

Medical Diagnostics (MDD) Major
Curriculum for 2023-2024 Academic Year
120 Credits & ≥2.0 Cumulative GPA Required for Graduation

University Requirements:

- ___ ENGL110 First Year Writing*
- ___ Multicultural Requirement 3 cr _____ (may simultaneously satisfy breadth or 2nd writing)
- ___ First Year Experience I, 1 cr (UNIV101)
- ✓ Discovery Learning Experience (DLE) 3 cr (satisfied by MMSC462)
- ✓ Capstone Experience (satisfied by MMSC462)
- ___ University Breadth Requirements* (these must be from **four different areas of study**/course rubrics)
 - ___ Creative Arts & Humanities* 3 cr _____
 - ___ History & Cultural Change* 3 cr _____
 - ___ Social & Behavioral Sciences* 3cr _____
- ✓ Math, Natural Science & Technology* 3 cr (satisfied by ≥ C- in BISC207 or 208, CHEM103 or 104)

MAJOR REQUIREMENTS:

- ___ Second Writing Requirement (must be designated in term taken; may also be breadth)
- ___ Mathematics (one of the following; MATH115, 117, 221 or 241; MATH115 required for PHYS201)
- ___ English Course: any ENGL course ≥200 (may simultaneously satisfy breadth or 2nd writing)
- ___ Additional Breadth
 - ___ Choose Creative Arts & Humanities, History & Cultural Change or Social & Behavioral Sciences 3 cr _____

Core (72 credits):

- | | |
|---|---|
| ___ BISC207 Introductory Biology I:4 | ___ MMSC415 Clinical Immun & Medical Virology*: 3 |
| ___ BISC208 Introductory Biology II: 4 | ___ MMSC420 Immunohematology II*: 2 |
| ___ CHEM103/133 Gen Chem/for Life Sci I: 4 | ___ MMSC423 Hematology I*: 2 |
| ___ CHEM104/134 Gen Chem/for Life Sci II:4 | ___ MMSC428 Medical Microbiology & Parasitology*: 3 |
| ___ CHEM214 Elem Biochem:3 OR | ___ MMSC433 Hematology II*: 2 |
| CHEM527 Intro Biochemistry: 3 | ___ MMSC436 Clin Physiological Chem II*: 3 |
| ___ CHEM321 Organic Chemistry I: 3 | ___ MMSC438 Diagnostic Bacteriology & Medical |
| ___ CHEM325 Organic Chemistry Lab I: 1 | Mycology*: 3 |
| ___ CHEM322 Organic Chemistry II: 3 | ___ MMSC462 Interdis. Healthcare Perspectives*: 3 |
| ___ CHEM326 Organic Chemistry Lab II: 1 | ___ MMSC490 Clinical & Molecular Cell Bio: 3 or |
| ___ MMSC100 Intro Med & Molec Sciences (P/F)*: 1 | BISC401 Molecular Bio of the Cell: 3 |
| ___ MMSC200 The Language of Medicine*: 3 | ___ MMSC491 Human Molecular Genetics: 3 or |
| ___ MMSC270 Med Microbio & Infectious Disease: 4 or | BISC403 Genetics: 3 |
| BISC300 Introduction to Microbiology: 4 | ___ STAT200 Basic Statistical Practice: 3 or STAT408 |
| ___ MMSC402 Body Fluid Analysis*: 2 | Statistical Research Methods: 3 |
| ___ MMSC407 Clin Physiological Chem I*: 3 | ___ ≥ 120 credits/2.0 Cum GPA required for graduation |
| ___ MMSC409 Immunohematology I*: 2 | |

Science Sequence (8 or 11 credits). Complete one of the following sequences:

Option 1 (recommended for PA school):

- ___ KAAP309 Human Anatomy & Physiology I: 4
- AND**
- ___ KAAP310 Human Anatomy & Physiology II: 4

Option 2 (recommended for medical school):

- ___ BISC306 General Physiology: 3 **AND**
- ___ PHYS201/221L Introductory Physics I: 4 **AND**
- ___ PHYS202/222L Introductory Physics II: 4

Student Name: _____ Student Signature: _____

MMSC Program Director: _____ Date: _____

✓ - indicates that this requirement will be satisfied by a course within the required major/core courses

* ≥ C- required

Medical Diagnostics (MDD) Major

Curriculum for 2023-2024 Academic Year

120 Credits & ≥2.0 Cumulative GPA Required for Graduation

Please note: in order to be positioned competitively for admission to medical, dental and PA programs as well as most other medical/healthcare professional or grad programs, a minimum cumulative undergraduate GPA of 3.0 will likely be required, with many programs well in excess of that. Students are advised to confirm admission requirements at your specific program(s) of interest.

Suggested MDD Academic Program Sequence

Consult with your advisor for possible alternative sequencing and term availability of courses. MMSC course term availability listed below is proposed for the 2023-24 academic year but is subject to change. Refer to Course Descriptions at <https://udapps.nss.udel.edu/CourseDescription/> for associated course Prerequisites and Corequisites.

First Year

30 credits

FALL – 16 credits

BISC207 Intro Biology I: 4
CHEM103/133 Gen Chemistry: 4
Mathematics: 3
MMSC100 Intro to Medical & Molecular Sciences (P/F): 1
UNIV101 First Year Experience: 1
Breadth Requirement _____: 3

SPRING – 14 credits

BISC208 Intro Biology II: 4
CHEM104/134 Gen Chemistry: 4
ENGL110 First Year Writing: 3
MMSC200 The Language of Medicine: 3

Second Year

29 credits

FALL – 15 credits

MMSC270 Med Micro/Infect Dis or BISC300 Intro Micro: 4
CHEM321 Organic Chemistry I: 3
CHEM325 Organic Chem I Lab: 1
PHYS201/221L Introductory Physics I: 4 **OR**
KAAP309 Human Anatomy & Physiology I: 4
Multicultural _____: 3

SPRING – 14 credits

BISC306 General Physiology: 3 or Elective (if choosing
KAAP309 and KAAP310 sequence)
CHEM322 Organic Chemistry II: 3
CHEM326 Organic Chem II Lab: 1
PHYS202/222L Introductory Physics II: 4 **OR**
KAAP310 Human Anatomy & Physiology II: 4
Elective: _____: 3

Third Year

30 credits

FALL – 14 credits; MMSC courses below Fall only

CHEM214 Elem Biochem: 3 or CHEM527 Intro Biochem: 3
MMSC402 Body Fluid Analysis: 2
MMSC415 Clinical Immunology & Medical Virology: 3
MMSC490 Clin & Molecular Cell Biology: 3 **OR**
BISC401 Molecular Biology of the Cell: 3
STAT200 Basic Statistical Practice or
STAT408 Statistical Research Methods: 3

SPRING – 16 credits; MMSC courses below Spring only

MMSC407 Clinical Physiological Chemistry I: 3
MMSC409 Immunohematology I: 2
MMSC423 Hematology I: 2
MMSC428 Medical Microbiology & Parasitology: 3
MMSC491 Human Molecular Genetics: 3 **OR**
BISC403 Genetics: 3
Breadth Requirement _____: 3

Fourth Year

31 credits

FALL – 16 credits; MMSC courses below Fall only

MMSC420 Immunohematology II: 2
MMSC433 Hematology II: 2
MMSC436 Clinical Physiological Chemistry II: 3
MMSC438 Diagnostic Bacteriology & Med Mycology: 3
Breadth Requirement _____/_____: 3
Elective: _____: 3

SPRING – 15 credits; MMSC course below Spring only

ENGL200 or higher: 3
MMSC462 Interdisciplinary Healthcare Perspectives: 3
Second Writing Requirement (designated each term): 3
Breadth Requirement _____: 3
Elective: _____: 3

Total of 120 credits

4+1 BS/MS Program students substitute: 1) MMSC603 Research Design for STAT200, and 2) MMSC690 Clinical & Molecular Cell Biology for MMSC490

Students are strongly advised to refer to their **Degree Audit** regularly (accessed via UDSIS) to confirm progressive completion of graduation requirements as designated in the UD online Undergraduate Catalog. Although every effort is made to accurately reflect curriculum requirements here, students are responsible for utilizing the Degree Audit for official confirmation of the status of degree requirement completion. Med Diagnostics program requirements can be found at www.udel.edu/catalog > Programs > Medical Diagnostics (BS). Please be sure to select the correct academic year for your program requirements.