Linguistics (Bachelor of Science)

This section presents the requirements for programs in:

- B.Sc. Honours in Linguistics with a Concentration in Linguistic Theory (Computer Science)
- B.Sc. Honours in Linguistics with a Concentration in Linguistic Theory (Neuroscience)
- B.Sc. Honours in Linguistics with a Concentration in Linguistic Theory (Psychology)
- B.Sc. Honours in Linguistics with a Concentration in Psycholinguistics and Communication Disorders (Computer Science)
- B.Sc. Honours in Linguistics with a Concentration in Psycholinguistics and Communication Disorders (Neuroscience)
- B.Sc. Honours in Linguistics with a Concentration in Psycholinguistics and Communication Disorders (Psychology)

B.Sc. Honours in Linguistics with a Concentration in Linguistic Theory (Computer Science) (20.0 credits)

A. Credits Included in the Major CGPA (9.0 credits)

1. 1.0 credit in:		1.0
ALDS 1001 [0.5]	Language Matters: Introduction to ALDS	
LING 1001 [0.5]	Introduction to Linguistics I	
2. 1.0 credit in:		1.0
LING 2005 [0.5]	Linguistic Analysis	
LING 2007 [0.5]	Phonetics	
3. 1.0 credit in:		1.0
LING 3004 [0.5]	Syntax I	
LING 3007 [0.5]	Phonology I	
4. 1.0 credit in LING at the 4000-level		1.0
5. 1.5 credits in LING, excluding LING 1100		1.5
6. 3.5 credits from the Concentration		3.5
a. 1.0 credit in:		
LING 3005 [0.5]	Morphology I	
LING 3505 [0.5]	Semantics	
b. 1.0 credit from:		
LING 4004 [0.5]	Syntax II	
LING 4005 [0.5]	Morphology II	
LING 4007 [0.5]	Phonology II	
LING 4505 [0.5]	Formal Semantics	
LING 4510 [0.5]	Lexical Semantics	
c. 1.5 credits in LING, excluding LING 1100		

B. Credits Not Included in the Major CGPA (11.0 credits)

7. 4.0 credits in Computer Science Requirements		4.0
a. 1.5 credits in:		
COMP 1005 [0.5]	Introduction to Computer Science I	
COMP 1006 [0.5]	Introduction to Computer Science II	
COMP 1805 [0.5]	Discrete Structures I	
b. 1.5 credits in:		
COMP 2401 [0.5]	Introduction to Systems Programming	
COMP 2402 [0.5]	Abstract Data Types and Algorithms	
COMP 2404 [0.5]	Introduction to Software Engineering	
c. 1.0 credit from:		
COMP 2406 [0.5]	Fundamentals of Web Applications	
COMP 2804 [0.5]	Discrete Structures II	
COMP 3000 [0.5]	Operating Systems	
COMP 3002 [0.5]	Compiler Construction	
COMP 3004 [0.5]	Object-Oriented Software Engineering	
COMP 3005 [0.5]	Database Management Systems	
COMP 3007 [0.5]	Programming Paradigms	
COMP 3008 [0.5]	Human-Computer Interaction	
8. 1.0 credit in:		1.0
MATH 1007 [0.5]	Elementary Calculus I	
MATH 1107 [0.5]	Linear Algebra I	
9. 6.0 credits in free electives		6.0

C. Additional Requirements

10. School Language Proficiency Requirement must be satisfied	
11. Bachelor of Science Experimental Science Requirement must be satisfied	
Total Credits	**20.0**

B.Sc. Honours in Linguistics with a Concentration in Linguistic Theory (Neuroscience) (20.0 credits)

A. Credits Included in the Major CGPA (9.0 credits)

1. 1.0 credit in:		1.0
ALDS 1001 [0.5]	Language Matters: Introduction to ALDS	
LING 1001 [0.5]	Introduction to Linguistics I	
2. 1.0 credit in:		1.0
LING 2005 [0.5]	Linguistic Analysis	
LING 2007 [0.5]	Phonetics	
3. 1.0 credit in:		1.0
LING 3004 [0.5]	Syntax I	
LING 3007 [0.5]	Phonology I	
4. 1.0 credit in LING at the 4000 level		1.0
5. 1.5 credits in LING, excluding LING 1100		1.5
6. 3.5 credits from the Concentration:		3.5
a. 1.0 credit in:		
LING 3005 [0.5]	Morphology I	
LING 3505 [0.5]	Semantics	
b. 1.0 credit from:		
LING 4004 [0.5]	Syntax II	
LING 4005 [0.5]	Morphology II	
LING 4007 [0.5]	Phonology II	
LING 4505 [0.5]	Formal Semantics	
LING 4510 [0.5]	Lexical Semantics	
c. 1.5 credits in LING, excluding LING 1100		

B. Credits Not Included in the Major CGPA (11.0 credits)

7. 3.5 credits in Neuroscience		3.5
a. 2.0 credits in:		

NEUR 1202 [0.5]	Neuroscience of Mental Health and Psychiatric Disease	
NEUR 1203 [0.5]	Neuroscience of Mental Health and Neurological Disease	
NEUR 2001 [0.5]	Introduction to Research Methods in Neuroscience	
NEUR 2002 [0.5]	Introduction to Statistics in Neuroscience	

b. 1.5 credits from:

NEUR 2201 [0.5]	Cellular and Molecular Neuroscience	
NEUR 2202 [0.5]	Neurodevelopment and Plasticity	
NEUR 3206 [0.5]	Sensory and Motor Neuroscience	
NEUR 3207 [0.5]	Systems Neuroscience	
NEUR 3303 [0.5]	The Neuroscience of Consciousness	

8. 1.5 credits in: 1.5

BIOL 1103 [0.5]	Foundations of Biology I	
BIOL 1104 [0.5]	Foundations of Biology II	
BIOL 3306 [0.5]	Human Anatomy and Physiology	

9. 1.0 credit from: 1.0

CHEM 1001 [0.5] & CHEM 1002 [0.5]	General Chemistry I General Chemistry II	
CHEM 1005 [0.5] & CHEM 1006 [0.5]	Elementary Chemistry I Elementary Chemistry II	

10. 1.0 credit in: 1.0

MATH 1007 [0.5]	Elementary Calculus I	
MATH 1107 [0.5]	Linear Algebra I	

11. 4.0 credits in free electives 4.0

C. Additional Requirements

12. School Language Proficiency Requirement must be satisfied

Total Credits 20.0

B.Sc. Honours in Linguistics with a Concentration in Linguistic Theory (Psychology) (20.0 credits)

A. Credits included in the Major CGPA (9.0 credits)

1. 1.0 credit in: 1.0

ALDS 1001 [0.5]	Language Matters: Introduction to ALDS	
LING 1001 [0.5]	Introduction to Linguistics I	

2. 1.0 credit in: 1.0

LING 2005 [0.5]	Linguistic Analysis	
LING 2007 [0.5]	Phonetics	

3. 1.0 credit in: 1.0

LING 3004 [0.5]	Syntax I	
LING 3007 [0.5]	Phonology I	

4. 1.0 credit in LING at the 4000 level 1.0

5. 1.5 credits in LING, excluding LING 1100 1.5

6. 3.5 credits from the Concentration: 3.5

a. 1.0 credit in:

LING 3005 [0.5]	Morphology I	
LING 3505 [0.5]	Semantics	

b. 1.0 credit from:

LING 4004 [0.5]	Syntax II	
LING 4005 [0.5]	Morphology II	
LING 4007 [0.5]	Phonology II	

LING 4505 [0.5]	Formal Semantics	
LING 4510 [0.5]	Lexical Semantics	

c. 1.5 credits in LING (excluding LING 1100)

B. Credits Not Included inthe Major CGPA (11.0 credits)

7. 3.5 credits in Psychology: 3.5

a. 2.0 credits in:

PSYC 1001 [0.5]	Introduction to Psychology I	
PSYC 1002 [0.5]	Introduction to Psychology II	
PSYC 2001 [0.5]	Introduction to Research Methods in Psychology	
PSYC 2002 [0.5]	Introduction to Statistics in Psychology	

b. 1.5 credits from:

PSYC 2307 [0.5]	Human Neuropsychology I	
PSYC 2700 [0.5]	Introduction to Cognitive Psychology	
PSYC 3307 [0.5]	Human Neuropsychology II	
PSYC 3506 [0.5]	Cognitive Development	
PSYC 3702 [0.5]	Perception	

8. 1.5 credits in: 1.5

BIOL 1103 [0.5]	Foundations of Biology I	
BIOL 1104 [0.5]	Foundations of Biology II	
BIOL 3306 [0.5]	Human Anatomy and Physiology	

9. 1.0 credit from: 1.0

CHEM 1001 [0.5] & CHEM 1002 [0.5]	General Chemistry I General Chemistry II	
CHEM 1005 [0.5] & CHEM 1006 [0.5]	Elementary Chemistry I Elementary Chemistry II	

10. 1.0 credit in: 1.0

MATH 1007 [0.5]	Elementary Calculus I	
MATH 1107 [0.5]	Linear Algebra I	

11. 4.0 credits in free electives 4.0

C. Additional Requirements

12. School Language Proficiency Requirement must be satisfied

Total Credits 20.0

B.Sc. Honours in Linguistics with a Concentration in Psycholinguistics and Communication Disorders (Computer Science) (20.0 credits)

A. Credits Included in the Major CGPA (9.0 credits)

1. 1.0 credit in: 1.0

ALDS 1001 [0.5]	Language Matters: Introduction to ALDS	
LING 1001 [0.5]	Introduction to Linguistics I	

2. 1.0 credit in: 1.0

LING 2005 [0.5]	Linguistic Analysis	
LING 2007 [0.5]	Phonetics	

3. 1.0 credit in: 1.0

LING 3004 [0.5]	Syntax I	
LING 3007 [0.5]	Phonology I	

4. 1.0 credit in LING at the 4000-level 1.0

5. 1.5 credits in LING, excluding LING 1100 1.5

6. 3.5 credits from the Concentration 3.5

a. 0.5 credit in:

LING 1002 [0.5]	Introduction to Linguistics II	

b. 2.0 credits in:

LING 2604 [0.5]	Communication Differences and Disabilities I
LING 3601 [0.5]	Language Processing and the Brain
LING 3603 [0.5]	Child Language
LING 3604 [0.5]	Communication Differences and Disabilities II

c. 1.0 credit from:

LING 4601 [0.5]	Cognitive Neuroscience of Language
LING 4603 [0.5]	First Language Acquisition
LING 4605 [0.5]	Psycholinguistic Research Methods
LING 4606 [0.5]	Statistics for Language Research

B. Credits Not Included in the Major CGPA (11.0 credits)

7. 4.0 credits in Computer Science Requirements		4.0

a. 1.5 credits in:

COMP 1005 [0.5]	Introduction to Computer Science I
COMP 1006 [0.5]	Introduction to Computer Science II
COMP 1805 [0.5]	Discrete Structures I

b. 1.5 credits in:

COMP 2401 [0.5]	Introduction to Systems Programming
COMP 2402 [0.5]	Abstract Data Types and Algorithms
COMP 2404 [0.5]	Introduction to Software Engineering

c. 1.0 credit from:

COMP 2406 [0.5]	Fundamentals of Web Applications
COMP 2804 [0.5]	Discrete Structures II
COMP 3000 [0.5]	Operating Systems
COMP 3002 [0.5]	Compiler Construction
COMP 3004 [0.5]	Object-Oriented Software Engineering
COMP 3005 [0.5]	Database Management Systems
COMP 3007 [0.5]	Programming Paradigms
COMP 3008 [0.5]	Human-Computer Interaction

8. 1.0 credit in:		1.0
MATH 1007 [0.5]	Elementary Calculus I	
MATH 1107 [0.5]	Linear Algebra I	
9. 6.0 credits in free electives		6.0

C. Additional Requirements

10. School Language Proficiency Requirement must be satisfied

11. Bachelor of Science Experimental Science Requirement must be satisfied

Total Credits	**20.0**

B.Sc. Honours in Linguistics with a Concentration in Psycholinguistics and Communication Disorders (Neuroscience) (20.0 credits)

A. Credits Included in the Major CGPA (9.0 credits)

1. 1.0 credit in:		1.0
ALDS 1001 [0.5]	Language Matters: Introduction to ALDS	
LING 1001 [0.5]	Introduction to Linguistics I	
2. 1.0 credit in:		1.0

LING 2005 [0.5]	Linguistic Analysis
LING 2007 [0.5]	Phonetics

3. 1.0 credit in:		1.0
LING 3004 [0.5]	Syntax I	
LING 3007 [0.5]	Phonology I	
4. 1.0 credit in LING at the 4000 level		1.0
5. 1.5 credits in LING, excluding LING 1100		1.5
6. 3.5 credits from the Concentration:		
a. 0.5 credit in:		0.5
LING 1002 [0.5]	Introduction to Linguistics II	
b. 2.0 credits in:		2.0
LING 2604 [0.5]	Communication Differences and Disabilities I	
LING 3601 [0.5]	Language Processing and the Brain	
LING 3603 [0.5]	Child Language	
LING 3604 [0.5]	Communication Differences and Disabilities II	
c. 1.0 credit from:		1.0
LING 4601 [0.5]	Cognitive Neuroscience of Language	
LING 4603 [0.5]	First Language Acquisition	
LING 4605 [0.5]	Psycholinguistic Research Methods	
LING 4606 [0.5]	Statistics for Language Research	

B. Credits Not Included in the Major CGPA (11.0 credits)

7. 3.5 credits in Neuroscience:		3.5

a. 2.0 credits in:

NEUR 1202 [0.5]	Neuroscience of Mental Health and Psychiatric Disease
NEUR 1203 [0.5]	Neuroscience of Mental Health and Neurological Disease
NEUR 2001 [0.5]	Introduction to Research Methods in Neuroscience
NEUR 2002 [0.5]	Introduction to Statistics in Neuroscience

b. 1.5 credits from:

NEUR 2201 [0.5]	Cellular and Molecular Neuroscience
NEUR 2202 [0.5]	Neurodevelopment and Plasticity
NEUR 3206 [0.5]	Sensory and Motor Neuroscience
NEUR 3207 [0.5]	Systems Neuroscience
NEUR 3303 [0.5]	The Neuroscience of Consciousness

8. 1.5 credits in:		1.5
BIOL 1103 [0.5]	Foundations of Biology I	
BIOL 1104 [0.5]	Foundations of Biology II	
BIOL 3306 [0.5]	Human Anatomy and Physiology	
9. 1.0 credit from:		1.0
CHEM 1001 [0.5] & CHEM 1002 [0.5]	General Chemistry I General Chemistry II	
CHEM 1005 [0.5] & CHEM 1006 [0.5]	Elementary Chemistry I Elementary Chemistry II	
10. 1.0 credit in:		1.0
MATH 1007 [0.5]	Elementary Calculus I	
MATH 1107 [0.5]	Linear Algebra I	
11. 4.0 credits in free electives		4.0

C. Additional Requirements

12. School Language Proficiency Requirement must be satisfied

Total Credits	20.0

B.Sc. Honours in Linguistics with a Concentration in Psycholinguistics and Communication Disorders (Psychology) (20.0 credits)

A. Credits Included in the Major CGPA (9.0 credits)

1. 1.0 credit in:		1.0
ALDS 1001 [0.5]	Language Matters: Introduction to ALDS	
LING 1001 [0.5]	Introduction to Linguistics I	
2. 1.0 credit in:		1.0
LING 2005 [0.5]	Linguistic Analysis	
LING 2007 [0.5]	Phonetics	
3. 1.0 credit in:		1.0
LING 3004 [0.5]	Syntax I	
LING 3007 [0.5]	Phonology I	
4. 1.0 credit in LING at the 4000 level		1.0
5. 1.5 credits in LING, excluding LING 1100		1.5
6. 3.5 credits from the Concentration		
a. 0.5 credit in:		0.5
LING 1002 [0.5]	Introduction to Linguistics II	
b. 2.0 credits in:		2.0
LING 2604 [0.5]	Communication Differences and Disabilities I	
LING 3601 [0.5]	Language Processing and the Brain	
LING 3603 [0.5]	Child Language	
LING 3604 [0.5]	Communication Differences and Disabilities II	
c. 1.0 credit from:		1.0
LING 4601 [0.5]	Cognitive Neuroscience of Language	
LING 4603 [0.5]	First Language Acquisition	
LING 4605 [0.5]	Psycholinguistic Research Methods	
LING 4606 [0.5]	Statistics for Language Research	

B. Credits Not Included in the Major CGPA (11.0 credits)

7. 3.5 credits in Psychology:		3.5
a. 2.0 credits in:		
PSYC 1001 [0.5]	Introduction to Psychology I	
PSYC 1002 [0.5]	Introduction to Psychology II	
PSYC 2001 [0.5]	Introduction to Research Methods in Psychology	
PSYC 2002 [0.5]	Introduction to Statistics in Psychology	
b. 1.5 credits from:		
PSYC 2307 [0.5]	Human Neuropsychology I	
PSYC 2700 [0.5]	Introduction to Cognitive Psychology	
PSYC 3307 [0.5]	Human Neuropsychology II	
PSYC 3506 [0.5]	Cognitive Development	
PSYC 3702 [0.5]	Perception	
8. 1.5 credits in:		1.5
BIOL 1103 [0.5]	Foundations of Biology I	
BIOL 1104 [0.5]	Foundations of Biology II	
BIOL 3306 [0.5]	Human Anatomy and Physiology	
9. 1.0 credit from:		1.0
CHEM 1001 [0.5] & CHEM 1002 [0.5]	General Chemistry I General Chemistry II	
CHEM 1005 [0.5] & CHEM 1006 [0.5]	Elementary Chemistry I Elementary Chemistry II	
10. 1.0 credit in:		1.0
MATH 1007 [0.5]	Elementary Calculus I	
MATH 1107 [0.5]	Linear Algebra I	
11. 4.0 credits in free electives		4.0

C. Additional Requirements

12. School Language Proficiency Requirement must be satisfied

Total Credits	20.0

School Language Proficiency Requirement

Students in B.A. Honours, Combined Honours, or 15 credit programs of the School of Linguistics and Language Studies are required, at graduation, to have a working knowledge of a language other than English. Proficiency is determined by successful completion of a 1.0 credit university course in the language or by an oral or written test given by the School.

B.Sc. Regulations

The regulations presented in this section apply to all Bachelor of Science programs. In addition to the requirements presented here, students must satisfy the University regulations common to all undergraduate students including the process of Academic Continuation Evaluation (see the *Academic Regulations of the University* section of this Calendar).

Breadth Requirement for the B.Sc.

Students in a Bachelor of Science program must present the following credits at graduation:

1. 2.0 credits in Science Continuation courses not in the major discipline; **students completing a double major are considered to have completed this requirement providing they have 2.0 credits in Science Continuation courses in each of the two majors;**
2. 2.0 credits in courses outside of the faculties of Science and Engineering and Design (may include NSCI 1000)

In most cases, the requirements for individual B.Sc. programs, as stated in this Calendar, contain these requirements, explicitly or implicitly.

Students admitted to B.Sc. programs by transfer from another institution must present at graduation (whether taken at Carleton or elsewhere):

1. 2.0 credits in courses outside of the faculties of Science and Engineering and Design (may include NSCI 1000) if the student received fewer than 10.0 transfer credits; or,
2. 1.0 credit in courses outside of the faculties of Science and Engineering and Design (may include NSCI 1000) if the student received 10.0 or more transfer credits.

Declared and Undeclared Students

Degree students are considered "Undeclared" if they have been admitted to a degree, but have not yet selected and been accepted into a program within that degree. The status "Undeclared" is available only in the B.A. and B.Sc. degrees. Undeclared students must apply to enter a program upon or before completing 3.5 credits.

Change of Program within the B.Sc. Degree

To transfer to a program within the B.Sc. degree, applicants must normally be *Eligible to Continue* (EC) in the new program, by meeting the CGPA thresholds described in Section 3.1.9 of the *Academic Regulations of the University.*

Applications to declare or change programs within the B.Sc. degree must be made online through Carleton Central by completing a Change of Program Elements (COPE) application form within the published deadlines. Acceptance into a program, or into a program element or option, is subject to any enrolment limitations, and/or specific program, program element or option requirements as published in the relevant Calendar entry.

Minors, Concentrations, and Specializations

Students may add a Minor, Concentration, or Specialization by completing a Change of Program Elements (COPE) application form online through Carleton Central. Acceptance into a Minor, Concentration, or Specialization normally requires that the student be *Eligible to Continue* (EC) and is meeting the minimum CGPAs described in Section 3.1.9 of the *Academic Regulations of the University*, as well as being subject to any specific requirements of the intended Minor, Concentration, or Specialization as published in the relevant Calendar entry.

Experimental Science Requirement

Students in a B.Sc. degree program must present at graduation at least two full credits of Experimental Science chosen from two different departments or institutes from the list below:

Approved Experimental Science Courses

Biochemistry	
BIOC 2200 [0.5]	Cellular Biochemistry
BIOC 4001 [0.5]	Methods in Biochemistry
BIOC 4201 [0.5]	Advanced Cell Culture and Tissue Engineering
Biology	
BIOL 1103 [0.5]	Foundations of Biology I
BIOL 1104 [0.5]	Foundations of Biology II
BIOL 2001 [0.5]	Animals: Form and Function
BIOL 2002 [0.5]	Plants: Form and Function
BIOL 2104 [0.5]	Introductory Genetics
BIOL 2200 [0.5]	Cellular Biochemistry
BIOL 2600 [0.5]	Ecology
Chemistry	
CHEM 1001 [0.5]	General Chemistry I
CHEM 1002 [0.5]	General Chemistry II
CHEM 1005 [0.5]	Elementary Chemistry I
CHEM 1006 [0.5]	Elementary Chemistry II
CHEM 2103 [0.5]	Physical Chemistry I
CHEM 2203 [0.5]	Organic Chemistry I
CHEM 2204 [0.5]	Organic Chemistry II
CHEM 2302 [0.5]	Analytical Chemistry I
CHEM 2303 [0.5]	Analytical Chemistry II
CHEM 2800 [0.5]	Foundations for Environmental Chemistry
Earth Sciences	
ERTH 1006 [0.5]	Exploring Planet Earth
ERTH 1009 [0.5]	The Earth System Through Time
ERTH 2102 [0.5]	Mineralogy to Petrology
ERTH 2404 [0.5]	Engineering Geoscience
ERTH 2802 [0.5]	Field Geology I
ERTH 3111 [0.5]	Vertebrate Evolution: Mammals, Reptiles, and Birds
ERTH 3112 [0.5]	Vertebrate Evolution: Fish and Amphibians
ERTH 3204 [0.5]	Mineral Deposits
ERTH 3205 [0.5]	Physical Hydrogeology
ERTH 3806 [0.5]	Structural Geology
Food Sciences	
FOOD 3001 [0.5]	Food Chemistry
FOOD 3002 [0.5]	Food Analysis
FOOD 3005 [0.5]	Food Microbiology
Geography	
GEOG 1010 [0.5]	Global Environmental Systems
GEOG 3108 [0.5]	Soil Properties
Neuroscience	
NEUR 3206 [0.5]	Sensory and Motor Neuroscience
NEUR 3207 [0.5]	Systems Neuroscience
NEUR 4600 [0.5]	Advanced Lab in Neuroanatomy
Physics	
PHYS 1001 [0.5]	Foundations of Physics I
PHYS 1002 [0.5]	Foundations of Physics II
PHYS 1003 [0.5]	Introductory Mechanics and Thermodynamics
PHYS 1004 [0.5]	Introductory Electromagnetism and Wave Motion
PHYS 1007 [0.5]	Elementary University Physics I
PHYS 1008 [0.5]	Elementary University Physics II
PHYS 2202 [0.5]	Wave Motion and Optics
PHYS 2604 [0.5]	Modern Physics I
PHYS 3007 [0.5]	Third Year Physics Laboratory: Selected Experiments and Seminars
PHYS 3606 [0.5]	Modern Physics II
PHYS 3608 [0.5]	Modern Applied Physics

Course Categories for B.Sc. Programs

Science Geography Courses

GEOG 1010 [0.5]	Global Environmental Systems
GEOG 2006 [0.5]	Introduction to Quantitative Research
GEOG 2013 [0.5]	Weather and Water
GEOG 2014 [0.5]	The Earth's Surface
GEOG 3003 [0.5]	Quantitative Geography
GEOG 3010 [0.5]	Field Methods in Physical Geography

GEOG 3102 [0.5]	Geomorphology
GEOG 3103 [0.5]	Watershed Hydrology
GEOG 3104 [0.5]	Principles of Biogeography
GEOG 3105 [0.5]	Climate and Atmospheric Change
GEOG 3106 [0.5]	Aquatic Science and Management
GEOG 3108 [0.5]	Soil Properties
GEOG 4000 [0.5]	Field Studies
GEOG 4005 [0.5]	Directed Studies in Geography
GEOG 4013 [0.5]	Cold Region Hydrology
GEOG 4017 [0.5]	Global Biogeochemical Cycles
GEOG 4101 [0.5]	Two Million Years of Environmental Change
GEOG 4103 [0.5]	Water Resources Engineering
GEOG 4104 [0.5]	Microclimatology
GEOG 4108 [0.5]	Permafrost

Science Psychology Courses

PSYC 2001 [0.5]	Introduction to Research Methods in Psychology
PSYC 2002 [0.5]	Introduction to Statistics in Psychology
PSYC 2700 [0.5]	Introduction to Cognitive Psychology
PSYC 3000 [1.0]	Design and Analysis in Psychological Research
PSYC 3506 [0.5]	Cognitive Development
PSYC 3700 [1.0]	Cognition (Honours Seminar)
PSYC 3702 [0.5]	Perception
PSYC 2307 [0.5]	Human Neuropsychology I
PSYC 3307 [0.5]	Human Neuropsychology II

Science Continuation Courses

A course at the 2000 level or above may be used as a Science Continuation credit in a B.Sc. program if it is not in the student's major discipline, and is chosen from the following:

BIOC (Biochemistry)

BIOL (Biology) Biochemistry students may use BIOL 2005 only as a free elective.

CHEM (Chemistry)

COMP (Computer Science) A maximum of two half-credits at the 1000-level in COMP, excluding COMP 1001 may be used as Science Continuation credits.

ERTH (Earth Sciences), except ERTH 2415 which may be used only as a free elective for any B.Sc. program. Students in Earth Sciences programs may use ERTH 2401, ERTH 2402, and ERTH 2403 only as free electives.

Engineering. Students wishing to register in Engineering courses must obtain the permission of the Faculty of Engineering and Design.

ENSC (Environmental Science)

FOOD (Food Science and Nutrition)

GEOM (Geomatics)

HLTH (Health Sciences)

ISAP (Interdisciplinary Science Practice)

MATH (Mathematics)

NEUR (Neuroscience)

PHYS (Physics), except PHYS 2903

Science Geography Courses (see list above)

Science Psychology Courses (see list above)

STAT (Statistics)

TSES (Technology, Society, Environment) except TSES 2305. Biology students may use these courses only as free electives. Integrated Science and Environmental Science students may include these courses in their programs but may not count them as part of the Science Sequence.

Science Faculty Electives

Science Faculty Electives are courses at the 1000-4000 level chosen from:

BIOC (Biochemistry)

BIOL (Biology) Biology & Biochemistry students may use BIOL 1010 and BIOL 2005 only as free electives

CHEM (Chemistry) except CHEM 1003, CHEM 1004 and CHEM 1007

COMP (Computer Science) except COMP 1001

ERTH (Earth Sciences) except ERTH 1010, ERTH 1011 and ERTH 2415. Earth Sciences students may use ERTH 2401, ERTH 2402, and ERTH 2403 only as free electives.

Engineering

ENSC 2001

FOOD (Food Science and Nutrition)

GEOM (Geomatics)

HLTH (Health Science)

ISAP (Interdisciplinary Science Practice)

MATH (Mathematics)

NEUR (Neuroscience)

PHYS (Physics) except PHYS 1901, PHYS 1902, PHYS 1905, PHYS 2903

Science Geography (see list above)

Science Psychology (see list above)

STAT (Statistics)

TSES (Technology, Society, Environment) Biology students may use these courses only as free electives.

Advanced Science Faculty Electives

Advanced Science Faculty Electives are courses at the 2000-4000 level chosen from the Science Faculty Electives list above.

Approved Courses Outside the Faculties of Science and Engineering and Design (may include NSCI 1000)

All courses offered by the Faculty of Arts and Social Sciences, the Faculty of Public Affairs, and the Sprott School of Business are approved as Arts or Social Sciences courses EXCEPT FOR: All Science Geography courses (see list above), all Geomatics (GEOM) courses, all Science Psychology courses (see list above). NSCI 1000 may be used as an Approved Course Outside the Faculties of Science and Engineering and Design.

Free Electives

Any course is allowable as a Free Elective providing it is not prohibited (see below). Students are expected to comply with prerequisite requirements and enrolment restrictions for all courses as published in this Calendar.

Courses Allowable Only as Free Electives in any B.Sc. Program

BIOL 4810 [0.5]	Education Research in Undergraduate Science

CHEM 1003 [0.5]	The Chemistry of Food, Health and Drugs
CHEM 1004 [0.5]	Drugs and the Human Body
CHEM 1007 [0.5]	Chemistry of Art and Artifacts
ERTH 1010 [0.5]	Our Dynamic Planet Earth
ERTH 1011 [0.5]	Evolution of the Earth
ERTH 2415 [0.5]	Natural Disasters
ISCI 1001 [0.5]	Introduction to the Environment
ISCI 2000 [0.5]	Natural Laws
ISCI 2002 [0.5]	Human Impacts on the Environment
MATH 0107 [0.5]	Algebra and Geometry
PHYS 1901 [0.5]	Planetary Astronomy
PHYS 1902 [0.5]	From our Star to the Cosmos
PHYS 1905 [0.5]	Physics Behind Everyday Life
PHYS 2903 [0.5]	Physics Towards the Future

Prohibited Courses

The following courses are not acceptable for credit in any B.Sc. program:

COMP 1001 [0.5]	Introduction to Computational Thinking for Arts and Social Science Students
MATH 0005 [0.5]	Precalculus: Functions and Graphs
MATH 0006 [0.5]	Precalculus: Trigonometric Functions and Complex Numbers
MATH 1009 [0.5]	Mathematics for Business
MATH 1119 [0.5]	Linear Algebra: with Applications to Business
MATH 1401 [0.5]	Elementary Mathematics for Economics I
MATH 1402 [0.5]	Elementary Mathematics for Economics II

Admissions Information

Admission requirements are based on the Ontario High School System. Prospective students can view the admission requirements through the Admissions website at admissions.carleton.ca. The overall average required for admission is determined each year on a program-by-program basis. Holding the minimum admission requirements only establishes eligibility for consideration; higher averages are required for admission to programs for which the demand for places by qualified applicants exceeds the number of places available. All programs have limited enrolment and admission is not guaranteed. Some programs may also require specific course prerequisites and prerequisite averages and/or supplementary admission portfolios. Consult admissions.carleton.ca for further details.

Note: If a course is listed as *recommended*, it is not mandatory for admission. Students who do not follow the recommendations will not be disadvantaged in the admission process.

Degrees

- B.Sc. (Honours)
- B.Sc. (Major)
- B.Sc.

Admission Requirements

B. Sc. Honours

First Year

The Ontario Secondary School Diploma (OSSD) or equivalent including a minimum of six 4U or M courses. For most programs including Biochemistry, Bioinformatics, Biotechnology, Chemistry, Combined Honours in Biology and Physics, Chemistry and Physics, Computational Biochemistry, Food Science, Nanoscience, Neuroscience and Biology, Neuroscience and Mental Health, and Psychology, the six 4U or M courses must include Advanced Functions, and two of Biology, Chemistry, Earth and Space Sciences, or Physics. (Calculus and Vectors is strongly recommended).

Specific Honours Admission Requirements

For the Honours programs in Earth Sciences, Environmental Science, Geomatics, Interdisciplinary Science and Practice, and Physical Geography, Calculus and Vectors may be substituted for Advanced Functions.

For the Honours programs in Physics and Applied Physics, and for double Honours in Mathematics and Physics, Calculus and Vectors is required in addition to Advanced Functions and one of 4U Physics, Chemistry, Biology, or Earth and Space Sciences. For all programs in Physics, 4U Physics is strongly recommended.

For Honours in Psychology, a 4U course in English is recommended.

For Honours in Environmental Science, a 4U course in Biology and Chemistry is recommended.

Advanced Standing

Applications for admission beyond first year will be assessed on their merits. Applicants must normally be *Eligible to Continue* in their year level, in addition to meeting the CGPA thresholds described in Section 3.1.9 of the Academic Regulations of the University. Advanced standing will be granted only for those subjects deemed appropriate for the program and stream selected.

B.Sc. Major and B.Sc.

First Year

The Ontario Secondary School Diploma (OSSD) or equivalent including a minimum of six 4U or M courses. The six 4U or M courses must include Advanced Functions and two of Calculus and Vectors, Biology, Chemistry, Earth and Space Science, or Physics (Calculus and Vectors is strongly recommended). For the B.Sc. Major in Physics, 4U Physics is strongly recommended.

Advanced Standing

Applications for admission beyond first year will be assessed on their merits. Applicants must normally be *Eligible to Continue* (EC) in their year level. Advanced standing will be granted only for those subjects deemed appropriate for the program and stream selected.

Co-op Option

Direct Admission to the First Year of the Co-op Option

Applicants must:

1. meet the required overall admission cut-off average and prerequisite course average. These averages may be higher than the stated minimum requirements;
2. be registered as a full-time student in the Bachelor of Science Honours program;
3. be eligible to work in Canada (for off-campus work placements).

Note that meeting the above requirements only establishes eligibility for admission to the program. The prevailing job market may limit enrolment in the co-op option.

Note: continuation requirements for students previously admitted to the co-op option and admission requirements for the co-op option after beginning the program are described in the Co-operative Education Regulations section of this Calendar.

Linguistics (LING) Courses

LING 1001 [0.5 credit]
Introduction to Linguistics I
Nature of language and linguistic knowledge. Formal description and analysis of language: phonetics, phonology, morphology, syntax and semantics.
Lecture and tutorial three hours a week.

LING 1002 [0.5 credit]
Introduction to Linguistics II
Survey of topics in linguistics: language change, sociolinguistics, language acquisition and processing. May include language typology, language contact and writing systems.
Prerequisite(s): LING 1001 (may be taken concurrently).
Lectures three hours a week.

LING 1100 [0.5 credit]
The Mysteries of Language
This course explores some intriguing mysteries of language - whether it is unique to humans, how children master its complexities so easily, how the brain handles language, how languages are born and die. These questions lead us to interesting discoveries about the human mind.
Lectures three hours a week.

LING 2005 [0.5 credit]
Linguistic Analysis
Phonological, morphological and syntactic analysis of linguistic data. Coursework consists primarily of practical exercises in data analysis.
Includes: Experiential Learning Activity
Prerequisite(s): LING 1001.
Lecture and tutorial three hours a week.

LING 2007 [0.5 credit]
Phonetics
Description of speech sounds; transcription systems; articulation; acoustics of speech sounds; perception of speech sounds; cross-linguistic diversity and phonetic universals; the role of phonetics in grammar.
Includes: Experiential Learning Activity
Precludes additional credit for LING 2001 (no longer offered).
Prerequisite(s): LING 1001.
Lecture and tutorial three hours a week.

LING 2504 [0.5 credit]
Language and Communication
Some of the central topics in the study of language and communication as pursued by linguists and philosophers. Topics include: the nature of meaning; the connections between language, communication and cognition; language as a social activity.
Also listed as PHIL 2504, COMS 2504.
Prerequisite(s): second-year standing.
Lectures three hours a week.

LING 2604 [0.5 credit]
Communication Differences and Disabilities I
A survey course highlighting a variety of communication differences and disabilities. Specific topics vary from year to year but typically will include speech, language, fluency and hearing differences and disabilities.
Also listed as ALDS 2604.
Prerequisite(s): second year standing or permission of the instructor.
Lectures three hours a week.

LING 2802 [0.5 credit]
History of the English Language
A historical study of the English language, its structure, variety, and cultural contexts,with an introduction to grammatical terminology and constructions.
Also listed as ENGL 2105.
Prerequisite(s): second-year standing or permission of the department.
Lectures three hours a week.

LING 3004 [0.5 credit]
Syntax I
Introduction to syntactic theory. Representation and analysis of sentence structure, syntactic relations and syntactic dependencies. Testing of grammatical hypotheses.
Includes: Experiential Learning Activity
Prerequisite(s): LING 2005.
Lecture and tutorial three hours a week.

LING 3005 [0.5 credit]
Morphology I
Introduction to word structure and morphological theory. Topics include inflectional and derivational morphology, morphological processes, and interaction of morphology with phonology and syntax.
Includes: Experiential Learning Activity
Prerequisite(s): LING 2005 and LING 2007.
Lectures three hours a week.

LING 3007 [0.5 credit]
Phonology I
The sound-systems of languages, analysis of phonological structure; generative phonology; phonological rules and derivations; cross-linguistic diversity and universals; segmental phonology; stress; tone.
Includes: Experiential Learning Activity
Precludes additional credit for LING 3002 (no longer offered).
Prerequisite(s): LING 2001 (no longer offered) or LING 2007.
Lecture and tutorial three hours a week.

LING 3009 [0.5 credit]
Special Topic in Linguistics
Selected topics in general linguistics not ordinarily treated in the regular course program. Contents of the course vary from year to year.
Lectures and discussion three hours per week.

LING 3504 [0.5 credit]
Pragmatics
The study of language in its conversational and cultural contexts. Topics include: conversational implicature; deixis; the semantics-pragmatics boundary; speaker's reference; speech acts. May include cross-cultural pragmatics.
Also listed as PHIL 3504.
Prerequisite(s): third-year standing, and one of LING 1001, PHIL 2001, PHIL 2504/COMS 2504/LING 2504 or PHIL 3506, or LING 3505 or permission of the Department of Philosophy or School of Linguistics and Language Studies.
Lectures three hours a week.

LING 3505 [0.5 credit]
Semantics
Study of language meaning. Lexical meaning and meanings of larger linguistic expressions, including nominal units, verbal units, and sentences. Meaning relationships between utterances. Relationship between linguistic meaning (semantics) and contextual meaning (pragmatics). Basic formal treatments of semantics.
Also listed as PHIL 3506.
Prerequisite(s): third-year standing, and one of LING 1001, PHIL 2001, PHIL 2504/LING 2504/COMS 2504 or PHIL 3504/LING 3504, or permission of the Department of Philosophy or School of Linguistics and Language Studies.
Lectures three hours a week.

LING 3601 [0.5 credit]
Language Processing and the Brain
Introduction to adult language processing and neurolinguistics. Psychological processes underlying speech production and perception, word recognition and sentence processing. Biological foundation and neuro-cognitive mechanisms of language. Experimental techniques and methodologies of current psycholinguistic studies.
Includes: Experiential Learning Activity
Also listed as PSYC 3709.
Prerequisite(s): LING 1001 or PSYC 2700 and second-year standing, or permission of the instructor.
Lectures three hours a week.

LING 3603 [0.5 credit]
Child Language
Milestones associated with the development of grammatical, pragmatic and metalinguistic competence from birth to about age ten, and the relative contributions of the environment, cognitive development and inborn knowledge to this development.
Includes: Experiential Learning Activity
Also listed as PSYC 3508.
Prerequisite(s): LING 1001 and second-year standing, or permission of the instructor.
Lectures three hours a week.

LING 3604 [0.5 credit]
Communication Differences and Disabilities II
An in-depth examination of select topics in the field of communication differences and disabilities. An emphasis is placed on theoretical accounts of specific differences and disabilities and the cross-linguistic evidence for these accounts. Specific topics may vary from year to year.
Also listed as ALDS 3604.
Prerequisite(s): LING 1001 and one of ALDS or LING 2604.
Lectures three hours a week.

LING 3701 [0.5 credit]
Corpus Linguistics
Computer-assisted analysis of electronic collections of naturally occurring language. Applications in such areas as language variation, grammar, lexicology, phraseology, translation, and learner language.
Includes: Experiential Learning Activity
Also listed as ALDS 3701.
Prerequisite(s): third-year standing in Applied Linguistics and Discourse Studies, or in Linguistics, or enrolment in the CTESL program, or permission of the instructor.
Lectures three hours a week.

LING 3702 [0.5 credit]
Sociolinguistics
The place of language within society; bilingual and multilingual communities; language, social mobility and social stratification; sociolinguistic factors in language change.
Also listed as ALDS 3202.
Precludes additional credit for ALDS 2701 (no longer offered).
Prerequisite(s): ALDS 1001 and third-year standing.
Lecture three hours a week.

LING 3801 [0.5 credit]
Structure of a Specific Language
Description and analysis of the structure of a specific language applying phonology, morphology, syntax, and semantics. Language to be studied will be announced in advance by the School.
Prerequisite(s): LING 2001 (no longer offered) or LING 2005 or LING 2007.
Lectures three hours a week.

LING 3810 [0.5 credit]
Historical Linguistics I
Language change; sound change; analogy; the comparative method; internal reconstruction; the philological method; historical linguistics and pre-history; language change and theories of grammar.
Precludes additional credit for LING 3101 (no longer offered).
Prerequisite(s): LING 2007.
Lectures three hours a week.

LING 3811 [0.5 credit]
Language Typology and Universals
Cross-linguistic survey of syntactic and morphological patterns found in the languages of the world. Typological classification and identification of language universals.
Includes: Experiential Learning Activity
Precludes additional credit for LING 3001 (no longer offered).
Prerequisite(s): LING 2005.
Lectures three hours a week.

LING 3900 [1.0 credit]
Independent Study
Research under the supervision of a member of the School. Normally available only to third- and fourth-year students in Linguistics.
Includes: Experiential Learning Activity
Prerequisite(s): permission of the instructor.

LING 3901 [0.5 credit]
Independent Study
Research under the supervision of a member of the School. Normally available only to third- and fourth-year students in Linguistics.
Includes: Experiential Learning Activity
Prerequisite(s): permission of the instructor.

LING 4004 [0.5 credit]
Syntax II
Advanced topics in syntax.
Includes: Experiential Learning Activity
Precludes additional credit for LING 4002 (no longer offered).
Prerequisite(s): LING 3004 and third-year standing.
Seminars three hours a week.

LING 4005 [0.5 credit]
Morphology II
Advanced topics in morphology.
Includes: Experiential Learning Activity
Prerequisite(s): LING 3005 and third-year standing.
Seminars three hours a week.

LING 4007 [0.5 credit]
Phonology II
Advanced topics in phonology.
Includes: Experiential Learning Activity
Precludes additional credit for LING 4001 (no longer offered).
Prerequisite(s): LING 3007, and third-year standing.
Seminars three hours a week.

LING 4009 [0.5 credit]
Special Topic in Linguistics
Examination of a topic or more specialized area in linguistics or language study. Topic to be announced.
Repeatable for credit when the topic changes.
Prerequisite(s): third- or fourth-year standing in Linguistics or permission of the instructor.
Also offered at the graduate level, with different requirements, as LING 5009, for which additional credit is precluded.
Seminars three hours a week.

LING 4412 [0.5 credit]
Diversité du français
Études des variétés du français, dans ses dimensions spatiales. Le contenu précis de ce cours varie selon les années. Consulter le site web du Département de français pour obtenir les détails. The course is taught in French, but students will submit written assignments in English.
Also listed as FREN 4412.
Prerequisite(s): FREN 2401 and FREN 3050, or permission of the Department.
Also offered at the graduate level, with different requirements, as FREN 5412 and LING 5412, for which additional credit is precluded.
Seminars three hours a week.

LING 4413 [0.5 credit]
Diachronie du français
Étude du français, dans ses dimensions historiques.
Le contenu précis de ce cours varie selon les années.
Consulter le site web du Département de français pour
obtenir les détails. The course is taught in French, but
students will submit written assignments in English.
Also listed as FREN 4413.
Prerequisite(s): FREN 2401 and FREN 3050, or
permission of the Department.
Also offered at the graduate level, with different
requirements, as FREN 5413 and LING 5413, for which
additional credit is precluded.
Seminars three hours a week.

LING 4414 [0.5 credit]
Analyse du français
Étude du français, dans ses dimensions morphologiques,
syntaxiques ou phonologiques. Le contenu précis de
ce cours varie selon les années. Consulter le site web
du Département de français pour obtenir les détails.
Course is taught in French, but students will submit written
assignments in English.
Also listed as FREN 4414.
Prerequisite(s): FREN 2401 and FREN 3050, or
permission of the Department.
Also offered at the graduate level, with different
requirements, as FREN 5414 and LING 5414, for which
additional credit is precluded.
Seminars three hours a week.

LING 4415 [0.5 credit]
Variation du français
Étude des variations internes de la langue, dans des
dimensions orales/écrites. Le contenu précis de ce
cours varie selon les années. Consulter le site web du
Département de français pour obtenir les détails. Course
is taught in French, but students submit assignments in
English.
Also listed as FREN 4415.
Prerequisite(s): FREN 2401 and FREN 3050, or
permission of the Department.
Also offered at the graduate level, with different
requirements, as FREN 5415 and LING 5415, for which
additional credit is precluded.
Seminars three hours a week.

LING 4505 [0.5 credit]
Formal Semantics
Advanced topics in compositional semantics and its
interfaces. Topics may include: logic, semantic types,
lambda calculus, intentional contexts, possible world
semantics, interfaces with syntax and pragmatics
quantification, anaphora, presupposition, implicatures,
scope and binding, and model theory.
Includes: Experiential Learning Activity
Also listed as PHIL 4505.
Prerequisite(s): LING 3505 or PHIL 3506, and third-year
standing, or permission of the Department of Philosophy
or School of Linguistics and Language Studies.
Seminars three hours a week.

LING 4510 [0.5 credit]
Lexical Semantics
Study of the meaning of words. Topics may include lexical
decomposition, meaning variation, lexical relations, and
lexical aspect.
Includes: Experiential Learning Activity
Also listed as PHIL 4055.
Precludes additional credit for LING 4055 (no longer
offered).
Prerequisite(s): LING 3505 or PHIL 3506, and third-year
standing.
Also offered at the graduate level, with different
requirements, as LING 5510, for which additional credit is
precluded.
Seminar three hours a week.

LING 4601 [0.5 credit]
Cognitive Neuroscience of Language
Further study of psychological and neurolinguistic
mechanisms of adult language processing. May include
topics from first language acquisition.
Includes: Experiential Learning Activity
Prerequisite(s): LING 3601 or permission of the instructor.
Also offered at the graduate level, with different
requirements, as LING 5601, for which additional credit is
precluded.
Seminars three hours a week.

LING 4603 [0.5 credit]
First Language Acquisition
Advanced topics in language acquisition and development
and the relative contributions of the environment, cognitive
development, and inborn knowledge.
Includes: Experiential Learning Activity
Prerequisite(s): LING 1001 and LING 3603.
Also offered at the graduate level, with different
requirements, as LING 5603, for which additional credit is
precluded.
Seminars three hours a week.

LING 4604 [0.5 credit]
Practicum in Speech Language Pathology
Through seven-hour-a-week field placements, students
pursue personal learning objectives concerning the clinical
application of the psycholinguistics of communication
disorders and cognitive development. A term paper
integrates experiential knowledge gained in the placement
with theoretical and empirical knowledge gained from the
student's program of study.
Includes: Experiential Learning Activity
Prerequisite(s): LING 3604, fourth-year Honours standing
in B.A. or B.Sc. in Linguistics with a Concentration in
Psycholinguistics and Communication Disorders with
a CGPA of 10.0 in the major, and permission from the
School of Linguistics and Language Studies.
Field placement one day a week.

LING 4605 [0.5 credit]
Psycholinguistic Research Methods
Experimental methodologies used in current psycholinguistic studies. Topics include experimental design and techniques, descriptive statistics, and interpreting and reporting research findings.
Includes: Experiential Learning Activity
Precludes additional credit for LING 4009 Section "A" (2015-16 and 2016-17) and LING 4009 Section "B" (2013-14) and LING 4009 Section "C" (2017-18).
Prerequisite(s): third- or fourth-year Honours standing in Linguistics or Cognitive Science, or permission of the instructor.
Also offered at the graduate level, with different requirements, as LING 5605, for which additional credit is precluded.
Seminar three hours a week.

LING 4606 [0.5 credit]
Statistics for Language Research
Application of statistical procedures to analysis of language data and to problems of measurement in experimental linguistics, applied linguistics, psycholinguistics, and related fields.
Includes: Experiential Learning Activity
Also listed as ALDS 4606.
Precludes additional credit for ALDS 4906/LING 4009 Section "B" if taken Winter 2015 or Winter 2016.
Prerequisite(s): Third-year standing in Linguistics or Applied Linguistics and Discourse Studies or Cognitive Science, or permission of the instructor.
Also offered at the graduate level, with different requirements, as LING 5606 and ALDS 5604, for which additional credit is precluded.
Seminar three hours a week.

LING 4801 [0.5 credit]
Linguistic Field Methods
With a language consultant, students discover the phonological, morphological, and syntactic structures of the target language using linguistic elicitation. Language will vary from year to year, but will normally be a non-European language. Language documentation, data management, ethical issues surrounding research in Indigenous communities.
Includes: Experiential Learning Activity
Prerequisite(s): LING 2005 and LING 2007.
Also offered at the graduate level, with different requirements, as ALDS 5801, for which additional credit is precluded.
Lectures three hours a week.

LING 4802 [0.5 credit]
Historical Linguistics: English
A theory-intensive course that will study the development of English starting with Proto-Indo-European progressing through Common Germanic to the stages of English itself. Topics include phonological sound changes, phonemic inventories, and morphological and syntactic typology.
Precludes additional credit for LING 4101 (no longer offered).
Prerequisite(s): LING 2005 and LING 2007, and one of LING 3005, LING 3810 or LING 3811.
Also offered at the graduate level, with different requirements, as LING 5802, ENGL 5101., for which additional credit is precluded.
Seminars three hours a week.

LING 4805 [0.5 credit]
Old English
Studies in Old English literature and its cultural and historical contexts. Instruction in grammar to facilitate reading knowledge of the Old English language.
Also listed as ENGL 4105.
Precludes additional credit for ENGL 3102 (no longer offered).
Prerequisite(s): fourth-year standing or permission of the department.
Seminar or lecture three hours a week.

LING 4900 [1.0 credit]
Independent Study in Linguistics
Permits fourth-year Honours students to pursue their interests in a selected area of linguistics.
Prerequisite(s): permission of the instructor.

LING 4901 [0.5 credit]
Independent Study in Linguistics
Permits fourth-year Honours students to pursue their interests in a selected area of linguistics.
Prerequisite(s): permission of the instructor.

LING 4905 [1.0 credit]
Honours Project in Experimental Linguistics
Students choose existing study in linguistic literature, replicate the study, present findings, compare to original study. Practical experience gathering and preparing materials, running experiments, analyzing data, interpreting findings; real, important contributions to the field of linguistics via replication studies (as mandated by the scientific method).
Includes: Experiential Learning Activity
Precludes additional credit for LING 4910.
Prerequisite(s): fourth-year Honours standing in Linguistics, with a Major CGPA of 9.0, and permission of the instructor.
Unscheduled.

LING 4910 [1.0 credit]
Honours Thesis in Linguistics
A thesis project selected in consultation with the School
and carried out under the direction of a faculty supervisor.
Includes: Experiential Learning Activity
Precludes additional credit for LING 4905.
Prerequisite(s): fourth-year Honours standing in Linguistics
with a CGPA of 10.0 in the major; one of LING 3004,
LING 3007, LING 3505, or LING 3601; and permission of
the instructor.