

UWRF Pre-Health Professional Curriculums with Biology

The Biomedical and Health Science (BMHS) Major includes courses to meet the requirement for a Bachelor of Science degree in Biology, as well as prepare the student for Graduate/Professional School in a Health Profession, or a career in many areas of biomedical research.

Students can also declare and meet all the requirements for a minor. The health professions schools and programs are not concerned with what your major or minor is, they look solely at the classes you take. It does not help to double major, particularly in two sciences. They are looking for students that have a strong ability in science and are broadly educated. They value students who have breadth in their classes.

Pre-“health” is NOT a major on its own, but an indication of a course plan students will be required to complete. Our BMHS major fulfills those requirements for health Professional Schools.



Prerequisites

The courses listed in the following pages are the **prerequisite courses** required by most professional schools in a particular field. Primary advice regarding courses and preparation for future careers should be obtained from your faculty advisor. Advisors are equipped to give suggestions as to selection and sequence of courses that will match your abilities and interests, as well as fulfill the university and major requirements. Advisors will give advice, but the final responsibility for proper course selection and completion of graduation requirements rests with the student.

Grades and GPA

A high GPA is important if you are to be a competitive applicant for a health professions program. It is important to get off to a good start, and to learn/adopt good, strong study habits right away. If you run into trouble, there are many resources available on campus to help, and you should seek them early on and not wait until failure of a test or of a class. GPA is not the only thing that professional schools consider when examining an application for admission, but it is an important consideration. **The professional schools must be convinced you are capable of success in their harder, faster curriculum.**

Clinical, Shadowing, Research (CSR) & Other Skills

Skills such as writing and speaking clearly, problem solving ability, good judgment, listening, leadership ability, and teamwork are clearly critical for working in the health fields. In addition, volunteering and helping people who need help shows commitment to humanity and to the community. Shadowing is of great value in exploring a field and determining if you are suitable for a particular profession, and professional schools will look for this experience in making sure you understand that career path.

Your Faculty Advisor or Pre-health Coordinator will assist you in finding these experiences, but it will be your persistence and motivation that will help you secure these opportunities. Becoming a Health Professional takes a sustained commitment to classes and experiences. You should not view your undergraduate years as something to get

The schools aren't looking for the best pre-health applicant, they're looking for the best you! Seek out opportunities to show you are doing your best with what you have been given.

Although this was developed by the AAMC (American Association of Medical Colleges) for pre-med students, it also applies well to most of the pre-health professions. Remember that each of you are a mix of innate qualities and experiences. You cannot have them all.

The diagram is a concentric circle model titled "AAMC Experiences-Attributes-Metrics Model". At the center is a small circle labeled "EXCELLENCE". Surrounding this is a ring divided into two sections: "MCAT scores" on the left and "GPA" on the right. The next ring out is labeled "METRICS" and contains the following items: "fields of interest", "intellectual curiosity", "maturity", "languages spoken", "perspectives", and "grade trends". The following ring is labeled "ATTRIBUTES" and contains: "geography", "ethnicity", "gender identity", "faith", "family status", "affiliations", "national origin", "community service", "relationship status", "citizenship", "sex", "leadership roles", "age", "physical ability", "values & beliefs", "race", "individual interests", and "sexual orientation". The outermost ring is labeled "EXPERIENCES" and contains: "cultural events", "life experiences", "education background", "historical events", "research experience", "political events", "world events", and "distance travelled". The entire model is enclosed in a large circle with the title "AAMC Experiences-Attributes-Metrics Model" written along the top arc.

UWRF

Basic Timeline for Planning Your Health Career

Use this as a general guideline for your pre-health path.
Remember to continually meet with your Advisor to stay on course and properly align with your plan.

Year 1	Year 2	Year 3	Year 4	Gap Year
<ul style="list-style-type: none"> Explore Career Choices Do Well in Biol.160 Join Pre-Health Club 	<ul style="list-style-type: none"> Focus on Fall courses Continue with CSR/Volunteering thru the year 	<ul style="list-style-type: none"> Focus on Fall courses Continue with CSR/Volunteering thru the year *Apply to affiliate program Determine timing of MCAT, OAT, GRE, DAT etc. 	<ul style="list-style-type: none"> Focus on Fall courses Apply to Health Professional Schools Continue with CSR thru the year 	
Plan With Advisor <ul style="list-style-type: none"> Take Biol. 110 Think about 4-yr course plan Plan for Summer experience 	Plan With Advisor <ul style="list-style-type: none"> Focus on Spring courses Plan out list of Health Schools & Pre-reqs *Apply to affiliate program 	Plan With Advisor <ul style="list-style-type: none"> Focus on Spring courses Determine timing of MCAT, OAT, GRE, DAT etc. Think about letters of Recommendations 	Plan With Advisor <ul style="list-style-type: none"> Focus on final GPA Complete interviews 	<p>If you decide on a Gap year:</p> <p>Continue with your CSR to gain more experience and apply to professional schools and/or prepare for entrance exams</p>
Summer <p>Gain clinical, shadowing, research, training experiences. (CSR)</p>	Summer <p>Continue with clinical, shadowing, research, experiences.</p>	Summer <p>Continue with CSR. ✓ Prepare for Entrance exams</p>	Summer <p>✓ Prepare to start Professional School ✓ Prepare for entrance exams (if taking gap year)</p>	

Access **Pre-Health Canvas Portal** for detailed information and important links for a variety of Health and Allied Health professions. Access is granted to **Biology Majors Only**.

For More Information, contact

Amber Qureshi, Pre-Health Coordinator
Department of Biology, Agri. Sci. Bldg (AGS) Rm 400
Amber.Qureshi@uwrf.edu



Pre-Medical (Osteopathic and Allopathic)

The recommended curriculum below meets the required and recommended pre-requisites of most medical schools, as well as prepares you for the Medical College Admission Test (MCAT). Additional courses are needed to meet requirements for the Biomedical and Health Sciences degree and for graduation.

Biology

Biology 150 or 160 (General Biology)

Biology 230 (General Zoology) Biology

240 (Cell Biology)

Biology 324 (Microbiology)

Biology 341 and 342 (Anatomy and Physiology I and II) Biology

350 (Genetics)

*Keep in mind that additional biology courses are required for the Biomedical and Health Sciences major.

Chemistry

Chemistry 111 and 116, 112 and 116 (General Chemistry 1 and 2) and

Chemistry 231, 232 236, 237 (Organic Chemistry 1 and 2)

Chemistry 360 (Biochemistry, 1 semester, 4 credits)

OR Chemistry 361 and 362 (2 semesters, 6 credits)

Physics

Physics 121 and 122, (2 semesters Algebra-Based Physics and Lab)

OR Physics 131 and 132, (2 semesters Calculus-Based Physics and Lab)

Math

Most require or recommend Math through Math 147, a very few require Math 166 (Calculus);

Math 231 (Biostatistics) is required

Generals

Psychology 101 (General Psychology) is required for MCAT Sociology

100 (Introduction to Sociology) is required for MCAT Coms 101
(Speech)

English 100 and 200 are usually required (2 writing classes).

Philosophy 220 (Bioethics) strongly recommended

*Most want to see humanities, upper-level humanities, and social/behavioral sciences

Notes:

- Schools would like you to take more non-sciences to broaden your perspective and interests. As a bio major you have already demonstrated your academic ability to do well in challenging science courses. Demonstrate that you are broadly educated.
- Before you apply, you will have to take (or at least set a date for) the Medical College Admission Test.
- The Biology Department has an **Early Provisional Acceptance** Program with Lake Erie College of Osteopathic Medicine, and **Guaranteed Interview options** with other Osteopathic schools. See Amber Qureshi for more information.

Pre-Dental

The curriculum below is suggested to meet the required and recommended pre-requisites of most dental schools, as well as to prepare students for the Dental Admission Test (DAT). Additional courses are needed to meet requirements for Biomedical and Health Sciences degree and for graduation.

Biology

Biology 150 or 160 (General Biology)

Biology 240 (Cell Biology)

Biology 324 (Microbiology)

Biology 341 and 342 (Anatomy and Physiology I and II) Biology
350 (Genetics)

*Keep in mind that additional biology courses are required for the Biomedical and Health Sciences major

Chemistry

Chemistry 111 and 116, 112 and 117 (General Chemistry 1 and 2) and

Chemistry 231, 232 236, 237 (Organic Chemistry 1 and 2)

Chemistry 360 (Biochemistry, 4 credits)

OR Chemistry 361 and 362 (Biochemistry I and Biochemistry II, 6 credits)

Physics

Physics 121 and 122, (2 semesters Algebra-Based Physics and Lab) **OR**

Physics 131 and 132, (2 semesters Calculus-Based Physics and Lab)

Math

No math prerequisite, but Geometry, Algebra, and Trigonometry are covered in the DAT (Dental Admissions Test), so Math 147 is a good idea and is required for the Biomedical and Health Sciences major. You should have some college-level math on your college transcript

Math 231 (Biostatistics) is required

Generals

Psychology 101 (General Psychology)

Coms 100 (Speech)

Sociology 100 (Introduction to Sociology)

English 100 or 200

Art 227 (Ceramics)* **Required**

Phil 220 (Bioethics)

Coms 213 (Intercultural Communication)

Notes:

- Shadowing is required.
- Students applying to Dental School must take the Dental Application Test (DAT).
- The Biology Department has an **Early Provisional Acceptance** Program with Lake Erie College of Osteopathic Medicine, and **Guaranteed Interview options** with other Dental schools. See Amber Qureshi for more information.

Pre-Optometry

The curriculum below is recommended to meet the required and recommended pre-requisites of most optometry schools, as well as to prepare you for the Optometry Admissions Test (OAT). Additional courses are required to meet requirements for the Biomedical and Health Sciences degree and for graduation.

Biology

Biology 150 or 160 (General Biology)

Biology 230 (General Zoology) Biology

240 (Cell Biology)

Biology 324 (Microbiology)

Biology 341 and 342 (Anatomy and Physiology I and II) Biology

350 (Genetics)

*Keep in mind that additional biology courses are required for the Biomedical and Health Sciences major.

Chemistry

Chemistry 111 and 116, 112 and 117 (General Chemistry 1 and 2) and

Chemistry 231, 232 236, 237 (Organic Chemistry 1 and 2)

Chemistry 360 (Biochemistry, 4 credits)

OR Chemistry 361 and 362 (Biochemistry I and II, 6 credits)

Physics

Physics 121 and 122, (2 semesters Algebra-Based Physics and Lab) **OR** Physics

131 and 132, (2 semesters Calculus-Based Physics and Lab) The Calculus-based series is recommended.

PHYSICS IS EXTREMELY IMPORTANT IN OPTOMETRY SCHOOL

Math

Math through Math 166 (Calculus), a select few require a second semester of Calculus Math

231 (Biostatistics) is required

Generals

Psych 101 (Introduction to Psychology)

Coms 100 (Speech)

Sociology 100

English 100 and 200 are usually required or strongly recommended.

Writing intensive or literature classes

Coms 216 (Intercultural Communication)

Phil 220 (Bioethics)

Most want to see humanities, upper-level humanities, and social/behavioral sciences

Notes:

- Shadowing is required
- Students applying to Optometry school must take the Optometry Admissions Test (OAT)

Pre-Physician Assistant

The curriculum below is suggested to meet both the required and recommended pre-requisites of most of the schools. Additional courses are needed to meet requirements for the Biomedical and Health Sciences degree, general education and university requirements, and for graduation.

Biology

Biology 150 or 160 (General Biology)

Biology 240 (Cell Biology)

Biology 243 (Biological Greek and Latin)

Biology 324 (Microbiology)

Biology 341 and 342 (Anatomy and Physiology I and II) Biology

350 (Genetics)

*Keep in mind that additional biology courses are required for the Biology major

Chemistry

Chemistry 111 and 116, 112 and 117, (General Chemistry 1 and 2) and

Chemistry 231, 232 236, 237 (Organic Chemistry 1 and 2)

Chemistry 360 (4 credits)

OR Chemistry 361 and 362 (Biochemistry I and II, 6 credits)

Math

Math 147 (College Algebra & Trigonometry) or Math 149 (Pre-calculus), CHECK PA SCHOOL FOR REQUIRED MATH

Math 231 (Biostatistics)

Physics

Not required for most schools, but Physics 121 or 131 is required for the Biomedical and Health Sciences major

Psychology

Psych 101 (introduction to Psychology),

Psych 245 (Lifespan Developmental Psychology) **OR**

Psych 335 and Psych 336 (Childhood and Adolescence, Adult and Aging)

Psych 325 (Abnormal Psychology)

Generals

Most require speech (Coms 100)

Recommend taking Bioethics (Phil 220)

Notes:

- Most schools require applicants to complete the GRE Exam.
- All schools require clinical experience (with patient contact) for admission (500 hours minimum for some, most require a lot more). This may include (but is not limited to) CNA, CMA, Pharmacy Tech, EMT, PCA.

Pre-Occupational Therapy

The curriculum below is suggested to meet both the required and recommended prerequisites of most of the schools. Additional courses are needed to meet requirements for the Biomedical and Health Sciences degree, general education and university requirements, and for graduation.

Biology

Biology 150 or 160 (General Biology)

Biology 240 (Cell Biology)

Biology 341 and 342 (Anatomy and Physiology I and II) Bio

243 (Biological Greek and Latin)

*Keep in mind that additional biology courses are required for the Biomedical and Health Sciences major

Chemistry

There is no chemistry requirement, but chemistry is required for the Biomedical and Health Sciences major.

Psychology

Psych 101 (introduction to Psychology),

Psych 245 (Lifespan Developmental Psychology) **OR**

Psych 335 and Psych 336 (Childhood and Adolescence, Adult and Aging)

Psych 325 (Abnormal Psychology)

Sociology

Sociology 101

Physics

Physics 121 (Algebra-Based Physics I and Lab)

Math

Statistics (Math 231, or Psychology 201)

Recommended Additional Courses

Health 315 (Nutrition)

PED 243 Motor Learning and Development

Heal 366 (Exercise Physiology)

Other appropriate Psychology or Health and Human Performance classes

Note:

- Many schools require at least 50 hours of observation/internship/work at 3 different settings.

Pre-Physical Therapy (4 + 3 Guaranteed Interview for DPT)

The curriculum below is suggested to meet both the required and recommended pre-requisites of most of the schools. Additional courses are needed to meet requirements for the Biomedical and Health Sciences degree and for graduation.

Biology

Biology 150 or 160 (General Biology)

Biology 240 (Cell & Molecular Biology)

Biology 341 and 342 (Anatomy and Physiology I and II) Biology
243 (Biological Greek and Latin)

At least 6-8 more biology courses

*Keep in mind that additional biology courses are required for the Biomedical and Health Sciences major

Chemistry

Chemistry 111 and 116, 112 and 117 (General Chemistry 1 and 2)

Math

Math 147 or 149 (some (University of Minnesota) require 1 semester of Calculus (Math 166) Statistics is required, Math 231 (Biostatistics)

Physics

Physics 121 and 122, (2 semesters Algebra-Based Physics and Lab)

OR Physics 131 and 132, (2 semesters Calculus-Based Physics and Lab)

Biomechanics (PED 354) can be taken in addition to/in place of Physics II for some schools

Additional Recommended Courses

Psych 245 (Lifespan Developmental Psychology)

OR Psych 335 and Psych 336 (Childhood and Adolescence, Adult and Aging) Psych
325 (Abnormal Psychology)

PED 243 Motor Learning and Development

Heal 366 (Exercise Physiology)

Notes:

- Most Physical Therapy schools require a number (usually 100) hours of observation prior to admission. Completion of the GRE exam (Graduate Record Exam) is also required.
- A Biomedical and Health Sciences major will provide good preparation for physical therapy programs and provide students with good preparation for many other fields of health care. **Physical Therapy Programs look favorably on students who have successfully taken and demonstrated competence in upper-level science classes.** A major in Health and Human Performance (Option II) may be appropriate for students with secondary interest in sports training or kinesiology.
- **The Biology Department has a 4 + 3 Guaranteed Interview option with Bellin College for their DPT program . See Amber Qureshi for more information.**

Pre-Chiropractic

UWRF has an affiliation agreement with Palmer College of Chiropractic in Davenport Iowa, which requires a fairly strict sequence of courses. The student attends UWRF for 6 semesters to take specific prerequisite classes needed for entrance into chiropractic school, as well as meet the general education and university requirements of UWRF. After one year at Palmer, the credits transfer back to UWRF, and the student graduates from UWRF with a BS in Biomedical and Health Sciences. The student continues on with chiropractic training at Palmer. UWRF does not have an affiliation agreement with other chiropractic schools. This page presents a suggested sequence of courses. It also meets both the required and recommended pre-requisites of most chiropractic Schools.

Biology

Biology 150 or 160 (General Biology) Biology

240 (Cell and Molecular Biology) Biology 324

(Microbiology)

Biology 341 and 342 (Anatomy and Physiology I and II)

*Keep in mind that additional biology courses are required for the Biomedical and Health Sciences major

Chemistry

Chemistry 111 and 116, 112 and 117 (General Chemistry 1 and 2) and

Chemistry 231, 232, 236, 237 (Organic Chemistry 1 and 2)

Chemistry 360 (Biochemistry)

OR Chemistry 361 and 362 (Biochemistry 1 and 2) is recommended

Physics

Physics 121 (Algebra based Physics I with lab) **AND** Physics 122 (Algebra based Physics II with lab)

OR Physics 131 (Algebra based Physics I with lab) **AND** Physics 132 (Algebra based Physics II with lab)

Math

Math 231 (Biostatistics)

Math 147 or Math 149 is required for the Biomedical and Health Sciences major

Psychology

Psychology 101 (General Psychology) One

additional psychology class

Social Sciences/Humanities

At least 15 credits

Additional Requirements

Speech (COMS 100) is recommended

For recommended 3-year course sequence at UWRF for 3+ with Palmer Chiropractic, see Amber Qureshi

Pre-Pharmacy

The curriculum below is suggested to meet both the required and recommended pre-requisites of most pharmacy schools. Additional courses are required to meet requirements for the Biomedical and Health Sciences degree and for graduation. Students may choose any major as long as they fulfill the prerequisite classes, some choose to major in Chemistry and minor in Biology, and others choose to major in Biomedical and Health Sciences and minor in Chemistry. Note- Most pharmacy schools WILL take AP test credit, as long as it is noted and credited on your college transcript.

Biology

Biology 150 or 160 (General Biology) Biology

240 (Cell and Molecular Biology)

Biology 324 (Microbiology), some, such as NDSU, want medical microbiology (Biology 325) Biology

341 and 342 (Anatomy and Physiology I and II)

*Keep in mind that additional biology courses are required for the Biomedical and Health Sciences major or minor

Chemistry

Chemistry 111 and 116, 112 and 117, (General Chemistry 1 and 2) and

Chem 231, 232 236, 237 (Organic Chemistry 1 and 2)

Chemistry 360 (Biochemistry, 4 credits)

OR Chemistry 361 and 362 (Biochemistry I and II, 6 credits)

****not required but suggested***

Chem 461 (Pharmacology 3 credits) OR

Biol. 357 (Drug Discovery 3 credits)

Math

Math 166 (Calculus 1); Econ 156 is not acceptable; Some require Calculus 2 (Math 167), as requirement is content based

Math 231 (Biostatistics)

Physics

Physics 121 and 122, (2 semesters Algebra-Based Physics and Lab)

OR Physics 131 and 132, (2 semesters Calculus-Based Physics and Lab)

General Education/Liberal Arts Requirements

Psychology 101 (General Psychology) Sociology

100 (Anthropology 100)

Economics 201 (Principals of Microeconomics)

English 100 and English 200

COMS 100 (Speech)

Philosophy 220 (Bioethics)

Intercultural Communication (COMS 213)

Note:

- The departments of Chemistry and Biology have an Early Provisional Acceptance Agreement with Lake Erie College of Osteopathic Medicine, School of Pharmacy. **See Dr Huang in Biology for additional information, and for an example course sequence.**

Medical Lab Scientist

UWRF has an agreement with the University of Minnesota (UM) Department of Medical Lab Sciences for students who are interested in a career as a Medical Lab Scientist (MLS). The agreement allows students to take 3 years of specific classes at UWRF, then attend MLS required classes and clinical experiences at the UM for 15 months. Following the students' time at the UM, the MLS credits will be transferred back to UWRF, and the student will earn the following: a BS from UWRF, certification as a Clinical Lab Scientist, and eligibility to sit for the national MLS exam.

For recommended 3-year course sequence at UWRF for 3+ with UMN, see Dr. Bonilla or Amber Qureshi

Required Courses for the UMN MLS Program:

School	City & State	Website	Last Updated
University of Wisconsin River Falls	River Falls, WI	www.uwrf.edu	July 2022
Prerequisite	Minimum Requirement	Approved Course(s)	Notes
General Biology	4 credits	BIOL 150	---
Human Physiology*	4 credits	BIOL 341 & BIOL 342	---
Calculus	3-4 credits	MATH 156 or MATH 166	---
Statistics	3-4 credits	MATH 226	---
Chemistry I with Lab	4 credits	CHEM 111 & CHEM 116 or CHEM 121	---
Chemistry II with Lab	4 credits	CHEM 112 & CHEM 117 or CHEM 122 or CHEM 240	---
Organic Chemistry I	3 credits	CHEM 231	lab not required
Organic Chemistry II	3 credits	CHEM 232 or CHEM 130 & CHEM 233	*lab not required CHEM 130 &
Foundation	Minimum Requirement	Approved Course(s)	Recommended
Microbiology with Lab	5 credits	BIOL 324	---
Genetics	3 credits	BIOL 350	---
Biochemistry	3 credits	CHEM 360 or CHEM 361 & CHEM 362	---
Professional Issues	2 credits	No equivalent	take upon entry
Immunobiology	3 credits	BIOL 345	---
Laboratory Techniques	4 credits	No equivalent	take upon entry

Pre-Nursing (Guaranteed Transfer to BSN or BS to Direct Entry MSN)

UWRF does not offer an undergraduate program in nursing, leading to a BSN/RN degree/license; however, **we have a Guaranteed Transfer option to a 15-month BSN program at Bellin College.**

1. **2 + 2 -> BSN:** Complete 2 years of the requirements for admission to the 15-month Bachelor of Science in Nursing (BSN) program at UWRF, then transfer to Bellin College.

For recommended 2-year course sequence at UWRF for 2 + transfer, see Amber Qureshi

Courses required:

****Certified Nurse Assistant (CNA) is required.**

Biol 160 – General Biology & Freshman Research

Biol. 240 – Cell & Molecular Biology

Biol 243 – Biol Greek & Latin/Medical Terminology

Biol 324 – Microbiology

Biol. 341- Anatomy & Physiology I

Biol 342- Anatomy & Physiology II

Chem 111- General Chemistry I

Chem 116 – Gen. Chem I Lab

Math 147 – College Algebra & Trigonometry

Math 231 - Biostatistics

Engl 100 – Academic Reading & Writing

Engl 200 – Advanced Writing

Coms 101 – Communication

Psyc 101- General Psychology

Psyc 245 – Lifespan Development

Phil 220 - Bioethics

Soci 220- Sociology of Diversity (*Cultural Diversity*)

Econ 100 – Modern Economics

Heal 315 - Nutrition

General Education – 1 more *Social and Behavioral Science Gen Ed.*

2. **BS -> MSN:** Some UWRF students may acquire their BS in Biology degree and apply for Direct Entry MSN (Masters of Nursing) that also prepare students for RN licensure. These programs typically take between 12-18 months. It is a good route for someone who may be interested in an advanced practice specialty, such as nurse anesthetist or practitioner **since it affords you the science background you will need.**

UW-Milwaukee is closely working with our Biology graduates who are interested in the BS-MSN route.

Imaging Technology Certifications - 3+ Articulations with Mayo Clinic

Sonography, Echocardiography, or Radiography

UWRF Biology has an affiliation agreement with the Mayo School of Health Sciences (MSHS) for students who are interested in a career as a **Ultrasound (Sonography) Technologist**, **Echocardiography Technologist** (An ultrasound technologist who specializes in the examination of and diagnosis of heart condition and diseases), or a **Radiography Technologist** (A person who takes X-rays, CT, MRI etc). This agreement will allow students to take 3 years of specific classes at UWRF, then attend MSHS required classes and clinical experiences at the MSHS for 18-21 months. Following the students' time at MSHS, their credits will be transferred back to UWRF, and the student will earn the following: a BS from the UWRF, certification as a specialized imaging technologist, and eligibility to sit for the national licensing exam.

Courses Required for Sonography, Echocardiography, or Radiography:

Biol. 160 General Biology	Coms 101 Communication
Biol 243 Medical Terminology	Math 147 College Algebra & Trigonometry
Biol. 341 Anatomy & Physiology I	Phil 220 Bioethics
Biol. 342 Anatomy & Physiology II	Psyc 101 Psychology
Engl. 100 – Academic Reading & Writing	Phys 121 Algebra-Based Physics
Engl. 200 Advanced Writing	Chem 111/116 General Chemistry <i>*Req for Radiography</i>

For recommended 3-year course sequence at UWRF for 3+ transfer, see Amber Qureshi

Note:

- Must have immunizations and TB test up to date
- Must have health insurance
- Must have excellent communication skills, physical and mental stamina, critical thinking skills.
- Must show professional and ethical conduct, emotional and mental stability, sound judgment and empathy.
- Must be able to learn and function in a wide variety of didactic and clinical settings.

Additional Requirements for Echocardiography 21-month Program

- Prerequisite courses less than 10 years old
- Prerequisite courses complete, with GPA at least 3.0, including math and science courses. **All grades C or higher**
- Patient care certification and experience as one of the following: Certified Nursing Assistant (C.N.A.), Registered Medical Assistant (C.M.A.), Registered Nurse (R.N.) or Licensed Practical Nurse (L.P.N.) Emergency Medical Technician (E.M.T.), Respiratory Therapist. **Any course involving direct patient care, many health internships would qualify. Certification NOT required.**
- Observed Echocardiographic Procedure

Additional Requirements for Sonography 21-month Program

- Prerequisite courses less than 6 years old
- GPA of 3.0, including sciences, **All grades C- or higher**
- Patient care experience as one of the following: Certified Nursing Assistant (C.N.A.), Registered Medical Assistant (C.M.A.), Registered Nurse (R.N.) or Licensed Practical Nurse (L.P.N.) Emergency Medical Technician (E.M.T.), Respiratory Therapist. Any course involving direct patient care, many health internships would qualify. ****Certification Required.**
- Must have observed Sonographic Procedure (Job Shadow)

Additional Requirements for Radiography 18-month Program

- Prerequisite courses less than 6 years old
- Prerequisite courses complete, with GPA at least 3.0, including math and science courses. Competitive applicants will have higher. **All grades C or higher**
- Patient care certification and experience as one of the following will give a competitive advantage: Certified Nursing Assistant (C.N.A.), Registered Medical Assistant (C.M.A.), Registered Nurse (R.N.) or Licensed Practical Nurse (L.P.N.) Emergency Medical Technician (E.M.T.), Respiratory Therapist. **Any course involving direct patient care, many health internships would qualify too, or direct customer care positions.**
- Must have observed Radiographic Procedure (Job Shadow)

Allied Health Sciences

There are many other Health Professions that afford very rewarding careers. Most require another semester or year of training for certification, and some require a graduate (Masters' Degree). A partial list includes:

- Surgical First Assistant
- Various Types of Cardiovascular Specialist
- Pathologist Assistant
- Anesthesiologist Assistant
- Nuclear Medical Technologist
- Respiratory Therapist
- Emergency Medicine Paramedic
- Public Health Specialist
- Prosthetics
- Audiologist
- Neurophysiology
- Genetics Counselor
- Histology Technician
- Respiratory Therapist
- **...And More!**

Access **Pre-Health Canvas Portal** for detailed information and important links for a variety of Health and Allied Health professions. Access is granted to **Biology Majors Only**.

For More Information, contact

Amber Qureshi, Pre-Health Coordinator
Department of Biology
400 Agricultural Sciences Bldg (AGS)
Amber.gureshi@uwrf.edu

