 1043, 1034, PHYS 2513. Emphasize latent heat, sensible heat, heat of formation, ideal gas law, Le Chatelier's Principle, single interpolation.
CHEG 2053	Material and Energy Balances (3 cr)	MEB will be moved to the Fall semester in the degree plan so that it will be a pre-requisite for Thermo I. Emphasize Steam Tables, Single interpolation, Extrapolation.
CHEG 2153	Biochemical Engineering Fundamentals Lab (2 cr)	Need to add Organic I as a pre-requisite. This course was last taught about 4 years ago as part of the bio-engineering concentration.
CHEG 2153	Biochemical Engineering Fundamentals (3 cr)	No recommendations.
CHEG 2156	Chemical Engineering Internship I (6 cr)	No recommendations.

CHEG 3011	Chemical Engineering Laboratory I (1 cr)	Emphasize lab report writing, literature review, safety. Dr. Martin to redesign course. This course can be substituted for CHEG 1021 for transfer students. Course description to change "... and heat transfer" to "... and heat transfer equipment".
CHEG 3013	Heat, Mass and Momentum Transport (3 cr)	Students should be introduced to unsteady-state mass balance in CHEG 2053. More emphasis on unsteady-state mass balance. Students also need to understand the concept x and y . Interpolation. In MEB they need to know that they can only balance mass and not mass fractions. Component balance. Reading assignments need to be incorporated along with quizzes.
CHEG 3023	Unit Operations (3 cr)	Use first two sentences of CHEG 3011 course description for CHEG 3023 course description. Remove "Experimental" from course description.
CHEG 3043	Equilibrium Stage Separation Processes (3 cr)	Use MEB to emphasize component balance. MEB and Thermo II are pre-requisites. Include use of Visio.
CHEG 3053	Chemical Engineering Thermodynamics II (3 cr)	Emphasize double interpolation, extrapolation and knowing the limits of extrapolation, single interpolation, exactness. Thermo I and MEB are pre-requisites.
CHEG 3063	Chemical Reaction Kinetics and Reactor Design (3 cr)	Organic II (CHEM 2043) should be an additional pre-requisite for this course. Emphasize How to develop rate laws – through experiment. Also review of literature to find the rate equation. Graphical integration. Levenspiel plots. Simpson's rule. Polymath. Multiple reactions, by-reactions. Solve a typical reaction.