

Student Name: _____ ID # _____

Advisor Name: _____ Anticipated Graduation Date: _____

BIOLOGY HONOURS CHECKLIST: ALL STREAMS (134 s.h.) 2026-27 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 ¹ | | | |
| <i>Academic Research & Writing</i> | | | | WAYS OF KNOWING (12 sem. hrs.) | | | |
| | 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, 9 s.h. of which must be from outside of the student's major. | | | |
| | ENGL _____ | 3 | | | | | |
| <i>Foundations</i> | | | | <i>Aesthetic & 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 & Linguistic Inquiry</i> | | | |
| | FNDN 201 | 3 | | | | 3 | Choose 3 sem. hrs. from the Cultural & Linguistic Inquiry category below. |
| <i>Logical & Ethical Reasoning</i> | | | | <i>Experiential & Embodied Inquiry</i> | | | |
| | PHIL _____ | 3 | Choose one of PHIL 100, 103, 105, 106, 109, or 210. | | ** | ** | Satisfied by BIOL 409 & 410. |
| <i>Religious & Spiritual Thought</i> | | | | <i>Historical & Archival Inquiry</i> | | | |
| | RELS _____ | 3 | Choose RELS 110 or 160. Compulsory during 1st semester of the 1st year. | | | 3 | Choose 3 sem. hrs. from the Historical & Archival Inquiry category below. |
| | RELS 111 | 3 | | <i>Quantitative & Computational Inquiry</i> | | | |
| | RELS 112 | 3 | | | ** | ** | Satisfied by CHEM 112 or MATH 123. |
| <i>Scientific Method & Lab Research</i> | | | | <i>Social & Global Inquiry</i> | | | |
| | ** | ** | Satisfied by BIOL 113 or 114. | | | 3 | Choose 3 sem. hrs. from the Social & Global Inquiry category below. |

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

Ways of Knowing: Categories

| | |
|--|--|
| Aesthetic & Performance Inquiry | ART 181, 182, 230, 250, 280; 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. |
| Cultural & Linguistic Inquiry | 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). |
| Historical & Archival Inquiry | ART 237, 238; ECON 306; GENV 312; HIST 107, 108, 135, 306, 339, 391; LDRS 302; 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. |
| Social & Global Inquiry | ANTH 101, 220, 302; BUSI 311; ECON 311, 354; EDUC 345, 365; ENGL 348; GENV 111, 212, 322, 354; HKIN 325; 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, 220; THTR 348. |

2. Required Biology Courses – ALL Streams (38 - 41 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 336** | 3 | *ONLY required for Cell & Developmental Stream. |
| | BIOL 114* | 4 | Includes a one s.h. lab (BIOL 199) as a co-requisite. | | BIOL 371 | 3 | |
| | BIOL 223 | 3 | | | BIOL 372 | 3 | |
| | BIOL 281 | 3 | | | BIOL 384 | 3 | |
| | BIOL _____ | 3 | Choose: BIOL 312, 314, 315, 316, or 318. | | BIOL 386 | 3 | |
| | BIOL _____ | 3 | Choose: BIOL 308, 360, or 345. | | BIOL 409 | 1 | |
| | BIOL _____ | 3 | Choose: BIOL 333 or 334. | | BIOL 410 | 2 | |

*Minimum grade of C required to progress to BIOL 223.

3. Ancillary Requirements (29 s.h.) – ALL Streams

| | | | | | | | |
|--|----------|---|---|-----------------------------|----------|---|---------------|
| | CHEM 111 | 4 | Includes a one s.h. lab (CHEM 198) as a co-requisite. | | MATH 124 | 3 | Or STAT 203.* |
| | CHEM 112 | 4 | Includes a one s.h. lab (CHEM 199) as a co-requisite. | | NATS 481 | 3 | |
| | CHEM 221 | 3 | | | PHYS 111 | 3 | |
| | CHEM 222 | 3 | | | PHYS 112 | 3 | |
| | MATH 123 | 3 | | *General & Ecology streams. | | | |

4. Stream Courses - Choose your stream below.

General Biology Stream (18 s.h.)

Choose six 300- or 400-level BIOL courses, in consultation with a Biology advisor, from two of the following subdisciplines:

1) Ecology, 2) Zoology, 3) Botany, 4) Genetics and Molecular Biology, 5) Physiology, 6) Microbiology, 7) Immunology.

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

Cell & Developmental Biology Stream (15 s.h.)

| ✓ | COURSE | S.H. | NOTES | ✓ | COURSE | S.H. | NOTES |
|---|------------|------|--|---|------------|------|-------|
| | BIOL _____ | 3 | | | BIOL _____ | 3 | |
| | BIOL _____ | 3 | | | BIOL _____ | 3 | |
| | BIOL _____ | 3 | Choose five of: BIOL 308, 312, 314, 315, 333, 334, 340, 343, 345, 346, 360, 423, 438, 440, 450, 470, 474 or 475. | | | | |

Ecology Stream Courses (18 s.h.)

Choose six of: BIOL 308, 312, 314, 316, 318, 360, 362, 364, or 484; OR approved courses from Au Sable.

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

| <input type="checkbox"/> Biochemistry & Molecular Biology Stream Courses (12 s.h. + 9 s.h. <i>additional ancillary</i>) | | | | | | | |
|--|------------|------|--|---|----------|------|-----------|
| ✓ | COURSE | S.H. | NOTES | ✓ | COURSE | S.H. | NOTES |
| | BIOL _____ | 3 | Choose four of: BIOL 333 or 334, 336, 423, 438, 470, 474, or 475. | | CHEM 240 | 3 | Ancillary |
| | BIOL _____ | 3 | | | CHEM 321 | 3 | Ancillary |
| | BIOL _____ | 3 | | | CHEM 322 | 3 | Ancillary |
| | BIOL _____ | 3 | | | | | |

5. Elective Courses (0 – 12 s.h., *as needed for stream*)

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.

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

NOTES:

- Honours Graduation requirement: A total of at least 134 s.h. of credit, including a minimum of 54 s.h. in the major, a minimum of 54 s.h. of upper-level credit (36 s.h. in the major), and a minimum cumulative GPA of 3.0 overall and in the major.
- 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 June 30 of the year prior to your completion. For more information on the graduation process, please visit 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.



B.Sc. Honours *Biology - General Emphasis - 5 Year Plan*

| | | YEAR 1 | | YEAR 2 | | YEAR 3 | | YEAR 4 | | YEAR 5 | |
|---|------|--------------------|--|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|
| ✓ | s.h. | Fall | | Fall | | Fall | | Fall | | Fall | |
| | 1 | FNDN 101 | | 3 | FNDN 201 | 3 | Core ¹ | 3 | Core ¹ | 3 | BIOL ² |
| | 3 | RELS 110 or 160 | | 3 | BIOL 223 | 3 | BIOL 371 | 3 | BIOL ⁴ | 1 | BIOL 409 |
| | 3 | ENGL 103 | | 3 | CHEM 221 | 3 | BIOL 384 | 3 | BIOL ⁴ | 3 | BIOL ⁴ |
| | 4 | BIOL 113 | | 3 | MATH 123 | 3 | BIOL ² | 3 | Elective | 3 | NATS 481 |
| | 4 | CHEM 111 | | | | 3 | PHYS 111 | | | 3 | Elective |
| | | Semester Total: 15 | | Semester Total: 12 | | Semester Total: 15 | | Semester Total: 12 | | Semester Total: 13 | |
| | | YEAR 1 | | YEAR 2 | | YEAR 3 | | YEAR 4 | | YEAR 5 | |
| ✓ | s.h. | Spring | | Spring | | Spring | | Spring | | Spring | |
| | 3 | FNDN 102 | | 3 | Core ¹ | 3 | Core ¹ | 3 | Core ¹ | 3 | Core ¹ |
| | 3 | RELS 111 | | 3 | BIOL 281 | 3 | BIOL 372 | 3 | BIOL ⁴ | 2 | BIOL 410 |
| | 3 | ENGL 104 | | 3 | CHEM 222 | 3 | BIOL 386 | 3 | BIOL ⁴ | 3 | BIOL ⁴ |
| | 4 | BIOL 114 | | 3 | MATH 124 | 3 | BIOL ³ | 3 | Elective | 3 | Elective |
| | 4 | CHEM 112 | | | | 3 | PHYS 112 | | | | |
| | | Semester Total: 17 | | Semester Total: 12 | | Semester Total: 15 | | Semester Total: 12 | | Semester Total: 11 | |

COURSE LEGEND

Core Courses

- 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

Major Courses

- Choose a 200- or 300-level course from:
 BIOL 212/312, 214/314, 315, 316, 318 (316 and 318 can be taken in the summer).
- Choose a 300- or 400-level course from:
 BIOL 308, 360, 345, 333, or 334.

Major + Core Courses

Ancillary Courses

Ancillary + Core Courses

- Choose 6 upper-level BIOL courses from two of the following subdisciplines: Ecology, Zoology, Botany, Genetics and Molecular Biology, Physiology, Microbiology, Immunology.

Electives

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.

B.Sc. Honours *Biology - Cell and Developmental Biology - 5 Year Plan*

| | | YEAR 1 | | YEAR 2 | | YEAR 3 | | YEAR 4 | | YEAR 5 | |
|---|------|--------------------|--|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|
| ✓ | s.h. | Fall | | Fall | | Fall | | Fall | | Fall | |
| | 1 | FNDN 101 | | 3 | FNDN 201 | 3 | Core ¹ | | Core ¹ | 1 | BIOL 409 |
| | 3 | RELS 110 or 160 | | 3 | Core ¹ | 3 | BIOL 371 | 3 | BIOL 336 | 3 | BIOL ² |
| | 3 | ENGL 103 | | 3 | BIOL 223 | 3 | BIOL 384 | 3 | BIOL ² | 3 | BIOL ² |
| | 4 | BIOL 113 | | 3 | CHEM 221 | 3 | PHYS 111 | 3 | BIOL ² | 3 | NATS 481 |
| | 4 | CHEM 111 | | 3 | MATH 123 | | | | | 3 | Elective |
| | | Semester Total: 15 | | Semester Total: 15 | | Semester Total: 12 | | Semester Total: 12 | | Semester Total: 13 | |
| | | YEAR 1 | | YEAR 2 | | YEAR 3 | | YEAR 4 | | YEAR 5 | |
| ✓ | s.h. | Spring | | Spring | | Spring | | Spring | | Spring | |
| | 3 | RELS 111 | | 3 | Core ¹ | | Core ¹ | 3 | Core ¹ | 2 | BIOL 410 |
| | 3 | ENGL 104 | | 3 | BIOL 281 | 3 | BIOL 372 | 3 | BIOL ³ | 3 | BIOL ¹ |
| | 3 | FNDN 102 | | 3 | CHEM 222 | 3 | BIOL 386 | 3 | BIOL ³ | 3 | BIOL ² |
| | 4 | BIOL 114 | | 3 | MATH 124 | 3 | PHYS 112 | 3 | Elective | 3 | Elective |
| | 4 | CHEM 112 | | | | 3 | Elective | | | | |
| | | Semester Total: 17 | | Semester Total: 12 | | Semester Total: 15 | | Semester Total: 12 | | Semester Total: 11 | |

COURSE LEGEND

Core Courses

- 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

Major Courses

- Cell and Development. Choose from: BIOL 308, 312, 314, 315, 333, 334, 340, 343, 345, 346, 360, 423, 438, 440, 450, 470, 474, 475.
- Choose 300- or 400-level BIOL course.

Major + Core Courses

Ancillary Courses

Ancillary + Core Courses

Electives

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.

B.Sc. Honours *Biology - Ecology Emphasis* - 4 Year Plan

| | | YEAR 1 |
|--------------------|------|-----------------|
| ✓ | s.h. | Fall |
| | 1 | FNDN 101 |
| | 3 | RELS 110 or 160 |
| | 3 | ENGL 103 |
| | 4 | BIOL 113 |
| | 4 | CHEM 111 |
| Semester Total: 15 | | |

| | | YEAR 2 |
|--------------------|------|-------------------|
| ✓ | s.h. | Fall |
| | 3 | FNDN 201 |
| | 3 | Core ¹ |
| | 3 | BIOL 223 |
| | | CHEM 221 |
| | | MATH 123 |
| Semester Total: 15 | | |

| | | YEAR 3 |
|--------------------|------|-------------------|
| ✓ | s.h. | Fall |
| | 3 | BIOL 371 |
| | 3 | BIOL 384 |
| | 3 | BIOL ² |
| | 1 | BIOL 409 |
| | 3 | PHYS 111 |
| | 3 | Elective |
| Semester Total: 16 | | |

| | | YEAR 4 |
|--------------------|------|-------------------|
| ✓ | s.h. | Fall |
| | 3 | BIOL ² |
| | 3 | BIOL ³ |
| | 3 | BIOL ³ |
| | 3 | NATS 481 |
| | 3 | Elective |
| Semester Total: 15 | | |

| | | YEAR 1 |
|--------------------|------|----------|
| ✓ | s.h. | Spring |
| | 3 | FNDN 102 |
| | 3 | RELS 111 |
| | 3 | ENGL 104 |
| | 4 | BIOL 114 |
| | 4 | CHEM 112 |
| Semester Total: 17 | | |

| | | YEAR 2 |
|--------------------|------|-------------------|
| ✓ | s.h. | Spring |
| | 3 | Core ¹ |
| | 3 | Core ¹ |
| | 3 | BIOL 281 |
| | 3 | CHEM 222 |
| | 3 | STAT 203 |
| Semester Total: 15 | | |

| | | YEAR 3 |
|------------------------|------|---------------------------|
| ✓ | s.h. | Spring |
| | 3 | Core ¹ |
| | 3 | Core ¹ |
| | 3 | BIOL 372 |
| | 3 | BIOL 386 |
| | 3 | PHYS 112 |
| | 6 | Summer: BIOL ⁴ |
| Semester Total: 15 / 6 | | |

| | | YEAR 4 |
|------------------------|------|---------------------------|
| ✓ | s.h. | Spring |
| | 3 | Core ¹ |
| | 3 | Core ¹ |
| | 3 | BIOL ³ |
| | 2 | BIOL 410 |
| | 3 | Elective |
| | 6 | Summer: BIOL ⁴ |
| Semester Total: 14 / 6 | | |

COURSE LEGEND

Core Courses

- 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

Major Courses

- Choose any BIOL course at the 200+ level.
- Choose a 300- or 400-level BIOL course
- Summer courses: choose from BIOL 308, 312, 314, 316, 318, 360, 362, 364, or 484; or approved courses from Au Sable.

Major + Core Courses

Ancillary Courses

Ancillary + Core Courses






Electives

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

This is an example of what a 4-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.

B.Sc. Honours *Biochemistry & Molecular Biology* - 5 Year Plan

| | | 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 ¹ | 1 | BIOL 409 |
| | 3 | RELS 110 or 160 | | 3 | Core ¹ | 3 | BIOL 384 | 3 | BIOL ² | 3 | BIOL ² |
| | 3 | ENGL 103 | | 3 | BIOL 223 | 3 | BIOL ² | 3 | BIOL ³ | 3 | BIOL ³ |
| | 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 ¹ | 3 | Core ¹ | 3 | Core ¹ |
| | 3 | RELS 111 | | 3 | CHEM 222 | 3 | BIOL 372 | 3 | Core ¹ | 2 | BIOL 410 |
| | 3 | ENGL 104 | | 3 | CHEM 230 | 3 | BIOL 386 | 3 | BIOL ³ | 3 | BIOL ³ |
| | 4 | BIOL 114 | | 3 | MATH 124 | 3 | BIOL ² | 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 | |
|---|---------------------------------|
|  | Core Courses |
|  | Major + Core Courses |
|  | Ancillary Courses |
|  | Ancillary + Core Courses |
|  | Electives |

- 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.