Student Name:	ID#
Advisor Name:	Anticipated Graduation Date:

# **BIOTECHNOLOGY MAJOR CHECKLIST (122 s.h.)**

#### 2016-17 Academic Calendar

THIS PROGRAM CHECKLIST IS INTENDED TO ASSIST STUDENTS AND ADVISORS IN ENSURING THAT ALL UNIVERSITY AND PROGRAM REQUIREMENTS ARE MET. IT IS THE RESPONSIBILITY OF THE **STUDENT** TO ENSURE THAT ALL REQUIREMENTS FOR THE DEGREE HAVE BEEN MET.

### 1. University Core Requirements (38 s.h.)\*+

- \* University Core Requirements are modified for students who transfer in with 57 s.h. or more of credit.
- † Students may "double-count" a cross-listed core requirements course once. See http://www.twu.ca/advising/ for more details.

✓ COUR	SE S	3.H.	NOTES	✓	COURSE	S.H.	NOTES		
Academic Writing Requirement <sup>1</sup>					NATURAL SCIENCE (6)				
ENGLISH (	6)					***			
☐ ENGL 1	03	3	ENGL 103 and 104 are compulsory during			***	Included in program requirements.		
☐ ENGL 1	)4	3	the first year for all new full-time (12 s.h. or more) students <sup>2</sup>	PH	ILOSOPHY (	(3)			
ARTS, MED	IA + C	CULT	URE (3)		PHIL	3			
		3	May be chosen from Art, Music, Theatre, or Arts, Media + Culture courses. 3	RE	LIGIOUS ST	UDIES	(12)		
HISTORY (	3)				RELS 101	3	Students may challenge the RELS 101 and/or		
☐ HIST_		3			RELS 102	3	102 courses by writing an exam provided by the Religious Studies dept. 4		
HUMAN KII	NETIC	S (4)			RELS	3	Biblical-content course (middle digit 0-5)		
☐ HKIN 19	0	2				3	Christianity and Culture or Inter-Cultural Religious Studies Course 5		
☐ HKIN _		1	Activity course	SC	CIETY & CU	LTURE	E (3)		
HKIN_	_	1	Activity course			3	See footnote 6.		
INTERDISC	IPLIN	ARY	STUDIES (3)	UN	IVERSITY O	ATION (1)			
☐ NATS 48	37	2			MYTW 101	1	Fall or Spring semester of first year. 7		
☐ NATS 49	90	1							

<sup>&</sup>lt;sup>1</sup> Students must take WRTG 100 (native English speakers) or WRTG 101 (non-native English speakers) in their first semester at TWU, unless exempt when admitted to the University. WRTG course credit may be included toward a degree program as elective credit.

## 2. Required Biology and Biotechnology Courses (45 s.h.)

✓	COURSE	S.H.	NOTES	✓	COURSE	S.H.	NOTES
	BIOL 113*	3	(Or BIOL 402, 404 & 405)*		BIOL 372	3	
	BIOL 114*	3	(Or BIOL 103, 104 & 105)*		BIOL 384	3	
	BIOL 223	3	Take in Year 2		BIOL 386	3	
	BIOL/BIOT 290	3			BIOL/BIOT 390	3	
	BIOL 333	3			BIOL 423	3	
	BIOL 334	3			BIOL/BIOT 470	3	
	BIOI 336	3			BIOL/BIOT 490	3	
	BIOL 371	3					

<sup>\*</sup>minimum of C in first year required to progress to BIOL 223.

<sup>&</sup>lt;sup>2</sup> Students for whom English is a second language may substitute ENGL 101 and 102 (6 s.h.) for ENGL 103 and 104, with ENGL 101 and 102 compulsory in the next two consecutive semesters following the successful completion of WRTG 101.

<sup>&</sup>lt;sup>3</sup> May include three 1-s.h. large theatre and music ensembles, but not small ensembles or music lessons.

<sup>&</sup>lt;sup>4</sup> A passing grade allows the student to replace RELS 101 and/or 102 with an alternative biblical-content course(s).

<sup>&</sup>lt;sup>5</sup> RELS course with a middle digit 6-9 or PHIL 210 or PHIL 310. If PHIL 210/310 is chosen, this will NOT also fulfill the Philosophy requirement.

<sup>&</sup>lt;sup>6</sup> Students may choose from Anthropology, Economics, Geography (excl. 121/131/320), Media + Communication, Modern Languages, Political Studies, Psychology, or Sociology

<sup>7</sup> MYTW 101 is compulsory during the first semester of the first year for all new students unless they have minimum 27 s.h. initial transfer credit.

#### 3. Required Internships (3 s.h.)

✓	COURSE	S.H.	NOTES	✓	COURSE	S.H.	NOTES
	BIOL/BIOT 100	1	Taken in the Spring semester of Year 1		BIOL/BIOT 200	2	In Industry during or after Year 2

#### 4. Required Co-Ops (must complete two)\*

✓	COURSE	S.H.	NOTES	✓	COURSE	S.H.	NOTES

<sup>\*</sup>BIOL/BIOT 300 may substitute one of the required co-ops.

### 5. Ancillary Courses (30 s.h.)

✓	COURSE	S.H.	NOTES	✓	COURSE	S.H.	NOTES
	CHEM 111	3	Take in Year 1		CHEM 358	3	
	CHEM 112	3	(May substitute CHEM 103/104 or CHEM 103/112)		MATH 123	3	
	CHEM 221	3	Year 2		MATH	3	Choose either MATH 124 or MATH 102
	CHEM 222	3	Year 2		PHYS 111	3	
	CHEM 357	3			PHYS 112	3	

#### 6. Elective Courses (6 s.h.)

✓	SUBJECT	COURSE #	S.H.	NOTES	✓	SUBJECT	COURSE #	S.H.	NOTES

<sup>&</sup>gt; NOTE: All Biotechnology courses are cross-listed as Biology courses, including Biotechnology practica.

> NOTE: A total of 122 s.h. of credit, including a minimum of 42 s.h. (24 s.h. in the major) of upper-level credit is required for graduation. A minimum overall (cumulative) GPA of 2.50 is required for graduation, with a minimum 2.50 GPA in all required courses for the major.

> NOTE: In order to be eligible for graduation you must complete an Application for Graduation via the Student Portal and submit a completed checklist to the Office of the Registrar by April 30<sup>th</sup> of the year prior to your completion (there is no fee to apply for graduation). Once your complete application has been received, a degree audit will be completed for you. This audit will confirm which courses are still outstanding in order for you to complete your degree.

This program is offered under the written consent of the Minister of Advanced Education effective March 9, 2006, having undergone a quality assessment process and been found to meet the criteria established by the minister. Nevertheless, prospective students are responsible for satisfying themselves that the program and the degree will be appropriate to their needs (for example, acceptable to potential employers, professional licensing bodies, or other educational institutions).