

# LIBERAL ARTS AND SCIENCES

Associate in Science Degree | Transfer Degree | Department of Chemistry and Chemical Technology

## Chemistry Option

A student interested in the Associate in Science (AS) degree in Liberal Arts and Sciences has to choose one of four options: Biology, Chemistry, Earth Systems and Environmental Science, or Physics. Each option prepares students for transfer to a complementary four-year degree program. Students in the Chemistry and the Earth Systems and Environmental Science options transfer to four-year science programs (biochemistry, biology, chemistry, earth and environmental science, etc.), teacher education programs, pharmacy schools, or engineering programs (biomedical, chemical, environmental). Enrichment programs are offered to encourage students to continue their education beyond the bachelor degree by attending graduate or other professional programs (e.g., medical school, physician assistant programs, physical therapy programs).

## LIBERAL ARTS AND SCIENCES CURRICULUM (PATHWAYS)

60 Credits required for AS Degree

### Required Core

- A. English Composition (6 Credits)
- B. Mathematical and Quantitative Reasoning
  - MTH 30<sup>1</sup> Pre-Calculus Mathematics *OR*
  - MTH 31 Analytic Geometry and Calculus I (4 Credits)
- C. Life and Physical Science
  - CHM 11<sup>1</sup> General College Chemistry I (4 Credits)

**SUBTOTAL 14**

### Flexible Core

- A. World Cultures and Global Issues (3 Credits)
- B. U.S. Experience in its Diversity (3 Credits)
- C. Creative Expression (3 Credits)
- D. Individual and Society (3 Credits)
- E. Scientific World
  - CHM 12<sup>1</sup> General College Chemistry II (4 Credits)

Restricted Elective Select one course from Area A-E.<sup>2</sup> (3 Credits)

**SUBTOTAL 19**

### Major Requirements

- Free Electives (0 - 4 Credits)
- MTH 31<sup>3</sup> Analytic Geometry and Calculus I (0 - 4 Credits)
- MTH 32 Analytical Geometry and Calculus II (5 Credits)

### Chemistry Option Requirements

Curriculum Coordinator: Dr. Soosairaj Therese

- CHM 31 Organic Chemistry I (5 Credits)
- CHM 32 Organic Chemistry II (5 Credits)
- Choose two of the three courses below:  
CHM 33 Quantitative Analysis *AND / OR*  
BIO 11 General Biology I *AND / OR*  
PHY 11 Physics I (8 Credits)

**TOTAL 27**

- <sup>1</sup> This program has obtained a waiver to require STEM variant courses in Required Core Area B and Area C and Flexible Core Area E. If students transferring into this program complete different courses in these areas, they will be certified as having completed the Common Core requirements, but it may not be possible for them to finish their degree within the regular number (60) of credits.
- <sup>2</sup> Restricted Elective: must select one course from Flexible Core A-E. No more than two courses in any discipline or interdisciplinary field.
- <sup>3</sup> Students in this major are required to take MTH 30 or MTH 31 to fulfill required Core Area B. Note that MTH 30 is a prerequisite to MTH 31, so students who take MTH 30 to fulfill Required Core B will not have free elective credits.

**Students are encouraged to check the Transfer Planning website for information on articulation agreements.**