200.B0

Dawson College

Science Program

200.E2
Environmental Science

200.H1/P1
First Choice

200.H2
Health Science

200.P2
Pure & Applied Science

081.62
Explorations Science

081.64
Developmental Science

DISCOVER

DAWSON COLLEGE

DAWSON COLLEGE'S SCIENCE PROGRAM

Dawson College's Science Program cultivates student curiosity, motivation and academic excellence. The program is student-centered and aims to:

- **Provide students with a well-rounded general and scientific education;**
- **Prepare students for university-level Science studies;**
- **Foster the student's view of herself/himself as a scientist;**
- **Encourage original academic achievement through in-class assignments and various Science-centered activities, and celebrate it by supporting such presentation and publication venues as DrJES and SPACE;**
- **Encourage student involvement in the wider scientific community and in society at large.**

ADMISSION TO THE SCIENCE PROGRAM

Conditional admission to Dawson College requires a **Diploma of Secondary Studies (DES)**, including:

- **Secondary V Language of Instruction**
- **Secondary V Second Language**
- **Secondary IV Science**
- **Secondary IV Mathematics**
- **Secondary IV History**
- **OR academic background judged equivalent to the DES.**

Conditional admission to Dawson's Science Program requires that a student obtain acceptable grades in the following Science pre-requisites:

- **Mathematics Science and Technology 564-506 OR Mathematics Science 565-506**
- **Chemistry 551-504**
- **Physics 553-504**
- **OR corresponding content**

Conditional admission is based on Secondary IV final and Secondary V mid-term grades. Final admission into the Science Program is contingent on obtaining a DES which includes the pre-requisite courses with appropriate grades.

The number of students that Dawson College can accept into the Science Program is limited; therefore students with the highest grades in high school have a better chance of being admitted.

Applications must be received by:

- **March 1 for admission into the Fall semester**
- **November 1 for admission into the Winter semester**

PROFILES OF STUDY IN THE SCIENCE PROGRAM

The Science Program offers three (3) profiles of study which qualifies students for admission to university.

- **Pure and Applied Science emphasizes preparation for the Physical Sciences, Engineering and Mathematics;**
- **Health Science emphasizes preparation for the Biological Sciences, Medicine and Dentistry;**
- **Environmental Science emphasizes preparation for the Biological Sciences as well as the Environmental Sciences and Ecology.**

Important: Regardless of which profile of studies is chosen, completion of a Diplôme d'Études Collègiales (DEC) in the Science Program at Dawson allows entrance into any university program.

First Choice Science

In addition to being in a profile, a Science student is in one of two streams:

- **Regular Science**
- **OR First Choice Science**

First Choice Science (FCS) offers an enriched curriculum – one that provides the opportunity to delve deeper into the subject material, visit more topics, or explore connections across the disciplines, for example. In addition, FCS students are exposed to advanced ideas through a seminar series where speakers from academia and industry make presentations on current progress in the sciences. Attendance at these seminars is compulsory for FCS students.

FCS students are grouped in their science and math courses, so they have the opportunity to develop a camaraderie and ésprit-de-corps. The groupings also afford them the opportunity to participate together in activities sponsored by the Science Program and the College.

Admission to FCS is **by invitation only** and is based on outstanding Secondary V grades.

Students already in the Science Program may apply for a transfer into FCS by making a formal program transfer request to the College as well as to the First Choice Science Coordinator.

Developmental Science Program

The Developmental Science Program is a one-year program preparing students for entry into Dawson College's Science Program and is for students whose grades in at least one of the Science pre-requisites do not meet admission requirements for the Science Program.

Successful completion of Developmental Science qualifies the student for admission to pre-university or technical programs. Students must apply to and meet the criteria for transfer into the program in which they wish to continue their studies.

Explorations Science Program

Explorations Science Program is a one-year program preparing students for entry into Dawson College's Science Program and is designed for students whose overall average meets the requirements for admission into the Science Program, but who did not complete one or more of the Science pre-requisites in high school.

Successful completion of Explorations Science qualifies the student for admission to pre-university or technical programs. Students must apply to and meet the criteria for transfer into the program in which they wish to continue their studies.

Science Program Courses

Students take a total of 26 courses in the Science Program over two years (four semesters). These courses are divided between General Education (English, French, Humanities, Physical Education and Complementary) and Science as follows:

- **14 General Education courses**
  - » 4 English
  - » 3 Humanities
  - » 2 French
  - » 3 Physical Education
  - » 2 Complementary (any non-science discipline)

Students admitted into the Science Program will be required to take English and French Placement Tests so as to be placed in the appropriate levels of English and French instruction. Placement Tests are scheduled by Dawson College and are by appointment only; the appointment letter is included in the acceptance package mailed to students after their request for admission has been granted.

- **9 Compulsory Science Courses (regardless of profile)**
  - » 1 Biology course (General Biology I)
  - » 2 Chemistry courses (General Chemistry; Chemistry of Solutions)
  - » 3 Mathematics courses (Calculus I; Calculus II; Linear Algebra)
  - » 3 Physics courses (Mechanics; Waves, Optics & Modern Physics; Electricity & Magnetism)
- **Selection of Science Option Courses**
  - » Pure & Applied Science students are free to choose their three option courses.
  - » Health Science students are required to do General Biology II and Organic Chemistry I and have one free option course.
  - » Environmental Science students are required to do General Biology II, Organic Chemistry I and Environmental Biology.

List of Science Option Courses

- General Biology II
- Probability and Statistics
- Human Anatomy and Physiology
- Calculus III
- Environmental Biology
- Astrophysics
- Organic Chemistry I
- Organic Chemistry II
- Engineering Physics
- Physical Geology
- Introduction to Computer Programming in Engineering and Science*

***Note:** Students who have taken a complementary course in Computer Science cannot take this course.

Pure & Applied Science
Profile

1st Semester - 7 courses

- Calculus I
- General Chemistry
- **Mechanics**

English
Humanities
Physical Education
Complementary Course

2nd Semester - 7 courses

- Chemistry of Solutions
- Calculus II
- **Waves, Optics & Modern Physics**

English
French
Humanities
Physical Education

3rd Semester - 6 courses

- **General Biology I**
- **Electricity & Magnetism**
- **Linear Algebra**

English
Physical Education
Complementary Course

4th Semester - 6 courses

- **Science Option**
- **Science Option**
- **Science Option**

English
French
Humanities

Courses in bold show differences between the Health Science, Environmental Science and Pure & Applied Science profiles.

In addition to these courses, students in the Science Program must pass a Comprehensive Examination and an English Exit Test in order to graduate.

Health Science
Profile

1st Semester - 7 courses

- Calculus I
- General Chemistry
- **Mechanics**

English
French
Humanities
Physical Education

2nd Semester - 7 courses

- Chemistry of Solutions
- Calculus II
- **General Biology I**

English
Humanities
Physical Education
Complementary Course

3rd Semester - 6 courses

- **Organic Chemistry I**
- **Waves, Optics & Modern Physics**
- **General Biology II**

English
French
Physical Education

4th Semester - 6 courses

- **Linear Algebra**
- **Electricity & Magnetism**
- **Science Option**

English
Humanities
Complementary Course

Courses in bold show differences between the Health Science, Environmental Science and Pure & Applied Science profiles.

In addition to these courses, students in the Science Program must pass a Comprehensive Examination and an English Exit Test in order to graduate.

Environmental Science
Profile

1st Semester - 7 courses

- Calculus I
- General Chemistry
- **General Biology I**

English
French
Humanities
Physical Education

2nd Semester - 7 courses

- Chemistry of Solutions
- Calculus II
- **Mechanics**

English
Humanities
Physical Education
Complementary Course

3rd Semester - 6 courses

- **Organic Chemistry I**
- **Waves, Optics & Modern Physics**
- **Environmental Biology**

English
French
Physical Education

4th Semester - 6 courses

- **Linear Algebra**
- **Electricity & Magnetism**
- **General Biology II**

English
Humanities
Complementary Course

Courses in bold show differences between the Health Science, Environmental Science and Pure & Applied Science profiles.

In addition to these courses, students in the Science Program must pass a Comprehensive Examination and an English Exit Test in order to graduate.

Developmental Science Program

Conditional admission to Dawson's Developmental Science Program requires that a student's passing grades are too low for direct admission to a regular pre-university science or technical program in the following Science pre-requisites:

- **Mathematics Science and Technology 564-506 or Mathematics Science 565-506 (or corresponding content)**
- **Chemistry 551-504 (or corresponding content)**
- **Physics 553-504 (or corresponding content)**

Conditional admission is based on Secondary IV final and Secondary V mid-term grades. Final admission into the Developmental Science Program is contingent on obtaining a DES which includes the pre-requisite courses with appropriate grades.

- **Applications must be received by March 1 for admission into the Fall semester.**
- **There is no admission into Developmental Science in the Winter semester.**

Course Grid

- **1st Semester – 6 courses**
  - » Remedial Activities for Sec V Mathematics OR **Calculus I**
  - » Remedial Activities for Sec V Chemistry OR **General Chemistry**
  - » Remedial Activities for Sec V Physics OR **Mechanics**
  - » **Physical Education**
  - » **Humanities**
  - » **English**
- **2nd Semester – 7 courses**
  - » **Calculus I** OR **Calculus II**
  - » **General Chemistry** OR **Chemistry of Solutions**
  - » **Mechanics** OR **Waves, Optics and Modern Physics**
  - » **Physical Education**
  - » **Humanities**
  - » **English**
  - » **French**

Courses in bold contribute towards graduation in the pre-university Science Program.

Explorations Science Program

Conditional admission to Dawson's Explorations Science Program requires that a student obtain acceptable grades in the following Science pre-requisite:

- **Mathematics Science and Technology 564-406 or Mathematics Science 565-406 (or corresponding content)**

Conditional admission is based on Secondary IV final and Secondary V mid-term grades. Final admission into Explorations Science Program is contingent on obtaining a DES which includes the pre-requisite courses with appropriate grades.

- **Applications must be received by March 1 for admission into the Fall semester.**
- **There is no admission into Explorations Science in the Winter semester.**

Course Grid (note that courses will depend on the student's placement and completion of high school mathematics and science courses)

- **1st Semester – 5 or 6 courses**
  - » Remedial Activities for Sec V Mathematics OR **Calculus I**
  - » Remedial Activities for Sec V Chemistry AND Remedial Activities for Sec V Physics OR Remedial Activities for Sec IV Science
  - » **Physical Education**
  - » **Humanities**
  - » **English**
- **2nd semester – 7 courses**
  - » **Calculus I** OR **Calculus II**
  - » **General Chemistry** OR Remedial Activities for Sec V Chemistry
  - » **Mechanics** OR Remedial Activities for Sec V Physics
  - » **Physical Education**
  - » **Humanities**
  - » **English**
  - » **French**

Courses in bold contribute towards graduation in the pre-university Science Program.

FREQUENTLY ASKED QUESTIONS

When reviewing my application, which grades are looked at?

Dawson calculates an overall average based on Secondary IV final and Secondary V mid-term grades. For pre-requisite courses, the Admissions Office looks at Secondary V mid terms. If the grades meet the criteria, students are sent a conditional offer of admission. Admission is always contingent on the student obtaining their Diplôme d'Études Secondaires (DES), including their pre-requisite courses with the appropriate grades.

Are my grades looked at in July?

Yes. Final grades are received from the Ministère de l'Éducation, des Loisirs et des Sports (MELS) and reviewed to ensure that students have obtained their high school diploma and maintained appropriate grades in their pre-requisite courses. Depending on those grades, students may be moved from regular Science to Developmental Science or from First Choice Science to the regular Science stream.

What is the difference between Pure and Applied, Health Science and Environmental Science?

Science students take a total of 26 courses over 2 years. These courses are divided between General Education (English, French, Humanities, Physical Education and Complimentary courses) and Science. All Science students regardless of profile do 9 compulsory Science courses: 1 in Biology, 2 in Chemistry, 3 in Mathematics and 3 in Physics.

- **Pure and Applied Science** students have 3 option courses to choose from the list of Science Option courses.
- **Health Science** students are required to take a 2nd Biology and a 3rd chemistry course. They have one option course to choose from the list of Science Option courses.
- **Environmental Science** students follow the same course requirements as Health Science students. Some of the courses, such as those in Biology and Chemistry, focus on Environmental Science topics in their curricula. In addition, Environmental Science students are required to take the Environmental Biology course, and therefore do not choose a course from the list of regular Science Option courses.

How do I get into First Choice Science?

Admission to First Choice Science (FCS) is **by invitation only**. Only students who apply to Dawson College as their first choice college will be considered for admission. To be considered for admission the following minimum grade requirements must be met:

- **80% Overall Secondary V Average**
- **85% each in Secondary V Chemistry, Mathematics, and Physics**

Admission to FCS is contingent on the spaces available and is therefore extremely competitive – achieving the above minima may not be sufficient. Students deemed eligible will receive a letter inviting them to join FCS.

What if I am missing a course or my grades are low for admissions into regular science?

If you are missing one, two or all three Science pre-requisite courses, but your overall average meets the admission requirements of the Science Program consider applying to Explorations Science, which allows you to take these courses at Dawson.

If you are passing the Science pre-requisites but one or more of your grades in these courses are below 70%, you may wish to apply to Developmental Science, which allows you to re-do the course(s) to improve your level of preparation.

Should I take a summer course?

It is always a good idea to take courses to boost the level of your academic preparation. However, a summer course may not help your admission into the Science Program since, by the time we receive the grade, admission to this competitive program will likely be closed. Speak to a Dawson College academic adviser to find out if a summer course will improve your chances of admission.

How long will it take to graduate from the Science Program if I need to complete Developmental Science or Exploration Science first?

The answer depends on how many remedial courses you need to take. If you need one or two remedial classes, you can usually obtain your diploma in four semesters by taking summer courses. If you need three remedial courses, it usually takes five semesters to graduate in Science.

What if I did my schooling in French?

Many students at Dawson do not consider English to be their mother tongue. We have services available to assist students with their studies including the Academic Skills Centre (Room 4E.3), which has programs and tutors to help students improve their speaking, reading and writing of English.

Why should I make Dawson MY college?

There are many colleges which offer a Science program and it is up to students to find the college which best suits their individual needs. Dawson's Science Program offers excellent facilities, state of the art laboratories, highly qualified and approachable teachers, and a quality preparation for university studies.

FOR FURTHER INFORMATION:

Please visit the Science Program home page:
www.dawsoncollege.qc.ca/science

Or contact:

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NOTES

Science Program

ABOUT DAWSON COLLEGE

Dawson College is located in downtown Montreal in a historic building on 12 acres of green space. The first English-language institution in the Quebec CEGEP network is today one of the largest with approximately 10,000 students enrolled in more than 50 programs and profiles of study. The College occupies an entire city block and is linked directly to the Atwater Métro station.

FEES

Tuition is free for Canadian citizens or landed immigrants with permanent residence in Quebec taking at least four courses per semester. A non-refundable $30 application fee and about $200 in student fees are charged. Books and supplies cost between $500 and $1,000 per year, although visual arts supplies are more costly. Financial aid is available; contact **(514) 931 8731 ext. 1186** for more information. Fees are subject to change without notice.

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