Premed Info Session: Preparing for Health-Related Careers at Tandon

Orientation Workshop
NYU Tandon Prehealth Committee

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What is the prehealth committee?

• Began at Tandon in 2012 to guide students
• Evaluates candidates and writes Committee Letter for AMCAS
  – Places you in the context of the school
  – Drawn from application, interview with the committee, and recommendation letters
  – Uploaded to AMCAS on NYU letterhead
• Offers letter to students even after graduation
• Works in tandem with Washington Square
Why “prehealth,” not “premed”?

- Medical School (MD or MD/PhD)
- Osteopathic School (DO)
- Nursing (RN)
- Pharmacy (PharmD)
- Physical Therapy (DPT)
- Physicians Assistant (PA)
- Dental School
- Veterinary School
Illustration of training and testing

- **Undergraduate degree**
  (4-5 years): prerequisite courses and clinical shadowing

- **Medical school**
  (2 years or so): fundamental courses in basic science

- **Rotations**
  3 to 6 specialties with elective courses

- **Residency**
  (3 to 8 years): paid position

- **MCAT**
- **USMLE Step 1**
- **USMLE Step 2**
- **USMLE Step 3**

*Timeline varies depending on career goal and professional school*
Prehealth Preparation
**Basic undergrad requirements**

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Requirements</th>
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<tbody>
<tr>
<td>General chem w/lab</td>
<td>• CM 1014, CM 1024</td>
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<tr>
<td>Organic chem w/lab</td>
<td>• CM 2213/CM 2211 and CM 2223/CM 2221</td>
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<tr>
<td>Two biology w/lab</td>
<td>• BMS 1004 (Intro to Cell Biology) and BMS 2004 (Physiology)</td>
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<tr>
<td>Two physics</td>
<td>• PH 1013 (Mechanics)</td>
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<td></td>
<td>• PH 2023/PH 2021 (Electricity, Magnetism, and Fluids)</td>
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<tr>
<td></td>
<td>• PH 2033/1 (Waves, Optics, and Thermo)</td>
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<tr>
<td>Two calculus</td>
<td>• MA 1054, MA 1154</td>
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<tr>
<td>Two English</td>
<td>• EXPOS UA 1 and 2</td>
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*Any undergrad major can be “prehealth” if you meet the prereqs*
Maximizing MCAT and application

| Additional biology        | • BMS 3114 (Genetics)  
|                          | • BMS 3514 (Organismal Physiology)  
|                          | • BMS 3214 (Microbiology)  
|                          | • BMS 3314 and BMS 4324 (Advanced Cell and Molecular Biology 1 and 2)  
|                          | • BMS 4844 Human Anatomy  
| Additional math          | • BMS 2512 Biostats, statistics  
| Biochemistry             | • CM 3314 and 3324 (Biochemistry 1 and 2)  
| Neuroscience             | • BE/BI graduate course at Tandon  
|                          | • NEURL-UA 100, Introduction to Neural Science  
| Psychology               | • PSYCH-UA 1, Introduction to Psychology  
| Social science (now on MCAT) | • Medical ethics, patient psychology, history of medicine (general education or STS minor)  |
New MCAT scoring

MCAT2015 has four test sections:

1. Chemical and Physical Foundations of Biological Systems
2. Critical Analysis and Reasoning Skills
3. Biological and Biochemical Foundations of Living Systems
4. Psychological, Social, and Biological Foundations of Behavior

MCAT2015 Total Score

- With centers at 125, section scores range from 118 to 132.
- The section scores sum to the total score.
- With its center at 500, the total score ranges from 472 to 528.
Preparing for your Application
Two-year lead time required

**Two years before starting health professional school**

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<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
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<tbody>
<tr>
<td>Take MCAT (option 1)</td>
<td><strong>Start NYU App</strong></td>
<td>Submit app / letters</td>
<td>Tandon Committee interview</td>
<td>Take MCAT (option 2)</td>
<td>Submit AMCAS Jun. 1</td>
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**MCAT scores ready**

**One year before starting health professional school**

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<tr>
<td>Secondary apps</td>
<td>Possible interviews</td>
<td>Decisions announced</td>
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**Classes start**
A gap year (or more) enhances application

Clinical experience

Work

MS degree

Research

Post Bacc
How can you prepare for this?

• Visit your advisor
  – Ask for advice (obviously)
  – Get used to articulating who you are

• Apply for competitive programs
  – Start drafting personal statements
  – Improve résumé
  – Learn how to meet deadlines

• Be a part of clubs, go to workshops
Beyond checkbox to extracurriculars

1. Clinical volunteering
   – Devote at least 300 hours before applying
   – Location in the US is required for minimum
   – Get a thorough understanding of medicine by talking to physicians and staff
   – Steadily volunteer as undergraduate
   – Keep a diary for future reference (apps)

2. Civic engagement / community work

3. Research experiences

4. Leadership in clubs and activities
Enhancing your experience

• Summer research
  – Garner strong letter from a faculty member
  – Grain credibility for Ph.D./M.D.
  – Learn to speak eloquently about research

• Study abroad
  – Coursework: London, Abu Dhabi
  – Internship: Accra, Buenos Aires, Sydney
  – J-term, summer options
  – GE3 (Tandon School of Engineering only)
Resources
Prehealth Resources

• School of Engineering:
  – Prehealth committee events
  – Local listserv
  – Wasserman Center for Career Development
  – PTC (Polytechnic Tutoring Center)
  – Undergraduate Summer Research Program
  – SUNY Downstate Medical School Linkage

• Robert & Ellen Salant Prehealth Program:
  – Listserv
  – Calendar of events
  – List of volunteering opportunities in NYC

• Association of American Medical Colleges (AAMC)
  – MSAR book (free with MCAT; discount from preprof advising)
  – AAMCPreMed on Facebook
  – List of summer enrichment / research, postbac programs
Prehealth events at Washington Square

Save the Date: Tandon Prehealth Workshop
Friday, November 4 at 6 pm
Premed Info Session: Preparing for Health-Related Careers at Tandon

Orientation Workshop