PRE-HEALTH ADVISING

for your 1st year

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http://www.du.edu/nsm/premed/
<table>
<thead>
<tr>
<th>Category</th>
<th>Contact</th>
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<tbody>
<tr>
<td>Pre-Health Advising</td>
<td>Nancy Lorenzon</td>
</tr>
<tr>
<td>Academic Advising</td>
<td>Todd Schuster</td>
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<tr>
<td>Career Center</td>
<td>John Haag</td>
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<td>Patricia Hickman</td>
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<td>Pre-Professional</td>
<td>Nancy Lorenzon</td>
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<td>Jim Fogleman</td>
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<td>Barbekka Hurtt</td>
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<tr>
<td>Administrativa support</td>
<td>Margene Brewer</td>
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</table>
Pre-Professional Allied Health Student

Pre-Health Clubs
Network with your DU peers, learn from off-campus professionals

Major Requirements
Discuss degree requirements with your faculty advisor. Seek study support, if needed

Application Process
Personal statement, recommendation letters, interview and professional skills

Entrance Exam Prep
Academic preparation, study skills, practice exams

Portfolio Development
Volunteer, clinical and research experiences, and resume building
**Coursework:**
- Prerequisites for professional school
- Preparation for MCAT exam
- Foundational knowledge

**Extracurricular activities:**
- Volunteer experiences
- Clinical experiences
- Foundational knowledge

**Pre-Professional Advisor**
Meet to discuss an academic and extracurricular plan

**Portfolio Development**
Volunteer, clinical and research experiences, and resume building

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Curriculum Advising:
Major Faculty Advisor
Academic Advising/Student Life
Pre-Professional/Allied Health Advisor

Academic support:
Course instructors
Science and Engineering Center
Math Center
Writing Center
Language Center
Research Center
Portfolio Development
Volunteer, clinical and research experiences, and resume building

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Pre-Professional
Allied Health Student Portfolio Development
Volunteer, clinical and research experiences, and resume building

Extracurricular Activities:
Career Center
Pre-Professional/Allied Health Advisor
Undergraduate Research Center
Academic Advising/Student Life
Networking opportunities
Entrance Exam Prep
Academic preparation, study skills, practice exams

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Application Process
Personal statement, recommendation letters, interview and professional skills

Entrance Exam Prep
Exam study and practice:
- CO-AHEC presentations
- Kaplan presentations
- Group study
- Practice exams

Pre-Professional Advisor
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Major Requirements
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Pre-Professional Allied Health Student Application Process
Personal statement, recommendation letters, interview and professional skills

Advising and workshops:
- PPAH Group Advising sessions
- Personal statement workshops
- Mock interviews
- Professionalism workshop
- Career Center
- Academic Advising
- Writing Center

Major Requirements
Discuss degree requirements with your faculty advisor. Seek study support, if needed
General timeline… 1st year

• Make a general curriculum plan:
  • Major and minor degree requirements
  • Professions school prerequisites (and suggested/elective courses)
  • Consider study abroad

• Develop study skills

• Focus on your transition to college and your coursework

• Get involved with health-related and other clubs

• Explore health careers: http://explorehealthcareers.org/en/home

• Start/ continue building your ‘resume’
  • Volunteer opportunities (health-related or not health-related)
  • Clinical experiences (shadowing)
  • Start learning about options for research and leadership opportunities
  • DU clubs

• Do some self-assessment

• Consider summer internships and experiences
## Typical Course Schedule for the Required Courses

<table>
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<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
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<tbody>
<tr>
<td></td>
<td>CHEM 1010/1240</td>
<td>CHEM 2451/2461</td>
<td>CHEM 2452/2462</td>
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<tr>
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<th>Fall</th>
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<tr>
<td></td>
<td>CHEM 2453/2462</td>
<td>CHEM 2011/2041</td>
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<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PHYS 1111*</td>
<td>PHYS 1112</td>
<td>PHYS 1113</td>
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This is the recommended sequence for typical pre-med students.

- Pre-dental students can take Physics in the 4th year.
- Pre-PT, pre-PA, and pre-nursing students only need one year of chemistry.
- Pre-PT students need one year of Physics; could be taken in the 2nd year.
- Pre-PA and pre-nursing students do not need Physics.

Pre-PA, pre-PT and pre-nursing have some additional required courses: Human Physiology, Human Anatomy, Microbiology (see advising sheets).
Study Abroad Options

Option 1
• Take Physics I in summer school at DU after 2nd year
• Go Abroad in Fall of 3rd Year
• Do Physics II in Winter of 3rd; Physics III in spring of 3rd year
• Take MCAT in May or June

Option 2
• Go Abroad in Fall of 3rd Year
• Take Physics in your 4th year (Dental Students)
• Pre-med students would take MCAT in May or June of Year 4
• You will have a Gap year or might be in 5th year MS program

Option 3 (for Students with AP score of 5 in Biology)
• Take Physics sequence in 2nd year while finishing Chem minor
Study Abroad Options NOT Recommended

Option not recommended
• Taking the Physics Sequence in 2\textsuperscript{nd} year
• Finishing the Chemistry sequence in 2\textsuperscript{nd} year
• Taking BIOL 2120 and BIOL 2510 in 2\textsuperscript{nd} year

Alternative option
• Take Physics I in summer after 1\textsuperscript{st} year
• Take BIOL 2120 + Organic III in Fall of 2\textsuperscript{nd} year
• Take Physics II + Analysis of Equilibrium in Winter 2\textsuperscript{nd} year
• Take Physics III + Chem of the Elements in Spring 2\textsuperscript{nd} year

Not Recommend
• Pre-med students should avoid going abroad in Fall of 4\textsuperscript{th} year if applying during summer between 3\textsuperscript{rd} and 4\textsuperscript{th} year
• Problem… if interviews for your program start in Fall, you do not want to be abroad delaying your interview
General timeline… 1st year

Summer after 1st year - Building your Resume

• Summer coursework?

• Read:
  • journals, books, news about medicine (what’s happening in medicine)
  • daily newspapers, weekly magazine (what’s happening in the world around you, outside of DU and medicine)

• Participate in volunteer work, shadowing in different settings/specialties, summer enrichment programs, internships, research

Additional help can be sought at the Academic Advising Center (Todd Schuster in Driscoll South) and the Career Center (John Haag and Patricia Hickman)

Also, see resources on the DU’s PPAHA (pre-health) website http://www.du.edu/nsm/premed/

and professional association websites: https://www.aamc.org/students/aspiring/ for med students, http://www.adea.org/GoDental/ for dental students, etc
Local Hospitals with Volunteer programs

Swedish Medical Center (about 2.7 miles from the DU campus)
http://www.swedishhospital.com/about_swedish_medical_center/volunteer_services/

Porter Hospital (about 1 mile from the DU campus)
http://www.porterhospital.org/volunteers

Presbyterian/St. Luke's Medical Center (about 5.5 miles from DU campus)
http://www.pslmc.com/careers/volunteers/

St. Joseph’s Hospital (about 5.5 miles from the DU campus)
http://www.exemplasaintjoseph.org/volunteer

National Jewish Hospital (about 5.8 miles from the DU campus)
http://www.nationaljewish.org/help/volunteer/

Children’s Hospital of Colorado (about 12 miles from the DU campus)
http://www.childrenscolorado.org/give/volunteer/index.aspx
Self-reflection and self-assessment

• What gaps exist in my knowledge (coursework or studying)?

• How do I need to strengthen my ‘resume’ (experiences)?

• Do I know why, and have I demonstrated that, I want to pursue a career in…?

• Have I researched different types of health careers and schools/programs?

• Am I aware of current issues, concerns and trends in healthcare?

• Have I determined a realistic timeline for my professional school preparation?
Work on the **Pre-Health Portfolio and Self-Assessment Guide**, if you have not already

A copy of the document can be found on the PreProfessional/Allied Health Advising website in the Advising section
Pre-Health Portfolio and Self-Assessment Guide

Name: _____________________________________________
Expected graduation date: ____________________________
Major: _____________________________________________
Minor(s):___________________________________________
Major faculty advisor: _________________________________
Preferred email: _____________________________________
Phone: _____________________________________________

Career plan/goals (professional school goals, ultimate career goals):

Parallel plan/goals (secondary plan- until acceptance into professional school):
<table>
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<th>Year 1</th>
<th>Science courses</th>
<th>Science GPA</th>
<th>Non-science courses</th>
<th>Non-science GPA</th>
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<td>Summer session</td>
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<td>Summer session</td>
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STANDARIZED TESTS (MCAT, DAT, PCAT, GRE, etc) include practice test scores

Date exam taken: ___  Scores (overall and subsections): ____
Date exam taken: ___  Scores (overall and subsections): ____
If not taken yet, date planned ______

Academic honors, awards, scholarships, accomplishments:
Accomplishment:
Dates (start- end):
Summary:
EXTRACURRICULAR ACTIVITIES:

For **EACH** activity, describe the activity and your role, motivation for being involved, contributions to development of competencies.

Experiences in clinical settings:
Activity:
Dates (start- end):
Average # hours/week:
Total number of hours:
Organization/department:
Contact name, title, contact info:
Activity summary:
Skills/competencies learned/demonstrated:

Volunteer experiences: …

Research experiences: …

Extracurricular activities (clubs, sports…):  …
SELF-REFLECTIONS:
Do a self-reflection about things that you have accomplished during the year, goals for the upcoming year, strengths and weaknesses, experiences, variations in academic records, etc.

Year 1:

Year 2:

Year 3:

Year 4:

PERSONAL STATEMENT:
*keep a shadowing, clinical, volunteer experience journal
LETTERS OF RECOMMENDATION:

Faculty referees:
1.
2.
3.

Non-faculty referees:
1.
2.
3.

Committee letter requested?
The 15 Core Competencies for Entering Medical Students (defined below) have been endorsed by the AAMC Group on Student Affairs (GSA) Committee on Admissions (COA).

The competencies fall into four categories: Interpersonal, Intrapersonal, Thinking and Reasoning, and Science.

**Interpersonal Competencies**

**Service Orientation**: Demonstrates a desire to help others and sensitivity to others’ needs and feelings; demonstrates a desire to alleviate others’ distress; recognizes and acts on his/her responsibilities to society; locally, nationally, and globally.

**Social Skills**: Demonstrates an awareness of others’ needs, goals, feelings, and the ways that social and behavioral cues affect peoples’ interactions and behaviors; adjusts behaviors appropriately in response to these cues; treats others with respect.
Cultural Competence: Demonstrates knowledge of socio-cultural factors that affect interactions and behaviors; shows an appreciation and respect for multiple dimensions of diversity; recognizes and acts on the obligation to inform one’s own judgment; engages diverse and competing perspectives as a resource for learning, citizenship, and work; recognizes and appropriately addresses bias in themselves and others; interacts effectively with people from diverse backgrounds.

Teamwork: Works collaboratively with others to achieve shared goals; shares information and knowledge with others and provides feedback; puts team goals ahead of individual goals.

Oral Communication: Effectively conveys information to others using spoken words and sentences; listens effectively; recognizes potential communication barriers and adjusts approach or clarifies information as needed.
Intrapersonal Competencies

**Ethical Responsibility to Self and Others:** Behaves in an honest and ethical manner; cultivates personal and academic integrity; adheres to ethical principles and follows rules and procedures; resists peer pressure to engage in unethical behavior and encourages others to behave in honest and ethical ways; develops and demonstrates ethical and moral reasoning.

**Reliability and Dependability:** Consistently fulfills obligations in a timely and satisfactory manner; takes responsibility for personal actions and performance.

**Resilience and Adaptability:** Demonstrates tolerance of stressful or changing environments or situations and adapts effectively to them; is persistent, even under difficult situations; recovers from setbacks.

**Capacity for Improvement:** Sets goals for continuous improvement and for learning new concepts and skills; engages in reflective practice for improvement; solicits and responds appropriately to feedback.
Thinking and Reasoning Competencies

**Critical Thinking**: Uses logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.

**Quantitative Reasoning**: Applies quantitative reasoning and appropriate mathematics to describe or explain phenomena in the natural world.

**Scientific Inquiry**: Applies knowledge of the scientific process to integrate and synthesize information, solve problems and formulate research questions and hypotheses; is facile in the language of the sciences and uses it to participate in the discourse of science and explain how scientific knowledge is discovered and validated.

**Written Communication**: Effectively conveys information to others using written words and sentences.
Science Competencies

**Living Systems**: Applies knowledge and skill in the natural sciences to solve problems related to molecular and macro systems including biomolecules, molecules, cells, and organs.

**Human Behavior**: Applies knowledge of the self, others, and social systems to solve problems related to the psychological, socio-cultural, and biological factors that influence health and well-being.
### MCAT scores and GPAs for applicants and matriculants to US Medical Schools, 2014

<table>
<thead>
<tr>
<th></th>
<th>Total MCAT</th>
<th>MCAT VR</th>
<th>MCAT PS</th>
<th>MCAT BS</th>
<th>GPA overall</th>
<th>GPA sci</th>
<th>GPA non-sci</th>
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<td><strong>applicants</strong></td>
<td>28.6</td>
<td>9.2</td>
<td>9.5</td>
<td>9.9</td>
<td>3.55</td>
<td>3.45</td>
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<td><strong>matriculants</strong></td>
<td>31.4</td>
<td>10.0</td>
<td>10.6</td>
<td>10.9</td>
<td>3.69</td>
<td>3.63</td>
<td>3.77</td>
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</table>

Source: American Association of Medical Colleges

### MCAT scores and GPAs for matriculants to US DO Schools, 2014

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<th>GPA sci</th>
<th>GPA non-sci</th>
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<tbody>
<tr>
<td><strong>applicants</strong></td>
<td>26.26</td>
<td>9.61</td>
<td>8.51</td>
<td>9.15</td>
<td>3.43</td>
<td>3.28</td>
<td>3.55</td>
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<td><strong>matriculants</strong></td>
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<td>9.51</td>
<td>3.51</td>
<td>3.39</td>
<td>3.60</td>
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Source: American Association of Colleges of Osteopathic Medicine
Goal of extracurricular activities

Leadership and Initiative
Diversity of Experience
Enthusiasm and Attitude
Open-mindedness
Critical Thinking Skills
Maturity
Self-Confidence
Genuine interest in Medicine and Learning
Sacrifice
Career vision and long term objectives
DU Health-related Student Organizations/Clubs

Council of Global Health and Development

CURE University

GlobeMed at the University of Denver

Pre-Health Club

University of Denver Global Brigades

University of Denver Pre-Veterinary Club (Dr. Robin Tinghitella, Dept. Biological Sci.)

University of Denver Health Pioneers
Upcoming events…

Wed, Sept 23 at 4:00-6:00pm: Discovering Research Opportunities Fair by the Undergraduate Research Center

*Sat, Sept 26 at 8:45am-5:00pm: CU Pre-Health Day at CU Anschutz Medical Campus ($18, includes continental breakfast, lunch, and a t-shirt; register at www.cuprehealth.org)

*Sat, Oct 3 at 8:30am-3:30pm: Pre-Dental Simulation Course at CU Anschutz Medical Campus ($45, RSVP at https://www.eventbrite.com/e/colorado-asda-pre-dental-sim-clinic-day-tickets-18389384143)

*Sat, Oct 3 at 8:15am-1:00pm Colorado Neurological Institute ‘Trending Toward Tomorrow: What’s New in Neuro?’ at the Doubletree Stapleton North (Register at www.blacktie-colorado.com. $10 for DU students, includes breakfast and lunch)


Wed., Oct 14 at 4-6pm: Mock Interviews for Pre-Health (Jennifer Hellier, Director of Colorado Health Professions Development Program (CO-HPD), Associate Director of Programs, Colorado AHEC Program)

Tues. Oct 27 at 4:00pm: Presentation by American University of Antigua, College of Medicine, Antigua, West Indies (Lisa Miller)

Wed., Jan 13 at 4-6pm: Personal Statement workshop (Jennifer Hellier, Director of Colorado Health Professions Development Program (CO-HPD), Associate Director of Programs, Colorado AHEC Program)

(*events off campus and not sponsored by DU)
Other in events in the planning stage…

Colorado Neurological Institute and DU ‘Grand Rounds’

Healthcare Career Fair (mid-late fall)

How to decide to which specific professional schools you should apply (late fall)

Application process workshop (late fall)

Gap year ideas (late fall)

MCAT prep group study (late fall - early spring)

MCAT/DAT practice exam

Interpersonal Skills and Professionalism workshop (spring)

Way Beyond the Elevator Speech: Developing your Academic or Professional Identity (Kate Willink; co-sponsored with URC and Extreme Academics)

DU Day at Rocky Vista University College of Osteopathic Medicine (early spring)

What would you like to see planned???