Chemical Technology Program Outcomes

Goal 1: Upon completion of program, students are expected to know and be able to develop a strong “Workplace Ethic”.

Achievement of this outcome is indicated by students exhibiting reliability, promptness and a positive work ethic. Health issues, notwithstanding, students are expected to attend all lectures and labs. Furthermore, all work is to be handed in on time.

Goal 2: Upon completion of program, students are expected to know and be able to work effectively as a member of a team.

Achievement of this outcome is indicated by students demonstrating the following:

- The ability to lead a team by setting direction, providing motivation, delegating tasks and integrating contributions.
- The ability to effectively participate as part of a multi-disciplinary team by recognizing the potential of, communicating with, and exploiting the talents of persons with differing backgrounds.
- The ability to effectively communicate orally and in written form.
- The ability to maintain a lab notebook that is current, accurate, neat and concisely worded.

Goal 3: Upon completion of program, students are expected to know and be able to develop problem solving skills that relate to the chemical process/biotech industries.

Achievement of this outcome is indicated by students demonstrating the following:

- The ability to conduct experiments and analyze results so as to achieve practical solutions to problems encountered in the chemical process industry.
- The ability to use computers for information retrieval and as a data management system. Also to observe trends in data and to analyze these trends to achieve practical solutions to problems.
- The ability to apply knowledge of chemical calculations to help solve problems encountered in the chemical process industry.
- The ability to apply knowledge of separation technologies to help solve problems encountered in the chemical process industry.
- The ability to apply knowledge of spectrophotometric, gravimetric and volumetric analyses to help solve problems encountered in the chemical process industry.
- The ability to apply knowledge of organic synthesis and structure elucidation to help solve problems encountered in the chemical process industry.

Goal 4: Upon completion of program, students are expected to know and be able to maintain a safe and clean laboratory.

Achievement of this outcome is indicated by students exhibiting the following:

- The ability to keep a clean work area and to correctly interpret the information on MSDS sheets so as to properly dispose of chemical waste.
- The ability to safely execute a Standard Operating Procedure (SOP).