

2024/25 Academic Year

PRE-MED & PRE-HEALTH ADVISING GUIDE

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Introduction

Congratulations on pursuing the **UMass Dartmouth Pre-Med and Pre-Health program**. The Pre-Med/Health program is an advising track open to all UMass Dartmouth undergraduate majors.

Your dedication to pursuing your undergraduate degree and pursuit of admissions to a medical or health graduate degree will be fully supported by your UMass Dartmouth major advisor and Pre-Med/Health advisor.

All students are responsible for tracking their progress and making satisfactory progression in their bachelor and minor degree requirements and towards medical or graduate school admissions.

Students are responsible for meeting regularly with the Academic advisor, minor advisor (when applicable), and Pre-Med/Health advisor.

In the junior and senior year, students will be responsible for initiating committee reviews of their application for the admissions application and for meeting the admission requirements for their target school. The Pre-Med/Health director and advising team are here to help guide you in the process.

Please note this advising handbook is not an exhaustive list of all activities that a Pre-Med/Health student should do and does not guarantee a student will be admitted to a medical or health graduate program by engaging in this advising program. This material is subject to change, students should directly contact the Pre-Med and Pre-Health program for up-to-date information.

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How do I know if Pre-Med/Health is the right choice for me?

Pre-Med/Health at UMass Dartmouth is an advising track and program, so any UMassD undergraduate in any major can participate. Choosing to participate does not mean you have to apply to a medical or health related graduate school; in fact, many students have chosen to pursue other paths after graduation.

If you have an interest in a medical or health related career fields, participating in Pre-Med/Health supports you in discovering if Medical or health graduate school is the best choice for you, and it connects you with other students who are also interested in this field.

Some factors and activities that students should consider and engage in when choosing to participate in Pre-Med/Health during their undergraduate degree:

- Asking what are my future career goals?
- Participate in a health-based internship or work experience
- Engage with the Pre-Health Society
- Attend medical or health networking events
- Attend a Medical or health graduate school open house or visit a class at a medical or health graduate school
- Network with individuals in the field and engage in an informational interview about their career and Medical or health graduate school experience

What major should I choose for Pre-Med/Health?

Students may choose from several majors at UMass Dartmouth for their Pre-Med/Health pathway.

The best piece of advice: Choose a major where you have Passion and will Excel!

Popular majors include Bioengineering, Biology, Chemistry, Health & Society, Medical Lab Science, and Psychology. Students should work with their major advisor and Pre-Med/Health advisor to ensure their degree meets their career and medical or health graduate school goals.

Please see the fact sheets in the appendix for information on some of the common majors which students choose for Pre-Med/Health here at UMass Dartmouth.

Should I elect a minor?

Yes, if it fits in with your program of study! Many students choose a minor at UMass Dartmouth in addition to their major program of study. If a student is a Biology major for example, they may elect a Chemistry minor to meet some of the medical or health graduate school requirements. Students should speak with their advisor to ensure the classes fit within the program of study before electing a minor.

Are there particular classes I have to take to get into Medical or health graduate school?

Yes! Each medical and health related graduate school has specific requirements for classes for admissions. Additionally, there are skills gleaned from certain classes that would benefit students in their Medical or health graduate school admissions process and future studies.

At UMass Dartmouth we encourage students to work with their academic major advisor to make sure they are meeting program requirements.

Students in the first year should meet with the Pre-Professional advising coordinator to select some target schools and review the admissions requirements.

Some classes we encourage students to consider, but are not required to take, related to Pre-Med/Health include:

Sample Fall Courses (taken across four years) *

- Biology with Lab
- Inorganic Chemistry with Lab
- Physics with Lab
- Organic Chemistry with Lab
- Calculus I or Statistics

Sample Spring Courses (taken across four years) *

- Biology with lab
- Inorganic Chemistry with lab
- Physics with lab
- Organic Chemistry with lab
- Calculus II or Statistics

How do I find the prerequisites for my target schools?

AAMC publishes the MSAR (Medical School Admissions Requirements), and schools list their requirements on their admission portals. <https://students-residents.aamc.org/medical-school-admission-requirements/medical-school-admission-requirements-msar-applicants>

Students should research schools (see finding a school help with your advisor or in this guide) and then make a chart of the schools, admissions requirements, and course prerequisites. This will be the guide for progressing through your degree.

Example School Research Table

School Name	GP A	MCAT	Course #1	Course #2	Course #3	Course #4	Course #5	Course #6
Medical State University	3.8	506.5	Biology with Lab	Organic Biology with Lab	Anatomy & Physiology with Lab	Physics with Lab	Statistics	Organic Chemistry

Do I need to keep a minimum GPA (Grade Point Average)?

Different schools will have different averages and ranges for admissions standards. You should review these as you identify schools. A 3.7 GPA or higher is competitive. Students should aim for at least a 3.5 GPA. There are exceptions or alternate admissions for lower GPAs (Grade Point Average), but they are rare.

Are there some pointers for Pre-requisites and GPA?

First, you should choose a major where you have passion and will excel, and you think is in a field that you are interested in staying in whether you go to graduate school or not.

Second, students should take science and admissions classes as a full-time student “on load” in the academic year (fall or spring). Summer classes are strongly encouraged not to take.

Students should also avoid repeating classes or having multiple withdrawals (W) on their transcript. These are all considered on your admissions applications.

Students should also review admission standards for their target school for further details (i.e., whether community college classes are accepted, AP credit, or even online modality).

Do I have to go to medical or health related graduate schools right after undergraduate graduation?

No! In fact, most people go into the workplace after graduation to gain experience before applying to medical or health-related graduate schools. There are several work opportunities to explore from the Peace Corps to health-related occupations. The Career Center and your faculty advisor is a great place to start to determine if going to graduate school or work after graduation is right for you.

See more information in the beyond academics section following.

What is AAMC (American Association of Medical Colleges)?

The AAMC leads and serves the academic medicine community to improve the health of people everywhere. Founded in 1876 and based in Washington, D.C., the AAMC is a not-for-profit association dedicated to transforming health through medical education, health care, medical research, and community collaborations. The AAMC administers the MCAT, MSAR and application services. All UMassD students applying to Medical School should set up an AAMC account preferably in their first year of Pre-Med/Health.

Website: <https://www.aamc.org/>

Are there other organizations that I should review if I am interested in veterinary, dental or other tracks?

The American Association of Veterinary Medical Colleges (AAVMC) publishes information and a Veterinary School Admissions Service for students interviewed in veterinary school:

<https://www.aavmc.org/>

The American Academy of Physician Assistants (AAPA) publishes information and services for students interested in the Physical Assistant (PA) track: <https://www.aapa.org/about/what-is-a-pa/>

The American Dental Association (ADA) published information on the Dental exam and admissions requirements: <https://www.ada.org/en/education/testing/exams/dental-admission-test-dat>

Students should meet with the Pre-Med/Health advisor to review the appropriate tracks and information needed for admissions to their desired medical or health related graduate school.

How do I study for the MCAT and GREs (Graduate Record Exam)?

There are many ways to study for your graduate school exams, which are a critical component of your medical or health graduate school admissions application. UMassD students are encouraged to start reviewing the exams early in their academic career and creating a study plan with your advising team.

Your Pre-Med/Health advisor will meet with you and other students to help discuss a good plan for you to achieve your MCAT and GRE (Graduate Record Exam) goals.

How do I choose a medical or health graduate school to apply to?

There are many medical or health graduate school options to choose from and not one school is the proper fit for everyone.

There are several factors you should consider when choosing a medical or health graduate school including:

- Location
- Acceptance Rates
- Average MCAT or GRE requirements
- Costs, fees, and scholarships
- Full time and part time study opportunities
- Clinic opportunities
- Specializations
- School certification
- Career support
- Graduate employment outcomes and careers

Tools such as the AAMC can help you narrow down your search by your key criteria.

Students should meet with their academic and Pre-Med/Health advisor to discuss options and start refining their lists as early as their first and second year to help in their Pre-Med/Health pathway.

Where should I intern or work to prepare for medical or health graduate school?

Internships and work experience can strengthen your medical or health graduate school application and are a fantastic way to identify your law career interests. Students should work with their academic advisor to identify required internship components in their major program of study. The Pre-Med/Health advisor can be a great resource for outreach to potential health-based options.

UMassD students should register early for the UMassD Career Center Handshake system and participate in Career Center events.

Website: <https://www.umassd.edu/career/>

Students should also join the UMassD Alumni Corsair Network to network with alumni in legal related fields.

Students should also create a LinkedIn profile early to facilitate networking.

Should I do a Research Experience for Undergraduates (REU) or another research opportunity?

Yes! REUs and summer research projects are a fantastic way to learn new skills, network with faculty and peers, create opportunities for publishing research, and are a powerful addition to your admissions application.

Students should work with their department faculty on identifying REU opportunities and/or work with the Pre-Med/Health advisor to identify opportunities at other universities and institutes around the country and the globe.

Can I study abroad?

Yes! In fact, this could be a wonderful opportunity for Pre-Med/Health students to earn international experience and network in the health field. Students interested in a study abroad option should first consult with their academic major advisor and then reach out to the UMassD Study Abroad office.

Website: <https://www.umassd.edu/ipo/study-abroad/>

What is the BaccMD Pathway Program?

The UMass Chan Medical School Baccalaureate MD (BaccMD) Pathway Program is a multiphase program that provides selected students from the UMass undergraduate campuses with the opportunity of provisional acceptance into T.H. Chan School of Medicine at UMass Chan Medical School. Students who are from racial or ethnic groups underrepresented in medicine nationally and in Massachusetts, who come from economically disadvantaged backgrounds, or are First Generation College graduates are eligible to apply to the BaccMD Program. Students apply to become Medical Scholars, the first phase of the program in the sophomore year. The program offers students to a broad range of academic and clinical immersion opportunities, including book clubs, academic and clinical immersion interactions with physicians and medical students, and observations at clinical sites at UMass Memorial Medical Center. These experiences help Medical Scholars develop insight into what is involved in the life of a medical student and health care provider. The selection of applicants to the Medical Scholars Program contributes to the T.H. Chan School of Medicine's diversity goals and educational mission that the student body will be contributing members to a diverse health care work force serving the needs of the commonwealth and the nation, with a focus on primary care and underserved communities.

Read more about the program here: <https://www.umassmed.edu/som/academics/prematriculation-programs/baccalaureate-md-program-pathway/>

All first-year students in the Pre-Med/Health track should consider participating in the Book Club monthly with UMass Chan

- Read more about Book Club here: <https://www.umassmed.edu/som/academics/prematriculation-programs/baccalaureate-md-program-pathway/book-club/>

Students should also participate in the Spring Symposium at UMass Chan.

The BaccMD Annual Symposium is an opportunity for any Pre-Med student from a UMass Campus (Amherst, Boston, Dartmouth, Lowell) to visit the T.H. Chan School of Medicine, learn about the medical school admissions process, meet, and talk with faculty and staff, interact with current UMass Chan students, and network with your peers from across the UMass system.

- Read more about the Symposium here:
<https://www.umassmed.edu/som/academics/prematriculation-programs/baccalaureate-md-program-pathway/symposium/>

How do I apply to medical or health graduate school?

Each medical or health graduate school establishes their own application, process, deadlines, and admissions requirements. Students should early in their Pre-Med/Health advising establish a list of medical or health graduate schools that fit their interests and career goals.

Students will work with their academic advisor and Pre-Med/Health advisor on the application starting as early as the summer prior to their final year of their undergraduate program, a year before the start of their potential for Medical or health graduate school enrollment.

Please see the Tips for Applying to Medical or Health graduate school section after the Checklist and Program Schedule

How do I get recommendations?

Students should review the requirements for recommendation letters for each Medical or health graduate school they are applying to.

Typically, a student should choose a faculty who can speak to their academic progress and work. Students can also choose a work experience or internship experience supervisor who can also speak to their performance and work at those sites. In some cases, Medical or health graduate schools also require a Pre-Med/Health advisor letter. Students should identify and speak with recommenders at least a year before their application submission and then ask at least 3-6 months in advance for their letter of recommendation.

Students will also engage with the Pre-Med committee on an encompassing committee letter.

How do I write a personal statement or essay?

Each Medical or health graduate school establishes their own requirements for the admissions essay and statement. Students should review the parameters as soon as the application is opened for the admission year. UMass Dartmouth students should work with their academic and Pre-Med/Health advisor on the parameters, find a reader they trust to review their writing, and work with resources such as the Writing and Multiliteracy Center (WMC). There are digital resources, such as Grammarly, that students can use to review their writing.

How do I pay for Medical or health graduate school?

Paying for Medical or health graduate school is a commitment and factor that all students should consider in their choice of Medical or health graduate schools to apply to. Medical or health graduate

schools typically have several scholarships and fellowships available to first year students, and students should evaluate these opportunities when developing their Medical or health graduate school admission list.

Students should review the FAFSA requirements and apply when FAFSA opens typically around October 1.

There are several external scholarships and fellowship opportunities. These can be found on sites such as AAMC and should be researched in advance of applying to Medical or health graduate school.

Do I have to have a resume for Medical or health graduate school?

Yes, many medical or health graduate schools do ask candidates for an updated resume reflecting their education and work experience. UMassD students can use the Career Center and participate in workshops to update and develop their resume for medical or health graduate school admission requirements.

Do I have to participate in the Pre-Health Society?

UMass Dartmouth, like many undergraduate institutions, has a student group called the Pre-Health Society. The student led group organizes activities such as alumni panels, medical or health graduate school visits, MCAT and GRE prep, and other activities to support students on the Pre-Med/Health track.

Participation in the Pre-Health Society is optional, but strongly encouraged. This type of leadership experience, in addition to other student groups such as Student Government Association is strongly encouraged to support your future medical or health graduate school admission goals.

Where do I get Pre-Med/Health help?

UMass Dartmouth offers students Pre-Med/Health support through the Pre-Med/Health advisor who is a supporting role in addition to your academic major program advisor. Students should meet with the Pre-Med/Health advisor at least one time per year to check in on their progress and medical or health graduate school admissions preparation.

The First Year Advising Process is recommended as:

1. Declare your Pre-Med/Health interest to:
 - a. Pre-Med Director at pre-med@umassd.edu
 - b. Or at Orientation via the sign-up sheet
 - c. Or by attending the Fall Orientation
2. Set up a meeting with Jessica Oliveira here:
<https://outlook.office365.com/owa/calendar/JessicaLOliveira@umassd.onmicrosoft.com/bookings/>
3. Participate in initial advising, topics include:
 - a. Is Pre-Med/Health right for me?
 - b. Class choice
 - c. Pre-Med/Health tracks
 - d. Choosing a school research
 - e. REUs introduction (where applicable)

- f. BaccMD program intro (where applicable)
4. Student is referred to faculty advising for further in-depth advising

Follow up Advising

- The Pre-Professional advisor will be available to students throughout their academic careers for advising
- Meet with your department faculty regularly for advising
- Participate in Pre-Med/Health workshops held throughout the years

Who is my department Pre-Med/Health advisor?

All students interested in pre-med/pre-health should reach out to the program via email at pre-med@umassd.edu.

Students will meet with the pre-med/pre-health director and establish their interest and the type of graduate programs they are interested in applying to at or after graduation. Students are then included on the pre-med email list which distributes important email notifications regarding advising and the program includes events, deadlines, and more.

Students are assigned to a pre-med/pre-health faculty advisor and their major program of study advisor. Students majoring in bioengineering, chemistry, biochemistry, medical laboratory science, and psychology will be assigned an additional advisor, listed in COIN. Other majors may discuss pre-med/pre-health interests with their program advisor.

Students should meet with their assigned advisor at least once each semester before registering for classes. Be sure to plan your meetings well in advance of selecting any classes. Students are also encouraged to meet with the pre-professional advisor in the STAR Center to ensure they are on track for meeting their targeted graduate school course requirements.

During the upper-class years in the undergraduate program, students will prepare to meet with the Pre-Med Faculty Committee. The Pre-Med Faculty Committee is responsible for interviewing and authoring committee letters, which are often needed when applying to graduate medical and health programs.

Faculty Program Contacts:

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Pre-Professional Advising:

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Pre-Professional
[Book an appointment](#)
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Checklist and Program Schedule

Please note this is not an exhaustive list, students should confer with the university catalog, advisors, and programs with any other questions on required activities as this information may be subject to change.

First Year Undergraduate

Summer

1. Meet with Academic Advisor and Pre-Med/Health Advisor to choose first year, first semester classes

Fall

1. Sign up for a AAMC or similar account where appropriate
2. Join student groups, such as the Pre-Health Society
3. Follow UMass Chan student groups or target graduate schools on social media and attend networking functions where available
4. Discuss graduate school opportunities to start on admission course requirements
5. Meet with your Academic Advisor and Pre-Med/Health Advisor and build next semester schedule.
6. Set a goal of at least a 3.5 GPA
7. Participate in the UMass Chan Book Club
8. Apply to BaccMD program (if applicable)

Spring

1. Participate in undergraduate research opportunities, REUs and networking events
2. Network with faculty and staff
3. Meet with your Academic Advisor and Pre-Med/Health Advisor and build next semester schedule.
4. Set a goal of at least a 3.5 GPA
5. Attend UMass Chan Spring Symposium
6. Apply for summer internship or REUs

Work with your Academic Advisor, Pre-Med/Health (and 3+3 Advisor if applicable) to create your schedule of classes for Year 1.

YEAR 1			
	FALL		SPRING

Second Year Undergraduate

Fall

1. Attend student groups such as Pre-Health Society and engage in activities
2. Meet with your Academic Advisor and Pre-Med/Health Advisor and build next semester schedule.
3. Set a goal of at least a 3.5 GPA
4. Refine the list of reach, target, and safety medical or health graduate schools that interest you
5. Take a sample graduate school exam to see how you do
6. Attend medical or health graduate school open houses to explore options

Spring

1. Attend student groups such as Pre-Health Society and engage in activities
2. Meet with your Academic Advisor and Pre-Med/Health Advisor and build next semester schedule.
3. Set a goal of at least a 3.5 GPA
4. Refine your list of medical or health graduate schools and create a plan to visit next year
5. Research internship and REU opportunities for your third year
6. Refresh your resume

Work with your Academic Advisor, Pre-Med/Health (and 3+3 Advisor if applicable) to create your schedule of classes for Year 2.

YEAR 2			
	FALL		SPRING

Third Year Undergraduate

Fall

1. Attend student groups such as Pre-Health Society and engage in activities
2. Meet with your Academic Advisor and Pre-Med/Health Advisor and build next semester schedule.
3. Set a goal of at least a 3.5 GPA
4. Finalize your list of medical or health graduate schools for visits and create a list of GPA, exam, and other requirements
5. Visit target medical or health graduate schools and/or an admission event to meet potential medical or health graduate school admission staff
6. Study and take sample exams
7. Prepare for your committee interview and letter process

Spring

1. Attend student groups such as Pre-Health Society and engage in activities
2. Meet with your Academic Advisor and Pre-Med/Health Advisor and build next semester schedule.
3. Set a goal of at least a 3.5 GPA
4. Visit target medical or health graduate schools
5. Finalize your list of medical or health graduate schools for applications
6. Meet with recommenders for your medical or health graduate school recommendations
7. Research scholarships and fellowships
8. Prepare for your committee interview and letter process
9. Take your GRE or MCAT or related exams
10. Applying for the next fall cycle? Check deadlines, most are early fall

Summer

1. Complete admission processes

Work with your Academic Advisor, Pre-Med/Health (and 3+3 Advisor if applicable) to create your schedule of classes for Year 3.

YEAR 3			
	FALL		SPRING

Fourth Year Undergraduate

Fall

1. Attend student groups such as Pre-Health Society and engage in activities
2. Meet with your Academic Advisor and Pre-Med/Health Advisor and build next semester schedule.
3. Complete the FAFSA
4. Research scholarships and fellowships and deadlines for funding
5. Wait for decisions if applying to schools for the next fall cycle or start applications for jobs after graduation

Spring

1. Finalize applications for scholarships and fellowships depending on deadlines
2. Continue interviews for jobs post-graduation

Summer

1. Get ready for Medical or health graduate school or for work after graduation!

Work with your Academic Advisor, Pre-Med/Health (and 3+3 Advisor if applicable) to create your schedule of classes for Year 4.

YEAR 3			
	FALL		SPRING

MCAT and GRE Study Resources

These materials have not been reviewed and are not Endorsed by the University and are suggested potential options to prepare for the graduate school exams. Students are responsible for identifying and vetting their own study resources.

AAMC Official Prep Hub (Free and Paid Resources)

<https://students-residents.aamc.org/prepare-mcat-exam/prepare-mcat-exam>

Khan Academy MCAT Test Prep (Free)

<https://www.khanacademy.org/test-prep/mcat>

Anki Flashcards (Free)

<https://ankiweb.net/shared/decks?search=mcats>

ETS GRE Test Prep (Free and Paid Resources)

<https://www.ets.org/gre/test-takers/general-test/prepare.html>

Kaplan (Paid)

<https://www.kaptest.com/mcat>

<https://www.kaptest.com/gre>

Princeton Review (Paid)

<https://www.princetonreview.com/medical/mcat-test-prep>

<https://www.princetonreview.com/grad/gre-test-prep>

Blueprint (Paid Materials and Tutoring)

<https://blueprintprep.com/>

Tips on Choosing a Medical or Health graduate school

There are several factors to consider when choosing a Medical or Health related graduate school. Each student should meet with their academic and Pre-Med/Health advisor to discuss options and start refining their lists as early as their first and second year to help in their Pre-Med/Health pathway.

1. Location
2. Acceptance Rates
3. Average MCAT or GRE requirements
4. Costs, fees, and scholarships
5. Full time and part time study opportunities
6. Clinic opportunities
7. Specializations
8. School certification
9. Career support
10. Graduate employment outcomes and careers

Tools such as the AAMC can help you narrow down your search by your key criteria.

Common Medical or Health graduate schools Overview*

School	State	Median GPA*	Median MCAT/GRE	Acceptance Rate*
UMass Chan	MA	3.81	514	23%
Rush Medical College	IL	3.57	510	4%
Saint Louis University School of Medicine	MO	3.86	512.22	4%
Meharry Medical College	TN	3.5	503	1.61%
Tufts	MA	4.04	515	6%
Boston University Avedisian School of Medicine	MA	3.71	517	4%
SUNY Downstate	NY	3.67	516	2.98%
Albany Medical College	NY	3.74	511	4%

**Please check with each school on up to date this information, this chart is representative based on past data and subject to change.*

Pathways to Pre-Med

Bioengineering

Key Outcomes

A combination of the life sciences, medicine, and engineering. Bioengineers design and develop devices, systems, and techniques to improve patient diagnosis, treatment, and care.

What you will study

Focuses on the connections between engineering and biology. Hands-on learning is a vital component of the program. You will also learn to contribute to the profession in an ethical and socially responsible manner. You will be trained to bring engineering and the life sciences together to advance human well-being and solve problems of the biological world.

Coursework

Coursework focuses on general, mechanical, electrical, and bioengineering. Students also take courses in Chemistry, Physics and English. Students complete a capstone design project during their senior year.

Potential Career Tracks

- Manufacturing
- Universities
- Hospitals
- Research facilities
- Graduate school
- Medical School (Vet, Dental, PA, MD)

Biology

Key Outcomes

A natural science studying life and all living organisms including their physiology, anatomy, behavior, origin, and distribution. Works with living things.

What you will study

Emphasizes field and laboratory opportunities; learn biology while studying living organisms. Start with a solid foundation in fundamental biological principles and practices. Then focus on specific interests such as cell and molecular biology, organismal biology, ecology and evolution, or the biology of marine organisms.

Coursework

Coursework focuses on general, mechanical, electrical, and bioengineering. Students also take courses in Chemistry, Physics and English. Students complete a capstone design project during their senior year.

Potential Career Tracks

- Manufacturing
- Universities
- Hospitals
- Research facilities
- Graduate school
- Medical School (Vet, Dental, PA, MD)

Medical Lab Science

Key Outcomes

A laboratory science, focusing on using technology and techniques to analyze samples and discover the presence or absence of disease. Works with biomedical instrumentation and patient specimens.

What You will Study

Focuses on the disciplines of Clinical Chemistry, Hematology, Urinalysis, Microbiology, Immunology, and Blood Banking. Emphasis on laboratory instrumentation, computers, quality control and genetic/molecular diagnostics. Learn to analyze blood and other body fluids to evaluate health status, diagnose disease, and aid in the proper management and treatment of disease.

Course Work

Our NAACLS accredited program provides coursework which focuses on gaining aptitude and experience with medical laboratory science specialties mentioned above. Students also take courses in Chemistry, Genetics, Human Physiology and Pathophysiology.

Potential Career Tracks

- Clinical laboratories
- Hospitals
- Physicians' offices
- Health departments
- Public health
- Medical School (Vet, Dental, PA, MD)

Chemistry

Key Outcomes

Chemists and biochemists study the structure and properties of matter and learn how natural and synthetic substances react with each other.

What You will Study

A biochemistry degree track provides core chemistry concepts, plus a focus on biomolecules. Students learn a variety of practical laboratory skills and how to use instrumentation. Biochemists use this training to solve problems in science and medicine, for example developing cancer treatments and diagnostics or new antibiotics.

Course Work

Our American Chemical Society certified B.S. curriculum includes research projects, laboratory and lecture courses in chemistry, biology, physics, and math.

Potential Career Tracks

- Pharmaceutical and biotech
- Forensics
- Food science
- Environmental labs
- Materials research
- Education
- Medical School (Vet, Dental, PA, MD)

Psychology

Key Outcomes

Psychology is the scientific exploration of human behavior. As a social science, it involves a critical evaluation of factors that impact human behavior. Given the powerful effect of lifestyle and behavioral change on health, Psychology plays a prominent role in medical treatment models.

What You will Study

The program provides a broad introduction to psychology, a solid foundation in research methodology, the ability to understand research and apply it to theory and practice across a wide range of human behavior. Students from our program who have gone on to medical school have focused on advanced options for research and counseling

Course Work

Coursework focuses on the foundations of Psychological Science and a Research Methods course with a corresponding lab. Students also explore subfields such as development, cognition, social psychology, with options involving exposure to counseling.

Potential career tracks

- Medical school
- Nursing
- Counseling
- Occupational Therapy
- Physical Therapy
- Hospital administration
- Research

Health & Society

Key Outcomes

An interdisciplinary program that explores how social, cultural, political, and economic factors impact human health and well-being. The focus is on understanding patterns of population health and strategies for promoting the health of diverse populations.

What you will study

The program integrates perspectives from sociology and anthropology, political science, economics, psychology, philosophy, crime and justice studies, and communication to provide a broad understanding of health-related challenges. The emphasis is on developing innovative approaches to improving human well-being and reducing health disparities.

Coursework

Coursework focuses on creatively utilizing diverse perspectives and research-based evidence from the social sciences and humanities to understand and solve health-related problems. Students connect classroom learning with community-based internships and applied research projects.

Potential career tracks

- Human services
- Medical care professions
- Public health and health care policy
- Health care administration
- Medical sociology and anthropology
- Medical School (Vet, Dental, PA, MD)

Research Experiences for Undergraduates (REUs)

Undergraduate research experiences are a fantastic way to gain practical experience in a medical or health-related field before your admissions application. These experiences are also valuable in identifying potential fields of study and networking in your field.

An REU is typically associated with the National Science Foundation (NSF) REU program. However, a REU can be any lab or field based medical or health related research program for undergraduates.

Students should work with the Pre-Med/Health advising team and director on which REUs may be a good fit for them.

Students are responsible for researching, identifying, and applying to REUs. The advising team is available as a guide to support the process.

National Science Foundation (NSF) REUs

The NSF funds several national REU experiences. Students should visit the site and research opportunities, deadlines, and application process.

Website: <https://www.nsf.gov/crssprgm/reu/>

UMassD campus REUs

Students should meet with the faculty advisor in their department to identify research experiences in their field of study.

UMass Chan BaccMD and Summer Experiences

For students on the medical pathway, UMass Chan offers several experiences for students.

The BaccMD Pathway program is one opportunity:

<https://www.umassmed.edu/som/academics/prematriculation-programs/baccalaureate-md-program-pathway/>

Summer Research Experiences are offered on an annual basis as well:

<https://www.umassmed.edu/gsbs/outreach-programs/summer-undergraduate-research-program/>

Other Opportunities

Students should check their emails frequently for any opportunities sent from the Pre-Med/Health director and program.

Beyond Academics – Application Process and Materials

The first three hurdles of your admissions application are: GPA, MCAT/GRE, and Pre-requisite courses. After clearing these there are other items to address as you prepare for your admissions application.

Purposeful Thematic Activities

Students should consider a set of purposeful and thematic activities as they prepare for medical and health related graduate school admissions. For example,

Personal Statement

Students should think about their theme for the admissions application and how other activities outside of academics fit with who you are and your specific goals, ambitions, and story. Students are encouraged to meet with campus offices such as the Writing and Multiliteracy Center (WMC) for writing assistance and review.

Shadowing

Students should “test out” their desired occupation through opportunities such as shadowing. Shadowing is an informal opportunity to see a day in the life of a professional such as a MD or OD. Due to health regulations, sometimes these are tricky to arrange, but are a fantastic opportunity to also network with professionals in the field. Other activities such as informational interviews can be useful in understanding what a future career really entails.

Volunteering

Students should identify volunteer opportunities in the medical and health field or related fields that fit in with their story and theme. For example, if you are interested in Pediatrics, finding an opportunity to volunteer with children’s groups is an idea. Campus offices such as the Leduc Center can help identify opportunities.

Application Timing

Application cycles range from mid-summer through late autumn for entry the following fall semester. To target medical school entry for the next fall after graduating, the MCAT should be taken the summer after the junior year or the fall of the senior year at the latest. Many students do not feel prepared yet to tackle MCAT exams at the time, and thus wait until at least a year after graduating to apply to medical school. Health related graduate schools often use the GRE, and this should also be taken in the summer after completing the junior year.

If you are not ready to apply, do not worry! The average age of a first-year medical student is currently around 25 years old and trending upwards. Only about 35% of medical school students, for example, enter directly from college.

A gap year or two can be extremely helpful with gaining life experience, gaining work experience beyond academics, improving your MCAT or GRE scores, gaining more research experience, and more.

After graduating if you choose not to apply (and get accepted) into graduate school, stay in touch! UMassD advisors are here to help, and you can still receive support from the Pre-Med/Health Committee and advisor.

Letters of Recommendation

Students should follow the admissions directions that correspond with each school to which they are applying. Students should confer with their department Pre-Med/Health advisor for support and review. Students will gather the letters of recommendation and submit them to the Pre-Med/Health director for committee review.

Committee Interview and Letter

The committee letter is a common practice in many medical and health related graduate school admissions processes. Students should review the admissions directions for each school to which they are applying. Some schools require this letter and for some this is optional. The committee letter is a letter from the UMass Dartmouth Pre-Med/Health faculty committee. The committee reviews the students' progress in their undergraduate courses, reviews the letters submitted, and reviews other factors such as student organization involvement. The committee then writes and generates a letter for the student's graduate school admission package. Due to the timing of the admissions cycle, students who are applying directly after graduation from their undergraduate degree typically start this process in the fall of the Junior year or sooner. Students who are applying after graduation should review with the Pre-Med/Health director for timing. For more information on the committee letter, students should meet with their faculty program pre-med/health advisor.

Admissions Interview

Many graduate programs in medicine and health require an interview as part of the admissions process. Students should review the admissions requirements for each school to which they are applying and review this requirement with their faculty program advisor. Students may have the option to practice interviews with the Pre-Med/Health faculty committee and should work with their program to determine eligibility and next steps on practicing and preparing for the interview as part of the admissions process.