

## Leadership in Medicine Curriculum Worksheet

**Core LIM Math/Science Courses** Students must take a minimum of 16 Math/Science courses.

### Biology

All LIM Students Take:

- BIO 103 Diversity of Life w/lab (F,W,S)
- BIO 104 Cellular Foundations of Life w/lab (F,W,S)
- BIO 205 Topics in Molecular Biology (F,W,S)
- BIO 206 Topics in Physiology (F,W,S)
- BIO 210 Neuroscience: Mind and Behavior. (must be taken during the 3<sup>rd</sup> summer)
- One of the following upper level BIO or BCH courses (not all courses offered each year – check catalog):

BIO 330 Comparative Animal Physiology  
 BIO 332 Comparative Vertebrate Anatomy  
 BIO 352 Microbiology  
 BIO 354 Developmental Biology  
 BIO 355 Immunology  
 BIO 362 Experimental Neurobiology

BIO 363 Introduction to Cellular Neuroscience  
 BIO 368 Advanced Molecular Biology  
 BIO 378 Cancer Cell Biology  
 BIO 384 Molecular Genetics  
 BCH 380 Biochemistry: Membranes, Nucleic Acids, Carbs  
 BCH 382 Biochemistry: Structure and Catalysis

### Physics

All LIM Students Take:

- PHY 110 Classical & Modern Physics for the Life Sciences I (F,S)
- PHY 111 Classical & Modern Physics for the Life Sciences II (F,W)

### Chemistry (Course requirements vary based on placement.)

If placed in CHM 101

- CHM 101 Intro to Chemistry I (F,W,S)
- CHM 102 Intro to Chemistry II (W,S)
- CHM 231 Organic Chemistry I (F,W)
- CHM 232 Organic Chemistry II (W,S)

If placed in CHM 110H

- CHM 110H Accelerated Intro to Chemistry (F)
- Math/Science Elective
- CHM 231 Organic Chemistry I (F,W)
- CHM 232 Organic Chemistry II (W,S)

### Mathematics (course requirements vary based on placement)

If placed in MTH 110

- MTH 110 Calculus I (F,W)
- MTH 112 Calculus II (W,S)

If placed in MTH 113

- MTH 113 AP Calculus (F)
- Math/Science Elective

If placed in MTH 115

- Math/Science Elective
- Math/Science Elective

### Additional Math/Science Courses Based on ID Major

<u>Biology</u>	<u>Chemistry</u>	<u>Biochemistry</u>	<u>Mathematics</u>	<u>Physics</u>
Advisor: Prof Pytel	Advisor: Prof Kehlbeck	Advisor: Prof Cohen	Advisor: Prof Khatami	Advisor: Prof LaBrake
<input type="checkbox"/> Biochemistry <i>BIO 330, 380 or                      BCH 382</i> <input type="checkbox"/> BIO 200+ w/lab Elective <input type="checkbox"/> BIO 200+ w/lab Elective	<input type="checkbox"/> BCH 382 <input type="checkbox"/> CHM 240 <input type="checkbox"/> CHM 200+ w/lab or 300+ Elective	<input type="checkbox"/> BCH 380 <input type="checkbox"/> BCH 382 <input type="checkbox"/> CHM 240 <input type="checkbox"/> CHM 330, 332, 340, or 351 <input type="checkbox"/> BIO 352, 354, 355, 363, 368, 378, 384	<input type="checkbox"/> Biochemistry <input type="checkbox"/> MTH 115 <input type="checkbox"/> MTH 199 <input type="checkbox"/> MTH 117 or 130 or 234 <input type="checkbox"/> MTH 200+ Elective <input type="checkbox"/> MTH 200+ Elective <input type="checkbox"/> MTH 300+ Elective	<input type="checkbox"/> Biochemistry <input type="checkbox"/> PHY 122 <input type="checkbox"/> PHY 123 <input type="checkbox"/> PHY 200 <input type="checkbox"/> PHY 210 <input type="checkbox"/> One additional PHY elective: PHY 220, 230, 270, 310 or 311

**LIM Non-Math/Science Courses**

(Students complete 15 non Math/Science courses, which includes a Statistics course or elective taken in its place)

All LIM Students Take:

- LRS 150 LIM Research Seminar** (2nd S)
- Statistics:** AP credit can meet Stats requirement. Replace with a non-science course. The LIM Statistics requirement can be met with the following courses: STA 104, ECO 243, SOC 300, PSC 220, PSY 200
- HC 630** (1<sup>st</sup> F, also counts as a graduate course)
- HC 633** (2<sup>nd</sup> W, also counts as a graduate course)

**Second ID Major Courses (typically eight):** Please check with your second ID major advisor regarding thesis requirement

- |                                |                                |
|--------------------------------|--------------------------------|
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |

**Three Non Science Electives**

- |                                |                                |
|--------------------------------|--------------------------------|
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |
| <input type="checkbox"/> _____ |                                |

**International Experience:** Mini Terms may be applied toward ID or count as free non-Science elective depending on credit offered. Director must approve all International Experiences

**Graduate Courses**

**Master of Science Courses** (12 courses required for MS Degree) Prerequisites

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|---|----------------|
| <input type="checkbox"/> <b>HC 630 Introduction to Health Systems</b> (1 <sup>st</sup> F – also counts as an undergraduate course)  |                |
| <input type="checkbox"/> <b>HC 633 Health Care Leadership</b> (2 <sup>nd</sup> W – also counts as an undergraduate course)  | HC 630         |
| <input type="checkbox"/> <b>AC 604 Financial &amp; Managerial Accounting for Decision Making</b>  |                |
| <input type="checkbox"/> <b>HC 605 Health Operations Management</b>   |                |
| <input type="checkbox"/> <b>HC 617 Health Care Finance</b>  | AC 604         |
| <input type="checkbox"/> <b>HC 634 Health &amp; Human Values I</b> (3 <sup>rd</sup> Su) (replace with HC 650 beginning summer 2020)   | HC 630, HC 633 |
| <input type="checkbox"/> <b>HC 635 Economics of Health</b> (3 <sup>rd</sup> S) or <b>HC 620 Health Economics</b> (only open MBA candidates)   | HC 630, HC 633 |
| <input type="checkbox"/> <b>HC 637 Clinical Leadership Practicum</b> ( 4 <sup>th</sup> S – course scheduled once a month throughout senior year and includes additional scheduled classes in Spring term) | HC 630, HC 633 |
| <input type="checkbox"/> <b>HC 651 Health Systems Management</b> (3 <sup>rd</sup> W)  | HC 630, HC 633 |
| <input type="checkbox"/> <b>HC 656 Group Practice Management</b> (3 <sup>rd</sup> Summer)   | HC 651         |
| <input type="checkbox"/> <b>HC 674 Legal Aspects of Health Care</b>   | HC 630, HC 633 |
| <input type="checkbox"/> <b>HC 684 Health Leadership Capstone</b>   | ALL            |

**Additional Courses required for MBA** (16 courses required for MBA degree) Prerequisites

- |  |                   |
|--|-------------------|
| <input type="checkbox"/> <b>HC 647 Statistical Methods for Data Analytics</b>      | Statistics course |
| <input type="checkbox"/> <b>HC 626 Health Systems Marketing</b>                    |                   |
| <input type="checkbox"/> <b>HC 648 Health Informatics</b>                          |                   |
| <input type="checkbox"/> <b>HC 680 Health Policy &amp; Managerial Epidemiology</b> |                   |