BACHELOR OF SCIENCE DEGREE
ASTROPHYSICS
COORDINATE MAJOR

FOR ADDITIONAL INFORMATION, PLEASE CONTACT THE PHYSICS AND ASTRONOMY ADVISING OFFICE

(1) UNIVERSITY REQUIREMENTS

Writing Requirement
Tier I: LB 133 4
Tier II: Satisfied by completing the Lyman Briggs College History, Philosophy and Sociology of Science and Senior requirements listed below.

Integrative Studies in Arts & Humanities (IAH)
IAH 201-210* 4
IAH 211-241*†# 4

Integrative Studies in Social, Behavioral & Economic Sciences (ISS)
ISS 200-level course* 4
ISS 300-level course*‡@ 4

*National, International, & Multicultural Diversity
Students must include at least one "N" course and one "I" course in their Integrative Studies programs. A "D" course may meet either an "N" or an "I" requirement, but not both.

†Summer 2013 to Summer 2017: LB 331, 333, and 336 will fulfill the IAH "B" university requirement (IAH 211 or higher). Please consult your LBC Academic Advisor for specific details for your program.

‡Summer 2013 to Summer 2017: LB 332, 334, and 335 will fulfill the ISS 300-level university requirement. Please consult your LBC Academic Advisor for specific details for your program.

# Beginning Fall 2017: LB 321a, 322a, 323a, 324a, 325a, 326a and 327a will fulfill the IAH university requirement (IAH 211 or higher).

@ Beginning Fall 2017: LB 321b, 322b, 323b, 324b, 325b, 326b and 327b will fulfill the ISS 300-level university requirement.

Please contact your LBC Academic Advisor for specific details for your program. If you fulfilled the LB 331, 332, 333, 334, 335 or 336 requirement you do not need the new Fall 2017 courses.

Mathematics, Biological and Physical Sciences
Satisfied by the Lyman Briggs College requirements in Mathematics, Biological and Physical Sciences (see next section).

(2) LYMAN BRIGGS COLLEGE REQUIREMENTS

Biological Sciences (9 cr.)
Complete ONE of the following groups of courses
(1) LB 144 & 145* 9
(2) BS 161, 162, 171, & 172* 10

Chemistry (8-9 cr.)
Complete ONE of the following groups of courses
(1) LB 171, 171L, 172, & 172L* 9
(2) CEM 141, 142, & 161* 8
(3) CEM 151, 152, & 161* 8

Physics (8-10 cr.)
Complete ONE of the following groups of courses
(1) LB 273, 274* 8
(2) PHY 183, 184, 191, & 192* 10

Mathematics (6-7 cr.)
Complete ONE of the following groups of courses
(1) LB 118 & 119* 8
(2) MTH 132 & 133* 7

History, Philosophy & Sociology of Science (11-12 cr.)
LB 133 4
LB 321-327, 330-336, 355, 490E; ENG 473A; HST 425; SOC 368 7-8

Senior Seminar (4 cr.)
LB 492 4

* Biology, Chemistry, Physics & Mathematics courses also meet graduation requirements for major

Minimum number of credits required: 120
Minimum cumulative and major grade point average: 2.0
## MAJOR REQUIREMENTS

Complete ALL of the following courses (37-38 cr.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AST 207</td>
<td>The Science of Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>AST 208</td>
<td>Planets and Telescopes</td>
<td>3</td>
</tr>
<tr>
<td>AST 304</td>
<td>Stars</td>
<td>3</td>
</tr>
<tr>
<td>AST 308</td>
<td>Galaxies and Cosmology</td>
<td>3</td>
</tr>
<tr>
<td>AST 410</td>
<td>Senior Thesis (two semesters to total 3-4 cr.)</td>
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<tr>
<td>LB 220</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MTH 235</td>
<td>Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>PHY 215 or 215B</td>
<td>Thermodynamics and Modern Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHY 321</td>
<td>Classical Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>PHY 410</td>
<td>Thermal and Statistical Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHY 471</td>
<td>Quantum Physics I</td>
<td>3</td>
</tr>
<tr>
<td>PHY 481</td>
<td>Electricity and Magnetism I</td>
<td>3</td>
</tr>
</tbody>
</table>

* MTH 234 can be substituted for LB 220

**IMPORTANT:** This advising guide is presented for planning purposes only. It is the student’s responsibility for knowing and following University, college and departmental requirements as stated in the [Academic Programs Catalog](#).

The Academic Advisors will provide information and suggest others based on expressed interests. It is the student’s responsibility for enrolling in classes and selecting the number of credits per semester for success. Appointments are made using the [Student Success Dashboard](#).