

Attendees: Emmanuel Dada (Chair), Michael Gyamerah, Sheena Reeves, Lealon Martin, Nabila Shamim, 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. The committee decided that it would require that students use engineering paper.
2. Instructors will stress “Identify, Formulate, Solve” in class instruction. Dr. Reeves to teach CHEG 1021 – Intro CHEG Lab, a 1 semester hour class, where this methodology of problem solving is introduced. Dr. Martin will share his presentation on this topic. It was decided that for consistency, all faculty will incorporate this approach in their instruction.

By incorporating the “Identify, Formulate, Solve” methodology, the department can at once satisfy ABET criterion E.

3. Faculty will use Syncplicity, a shared file service to share files like course notes, lectures, course assessments, etc. Dr. Reeves to obtain a shared account for CHEG faculty. Each instructor is to create an account. Additionally, each course will have a folder. Course assessment reports to be filed by some faculty in 2020.
4. The faculty was particularly concerned about “fixing” concepts in the students so that students can access these concepts, incorporate them and build on them as they move from class to class. It was felt that the length of time between introduction of a concept and reuse and application of that concept in a subsequent class may be too long. As an example, students have not been applying engineering economics concepts in their final capstone projects.
5. GNEG has been discontinued starting from Summer 2019. Calc I will therefore be reinforced in MEB recitation (there is no MEB recitation in Fall 2019), Thermo I and Thermo II.
6. We discussed how to compensate for gaps from MATH 1124 pre-requisite. Concepts that need to be emphasized are: Derivatives (rules of differentiation – MEB, Thermo I), anti-derivatives (Thermo I), graphical integration and graphical differentiation, partial derivatives, exact functions, exact differentiation, degrees of freedom, capacity.

Course ID	Course Name	Committee-recommended changes
CHEG 1011	Intro Engr, Comp Sci & Tech (1 cr)	Not under CHEG control. Taught by Dr. Kirby.
CHEG 1021	Intro CHEG Lab (1 cr)	Taught by freshmen coordinator (Dr. Reeves for Fall 2019, Dr. Martin Summer 2019). Co-requisite to CHEG 1011. Emphasize concepts of extrapolation, trendlines, R-squared values, units, use of excel, calculation of GPA, engineering terminology, MATLAB to solve polynomials, algebra, trigonometry, VISIO to construct block flow diagrams. Class will be project-based. Will incorporate group project

		and/or report. Powerpoint for presentation.
CHEG 2003	Eco Anal Technical Application (3 cr)	Project for students. Use an engineering project. Extrapolation. Single and double interpolation.
CHEG 3023	Unit Operations (3 cr)	Internal rate of return, Payback Period, capital costs, Operating expense. Included these concepts in this course as a bridge between CHEG 2003 and CHEG 4043.