

Course selection for Integrated Science

Integrated Science is a full-time, first-year program designed to prepare BSc students for undergraduate science honours degrees. The program emphasizes the connections among the different science disciplines and provides students with research training and experience. The core program is equivalent to two terms of Biology, two terms of Psychology, one term each of Statistics, Earth Sciences, Science Writing and Research, and Science Communication and Research. Science Writing and Research, together with PHIL 1050 (Ethics in Science), fulfills the writing requirement for BSc students.

In the fall, students have lectures, laboratories and field trips in Biology, Psychology and Statistics, and receive training in research skills (experimental design, analysis, scientific writing). The winter term consists of lectures and laboratories in Biology, Psychology and Earth Sciences, and students conduct a 10-week research project in a Dalhousie or Dalhousie affiliated research lab. Students present results of their research at a conference-style event. Students also register for several other science courses; these are taken along with other BSc students, typically in larger classes. Students take a full year of Chemistry (CHEM 1011.03 in fall and CHEM 1012.03 in winter), and one or two terms of Calculus (see below).

Courses taken within the program core by the 80 student DISP cohort (dark gray). Courses taken with other BSc students (light gray required, light yellow choice required, dark yellow optional)

Fall term (18-21 credit hours)	BIOL 1501.03 Integrated Introductory Biology I	PSYO 1501.03 Integrated Introductory Psychology I	STAT 1501.03 Integrated Introductory Statistics	SCIE 1551.03 Integrated Science Writing and Research	PHIL 1050.03 Ethics in Science
	CHEM 1011.03 Concepts in Chemistry I	MATH 1000.03 OR take MATH 1215.03 in winter	PHYC 1190.03 OR PHYC 1310.03 (Intro Physics I)		
Winter (18-21 credit hours)	BIOL 1502.03 Integrated Introductory Biology II	PSYO 1502.03 Integrated Introductory Psychology II	ERTH 1501.03 Integrated Introductory Geology I	SCIE 1552.03 Integrated Science Communications and Research	
	CHEM 1012.03 Concepts in Chemistry II	MATH 1215.03 OR take MATH 1000.03 in fall	MATH 1010.03 (taken after MATH 1000.03)	PHYC 1290.03 OR PHYC 1320.03 (Intro Physics II)	

DISP students take 18 credit hours each term, equivalent to one extra course each term. A regular full course load is 15 credit hours per term. Students taking Physics, or a full year of calculus (Math 1000+1010) will have a further course overload and should expect a significantly heavier workload.

Math and physics requirements by BSc degree program. For Math, students choose EITHER Life Sciences Calculus (MATH 1215.03) OR Differential and Integral Calculus I + II (MATH 1000.03 + MATH 1010.03). If considering Physics courses, please consult the course descriptions for PHYC 1190/1290 and PHYC 1310/1320 in the Academic Calendar. *For double majors, consider requirements for both majors when selecting courses.*

Degree Program	Math 1215	Math 1000+1010	Physics I 1190/1310	Physics II 1290/1320	Notes
Actuarial Science		•			
Biochemistry & Molecular Biology	•				
Biology	•				
Chemistry		•	•	•	Physics can be taken in second year
Earth Science	•	•*	•	•	Physics can be taken in second year. Students pursuing Professional Geologist should take PHYC 1190/1290 & Math 1000/1010. *Earth majors take Math 1215 or 1000 (1010 optional).
Economics		•			
Environmental Science	•				
Marine Biology	•				
Mathematics		•			
Medical Sciences	•		•		Physics 1310 is normally taken in 3 rd year
Microbiology & Immunology	•				
Neuroscience	•				
Ocean Sciences		•	•	•	Physics can be taken in second year
Physics & Atmospheric Science		•	•	•	Students will need to defer Math or Chemistry to summer OR second year if they wish to take Physics within the 21-credit hour/term limit
Psychology	•				
Statistics		•			

Math 1215.03 and 1000.03 are equivalent. Students achieving B in 1215 may continue to 1010.03 in a later year.

Students considering Physics as a Major should contact Dr. Gabrielle Tompkins to discuss whether the DISP program is the best fit, or to discuss options for meeting course requirements within 21 credit hours per term. *Physics 1310, Math 1000/1010, and Chem 1011/1012 are also offered summer term.*

BSc degree requirements and the Integrated Science program

Requirement	Covered by
Mathematics (6 credit hours)	STAT 1501.03 + MATH 1215.03 or MATH 1000.03
Social Science (6 credit hours)	PSYO 1501.03 + PSYO 1502.03
Life/Physical Science (6 credit hours)	Biology, Earth Science, Psychology, Chemistry
Languages & Humanities (6 credit hours)	PHIL 1050.03 + additional 3 credits before graduating
Writing (6 credit hours)	PHIL 1050.03 + SCIE 1551.03

Integrated Science is a unique program housed in the Faculty of Science at Dalhousie University. See disp.science.dal.ca or for additional details, or contact the DISP Director at 902-494-8496, or disp@dal.ca.