## Biotech Pathways Credit Equivalencies – Biotechnology Technologist (3 yr) to Honours Specialization Biology, Nipissing University

**BIOL 1006** 

**CHEM 1006** 

**CHEM 1007** 

CHEM 2306 – Introduction to Organic Chemistry I

BIOL 2116 (Principles of Microbiology)

BIOL 2206 (Principles of Biochemistry)

BIOL 3126 (Molecular Biology Techniques)

2 of:

CHEM 2307 – Introduction to Organic Chemistry II

CHEM 2106 – Introduction to Analytical Chemistry

BIOL 4227 - Nutrition

## Biotech Pathways Credit Equivalencies – Biotechnology Technologist (3 yr) to Honours Specialization Biology, Nipissing University

2 of:

BIOL 2407 (Environmental Toxicology)

NURS 2037 (Pharmacology)

CRJS 2926 (Introduction to Forensics)

3 of:

BIOL 3306 (Enzymology)

BIOL 3346 (Microscopy Methods & Applications)

BIOL 3557 (Genetics & Society)

BIOL 3597 (Immunology)

1 1000-level MATH

1 1000-level COSC

1 1000-level Humanities

1 1000-level Social Science/Professional Studies

Total 54 credits

# BIOTECH Pathways – CREDIT TRANSFER PLAN Biotechnology Technologist (3 yr) to Honours Specialization in Biology – Nipissing University

	Year 1		Year 2		Year 3		Year 4	
	BIOL Requires	College Equivalency	BIOL Requires	College Equivalency	BIOL Requires	College Equivalency	BIOL Requires	College Equivalency
	Biol 1006	Yes	Biol 2446	No	Biol 3117	No	9 credits 4000	No
	Biol 1007	No	Biol 2557	No	12 credits 3000	Yes		
	Chem 1006	Yes	Biol 2336 or Biol 2337	No	18 credits 2000-4000	No		
	Chem 1007	Yes	Biol 2836 or Biol 2837	No				
	Math 1000 level	Yes	Additional 2nd year Biology - Chemistry	21 @ 2000				
	Required Electives							
	3 credits science	Yes	3 credits science	No				
	3 credits humanities (Acad 1601)	Yes	3 credits humanities	No				
	3 credits social science - professional studies	Yes	3 credits social science - professional studies	No				
Total	30	21	30	21	30	12	30	0
Cumulative	30	21	60	42	90	54	120	54

## BIOTECH Pathway – Remaining Required Credits Biotechnology Technologist (3 yr) to Honours Specialization in Biology – Nipissing University

#### 1000 level

- Biol 1007 (Organismal/Evolutionary Bio)
- 3 credits science
- 3 credits humanities
- 3 credits social science professional studies

#### 2000 level

- Biol 2446 (Principles of Ecology)
- Biol 2557 (Genetics)
- Biol 2336 or Biol 2337 (Biology of Seed/Seedless Plants)
- Biol 2836 or Biol 2837 (Invertebrate/Vertebrate Zoology)

#### 3000/4000 level

- Biol 3117 (Biostatistics)
- 18 credits 2000-4000 Biol
- 9 credits 4000 Biol

Remaining proscribed courses described above constitute 54 credits. Including 54 transfer credits, students require an additional 12 credits to complete 120 credits for graduation.

### Additional Information/Considerations

#### **Admission Requirements:**

Graduates of a Biotechnology (3 year) Advanced Diploma with a sufficient amount of academic content, and who have achieved a minimum B or 70% average may be considered for admission to the Honours Specialization in Biology and will be eligible for a minimum of 54 transfer credits, as assigned.

#### **Bridging Models:**

Distance/online – might work in collaboration with Nipissing's Centre for Flexible Teaching & Learning to develop this. However, since at the current time BIOL1007 is offered only in the winter semester, and is a prerequisite for many of the courses students would be required to complete in the Biology program at Nipissing (see slide 4), options are limited in terms of the courses students might be able to enroll in during a bridging semester or via distance education. In consultation with the Department, it was agreed that we would prefer to not open up the option for students to complete a BIOL1007 'equivalent' online without a laboratory component.

Also note that summer sessions are not really an option for bridging core courses (e.g. BIOL1007), as generally only electives are offered during summer sessions. Students might, however, take electives during the summer semester following their first semester of enrolment, in order to complete program requirements within < 2 calendar years.

## Pathways Template – BIOTECH Advanced Diploma

Please specify who your pathway is for:	Biotechnology Technologist Diploma (3 year)				
Graduates of Biotechnology Diploma (2 year) or Biotechnology Advanced Diploma (3 year)					
Degree Program	Honours Specialization in Biology				
Admission Criteria					
Average	70%				
Other Admission Selection Criteria					
Credits Granted					
Total # of Transfer Credits/Full Courses Granted	54 credits (18 courses)				
Biological Science	21-27 credits (7-9 courses)				
	(note: many of these are 'electives' in the sense that they are not required core courses for the program)				
Math/ Other Science	21-27 credits (7-9 courses)				
	(note: many of these are 'electives' in the sense that they are not required core courses for the program)				
Analytical/ Laboratory Skills					
Social Science/	6-12 credits (2-4 courses)				
Management Management	**this will depend on whether a student chooses to 'count' particular courses as humanities or sciences  credits towards their remaining degree requirements				
Other/General Education Requirements					
Electives					

## Pathways Template – BIOTECH Advanced Diploma

Point of Entry (Summer, Winter, Fall)	Winter Entry - would offer students the most flexibility in terms of choice of which of their remaining required courses they might wish to register in (since BIOL1007 is offered in the winter and is a prerequisite for many of the other credits remaining to be completed)  Fall Entry – would also be possible, but students would have no choice in which of the remaining credit requirements they would be required to fulfill during the first two academic semesters  *** see slide 4
Degree Requirements	
# of Credits to be Completed	54 proscribed required credits + 12 elective credits  ** see slide 4
Bridging	Since at the current time BIOL1007 is offered only in the winter semester, and is a prerequisite for many of the courses students would be required to complete in the Biology program at Nipissing (see slide 4), options are limited in terms of the courses students might be able to enroll in during a bridging semester or via distance education.
Specific Courses/Codes	Biol 1007 (Organismal/Evolutionary Bio) 3 credits science 3 credits humanities 3 credits social science - professional studies Biol 2446 (Principles of Ecology) Biol 2557 (Genetics) Biol 2336 or Biol 2337 (Biology of Seed/Seedless Plants) Biol 2836 or Biol 2837 (Invertebrate/Vertebrate Zoology) Biol 3117 (Biostatistics) 18 credits 2000-4000 Biol 9 credits 4000 Biol
Other Comments or Requirements	Expected time to completion for Pathway students is 5 academic semesters  Internal approval is expected in time to offer the Pathway beginning January 2014  Pathway is expected to be available prior to review for 3 years