# A Dalhousie head start for high school students

# Online science courses - A Nova Scotia First

Scotia can now get a head start on university, with innovative new online classes at Dalhousie.

Two web-based biology courses are now available to motivated high school students who seek advanced academic challenges. For the first time, students from Yarmouth to Glace Bay can earn credits toward a university degree, before leaving high school.

The first class begins in February 2007. It's open to Grade 12 students with an 80 per cent average and access to the internet. Students can get a taste of the university experience and the life sciences, with weekly assignments and quizzes as well as a term project, formal lab reports, a midterm and final exam. With one teaching assistant per 20 students, assistance for any question or problem is just an e-mail or phone call away.

The online classes - BIOL 1020 and 1021 — were launched in 2003/2004 to provide students greater flexibility in their class schedules. The courses are designed to be highly interactive, web-based equivalents to the classroom based Introductory Biology classes (BIOL 1010 and 1011). The first lesson in each class is an orientation session designed to familiarize students with the technical workings of the



class. Laboratory experiments and exercises are conducted with use of computer simulation and other tools and by practical assignments. Students communicate regularly with classmates and instructors via discussion boards, internal e-mail and chat rooms.

#### A solid head start

Both courses count as prerequisites for a number of higher-level Dalhousie science courses, and can satisfy science electives in arts and social sciences programs. Completing one or both classes before arriving at the university will allow students to proceed to second-year biology classes more quickly. It's a solid head start for pursuing medicine, dentistry, the health professions, marine sciences and much more.

The classes introduce students to the language, concepts and practice of biology. BIOL 1020 deals with structures and processes common to all organisms including cell structure and function, Mendelian and molecular genetics, and evolution. BIOL 1021 looks at biodiversity, whole organism structure and function, and ecological relationships.

For more details see: biology.dal.ca/online/



www.dal.ca

alhousie appreciates the assistance of principals, teachers and guidance counsellors who create awareness of this unique educational opportunity for Nova Scotia high school students.

Deadline for enrolment applications for the February class is November 30. There is no application fee.

For further information or to apply, students should contact:

The Office of the Registrar Dalhousie University

E-mail: registrar@dal.ca PHONE: (902) 494-2450 FAX: (902) 494-1630

biology.dal.ca/online/ www.registrar.dal.ca/

### Admission requirements

- Completion of Grade 11
- 80 per cent average and in good standing
- High school biology and/or chemistry are recommended as background

#### Textbook

Biology: Concepts and Connections, 5th ed., N.A. Campbell, J.B. Reece, M.R. Taylor, E.J. Simon. Benjamin Cummings/Pearson Education Inc. (2006) + Student Access Kit.

Available at the Dalhousie bookstore.



## **Technical requirements**

Students' computers should have the following minimum standards or their equivalents:

- Browsers: Netscape 6 or Microsoft Internet Explorer 4.5
- Modem: 28.8 Kb
- E-mail
- Word processing software (ie. Microsoft Word or WordPerfect)
- Basic drawing or painting software (ie. Paint) that can produce simple electronic images in .gif or .jpg formats
- Plugins: Adobe Acrobat Reader, RealAudio, Quicktime, Macromedia Flash and Shockwave Players
- CD-ROM drive
- speakers (to take advantage of the multimedia elements of the class)
- printer, scanner and microphone (optional, but useful)

We look forward to talking with you and welcoming your students to Dalhousie.



biology.dal.ca/online/