

| NAME | |
|----------|--|
| E NUMBER | |
| CATALOG | |

SP20

GENERAL EDUCATION: 30-38 HRS

LANGUAGE: 9 HRS

| Course | Hours | Grade | Semester |
|------------------------------------|-------|-------|----------|
| ENG 1001G Composition & Language | 3 | | |
| ENG 1002G Composition & Literature | 3 | | |
| CMN 1310G Intro to Speech | 3 | | |

Grade of "C" or better is required

SCIENCE AWARENESS: 7HRS

Completed in major.

MATHEMATICS: 3-5 HRS

Completed in major.

HUMANITIES/FINE ARTS*: 9 HRS

| Course | Hours | Grade | Semester |
|------------------------|-------|-------|----------|
| Humanities | 3 | | |
| Fine Arts | 3 | | |
| Humanities / Fine Arts | 3 | | |

SOCIAL/BEHAVIORAL SCIENCES*: 9 HRS

| Course | Hours | Grade | Semester |
|--------------------------|-------|-------|----------|
| PHI 2500 Intro to Ethics | 3 | | |
| | 3 | | |
| | 3 | | |

SENIOR SEMINAR: 3 HRS

| Course | Hours | Grade | Semester |
|--------|-------|-------|----------|
| EIU | 3 | | |

Seminar topic must be outside the major area. See Undergraduate Catalog for Senior Seminars that exclude Biological Sciences majors.

FOREIGN LANGUAGE: 0-8 HRS

EXEMPT? YES NO

Exempt if 2yrs in high school of a single foreign language with average grade of "C" or better.

| Course | Hours | Grade | Semester |
|--------|-------|-------|----------|
| | | | |
| | | | |

^{*} One course must meet Cultural Diversity requirement.

SCIENCE CORE: 51-53 HRS

| Biology Courses | Hours | Grade | Semester |
|--------------------------------------|-------|-------|----------|
| BIO 1150 Biology Forum | 1 | | |
| BIO 1500 General Biology I | 4 | | |
| BIO 1550G* General Biology II | 4 | | |
| BIO 3120* Molecular & Cell Biology | 4 | | |
| BIO 3200* Genetics | 4 | | |
| BIO 2220+ Anatomy & Physiology II | 4 | | |
| BIO 3180* Ecology and Evolution | 4 | | |
| Physics Courses | Hours | Grade | Semester |
| PHY 1151G* Principles Physics I | 3 | | |
| PHY 1152G* Principles Physics I Lab | 1 | | |
| PHY 1161G* Principles Physics II | 3 | | |
| PHY 1162G* Principles Physics II Lab | 1 | | |

| Math Courses | Hours | Grade | Semester |
|------------------------------------|-------|-------|----------|
| MAT 2110G Brief Calculus | 3 | | |
| MAT 2250G* Elementary Statistics | 4 | | |
| Chemistry Courses | Hours | Grade | Semester |
| CHM 1310G General Chemistry I | 3 | | |
| CHM 1315G General Chemistry I Lab | 1 | | |
| CHM 1410* General Chemistry II | 3 | | |
| CHM 1415* General Chemistry II Lab | 1 | | |
| CHM 2440 Organic Chemistry I | 3 | | |
| CHM 2445 Organic Chemistry Lab I | 1 | | |

^{*}Additional prerequisite classes may be required. See Undergraduate Catalog

MAJOR ELECTIVES: 21 HRS

21 hours of course work in Biological Sciences (with the exception of **BIO 3400**, workshops, and courses designed for General Education) or Mathematics or Physical Sciences courses above 2000 (with the exception of general education and **CHM 2310**). A minimum of 15 hrs must be taken in Biological Sciences.

| Course | Hours | Grade | Semester |
|--|-------|-------|----------|
| BIO 2210 Anatomy and Physiology I | 4 | | |
| BIO 3210 [^] Immunology | 4 | | |
| BIO 3300 [^] General Microbiology | 4 | | |
| BIO 3624 [^] Histology | 3 | | |
| CHM 2840 Organic Chemistry II | 3 | | |
| CHM 2845 Organic Chemistry II Lab | 1 | | |
| CHM 3450 [#] Biochemistry | 3 | | |
| NUR 2613 Medical Terminology | 3 | | |

BIO 2210 (4) Anatomy and Physiology I BIO 3210 (4) Immunology BIO 3300 (4) General Microbiology BIO 3312 (3) Horticulture

BIO 3322 (3) Dendrology

BIO 3450 (1-3) Independent Study BIO 3451 (1-3) Undergraduate

Research

BIO 3610 (3) Survey of Algae & Fungi BIO 3612 (3) Plant Evolution & Diversity BIO 3620 (4) Funct. Comp. Anatomy

BIO 3620 (4) Funct. Comp. Anat BIO 3622 (4) Embryology

BIO 3624 (3) Histology BIO 3628 (4) Evolutionary Medicine BIO 3690 (4) Clinical Rotation

BIO 3700 (4) Parasitology BIO 3710 (3) Plant-Animal Interactions

BIO 3720 (4) Entomology

BIO 3740 (3) Clinical Mycology BIO 3810 (3) Freshwater Ecology BIO 3850 (3) Environmental Biology

BIO 3888G (3) Tropical/Marine Ecology

BIO 3950 (3) Vertebrate Natural History BIO 3952 (3) Invertebrate Natural History

BIO 3960 (1-4) Special Topics BIO 4400 (1) Teaching in the Lab

BIO 4400 (1) leaching in the Lab BIO 4751 (3) Adv. Molec. & Cell Biol. BIO 4800 (2) Research Techniques

BIO 4810 (4) Plant Ecology BIO 4812 (3) Fisheries Ecology & Mgmt

BIO 4814 (3) Conservation Biology BIO 4816 (3) Biotic Communities BIO 4818 (4) Environmental

Microbiology

BIO 4820 (4) Spatial Analysis for
Environmental Sciences

BIO 4830 (3) Comp. Vertebrate Physiology

BIO 4832 (4) Animal Behavior BIO 4833 (4) Neurobiology of Diseases

BIO 4834 (3) Neurobiology

BIO 4835 (3) Advanced Neurobiology BIO 4836 (4) Pathogenic Microbiology BIO 4892 (4) Intro. Paleobotany

BIO 4914 (3) Plant Anatomy BIO 4920 (3) Medicinal Plants

BIO 4940 (3) Phycology **BIO 4942** (3) Mycology

BIO 4944 (3) Lichens BIO 4946 (3) Bryology

BIO 4948 (3) Plant Taxonomy BIO 4950 (3) Ichthyology

BIO 4952 (3) Herpetology BIO 4954 (3) Ornithology

BIO 4956 (3) Mammalogy BIO 4960 (3) Wetland & Aqua. Vasc. Plants

BIO 4984 (3) Organic Evolution

Courses numbered 5000-5499 inclusive, may be taken by a senior whose graduation requirements average 2.75 or higher, with the permission of the instructor and the Dean of the Graduate School.

^{*}BIO 2210 (Anatomy and Physiology I) prerequisite. BIO 2210 counts as BIO elective credit.

^{*}Required by some pathologist's assistant schools

^{&#}x27;Recommended by some pathologist's assistant schools

Departmental Exit Interview is also required prior to leaving EIU.

A Pathologists' Assistant is a highly trained, certified allied healthcare professional who is qualified by academic and practical training to provide various services in anatomic pathology under the direction and supervision of a licensed, Board Certified or Board Eligible Anatomic Pathologist. Pathologists' Assistants are academically and practically trained to provide accurate and timely processing of a variety of laboratory specimens, including comprehensive macroscopic examination and evaluation of all surgical pathological specimens. Pathologists' Assistants also perform postmortem examinations including prosection, assisting the Pathologist with rendering the provisional anatomic diagnosis, composing the clinical history, recording the macroscopic anatomic findings, and submitting tissue sections for microscopic examination. Pathologists' Assistants play a critical role in the delivery of healthcare services in both surgical pathology and autopsy pathology. They are key partners in assisting the Pathologist to arrive at a pathologic diagnosis, but it is the sole responsibility of the Pathologist to render a diagnosis.

The PathA degree is a Masters level degree. Students must attend and graduate from a NAACLS accredited PathA program and pass the ASCP certification exam. Programs are 22-24 months with the first year consisting of didactic coursework and the second year is a clinical rotation through several affiliated hospitals. The average entrant has competitive scores on the GRE, has a minimum grade point average of 3.00/4.00 and has completed shadowing with a Pathologist's Assistant in a surgical pathology laboratory. Attributes such as demonstrated caring attitude toward others, communication skills, emotional stability under stress and problem solving ability are important selection factors.

There are currently 12 NAACLS accredited PathA programs in the United States and Canada. It is very important when you begin your program to identify which programs you plan to apply and plot out their requirements accordingly.

RESOURCES:

American Association of Pathologists' Assistants www.pathassist.org

National Accrediting Agency for Clinical Laboratory Sciences naacls.org

Eastern Virginia Medical School www.evms.edu

Loma Linda University medicine.llu.edu/education/pathologists-assistant-program

University of Calgary

cumming.ucalgary.ca/gse/programs/pathologists-assistant

University of Toledo

www.utoledo.edu/med/depts/path/PA%20Program.html

University of Western Ontario

www.schulich.uwo.ca/pathol/gps/mclsc_pathologists_assistant/index.html

University of Maryland

www.medschool.umaryland.edu/pathology/Pathologists-Assistant-Program/

Wayne State University

cphs.wayne.edu/pathologists-assistant/

Rosalind Franklin University

www.rosalindfranklin.edu/Default.aspx

Duke University

pathology.duke.edu/academic-programs/pathologists-assistant-program

Drexel University

www.drexelmed.edu/

West Virginia University

medicine.hsc.wvu.edu/pa/

Quinnipiac University

www.quinnipiac.edu/

SAMPLE COURSE SEQUENCE:

The suggested sequence assumes that the foreign language requirement has been completed.

| The suggested sequence assumes that the loreign language requirement has been completed. | | | | |
|---|--|--|--|--|
| FRESHMAN | | | | |
| FALL | SPRING | | | |
| ENG 1001G BIO 1500 CHM 1310G/1315G BIO 1150 PSY 1879G | ENG 1002G BIO 1550G CHM 1410G/1415G PHI 2500G MAT Prereq or Stats | | | |
| SOPHOMORE | | | | |
| FALL | SPRING | | | |
| BIO 3120 CHM 2440/2445 MAT 2110G Gen Ed Elective | BIO 3200 CHM 2840/2845 BIO 2210 Gen Ed Elective | | | |
| JUNIOR | | | | |
| FALL | SPRING | | | |
| BIO 2220 PHY 1151G/1152G (Fall ONLY) CHM 3450 (Fall ONLY) BIO Elective >3000 MCAT or GRE Prep | BIO 4750 OR MAT 2250G (if not taken in FRESHMAN SPR) PHY 1161/1162 CMN 1310G BIO Elective >3000 MCAT or GRE Prep/Apply to PathA School | | | |
| SENIOR | <u> </u> | | | |
| FALL | SPRING | | | |
| EIU 4*** BIO Elective >3000 Gen Ed Elective Free Elective PathA School Admission Interviews | BIO 3180 BIO Elective >3000 Gen Ed Elective Free Elective Exit Interview | | | |