MEMORANDUM FOR: Chemical Engineers of CHEN E4001 and CHEN E4002

SUBJECT: CHEN E4001x and E4002x Essentials A and B Course Syllabus

Welcome to CHEN E4001 and CHEN E4002, Essentials of Chemical Engineering A & B. These two courses will cover essential material from the undergraduate chemical engineering curriculum in a program especially designed for students with a BS in chemistry or a related field, such as biochemistry, polymer science, or mathematics.

Each course consists of four modules, with each module taught by a different member of the Chemical Engineering faculty, and covering essential elements of one undergraduate course.

Here is a list of the modules to be covered, including the faculty members who will teach the modules:

CHEN E4001x
1. Math – Prof. West
2. Thermodynamics I – Prof. Moment
3. Thermodynamics II – Prof. Kumar
4. Reaction Kinetics & Reactor Design – Prof. McNeill

CHEN E4002x
1. Introduction to Chemical Engineering and Process Control – Prof. Bozic
2. Transport Phenomena I – Prof. During
3. Transport Phenomena II – Prof. Bishop
4. Chemical & Biochemical Separations – Prof. Banta

Each module will consist of lectures, recitation classes, and homework assignments, all within approximately a three-week period. These courses assume you have a working knowledge of multivariable calculus and ordinary differential equations.

You will need to purchase a total of 5 textbooks for the two courses. While that may appear excessive, these books will be useful to you throughout your chemical engineering career. The required textbooks are as follows:
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SUBJECT: CHEN E4001 and CHEN E4002 Syllabus

CHEN E4001x


CHEN E4002x


