### Premedical Professions Advising

Predentistry, premedicine, preoptometry, and preveterinary medicine are career interests, usually developed together with completing a bachelor’s degree. Students prepare by taking courses to meet dental school entry requirements, studying to learn concepts and perform well academically, shadowing or working in dental practices, and volunteering to serve people in need. They take the Dental Admission Test (http://www.ada.org/dat.aspx) (DAT) and apply for admission to dental schools, usually in the summer between the junior and senior year.

Dental schooling is 4 years of graduate-level, professional education and training. There is no dental school in Kansas, however, there is an agreement for some seats for Kansas residents at the University of Missouri—Kansas City (UMKC) School of Dentistry.

The UMKC School of Dentistry also requires:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 380</td>
<td>Organic Chemistry I, Honors</td>
<td>5</td>
</tr>
<tr>
<td>&amp; CHEM 331</td>
<td>and Organic Chemistry I Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHEM 335</td>
<td>Organic Chemistry II</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 336</td>
<td>and Organic Chemistry II Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHEM 385</td>
<td>Organic Chemistry II, Honors</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 336</td>
<td>and Organic Chemistry II Laboratory</td>
<td></td>
</tr>
<tr>
<td>Physics I with Lab.</td>
<td>Satisfied by one of the following:</td>
<td>4-5</td>
</tr>
<tr>
<td>PHSX 114</td>
<td>College Physics I</td>
<td></td>
</tr>
<tr>
<td>PHSX 211</td>
<td>General Physics I</td>
<td></td>
</tr>
<tr>
<td>&amp; PHSX 216</td>
<td>and General Physics I Laboratory</td>
<td></td>
</tr>
<tr>
<td>PHSX 213</td>
<td>General Physics I Honors</td>
<td></td>
</tr>
<tr>
<td>Physics II with Lab.</td>
<td>Satisfied by one of the following:</td>
<td>4</td>
</tr>
<tr>
<td>PHSX 115</td>
<td>College Physics II</td>
<td></td>
</tr>
<tr>
<td>PHSX 212</td>
<td>General Physics II</td>
<td></td>
</tr>
<tr>
<td>&amp; PHSX 236</td>
<td>and General Physics II Laboratory</td>
<td></td>
</tr>
<tr>
<td>PHSX 214</td>
<td>General Physics II Honors</td>
<td></td>
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Some dental schools require additional mathematics, psychology, and/or biology courses.

For more information, visit the website (https://medadvising.ku.edu).

### Premedical Professions Preparation

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition or ENGL 101Honors Introduction to English</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing or ENGL 202Freshman-Sophomore Honors Proseminar:</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 151</td>
<td>Principles of Molecular and Cellular Biology, Honors</td>
<td></td>
</tr>
<tr>
<td>BIOL 152</td>
<td>Principles of Organismal Biology</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 153</td>
<td>Principles of Organismal Biology, Honors</td>
<td></td>
</tr>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 170</td>
<td>Chemistry for the Chemical Sciences I</td>
<td></td>
</tr>
<tr>
<td>CHEM 190</td>
<td>Foundations of Chemistry I, Honors</td>
<td></td>
</tr>
<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 175</td>
<td>Chemistry for the Chemical Sciences II</td>
<td></td>
</tr>
<tr>
<td>CHEM 195</td>
<td>Foundations of Chemistry II, Honors</td>
<td></td>
</tr>
<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>&amp; CHEM 331</td>
<td>and Organic Chemistry I Laboratory</td>
<td></td>
</tr>
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</table>

Biochemistry. Satisfied by:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 416</td>
<td>Cell Structure and Function</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 600</td>
<td>Introductory Biochemistry, Lectures or BIOL 636Biochemistry I</td>
<td></td>
</tr>
</tbody>
</table>

For more information, visit the website (https://medadvising.ku.edu).

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<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 240</td>
<td>Fundamentals of Human Anatomy &amp; BIOL 241and Human Anatomy Observation Laboratory</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 246</td>
<td>Principles of Human Physiology &amp; BIOL 247and Principles of Human Physiology Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 546</td>
<td>Mammalian Physiology &amp; BIOL 547and Mammalian Physiology Laboratory</td>
<td></td>
</tr>
<tr>
<td>Cell biology.</td>
<td>Satisfied by:</td>
<td>3-4</td>
</tr>
<tr>
<td>BIOL 416</td>
<td>Cell Structure and Function</td>
<td></td>
</tr>
<tr>
<td>BIOL 600</td>
<td>Introductory Biochemistry, Lectures or BIOL 636Biochemistry I</td>
<td></td>
</tr>
</tbody>
</table>

Some medical schools require additional mathematics, psychology, and/or biology courses.

For more information, visit the website (https://medadvising.ku.edu).

### Premedicine

Premedicine is a career interest, usually developed together with completing a bachelor’s degree and major. Students prepare by taking courses to meet medical school entry requirements, studying to learn concepts and perform well academically, volunteering or working in health care settings, and serving people in need. They take the Medical College Admission Test (https://www.aamc.org/students/applying/mcat) (MCAT) and apply for admission to medical schools, usually in the summer between the junior and senior year.

Medical schooling is 4 years of graduate-level, professional education and training, followed by a three- to six-year residency program. The only medical school in Kansas is the KU School of Medicine.

Most medical schools require:

- Chemistry I with Lab. | Satisfied by one of the following: | 5
- CHEM 380 Organic Chemistry I, Honors
- & CHEM 331 and Organic Chemistry I Laboratory
- CHEM 335 Organic Chemistry II
- & CHEM 336 and Organic Chemistry II Laboratory
- CHEM 385 Organic Chemistry II, Honors
- & CHEM 336 and Organic Chemistry II Laboratory
- Physics I with Lab. | Satisfied by one of the following: | 4-5
- PHSX 114 College Physics I
- PHSX 211 General Physics I
- & PHSX 216 and General Physics I Laboratory
- PHSX 213 General Physics I Honors
- Physics II with Lab. | Satisfied by one of the following: | 4
- PHSX 115 College Physics II
- PHSX 212 General Physics II
- & PHSX 236 and General Physics II Laboratory
- PHSX 214 General Physics II Honors

For more information, visit the website (https://medadvising.ku.edu).
Some also require:

2
Calculus. Satisfied by:

Biochemistry. Satisfied by:

Code Title Hours
English Composition I. Satisfied by: 3

ENGL 101 Composition
or ENGL 10! Honors Introduction to English

English Composition II. Satisfied by:

ENGL 102 Critical Reading and Writing
or ENGL 20! Freshman-Sophomore Honors Proseminar: _____

Biology I with Lab. Satisfied by: 4

BIOL 150 Principles of Molecular and Cellular Biology
or BIOL 151 Principles of Molecular and Cellular Biology, Honors

Biology II with Lab. Satisfied by: 4

BIOL 152 Principles of Organismal Biology
or BIOL 153 Principles of Organismal Biology, Honors

General Chemistry I with Lab. Satisfied by one of the following: 5

CHEM 130 General Chemistry I
CHEM 170 Chemistry for the Chemical Sciences I
CHEM 190 Foundations of Chemistry I, Honors

General Chemistry II with Lab. Satisfied by one of the following: 5

CHEM 135 General Chemistry II
CHEM 175 Chemistry for the Chemical Sciences II
CHEM 195 Foundations of Chemistry II, Honors

Organic Chemistry I with Lab. Satisfied by one of the following: 5

CHEM 330 Organic Chemistry I
& CHEM 331 and Organic Chemistry I Laboratory
CHEM 380 Organic Chemistry I, Honors
& CHEM 331 and Organic Chemistry I Laboratory

Organic Chemistry II with Lab. Satisfied by one of the following: 5

CHEM 335 Organic Chemistry II
& CHEM 336 and Organic Chemistry II Laboratory
CHEM 385 Organic Chemistry II, Honors
& CHEM 336 and Organic Chemistry II Laboratory

(The KU School of Medicine accepts BIOL 600 or BIOL 636 as a substitute for CHEM 335, and CHEM 331 meets their organic lab requirement without CHEM 336.)

Physics I with Lab. Satisfied by one of the following: 4-5

PHYS 114 College Physics I
PHYS 211 General Physics I
& PHYS 216 and General Physics I Laboratory
PHYS 213 General Physics I Honors

Physics II with Lab. Satisfied by one of the following: 4

PHYS 115 College Physics II
PHYS 212 General Physics II
& PHYS 236 and General Physics II Laboratory
PHYS 214 General Physics II Honors

Some also require:

Code Title Hours
Biochemistry. Satisfied by: 3-4

BIOL 600 Introductory Biochemistry, Lectures
or BIOL 636 Biochemistry I

Calculus. Satisfied by: 3-5

MATH 115 Calculus I
MATH 125 Calculus I

MATH 141 Calculus I: Honors

Genetics. Satisfied by: 4

BIOL 350 Principles of Genetics
or BIOL 360 Principles of Genetics, Honors

Statistics. Satisfied by one of the following: 3

PSYC 210 Statistics in Psychological Research
PSYC 211 Statistics in Psychological Research, Honors
MATH 365 Elementary Statistics
BIOL 570 Introduction to Biostatistics

The MCAT also requires knowledge from:

Code Title Hours
Biochemistry. Satisfied by one of the following: 3-7

BIOL 600 Introductory Biochemistry, Lectures
BIOL 636 Biochemistry I
& BIOL 638 and Biochemistry II

Elective Courses. Satisfied by:

Psychology. Satisfied by one of the following: 3

PSYC 104 General Psychology
or PSYC 105 General Psychology, Honors

Sociology. Satisfied by one of the following: 3

SOC 104 Elements of Sociology
SOC 105 Elements of Sociology, Honors
SOC 160 Social Problems and American Values
SOC 161 Social Problems and American Values, Honors

For more information, visit the website (https://medadvising.ku.edu).

Preoptometry

Preoptometry is a career interest, usually developed together with completing a bachelor's degree and major. Students prepare by taking courses to meet optometry school admission requirements, studying to learn concepts and perform well academically, shadowing or working in optometry practices, and volunteering to serve people in need. They take the Optometry Admission Test (http://www.ada.org/en/oat) (OAT) and apply for admission to optometry schools, usually in the summer between the junior and senior year.

Optometry schooling is four years of graduate-level, professional education and training. There is no optometry school in Kansas, however, there are agreements for some seats for Kansas residents at the University of Missouri - St. Louis School of Optometry, Northeastern State University of Oklahoma College of Optometry, and the Southern College of Optometry in Tennessee.

Most optometry schools require:

Code Title Hours
English Composition I. Satisfied by: 3

ENGL 101 Composition
or ENGL 10! Honors Introduction to English

English Composition II. Satisfied by: 3

ENGL 102 Critical Reading and Writing
or ENGL 20! Freshman-Sophomore Honors Proseminar: _____

Biology I with Lab. Satisfied by: 4

BIOL 150 Principles of Molecular and Cellular Biology
or BIOL 151 Principles of Molecular and Cellular Biology, Honors
Most also require or recommend:

Biology II with Lab. Satisfied by:
- **Biol 152** Principles of Organismal Biology
  or **Biol 153** Principles of Organismal Biology, Honors

General Chemistry I with Lab. Satisfied by one of the following:
- **Chem 130** General Chemistry I
- **Chem 170** Chemistry for the Chemical Sciences I
- **Chem 190** Foundations of Chemistry I, Honors

General Chemistry II with Lab. Satisfied by one of the following:
- **Chem 135** General Chemistry II
- **Chem 175** Chemistry for the Chemical Sciences II
- **Chem 195** Foundations of Chemistry II, Honors

Physics I with Lab. Satisfied by one of the following:
- **PhsX 114** College Physics I
- **PhsX 211** General Physics I
  & **PhsX 216** and General Physics I Laboratory
- **PhsX 213** General Physics I Honors

Physics II with Lab. Satisfied by one of the following:
- **PhsX 115** College Physics II
- **PhsX 212** General Physics II
  & **PhsX 236** and General Physics II Laboratory
- **PhsX 214** General Physics II Honors

Calculus I: Satisfied by one of the following:
- **Math 115** Calculus I
- **Math 125** Calculus I
- **Math 141** Calculus I: Honors

Microbiology with Lab. Satisfied by one of the following:
- **Biol 400** Fundamentals of Microbiology
  & **Biol 402** and Fundamentals of Microbiology Laboratory
- **Biol 401** Fundamentals of Microbiology, Honors
  & **Biol 402** and Fundamentals of Microbiology Laboratory

Organic Chemistry with Lab. Satisfied by one of the following:
- **Chem 330** Organic Chemistry I
  & **Chem 331** and Organic Chemistry I Laboratory
  or **Chem 380** Organic Chemistry I, Honors

Psychology. Satisfied by:
- **Psych 104** General Psychology
  or **Psych 105** General Psychology, Honors

Statistics. Satisfied by:
- **Psych 210** Statistics in Psychological Research
- **Psych 211** Statistics in Psychological Research, Honors
- **Math 365** Elementary Statistics
- **Biol 570** Introduction to Biostatistics

Most also require or recommend:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Biol 240</strong></td>
<td>Fundamentals of Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>&amp; <strong>Biol 241</strong></td>
<td>and Human Anatomy Observation Laboratory</td>
<td></td>
</tr>
</tbody>
</table>

Some require additional mathematics, psychology, and/or other courses.

For more information, visit the website (https://medadvising.ku.edu).

**Preventerinary Medicine**

Preventerinary medicine is a career interest, usually developed together with completing a bachelor's degree and major. Students prepare by taking courses to meet veterinary school admission requirements, studying to learn concepts and perform well academically, shadowing or working in veterinary practices, and volunteering to help people and other animals in need. They take the Graduate Record Examination (http://www.ets.org/gre) (GRE) and apply for admission to veterinary schools, usually in the summer between the junior and senior year.

Veterinary schooling is four years of graduate-level, professional education and training. The only veterinary school in Kansas is the Kansas State College of Veterinary Medicine.

The Kansas State College of Veterinary Medicine requires:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>English Composition I. Satisfied by:</td>
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<td></td>
</tr>
<tr>
<td><strong>En 101</strong></td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>or <strong>En 101H</strong></td>
<td>Honors Introduction to English</td>
<td></td>
</tr>
<tr>
<td>English Composition II. Satisfied by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>En 102</strong></td>
<td>Critical Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>or <strong>En 201H</strong></td>
<td>Freshman-Sophomore Honors Proseminar:</td>
<td></td>
</tr>
</tbody>
</table>

Public Speaking. Satisfied by:
- **Com 130** Speaker-Audience Communication
  or **Com 131** Speaker-Audience Communication, Honors

Chemistry I with Lab. Satisfied by one of the following:
- **Chem 130** General Chemistry I
- **Chem 170** Chemistry for the Chemical Sciences I
- **Chem 190** Foundations of Chemistry I, Honors

Chemistry II with Lab. Satisfied by one of the following:
- **Chem 135** General Chemistry II
- **Chem 175** Chemistry for the Chemical Sciences II
- **Chem 195** Foundations of Chemistry II, Honors

General Organic Chemistry with Lab. Satisfied by one of the following:
- **Chem 330** Organic Chemistry I
  & **Chem 331** and Organic Chemistry I Laboratory
  or **Chem 380** Organic Chemistry I, Honors
  & **Chem 331** and Organic Chemistry I Laboratory

General Biochemistry. Satisfied by one of the following:
- **Biol 600** Introductory Biochemistry, Lectures
- **Biol 636** Biochemistry I
  & **Biol 638** and Biochemistry II

Physics I with Lab. Satisfied by one of the following:
- **PhsX 114** College Physics I
- **PhsX 211** General Physics I
  & **PhsX 216** and General Physics I Laboratory

For more information, visit the website (https://medadvising.ku.edu).
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PHSX 213</td>
<td>General Physics I Honors</td>
<td>4</td>
</tr>
<tr>
<td>PHSX 115</td>
<td>College Physics II</td>
<td></td>
</tr>
<tr>
<td>PHSX 212</td>
<td>General Physics II</td>
<td></td>
</tr>
<tr>
<td>&amp; PHSX 236</td>
<td>and General Physics II Laboratory</td>
<td></td>
</tr>
<tr>
<td>PHSX 214</td>
<td>General Physics II Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Biology I with Lab. Satisfied by:</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
<td></td>
</tr>
<tr>
<td>or BIOL 151</td>
<td>Principles of Molecular and Cellular Biology, Honors</td>
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<tr>
<td></td>
<td>Microbiology with Lab. Satisfied by one of the following:</td>
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<tr>
<td>BIOL 400</td>
<td>Fundamentals of Microbiology</td>
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<tr>
<td>&amp; BIOL 402</td>
<td>and Fundamentals of Microbiology Laboratory</td>
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</tr>
<tr>
<td>BIOL 401</td>
<td>Fundamentals of Microbiology, Honors</td>
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</tr>
<tr>
<td>&amp; BIOL 402</td>
<td>and Fundamentals of Microbiology Laboratory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Genetics. Satisfied by:</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Principles of Genetics</td>
<td></td>
</tr>
<tr>
<td>or BIOL 360</td>
<td>Principles of Genetics, Honors</td>
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<tr>
<td></td>
<td>12 credit hours of social sciences and/or humanities</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>And, enough electives to reach a total of 64 credit hours</td>
<td></td>
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</table>

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