

**MOHAWK VALLEY COMMUNITY COLLEGE
LIBERAL ARTS & SCIENCES MATHEMATICS & SCIENCE - A.S. (CHEMISTRY)**

TO

**STATE UNIVERSITY OF NEW YORK AT COBLESKILL
FERMENTATION SCIENCE – B.S.**

| | MVCC Course | | | Cobleskill Equivalent | |
|--------|-----------------------------------------|----|--------------------------|----------------------------------------|---|
| CF 100 | College Foundations Seminar | 1 | FFCS 101 | EL- Foundation for College Success | 1 |
| CH 141 | General Chemistry 1 | 4 | CHEM 111/ X | MF(GE SC) - General Chemistry I/ Lab | 4 |
| CH 142 | General Chemistry 2 | 4 | CHEM 112/ X | MF (GE SC) - General Chemistry II/ Lab | 4 |
| CH 247 | Organic Chemistry 1 | 5 | CHEM 231/ X | MF (GE SC) - Organic Chemistry I/ Lab | 5 |
| CH 248 | Organic Chemistry 2 | 5 | CHEM 232/ X | AT(GE SC) - Organic Chemistry II/ Lab | 5 |
| EN101 | English 1: Composition | 3* | ENGL 101 | LAS (GE CM) – Composition I | 3 |
| EN 102 | English 2: Ideas & Values Literature | 3* | ENGL 121 | LAS(GE HU) – Intro. to Literature | 3 |
| MA 151 | Calculus I | 4 | MATH 231 | AT (GE MA) – Calculus I | 4 |
| MA 152 | Calculus II | 4 | MATH 232 | EL-- Calculus II | 4 |
| PH 261 | Engineering Physics I | 4 | PHYS 211/x | AT (GE SC) – Calculus Physic I/Lab | 4 |
| PH 262 | Engineering Physics II | 4 | PHYS 212/x | EL (GE SC) – Calculus Physic II/Lab | 4 |
| BI 141 | Restrictive Elective: General Biology 1 | 4* | BIOL 111/ X | MF(GE SC) - Biology I/ Lab | 4 |
| BI 201 | Restrictive Elective: Microbiology | 4 | BIOL 219/ X | MF- Microbiology/Lab | 4 |
| | Restrictive Elective: | 4 | | EL – Equivalent course | 4 |
| HI 101 | History of Civilization I | 3* | HIST 103 | LAS (GE WO) - History of World Civ. I | 3 |
| | Core GE Social Science | 3* | <i>Equivalent Course</i> | LAS (GE SS) – Equivalent course | 3 |
| PE | Physical Education Elective | 2 | <i>Equivalent Course</i> | EL- Physical Education | 1 |

Credits from the courses above, in the Liberal Arts & Science Mathematics & Science A.S. - Chemistry Option program, will transfer to the BS degree in Fermentation Science in the following categories:

| | |
|-------------------------------------------|-----------|
| Major Field Requirements | 21 |
| Advisement Track Biocatalysis | 13 |
| Liberal Arts & Sciences Requirements..... | 12 |
| General Electives | 14 |
| TOTAL CREDITS TRANSFERRED | 60 |

SUNY General Education: 30 credits have been satisfied in 6 different categories.*

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*60 credits will be transferred to the 125 credit requirement in the Bachelor of Science in Biotechnology.
65 credits of the following coursework will need to be satisfied to meet degree requirements.*

Major Field Requirements – 36 credits including the following:

| | | |
|-----------------|-------------------------------------------------|---|
| ACCT 101 | Financial Accounting | 3 |
| BADM 134 or 249 | Principles of Marketing or Management | 3 |
| BIOL 419/419X | Applied Microbiology & Lab | 5 |
| CHEM 214 | Introduction to Fermentation Science | 3 |
| CHEM 244/244X | Instrumental Analysis & Lab | 4 |
| CHEM 351 | Biochemistry | 3 |
| CHEM 340/340X | Fermentation Science & Lab | 4 |
| CHEM 401 | Fermentation Research, Reporting & Presentation | 2 |
| CHEM 460 | Fermentation Senior Seminar | 3 |
| CHEM 480 | Senior Project | 6 |

Biocatalysis Advisement Track – 14 credits including the following:

BIOL 364 Biotechnology (4), CHEM 3XX Law & Regulation (3), ENVR 303 Applied Thermodynamics (3),
4 Science Elective Credits selected from: BIOL 375 Cell Biology (4), BIOL 410 Molecular Genetics (3), BIOL 425
Bioinformatics (4), or CHEM 395 Topics in Current Research.

Liberal Arts & Sciences – 15 credits including the following:

| | | |
|-----------------|------------------------------------------------------------|---|
| MATH 225 | Statistical Methods | 3 |
| ECON 123 | Microeconomics | 3 |
| PHIL 305 or 320 | Ethics in Science, Medicine & Technology or Ethics & Mgmt. | 3 |
| COMM 301 | Technical Communications | 3 |
| SOSC 3XX | Fermentation: A Sociological Perspective | 3 |

30 credits of SUNY Gen. Eds. are required in seven different categories.

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