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| YEAR | **FALL SEMESTER** | | | **SPRING SEMESTER** | | | Summer Options |
| **First** | CEM 141 | General Chemistry (F/S/Su) | 4 | BS 161 | Cell & Molecular Biology (F/S/Su) | 3 | Study Abroad: studyabroad.isp.msu.edu |
| CEM 161 | Chemistry Lab I (F/S/Su) | 1 | BS 171 | Cell & Molecular Biology Lab (F/S/Su) | 2 |
| MTH 103 | College Algebra (F/S/Su) | 3 | MTH 124/132 | Survey of Calculus I/Calculus (F/S/Su) | 3 |
| BLD 121 | Survive to Thrive Freshman Seminar (F/S) | 1 | CEM 162 | Chemistry Laboratory II (F/S/Su) | 1 |
| ISS 2XX\* | Integrative Studies in Social Sciences (S/F/Su) | 4 | WRA 101 | Writing as Inquiry | 4 |
| BLD 150 | Intro to BLD Testing (elective) (F/S) | 1 | xxx xxx | Elective (as needed) |  |
|  |  |  |  |  |  |
|  | Term Credits | 13+ |  | Term Credits | 13+ |
|  | | | | | | | |
| **Second** | BLD 213L | Clinical Laboratory Methods (F/S) | 2 | MGI 201/301 | Fundamentals of Microbiology (F/S/Su) | 3 | Study Abroad |
| CEM 251 | Organic Chemistry I (F/S/Su) | 3 | CEM 252 | Organic Chemistry II (F/S/Su) | 3 |
| PHY 231 | Introductory Physics I (F/S/Su) | 3 | PHY 232 | Introductory Physics II (F/S/Su) | 3 |
| PSL 310 | Physiology for Pre-Health Prof (F/S/Su) | 4 | BLD 204 | Mechanisms of Disease (S/Su) | 3 |
| STT 200 | Statistical Methods (F/S/Su) | 3 | BLD 313 | Quality in Clinical Lab Practice (S) | 3 |
|  |  |  |  |  |  |
|  | Term Credits | 15 |  | Term Credits | 15 |
|  | | | | | | | |
| **Third** | BLD 314L | Adv. Clinical Laboratory Methods (F/S) | 1 | MGI 365 | Medical Microbiology (S) | 3 | Study Abroad |
| BLD 324 | Hematology and Hemostasis (F) | 3 | MGI 365L | Medical Microbiology Lab (S) | 1 |
| BLD 434 | Clinical Immunology (F/Su) | 3 | BLD 435 | Immunohematology (S) | 2 |
| BMB 401 | Comprehensive Biochemistry (F/S/Su) | 4 | BLD 302 | Clinical Chemistry (S) | 2 |
| IAH 201-210+\* | Integrative Studies in Arts & Humanities (F/S/Su) | 4 | BLD 430 | Molecular Diagnostics (S) | 2 |
|  |  |  | ISS 3XX\* | Integrative Studies in Social Science (F/S/Su) | 4 |
|  | Term Credits | 15 |  | Term Credits | 14 |
|  | | | | | | | |
| **Fourth** | BLD 402 | Advanced Clinical Chemistry (F) | 4 | BLD 435L | Immunohematology Lab (S) | 1 |  |
| MGI 465 | Advanced Medical Microbiology (F) | 3 | BLD 424 | Adv. Hematology and Hemostasis (S) | 2 |
| MGI 465L | Advanced Medical Microbiology Lab (F) | 2 | BLD 424L | Adv. Hematol, Hemostasis, Urine Lab (S) | 1 |
| BLD 456 | Medical Laboratory Professionalism (F) | 2 | CEM 333 | Instrumental Methods & Apps (S) | 3 |
| BLD 445 | Medical Laboratory Management (F) | 1 | IAH 211+\* | Integrative Studies in Arts & Hum. (F/S/Su) | 4 |
| xxx xxx | Elective | 4 | xxx xxx | Elective | 4 |
|  |  |  |  |  |  |
|  | Term Credits | 16 |  | Term Credits | 15 |
|  | | | | | | | |
| **Credits prior to Clinical Courses** | | | | | | **120** |  |
|  | | | | | |  |  |

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| --- | --- |
| **Approved course substitutions include:** | **CLINICAL COURSES (total 14 credits):** |
| BMB 401(4) - BMB 461(3) and BMB 462(3) | BLD 471L Advanced Clinical Chemistry Lab (3) |
| CEM 162(1) - CEM 262 (2) | BLD 473L Advanced Clin Hematology & Body Fluids (3) |
| MTH 132(3) - MTH 124 (3) | BLD 475L Advanced Clin Immunology & Immunohematology Lab (2) |
| PSL 310(4) - PSL 431(3) and PSL 432(3) | BLD 477L Advanced Clinical Microbiology Lab (3) |
| STT 200(3) - STT 201 (4) or STT 231 (3) | BLD 479 Professional Behavior (1) |
| \*Many of the courses in the Arts and Humanities and Social, Behavioral, and Economic Sciences arenas, emphasize national diversity (designated “N” at the end of the course title), or international and multi-cultural diversity (designated “I” at the end of the course title). Some courses emphasize both national diversity, and international and multi-cultural diversity (designated “D” at the end of the course title). Students must include at least one “N” course and one “I” course in their Integrative Studies programs. A “D” course may meet either an “N” or an “I” requirement but not both | BLD 480 Medical Laboratory Science Examinations I (1) |
| BLD 481 Medical Laboratory Science Examinations II (1) |
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| **TOTAL CREDITS TO GRADUATE 134** |

\*\*\* Enrollment in the medical laboratory science major is limited. A new cohort is admitted at the end of the spring semester of the third year. Applications for admission are due at the beginning of the spring semester of the third year. Applicant interviews are conducted during the spring semester of the third year. Admission decisions for students admitted to the medical laboratory science major are made following review of final grades from spring semester of third year. Students are admitted as Biomedical Laboratory Science major until the application process for Medical Laboratory Science is completed.

Eligible for national certification examinations after graduation.

The Bachelor of Science degree program in medical laboratory science has been accredited by the

National Accrediting Agency for Clinical Laboratory Sciences,

5600 N. River Rd., Suite 720 Rosemont, IL 60018-5119 Tel: 773-714-8880

A map with a location on it

Description automatically generated