# RECOMMENDED COURSES FOR PRE-MED MAJORS BY MATH PLACEMENT SCORES

## FALL 2013

<table>
<thead>
<tr>
<th>Math Level 4/5 ACT 25/SAT 580</th>
<th>Math Level 3.5 ACT 23/SAT 540</th>
<th>Math Level 3 ACT 22/SAT 520</th>
<th>Math Level 1 or 2 ACT 21/SAT 500 or less</th>
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<tbody>
<tr>
<td><strong>FALL 13</strong></td>
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<tr>
<td>STAT 216Q (3 cr.)</td>
<td>M121Q (3 cr.)</td>
<td>Take MPLEX – register for math course as per results</td>
<td>Take MPLEX – register for math course as per results (4 cr.)</td>
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<tr>
<td>CHMY 141 or CHMY 151 (Honors) 4 credits</td>
<td>*Take CHMY 141 Spring semester</td>
<td>IA/IH/D Core class – choose 1 (3-4 cr.)</td>
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<tr>
<td>BIOH 185 4 credits</td>
<td>IA/IH/D Core class – choose 1 (3-4 cr.)</td>
<td>PSYX 100IS (4 credits)</td>
<td>BIOM 103IN Unseen Universe</td>
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<td>PSYX 100IS – (4 cr)</td>
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<td>US 191 – Learning strategies (1 Credit)</td>
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<td><strong>TOTAL</strong></td>
<td>14-15 credits</td>
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## SPRING 14

| MEDS 140 (1 cr.)               | MEDS 140 (1 cr.)               | MEDS 140 (1 cr.)               | MEDS 140 (1 cr.)               |
| CHMY 143 or CHMY 153 (Honors) 4 cr. | CHMY 141 (4 cr.)               | WRIT 101W *(if needed)* 3 cr. |                               |
| BIOB 256 (4 cr.)               | Take STAT 216 or M161         | SOCI 101IS (3 cr.)             |                               |
| M161Q – 4 cr.                  | IA/IH/D Core or BIOM 250      | IA/IH/D core class – choose 2 (6-8 cr.) |                               |
| WRIT 101W *If needed or WRIT 201 or LIT 110IH (3 cr.) | WRIT 101W *(if needed)* or WRIT 201 or LIT 110IH (3 cr.) |                               |                               |
| If Honors, take UH 202 (4 cr.) not WRIT/LIT | If Honors: UH 202 (4 cr.) not WRIT/LIT | If Honors: UH 202 (4 cr.) not WRIT/LIT |                               |
| **TOTAL**                      | 16-17 credits                 | 15-17 credits                 |                               |
BIOH 185 INTEGRATIVE PHYSIOLOGY I  
**Corequisite:** CHMY 141 or CHMY 151.  
-- How the human body works. For students planning to be health professionals. Designed to be taken before BIOB 256, includes basic cellular mechanisms, physiological control and communications. Major topics include muscle, nerve, respiratory, renal and cardiovascular systems. Cadaver laboratory will cover related human anatomy.

BIOB 256 INTRO BIOL: CELLS TO ORGANISMS  
**Prerequisite:** BIOH 185, STAT 216 and CHMY 141 with a grade of "C-" or better.  
-- Introduction to form and function in the animal and plant kingdoms. Topics will include circulation and gas exchange, chemical signals, reproduction, nutrition, and the animal nervous system. Laboratories will be inquiry based with mathematical and computational applications to biological problems.

CHMY 141 COLLEGE CHEMISTRY I  
**Prerequisite:** Successful completion of M 121Q, College Algebra, or placement in a math level 4 course (Survey of Calculus or Precalculus).  
-- The first of a two-semester course sequence about the general principles of modern chemistry with emphasis on atomic structure, chemical bonding, the periodic table, equilibria, chemical reactivity, and kinetics.

CHMY 143 COLLEGE CHEMISTRY II  
**Prerequisite:** CHMY 141 or CHMY 151.  
-- The second semester of the two-semester general chemistry sequence.

PSYX 100IS INTRODUCTORY PSYCHOLOGY  
-- Introduction to methods and approaches to psychology including exploration of problems in physiological psychology, learning, memory and information processing, abnormal behavior, and social psychology, with selected individual study of other areas related to the student’s interests.

MEDS 140 INTRODUCTION TO MEDICINE AND HEALTH PROFESSIONS  
-- This course will assist students in exploring various departments at MSU and choosing a major that best fits their passions, career goals, and educational interests. This course will also provide an opportunity to explore the breadth of health care professions.

M 161Q SURVEY OF CALCULUS  
**Prerequisite:** M 121 or Math Placement Test within the past 12 months.  
-- A survey of basic calculus including limits, differentiation, and integration with applications to business, biology, and social science problems.

BIOM 250 MICROBIOLOGY FOR HEALTH SCIENCES: INFECTIOUS DISEASES  
-- Introduction to the world of microorganisms; prokaryotic cell structure, function and genetics; the immune response; etiology, pathogenesis, epidemiology, treatment and control of important infectious diseases of humans.

PHSX 205 COLLEGE PHYSICS I  
**Prerequisite:** High school trigonometry or M 151.  
-- First semester of sequence. Topics include kinematics and dynamics of linear and rotational motion; work and energy; impulse and momentum; and fluids. Students will not receive credit if they have passed PHSX 220 or PHSX 240.

WRIT 201 COLLEGE WRITING II  
**Prerequisite:** WRIT 101W.  
-- Study and practice of strategies and devices of expository and argumentative prose. Builds upon writing skills learned in WRIT 101.

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