## Cornell Courses that Satisfy Most Medical and Dental School Requirements

<table>
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<tr>
<th>Subject</th>
<th>Cornell University Courses</th>
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| **Biology** | Offered fall, spring, and summer  
BIOMG 1350 Introductory Biology: Cell and Developmental Biology  
AND BIOG 1440 or 1445* Introductory Biology: Comparative Physiology  
*BIOG 1445 is an individualized instruction format course.  
AND BIOG 1500 Investigative Biology Laboratory  
Offered prior to 2014  
BIOG 1107 Introductory Biology I: From Atom to Cell  
AND BIOG 1108 Introductory Biology II: From Cell to Biosphere  
AND BIOG 1500 Investigative Biology Laboratory |
| **Biochemistry** | Any of the following:  
• BIOMG 3310 Principles of Biochemistry: Proteins and Metabolism (offered fall)  
AND BIOMG 3320 Principles of Biochemistry: Molecular Biology (offered spring)  
• BIOMG 3300 Biochemistry, Individualized Instruction (offered fall, spring)  
• BIOMG 3350 Principles of Biochemistry: Proteins, Metabolism, and Molecular Biology (offered spring)  
• NS 3200 Introduction to Human Biochemistry (offered fall)  
• BIOMG 3330 Principles of Biochemistry: Proteins, Metabolism, and Molecular Biology (offered summer) |
| **Upper-level Biology** | Although not required, students find that taking courses in the following areas useful in understanding advanced concepts and providing greater depth of preparation for MCAT exams:  
• BIOMG 2800 Genetics Lecture (offered fall, spring, summer)  
  o BIOMG 2801 Genetics Lab (offered fall, spring, summer)  
• BIOMI 2900 General Microbiology Lectures (offered fall, spring, summer)  
• NS 3410 Human Anatomy and Physiology (offered spring)  
  o NS 3420 Human Anatomy and Physiology Laboratory (offered spring)  
Other courses in the areas of cell biology, evolutionary biology, genetics, microbiology, neurobiology, behavior, nutrition, and physiology may be useful. Students are encouraged to consult with a health careers advisor to select courses. |
| **General Chemistry** | **Option 1**  
CHEM 2070 General Chemistry I (offered fall, summer)  
AND CHEM 2080 General Chemistry II (offered spring, summer)  
**Option 2**  
CHEM 2150 Honors General and Inorganic Chemistry (offered fall)  
  o An accelerated one-semester course leading directly to organic chemistry  
  o An AP score of 5 on Chemistry is highly recommended  
  o Some medical schools require a full-year of general chemistry  
**Option 3**  
For Engineering Students Only  
CHEM 2090 Engineering General Chemistry (offered fall, spring)  
AND CHEM 2080 General Chemistry II (offered spring, summer)  
OR CHEM 2150 Honors General and Inorganic Chemistry (offered fall) |
| **Organic Chemistry** | **Option 1**  
CHEM 3570 Organic Chemistry for the Life Sciences (offered fall, summer)  
AND CHEM 3580 Organic Chemistry for the Life Sciences (offered spring, summer)  
AND CHEM 2510 Introduction to Experimental Organic Chemistry (offered fall, spring, summer)  
**Option 2**  
CHEM 3590 Honors Organic Chemistry I (offered spring)  
AND CHEM 3600 Honors Organic Chemistry II (offered fall)  
AND CHEM 2510 Introduction to Experimental Organic Chemistry (offered fall, spring, summer) |
| Organic Chemistry, cont’d. | **Option 3** | CHEM 3530 Principles of Organic Chemistry *(offered fall)*  
AND CHEM 2510 Introduction to Experimental Organic Chemistry *(offered fall, spring, summer)*  
- A single-semester organic chemistry course  
- Some medical schools require a full-year of organic chemistry  
- Schools that do not require a full-year organic chemistry sequence usually require a one-semester biochemistry course and may also require biochemistry lab.  
*Students are encouraged to explore requirements of medical schools before enrolling in this course.* |
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<td><strong>English</strong></td>
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<td>Most medical schools will accept First-Year Writing Seminars (FWS) in fulfillment of their writing requirement; however, writing-intensive courses from other disciplines may also be acceptable. Students are encouraged to check the requirements of specific medical schools as the English requirement varies.</td>
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<td><strong>Calculus</strong></td>
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- MATH 1106 Calculus for the Life and Social Sciences *(offered spring)*  
- MATH 1110 Calculus I *(offered fall, spring, summer)*  
- MATH 1910 Calculus for Engineers *(offered fall, spring, summer)*  
**Statistics** | |  
- STSCI 2150 Introductory Statistics for Biology *(offered fall, spring)*  
- BTRY 3010 Biological Statistics I *(offered fall)*  
- MATH 1710 Statistical Theory and Application in the Real World *(offered fall, spring)*  
- AEM 2100 Introductory Statistics *(offered fall)*  
- ILRST 2100 Introductory Statistics *(offered fall, winter, spring, summer)*  
- PSYCH 3500 Statistics and Research Design *(offered fall, summer)*  
- ECON 3130 Statistics and Probability *(offered fall)*  
- SOC 2010 Evaluating Statistical Evidence *(offered fall)*  
- ENGRD 2700 Basic Engineering Probability and Statistics *(offered fall, spring, summer)*  
- CEE 3040 Uncertainty Analysis in Engineering *(offered fall)*  
- PAM 2100 Introduction to Statistics *(offered spring)* |
| **Math** | |  
**Option 1**  
*Individualized instruction, not calculus-based*  
PHYS 1101 General Physics I *(offered fall, summer)*  
AND PHYS 1102 General Physics II *(offered spring, summer)* |
| **Option 2**  
*Calculus-based* | | PHYS 2207 Fundamentals of Physics I *(offered fall)*  
AND PHYS 2208 Fundamentals of Physics II *(offered spring)* |
| **Option 3**  
*For Engineering Students* | | PHYS 1112 Physics I: Mechanics & Heat *(offered fall, spring, summer)*  
AND PHYS 2208 Fundamentals of Physics II *(offered spring)* |
| **Option 4**  
*For Engineering Students* | | PHYS 1112 Physics I: Mechanics & Heat *(offered fall, spring, summer)*  
AND PHYS 2213 Physics II: Electromagnetism *(offered fall, spring, summer)*  
AND PHYS 2214 Physics III: Oscillations, Waves, and Quantum Physics *(offered fall, spring, summer)*  
* Crossovers between 1101/2208 and 2207/1102 are acceptable.* |
| **General Physics** | | The “Psychological, Social, and Biological Foundations of Behavior” section of the MCAT2015 covers topics taught in social science courses. A student can prepare for this section by taking courses in Sociology, Psychology, Human Development, and Development Sociology. Students are encouraged to consult with a health careers advisor to select courses. |
| **Social Science** | | The Association of American Medical Colleges (AAMC) has outlined fifteen core competencies that should be demonstrated by entering medical students. These competencies are separated into four |