

Student Name: \_\_\_\_\_ ID # \_\_\_\_\_

Advisor Name: \_\_\_\_\_ Anticipated Graduation Date: \_\_\_\_\_

## BIOLOGY HONOURS CHECKLIST (134 s.h.) BIOCHEMISTRY & MOLECULAR BIOLOGY EMPHASIS 2024-25 Academic Calendar

### 1. Inquiry: Ways of Knowing – Core Requirements (37 s.h.\*)

*\*University Core Requirements are modified for students who transfer in with 57 s.h. or more of initial transfer credit. See [Academic Calendar](#) for details.*

| ✓   | COURSE     | S.H. | NOTES  | ✓  | COURSE | S.H. | NOTES   |
|---|------------|------|--|--|--------|------|---|
| FOUNDATIONAL INQUIRIES (25 sem. hrs.)       |            |      |  | Academic Writing Requirement <sup>1</sup>  |        |      |   |
| <i>Academic Research &amp; Writing</i>      |            |      |  | <b>WAYS OF KNOWING (12 sem. hrs.)</b>  |        |      |   |
|   | ENGL _____ | 3    | Choose two of ENGL 101, 102, 103, 104.   | In addition to the courses on the left, students must take an additional 12 sem. hrs. from each of the following categories, <i>9 s.h. of which must be from outside of the student's major.</i> |        |      |   |
|   | ENGL _____ | 3    |  |  |        |      |   |
| <i>Foundations</i>                          |            |      |  | <i>Aesthetic &amp; Performance Inquiry</i>   |        |      |   |
|   | FNDN 101   | 1    | Compulsory during the first semester of the first year for all new students unless they have a minimum 24 sem. hrs. initial transfer credit. |  |        | 3    | Choose 3 sem. hrs. from the Aesthetic & Performance Inquiry category below. |
|   | FNDN 102   | 3    | Normally taken before year three.  | <i>Cultural &amp; Linguistic Inquiry</i>   |        |      |   |
|   | FNDN 201   | 3    |  |  |        | 3    | Choose 3 sem. hrs. from the Cultural & Linguistic Inquiry category below.   |
| <i>Logical &amp; Ethical Reasoning</i>      |            |      |  | <i>Experiential &amp; Embodied Inquiry</i>   |        |      |   |
|   | PHIL _____ | 3    | Choose one of PHIL 100, 103, 105, 106, 109, or 210.  |  | **     | **   | Satisfied by BIOL 409 & 410.  |
| <i>Religious &amp; Spiritual Thought</i>    |            |      |  | <i>Historical &amp; Archival Inquiry</i>   |        |      |   |
|   | RELS _____ | 3    | Choose RELS 110 or 160.<br>Recommended in 1st semester of the 1st year.  |  |        | 3    | Choose 3 sem. hrs. from the Historical & Archival Inquiry category below.   |
|   | RELS 111   | 3    |  | <i>Quantitative &amp; Computational Inquiry</i>  |        |      |   |
|   | RELS 112   | 3    |  |  | **     | **   | Satisfied by CHEM 112.  |
| <i>Scientific Method &amp; Lab Research</i> |            |      |  | <i>Social &amp; Global Inquiry</i>   |        |      |   |
|   | **         | **   | Satisfied by BIOL 113 or 114.  |  |        | 3    | Choose 3 sem. hrs. from the Social & Global Inquiry category below.         |

<sup>1</sup>**Academic Writing Requirement:** students must take WRTG 100 (native English speakers) or WRTG 101 (non-native English speakers) in their first semester at TWU, unless exempt at the time of admission to the University. WRTG course credit may be included toward a degree program as elective credit.

### Ways of Knowing: Categories

|  |  |
|--|--|
| <b>Aesthetic &amp; Performance Inquiry</b> | ART 181, 182, 250; ENGL 207, 208, 310; HKIN 342; MCOM 211, 221, 231, 369; MUSI 110; PHIL 370; SAMC 111, 370; THTR 130, 161; any Music Ensembles; any Music (MUSA) Private Lessons.   |
| <b>Cultural &amp; Linguistic Inquiry</b>   | ANTH 210, 395; EDUC 496; ENGL 334, 340, 482; GREE 235; HEBR 245; HIST 237; IDIS 201; POLS 237; RELS 235, 245; SOCI 395; any World Languages & Cultures course (CHIN, FREN, JAPA, RUSS, SPAN).  |
| <b>Historical &amp; Archival Inquiry</b>   | ART 237, 238; ECON 306; GENV 312; HIST 107, 108, 135, 306, 339, 391; MUSI 131, 132; NURS 230; PHIL 203, 314, 421; POLS 391; PSYC 408; RELS 320, 351, 352, 475; SAMC 112; SOCI 391; THTR 331, 332.  |
| <b>Social &amp; Global Inquiry</b>         | ANTH 101, 302; BUSI 311; ECON 311, 354; EDUC 345, 365; ENGL 348; GENV 111, 212, 322, 354; LING 101, 210, 302; MCOM 111, 171, 251, 313, 315, 317, 372, 491; NURS 227; PHIL 208, 220, 310, 320; POLS 101, 211, 310, 312, 320, 493; PSYC 399; RELS 271, 272, 285, 381, 384, 386, 476; SOCI 101; THTR 348. |

April 2024

## 2. Required Biology Courses (38 s.h.)

| ✓ | COURSE     | S.H. | NOTES   | ✓   | COURSE   | S.H. | NOTES |
|---|------------|------|---|---|----------|------|-------|
|   | BIOL 113*  | 4    | Includes a one s.h. lab (BIOL 198) as a co-requisite. |   | BIOL 371 | 3    |       |
|   | BIOL 114*  | 4    | Includes a one s.h. lab (BIOL 199) as a co-requisite. |   | BIOL 372 | 3    |       |
|   | BIOL 223   | 3    |   |   | BIOL 384 | 3    |       |
|   | BIOL 281   | 3    |   |   | BIOL 386 | 3    |       |
|   | BIOL _____ | 3    | Choose: BIOL 312, 314, 315, 316, or 318.              |   | BIOL 409 | 1    |       |
|   | BIOL _____ | 3    | Choose: BIOL 308, 360, or 345.                        |   | BIOL 410 | 2    |       |
|   | BIOL _____ | 3    | Choose: BIOL 333 or 334.                              | *Minimum grade of C required to progress to BIOL 223. |          |      |       |

## 3. Required Biochemistry & Molecular Biology Courses (12 s.h.)

Choose four of: BIOL 333 or 334; 336, 423, 438, 470, 474, or 475.

| ✓ | COURSE     | S.H. | NOTES | ✓ | COURSE     | S.H. | NOTES |
|---|------------|------|-------|---|------------|------|-------|
|   | BIOL _____ | 3    |       |   | BIOL _____ | 3    |       |
|   | BIOL _____ | 3    |       |   | BIOL _____ | 3    |       |

## 4. Ancillary Requirements (47 s.h.)

| ✓ | COURSE   | S.H. | NOTES   | ✓ | COURSE   | S.H. | NOTES |
|---|----------|------|---|---|----------|------|-------|
|   | CHEM 111 | 4    | Includes a one s.h. lab (CHEM 198) as a co-requisite. |   | CHEM 357 | 3    |       |
|   | CHEM 112 | 4    | Includes a one s.h. lab (CHEM 199) as a co-requisite. |   | CHEM 358 | 3    |       |
|   | CHEM 221 | 3    |   |   | MATH 123 | 3    |       |
|   | CHEM 222 | 3    |   |   | MATH 124 | 3    |       |
|   | CHEM 230 | 3    |   |   | NATS 481 | 3    |       |
|   | CHEM 240 | 3    |   |   | PHYS 111 | 3    |       |
|   | CHEM 321 | 3    |   |   | PHYS 112 | 3    |       |
|   | CHEM 322 | 3    |   |   |          |      |       |

## 5. Elective Courses (0 s.h.)

Students are encouraged, but not required, to take elective classes that contribute to a concentration or a minor. If you choose to take a concentration or a minor, please attach the appropriate concentration/minor checklist available at [twu.ca/advising](http://twu.ca/advising).

| ✓ | COURSE | S.H. | NOTES | ✓ | COURSE | S.H. | NOTES |
|---|--------|------|-------|---|--------|------|-------|
|   |        |      |       |   |        |      |       |
|   |        |      |       |   |        |      |       |






### NOTES:

- A total of 134 s.h. of credit, including a minimum of 51 s.h. of upper-level credit (36 s.h. in the major) is required to complete this degree. Students must have a minimum overall (cumulative) GPA of 2.7 to graduate, including a GPA of 3.0 in Biology.
- You must complete an [Application for Graduation](#) via the Student Portal and [submit a copy of your filled in program checklist\(s\)](#) (i.e. this document) to the Office of the Registrar by April 30 of the year prior to your completion. For more information on the graduation process, please visit [twu.ca/graduation](http://twu.ca/graduation).

*This program is offered under TWU's exempt status with the Degree Quality Assessment Board.*

THIS CHECKLIST IS INTENDED TO ASSIST STUDENTS AND ADVISORS IN ENSURING THAT ALL REQUIREMENTS ARE MET. IT IS THE RESPONSIBILITY OF THE **STUDENT** TO MEET ALL REQUIREMENTS.

|   |      | YEAR 1             |  | YEAR 2             |                   | YEAR 3             |                   | YEAR 4             |                   | YEAR 5             |                   |
|---|------|--------------------|--|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|
| ✓ | s.h. | Fall               |  | Fall               |                   | Fall               |                   | Fall               |                   | Fall               |                   |
|   | 1    | FNDN 101           |  | 3                  | FNDN 201          | 3                  | BIOL 371          | 3                  | Core <sup>1</sup> | 1                  | BIOL 409          |
|   | 3    | RELS 110 or 160    |  | 3                  | Core <sup>1</sup> | 3                  | BIOL 384          | 3                  | BIOL <sup>2</sup> | 3                  | BIOL <sup>2</sup> |
|   | 3    | ENGL 103           |  | 3                  | BIOL 223          | 3                  | BIOL <sup>2</sup> | 3                  | BIOL <sup>3</sup> | 3                  | BIOL <sup>3</sup> |
|   | 4    | BIOL 113           |  | 3                  | CHEM 221          | 3                  | PHYS 111          | 3                  | CHEM 357          | 3                  | NATS 481          |
|   | 4    | CHEM 111           |  | 3                  | MATH 123          | 3                  | CHEM 322          |                    |                   |                    |                   |
|   |      | Semester Total: 15 |  | Semester Total: 15 |                   | Semester Total: 15 |                   | Semester Total: 12 |                   | Semester Total: 10 |                   |
|   |      | YEAR 1             |  | YEAR 2             |                   | YEAR 3             |                   | YEAR 4             |                   | YEAR 5             |                   |
| ✓ | s.h. | Spring             |  | Spring             |                   | Spring             |                   | Spring             |                   | Spring             |                   |
|   | 3    | FNDN 102           |  | 3                  | CHEM 240          | 3                  | Core <sup>1</sup> | 3                  | Core <sup>1</sup> | 3                  | Core <sup>1</sup> |
|   | 3    | RELS 111           |  | 3                  | CHEM 222          | 3                  | BIOL 372          | 3                  | Core <sup>1</sup> | 2                  | BIOL 410          |
|   | 3    | ENGL 104           |  | 3                  | CHEM 230          | 3                  | BIOL 386          | 3                  | BIOL <sup>3</sup> | 3                  | BIOL <sup>3</sup> |
|   | 4    | BIOL 114           |  | 3                  | MATH 124          | 3                  | BIOL <sup>2</sup> | 3                  | CHEM 358          | 3                  | CHEM 321          |
|   | 4    | CHEM 112           |  |                    |                   | 3                  | PHYS 112          |                    |                   |                    |                   |
|   |      | Semester Total: 17 |  | Semester Total: 12 |                   | Semester Total: 15 |                   | Semester Total: 12 |                   | Semester Total: 11 |                   |

| COURSE LEGEND   |                                 |
|---|---------------------------------|
|  | <b>Core Courses</b>             |
|  | <b>Major + Core Courses</b>     |
|  | <b>Ancillary Courses</b>        |
|  | <b>Ancillary + Core Courses</b> |
|  | <b>Electives</b>                |

- Core electives should be chosen as follows:  
 ONE Logical & Ethical Reasoning  
 ONE Aesthetic and Performance Inquiry  
 ONE Cultural & Linguistic Inquiry  
 ONE Historical & Archival Inquiry  
 ONE Social & Global Inquiry
- Choose a 300- or 400-level BIOL course.
- Biochemistry and Molecular Biology. Choose from: BIOL 333, 336, 423, 438, 470, 474, 475.

*Summer Sessions are encouraged to reduce semester load and/or repeat courses.*

*This is an example of what a 5-year degree plan might look like. It is not the official program checklist. In the case of any discrepancy between this program plan and the checklist, the checklist shall prevail. It is the student's responsibility to ensure they complete all program requirements as laid out in the approved checklist.*