**Bachelor of Science** 

Major: Medical Laboratory Science 2023-2024 Sample 4-Year Plan

**Total Degree Requirements: 120 credits** 

| Student | Student ID# | Student Phone #          |
|---------|-------------|--------------------------|
| Advisor | Minimum GPA | Minor/Career Interest(s) |

Students are not limited to this plan; it is meant to be used as a guide for planning purposes in consultation with your advisor. The sample schedule is one possible path to completing your degree within four years. For official program requirements, please refer to the <a href="Undergraduate Catalog">Undergraduate Catalog</a>.

## First Year

## Fall

| Prefix + Number | Course Title                              | Prerequisites/Comments | Credits | Semester | Grade |
|-----------------|---|------------------------|---------|----------|-------|
| CHEM 106/106L   | Chemistry Survey and Lab (SGR #6)         |                        | 4       |          |       |
| GEN ELEC        | General Elective (BIOL 151/L Recommended) |                        | 3       |          |       |
| MATH 114        | College Algebra (SGR #5)                  | p. Placement           | 3       |          |       |
| MLS 201         | Understand Medical Laboratory Science     |                        | 2       | F        |       |
| SGR #2          | Oral Communication (CMST 101 Recommended) |                        | 3       |          |       |
|                 |   | Total Credit Hours     | 15      |          |       |

**Spring** 

| Prefix + Number | Course Title                                 | Prerequisites/Comments       | Credits | Semester | Grade |
|-----------------|--|------------------------------|---------|----------|-------|
| CHEM 108/108L   | Organic and Biochemistry and Lab (SGR #6)    | p. CHEM 106/L                | 5       |          |       |
| SGR #1          | Written Communication (ENGL 101 Recommended) |                              | 3       |          |       |
| SGR #3          | Social Sciences                              | From 2 different disciplines | 3       |          |       |
| SGR #3          | Social Sciences                              | From 2 different disciplines | 3       |          |       |
| SGR #4          | Arts and Humanities                          | From 2 different disciplines | 3       |          |       |
|                 |  | Total Credit Hours           | 17      |          |       |

## **Second Year**

Fall

| Prefix + Number | Course Title                                 | Prerequisites/Comments       | Credits | Semester | Grade |
|-----------------|--|------------------------------|---------|----------|-------|
| BIOL 221/221L   | Human Anatomy and Lab                        |                              | 4       |          |       |
| SGR #1          | Written Communication (ENGL 201 Recommended) |                              | 3       |          |       |
| SGR #4          | Arts and Humanities                          | From 2 different disciplines | 3       |          |       |
|                 |  | Total Credit Hours           | 10      |          |       |

**Spring** 

| Prefix + Number | Course Title                              | Prerequisites/Comments     | Credits | Semester | Grade |
|-----------------|---|----------------------------|---------|----------|-------|
| BIOL 325/325L   | Physiology and Lab                        | p. BIOL 221/L and CHEM 106 | 4       |          |       |
| GEN ELEC        | General Elective (MICR 231/L Recommended) |                            | 4       |          |       |
| STAT 281        | Introduction to Statistics                | p. MATH 103 or higher      | 3       |          |       |
|                 |   | Total Credit Hours         | 11      |          |       |

# MLS 1-Must be accepted into Professional Program

## Fall

| Prefix + Number | Course Title                             | Prerequisites/Comments | Credits | Semester | Grade |
|-----------------|--|------------------------|---------|----------|-------|
| MLS 311         | Clinical Chemistry I                     | p. CHEM 108/L          | 4       | F        |       |
| MLS 403/403L    | Diagnostic Immunology and Lab            |                        | 4       | F        |       |
| MLS 412/412L    | Laboratory Methods and Lab               |                        | 4       | F        |       |
| MLS 461         | Introduction to Management and Education |                        | 3       | F        |       |
|                 |  | Total Credit Hours     | 15      |          |       |



Spring

| Prefix + Number | Course Title                      | Prerequisites/Comments | Credits | Semester | Grade |
|-----------------|-----------------------------------|------------------------|---------|----------|-------|
| MLS 301/301L    | Hematology I and Lab              |                        | 3       | S        |       |
| MLS 341/341L    | Diagnostic Microbiology I and Lab |                        | 5       | S        |       |
| MLS 411/411L    | Clinical Chemistry II and Lab     |                        | 4       | S        |       |
| MLS 431/431L    | Immunohematology I and Lab        | p. MLS 403/L           | 3       | S        |       |
|                 |                                   | Total Credit Hours     | 15      |          |       |

### MLS 2

#### Fall

| Prefix + Number | Course Title                         | Prerequisites/Comments | Credits | Semester | Grade |
|-----------------|--------------------------------------|------------------------|---------|----------|-------|
| MLS 401         | Hematology II and Hemostasis         |                        | 3       | F        |       |
| MLS 401L        | Hematology II/Hemostasis Lab         |                        | 1       | F        |       |
| MLS 441/441L    | Diagnostic Microbiology II and Lab   |                        | 5       | F        |       |
| MLS 451/451L    | Immunohematology II and Lab          |                        | 3       | F        |       |
| MLS 471/471L    | Advanced Medical Diagnostics and Lab |                        | 4       | F        |       |
|                 |                                      | Total Credit Hours     | 16      |          |       |

**Spring** 

| Prefix + Number | Course Title                     | Prerequisites/Comments | Credits | Semester | Grade |
|-----------------|----------------------------------|------------------------|---------|----------|-------|
| MLS 472         | Advanced Clinical Experience I   |                        | 8       | S        |       |
| MLS 473         | Advanced Clinical Diagnostics I  |                        | 3       | S        |       |
| MLS 474         | Advanced Clinical Diagnostics II |                        | 3       | S        |       |
| MLS 489         | Phlebotomy Clinical Practice     |                        | 1       | S        |       |
|                 |                                  | Total Credit Hours     | 15      |          |       |

#### Summer

| Prefix + Number | Course Title                        | Prerequisites/Comments | Credits | Semester | Grade |
|-----------------|-------------------------------------|------------------------|---------|----------|-------|
| MLS 475         | Advanced Clinical Experience II     |                        | 3       | Su       |       |
| MLS 483         | Senior Capstone Clinical Experience |                        | 3       | Su       |       |
|                 |                                     | Total Credit Hours     | 6       |          |       |

### **Comments/Notes**

Students from all academic majors can pursue graduation with Fishback Honors College distinction. View the Honors program requirements.

### **Medical Laboratory Science Professional Program Admission**

### Admission is competitive and will be determined based on the following criteria:

- 1. Submission of cumulative GPA on a 4.0 scale of all college work completed at the time of application.
- 2. Grade of C or 70% minimum on all prerequisite courses.
- 3. Completion of prerequisite courses CHEM106/106L, CHEM108/108L, BIOL 221/221L, BIOL 325/325L, STAT 281, and course or content equivalences as approved by the program director prior to admission.
- 4. Confirmation of ability to meet the non-academic Essential Functions of the program.
- Completion of an approved background check administered according to program guidelines. (expenses concurred are student's responsibility) \*
- 6. Completion of an interview with the Medical Laboratory Science Admissions committee.
  \*Note: An additional background check may be required prior to clinical placement, dependent on clinical affiliate requirements.
  Students are responsible for all costs associated with background checks.

# Notes

Clinical Practice courses will be completed at a clinical affiliate site. Placement at the clinical affiliate will be made by MLS program faculty. Current available sites are Avera Health Network Affiliated Hospitals, Mayo SW Regional Health Network, VA Regional Medical Center Sioux Falls, Huron Regional Medical Center, Prairie Lakes Healthcare, VA Medical Center Black Hills of Hot Springs, Rapid City Regional Hospital, Sanford Health Network Affiliated Hospitals and Spearfish Regional Hospital.