MCB COURSE LIST

Terms shown below note terms in which courses were last offered. Departments sometimes change what terms courses are offered without notifying MCB. Please check the Registrar's website - http://www.dartmouth.edu/~reg/ - to determine when electives are being offered. Most up-to-date information will be found using the term timeline (Registrar’s website) which is updated each term.

KEY: Bioc-Biochemistry  Biol-Biological Sciences  Gene-Genetics  Micr-Microbiology & Immunology

Year One Students: Find Core Course information at end of this list

Second Year Students: Teaching Assignment course number

Biol 169 - Teaching Assignment

Journal Clubs:  Historical Term for course

<table>
<thead>
<tr>
<th>Course</th>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>Biol 125</td>
<td>Spring</td>
<td>The Nature and Practice of Science *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* approved as one-time, one-term journal club for MCB students</td>
</tr>
<tr>
<td>Cosc 189</td>
<td>Winter, Spring</td>
<td>Topics in Applied Computer Science</td>
</tr>
<tr>
<td>Engg 199</td>
<td>Fall</td>
<td>Advances in Biotechnology</td>
</tr>
<tr>
<td>Bioc 259</td>
<td>Fall, Winter, Spring</td>
<td>Actin Cytoskeleton</td>
</tr>
<tr>
<td>Bioc 260</td>
<td>Fall, Winter, Spring</td>
<td>Structural Biology (enroll in Chem 264)</td>
</tr>
<tr>
<td>Bioc 261</td>
<td>Fall, Winter, Spring</td>
<td>Cancer Biology</td>
</tr>
<tr>
<td>Biol 261</td>
<td>Fall, Winter, Spring</td>
<td>Building a Career in Science (Students Years 4 and up)</td>
</tr>
<tr>
<td>Bioc 262</td>
<td>Fall, Winter, Spring</td>
<td>Lipid Biology in Health and Diseases (Cell Biology)</td>
</tr>
<tr>
<td>Biol 263</td>
<td>Fall, Winter, Spring</td>
<td>Cell Cycle</td>
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<tr>
<td>Biol 265</td>
<td>Fall, Winter, Spring</td>
<td>Microbial Ecology/Environmental Microbiology</td>
</tr>
<tr>
<td>Chem 263</td>
<td>Fall, Winter, Spring</td>
<td>Bioinorganic Chemistry</td>
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<tr>
<td>Cosc 294</td>
<td>Spring</td>
<td>Topics in Computational Immunology (counts as journal club for MCB)</td>
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<tr>
<td>Micr 264</td>
<td>Fall, Winter, Spring</td>
<td>Immunology</td>
</tr>
<tr>
<td>Micr 265</td>
<td>Fall, Winter, Spring</td>
<td>Molecular Pathogenesis</td>
</tr>
<tr>
<td>Biol 268</td>
<td>Fall, Winter, Spring</td>
<td>Genes and Gene Products</td>
</tr>
<tr>
<td>Bioc 269</td>
<td>Fall, Winter, Spring</td>
<td>Plant Molecular Genetics</td>
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<tr>
<td>QBS 270/Biol 270</td>
<td>Winter, Spring</td>
<td>Computational Biology</td>
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<tr>
<td>Unsg 300</td>
<td>Fall, Winter, Spring</td>
<td>Communicating Science (counts as one-time, one-term journal club for MCB)</td>
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Courses approved for credit towards program requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>Bioc 118</td>
<td>Spring '15</td>
<td>Advanced Topic in Genetics and Molecular Genetics</td>
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<tr>
<td></td>
<td></td>
<td>(identical to GENE 118)</td>
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<tr>
<td>Bioc 122</td>
<td>Winter '15</td>
<td>Metabolism (same as BIOC 112 - permission of instructor)</td>
</tr>
<tr>
<td>Bioc 132</td>
<td>Spring '16</td>
<td>Inorganic Biochemistry (Identical to Chem 132)</td>
</tr>
<tr>
<td>Bioc 150</td>
<td>Spring '15</td>
<td>Neuroscience I: Molecular and Cellular Neuroscience</td>
</tr>
<tr>
<td>Biol 128</td>
<td>Winter '15</td>
<td>Statistics and Experimental Design I</td>
</tr>
<tr>
<td>Biol 129</td>
<td>Spring '15</td>
<td>Statistics and Experimental Design II</td>
</tr>
<tr>
<td>Biol 147</td>
<td>Spring '15</td>
<td>Genomics: From Data to Analysis</td>
</tr>
<tr>
<td>Biol 166</td>
<td>Winter '15</td>
<td>Molecular Basis of Cancer</td>
</tr>
<tr>
<td>Biol 171</td>
<td>Spring '15</td>
<td>Current Topics in Cell Biology</td>
</tr>
<tr>
<td>Biol 173</td>
<td>Fall '14</td>
<td>Cell Signaling</td>
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</tbody>
</table>
Biol 174  
Fall '15  
Advanced Neurobiology

Biol 176  
Spring '15  
Advanced Genetics

Biol 180  
Winter '15  
Microscopy Principles and Application

Chem 131  
Fall '15  
Topics in Advanced Inorganic Chemistry

Chem 161  
Fall '15  
Topics in Biophysical Chemistry

(all versions of this course number are approved)

Cosc 175  
Fall '14  
Introduction to Bioinformatics (formerly COSC 143)

Cosc 186  
Spring '15  
Computational Structural Biology

Cosc 189  
Winter '15  
Topics in Computational Immunology

Engs 161  
Winter '15  
Microbial Physiology and Metabolic Engineering

Engs 163  
Winter '15  
Protein Engineering

Engs 167  
Fall '14  
Medical Imaging (alternate years)

Gene 118  
Spring '15  
Advanced Topic in Genetics and Molecular Genetics

(Identical to Bioc 118)

Gene 142  
Winter '15  
Genetics and Physiology of Behavior

Gene 145  
Spring '15  
Human Genetics  
(Identical to Micr 145)

Gene 146  
Spring '15  
Molecular and Computational Genomics

Gene 148  
Winter '15  
Biological Mass Spectrometry and Proteomics

Micr 142  
Winter '15  
Advanced Cellular and Molecular Immunology

Micr 144  
Fall '14  
Cellular and Molecular Basis of Immunity

Micr 146  
Spring '16  
Immunotherapy

Micr 148  
Fall '15  
Advanced Molecular Pathogenesis

Micr 149  
Spring '15  
Microbial Physiology and Metabolism

Micr 167  
Winter '15  
Biology of Fungi and Parasites that Cause Disease

Pemm 103  
Fall '14  
Biostatistics

Pemm 113  
Fall '14  
Advanced Endocrine Physiology

Pemm 116  
(as requested)  
Advanced Cardiovascular Physiology

Pemm 123  
Winter '15  
Graduate Toxicology

Pemm 125  
Spring (arrange)  
Neurobiology for the Rest of Us  
(arrange)

Pemm 126  
Spring '15  
Cancer Biology

Pemm 211  
Fall '15  
Neurobiology of Disease

Pemm 271  
Spring '15  
Advanced Biomedical Sciences

Pemm 275  
Spring '15  
Vascular Biology

QBS 120  
Fall '14  
Foundations of Biostatistics I: Statistical Inference

QBS 121  
Winter '15  
Foundations of Biostatistics II: Regression

QBS 130  
Winter '15  
Foundations of Epidemiology I: Theory and Methods

QBS 131  
Spring '15  
Foundations of Epidemiology II: Molecular Epidemiology

Ethics Courses

Year One students required to complete one ethics course during first year

Biol 110  
Fall  
Scientific Integrity and Research Ethics

Pemm 124  
Winter '15  
Ethical Conduct in Research  
(two-term course)

(ethics facilitator sessions required)

(enroll in UNSG 100 for Fall term of the PEMM 124 ethics course)

Required for First Year Students:

Core Courses by term:

Bioc 101  
Fall  
Molecular Information in Biological Systems

** enroll in Bioc 101
Gene 102  
** enroll in Bioc 101

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<thead>
<tr>
<th>Course</th>
<th>Semester</th>
<th>Title</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Biol 103</td>
<td>Winter</td>
<td>The Molecular Mechanisms of Cellular Responses</td>
<td>** enroll in Biol 103</td>
</tr>
<tr>
<td>Micr 104</td>
<td>Winter</td>
<td>The Molecular Mechanisms of Cellular Responses</td>
<td>** enroll in Biol 103</td>
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</tbody>
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ENROLL IN ONE CORE MODULE PER SECTION (three sections for Spring term)

RIP Colloquium

Biol 271  
** students enroll in BIOL 271 for Spring term only to receive grade for attendance during all three terms.