Unofficial Graduation Checklist

Name _____________________________________________________                 R# ______________________

Catalog year – 2017-2019

Major – Cell and Molecular Biology

CMBI Core (22 hours)

____ BIOL 1403 Biology I (CL)                                (Fall only)
____ BIOL 1404 Biology II (CL)                           (Spring only)
____ BIOL 3416 Genetics (CL)
____ BIOL 3302 Developmental Biology                   (Spring only)
____ BIOL 3320 Cell Biology
____ BIOL 3120 Cell Biology Lab
____ BIOL 4320 Molecular Biology (CL)            (Spring only)

CMBI electives (Choose 4 from approved list on back) –
must include at least one lab course

1. ____________                3. ____________
2. ____________                4. ____________

Biology Electives (as needed to reach 39 hours)

(Choose from any 3000-4000 level electives in BIOL, BOT, MBIO or
ZOOL to bring total to 39 hours)

• Does NOT include MBIO 3400
• You may apply either PHIL 3322 or 3325 or 3334 as an upper-
division elective, but only one.
• No more than 6 hours of Undergraduate Research may apply
to your degree.

Chemistry (19 hours)

____ CHEM 1307 Principles of Chemistry I
____ CHEM 1107 Exp. Principles of Chemistry I
____ CHEM 1308 Principles of Chemistry II
____ CHEM 1108 Exp. Principles of Chemistry II
____ CHEM 3305 Organic Chemistry I
____ CHEM 3105 Exp. Organic Chemistry I
____ CHEM 3306 Organic Chemistry II
____ CHEM 3106 Exp. Organic Chemistry II
____ CHEM 3310 Molecular Biochemistry
OR
____ CHEM 3311/3111 Biological Chemistry I and
____ CHEM 3312 Biological Chemistry II

Physics (8 hours)

____ PHYS 1403 General Physics I
____ PHYS 1404 General Physics II

Math (Minimum 6 hours)

____ MATH 1451 MATH __________

General Education Requirements: When selecting courses
to fulfill your General Education requirements, you must
ALWAYS refer to the approved selection of courses in the
TTU catalog.

English (9 hours required)

____ ENGL 1301
____ ENGL 1302
____ 2000-level English Lit i.e. ENGL 2307, 2351, 2388, 2391, 2310, 2381, 2382, 2383

** Note –ENGL 2371 will not complete Eng. Lit requirement

Oral Communication (3 hours required)

____ Choose from COMS 2300, COMS 2358, CFAS 2300,
ENGR 2331, or MCOM 2310

Foreign Language (Hours vary) A minimum of one semester of
foreign language at the 2000-level or above plus necessary pre-reqs.

__________        __________        __________

U.S. & Texas History (6 hours)  Choose 2 of following 3:
____ HIST 2300     ____ HIST 2301     ____ HIST 2310

U.S. & Texas Government (6 hours)

____ POLS 1301     ____ POLS 2306
(POLS 2302 prior to 2017 catalog)

Social & Behavioral Sciences (3 hours)

__________

Creative Arts (3 hours) __________

Personal Fitness & Wellness (1 hour)

__________

Multicultural (3 hours) __________

Mathematics (6 hours) & Life Sciences (8 hours) are met by
your Biology degree requirements.

Language, Philosophy & Culture (3 hours) __________

*May be Fulfilled by Selected English Lit

Communication Literacy Classes – Beginning with the
2017 catalog and beyond, you must take 3
Communication Literacy courses in your major.
Other Graduation Requirements:

Minor – Chemistry
May be fulfilled by adjunct requirements for MBIO major.

Have you taken 40 hours of 3000-4000 (upper) level classes?

Optional Courses:

Pre-requisites for Post-graduate programs

Approved list of CMBI electives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>BIOL 3410</td>
<td>Experimental Molecular Biology (counts as a lab course)</td>
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<tr>
<td>BIOL 4300</td>
<td>Undergraduate Research (3 hours may apply as an CMBI elective – additional 3 hours may apply as elective needed to reach 39 hours)</td>
</tr>
<tr>
<td>BIOL 3305</td>
<td>Organic Evolution</td>
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<tr>
<td>BIOL 4307</td>
<td>Cancer Biology (CL)</td>
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<tr>
<td>BOT 3401</td>
<td>Plant Physiology (cross-listed as NRM 3401)</td>
</tr>
<tr>
<td>MBIO 3401</td>
<td>Principles of Microbiology</td>
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<tr>
<td>MBIO 4303</td>
<td>Physiology of Bacteria (CL)</td>
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<tr>
<td>MBIO 4310</td>
<td>Introduction to Virology</td>
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<tr>
<td>MBIO 4311</td>
<td>Biofilms</td>
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<tr>
<td>MBIO 4367</td>
<td>Molecular Pathogenesis of Protozoans (CL)</td>
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<tr>
<td>MBIO 4402</td>
<td>Immunology and Serology</td>
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<tr>
<td>MBIO 4404</td>
<td>Pathogenic Microbiology</td>
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<tr>
<td>MBIO 4406</td>
<td>Genetics of Microorganisms</td>
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<tr>
<td>ZOOL 3401</td>
<td>Animal Histology</td>
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<tr>
<td>ZOOL 4304</td>
<td>General Endocrinology</td>
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<tr>
<td>ZOOL 4409</td>
<td>Comparative Animal Physiology (CL)</td>
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</tbody>
</table>

All grades in the major, minor, and adjunct requirements must be a "C" or higher

Approved Special Topics Courses

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<tr>
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<tbody>
<tr>
<td>BIOL 4301</td>
<td>Immune Response to Infectious &amp; Inflammatory Disease (CL)</td>
</tr>
<tr>
<td>BIOL 4301</td>
<td>Biomolecular Signaling</td>
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<tr>
<td>BIOL 4301</td>
<td>RNA Silencing &amp; Regulatory Small RNAs</td>
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<tr>
<td>BIOL 4301</td>
<td>Cell Biology II</td>
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<tr>
<td>BIOL 4301</td>
<td>Principles of Pharmacology and Translation Neuroscience</td>
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<tr>
<td>BIOL 4301</td>
<td>Genomes and Genome Evolution</td>
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<tr>
<td>BIOL 4301</td>
<td>Metagenomics or Biological Informatics</td>
</tr>
<tr>
<td>BIOL 4301</td>
<td>Environmental Endocrinology</td>
</tr>
<tr>
<td>BIOL 4301</td>
<td>Neurobiology (CL)</td>
</tr>
</tbody>
</table>