### 1.0 Degree Title
Specify the two degrees for concurrent degree programs

| BSc |

#### 1.1 Major (Legacy = Subject) (30-char. max.)

| Biology and Mathematics |

#### 1.2 Concentration (Legacy = Concentration/Option)
If applicable (30 char. max.)

| |

#### 1.3 Minor (with Concentration, if applicable)
(30 char. max.)

| |

#### 1.4 Category

- [X] Faculty Program (FP)
- [ ] Major
- [ ] Joint Major
- [ ] Major Concentration (CON)
- [ ] Minor
- [ ] Minor Concentration (CON)
- [ ] Honours (HON)
- [ ] Joint Honours Component (HC)
- [ ] Internship/Co-op
- [ ] Thesis (T)
- [ ] Non-Thesis (N)
- [ ] Other

#### 1.5 Complete Program Title

| B.Sc.; Faculty Program in Biology & Mathematics |

### 2.0 Administering Faculty/Unit

| SCIENCE |

#### Offering Faculty/Department

| BIOLOGY |

### 3.0 Effective Term of revision or retirement
Please give reasons in 8.0 “Rationale” in the case of retirement (Ex. Sept. 2004 = 200409)

| Term |

#### 4.0 Existing Credit Weight

| 57 |

#### Proposed Credit Weight

| |

### 5.0 Description (Maximum 150 words)

| |

### 6.0 List of existing program and proposed program

#### Existing program (list courses as follows: Subj Code/Crse Num, Title, Credit weight, under the headings of: Required Courses, Complementary Courses, Elective Courses)

| |

#### Proposed program (list courses as follows: Subj Code/Crse Num, Title, Credit weight, under the headings of: Required Courses, Complementary Courses, Elective Courses)

| |
### Existing program (list courses as follows: Subj Code/Crse Num, Title, Credit weight, under the headings of: Required Courses, Complementary Courses, Elective Courses)

**FACULTY PROGRAM IN BIOLOGY AND MATHEMATICS** (57 credits)

**Required Courses** (21 credits)
- COMP 202 (3) Introduction to Computing 1
- MATH 133 (3) Calculus 3
- MATH 222 (3) Linear Algebra
- MATH 315 (3) Ordinary Differential Equations
- MATH 323 (3) Probability Theory
- MATH 324 (3) Statistics

**Complementary Courses** (36 credits)
21 credits in Biological Sciences including
- 12 credits selected from:
  - BIOL 200 (3) Molecular Biology
  - BIOL 201 (3) Cell Biology and Metabolism
  - BIOL 202 (3) Basic Genetics
  - BIOL 205 (3) Biology of Organisms
  - BIOL 206 (3) Methods in Biology of Organisms
- 9 credits selected from:
  - BIOL 303 (3) Developmental Biology
  - BIOL 306 (3) Neurobiology and Behaviour
  - BIOL 307 (3) Behavioural Ecology/Sociobiology
  - BIOL 324 (3) Ecological Genetics
  - BIOL 370 (3) Human Genetics Applied
  - BIOL 473 (3) Ecology of Aquatic Invertebrates
  - BIOL 520 (3) Gene Activity in Development
  - BIOL 530 (3) Neural Basis of Behaviour
  - BIOL 531 (3) Neurobiology Learning Memory

6 credits of any other Biological Sciences courses

9 credits of Mathematics including at least 3 credits selected from:
- MATH 314 (3) Advanced Calculus
- MATH 317 (3) Numerical Analysis
- MATH 319 (3) Partial Differential Equations
- MATH 327 (3) Matrix Numerical Analysis
- MATH 407 (3) Dynamic Programming
- MATH 423 (3) Regression and Analysis of Variance
- MATH 447 (3) Stochastic Processes

or other suitable mathematics courses chosen in consultation with the adviser.

Advisers: Drs. M. Mackey and L. Glass (Department of Physiology)

### Proposed program (list courses as follows: Subj Code/Crse Num, Title, Credit weight, under the headings of: Required Courses, Complementary Courses, Elective Courses)

**FACULTY PROGRAM IN BIOLOGY AND MATHEMATICS** (57 credits)

**Required Courses** (36 credits)
- COMP 202 (3) Introduction to Computing 1
- MATH 133 (3) Calculus 3
- MATH 222 (3) Linear Algebra
- MATH 315 (3) Ordinary Differential Equations
- MATH 323 (3) Probability Theory
- MATH 324 (3) Statistics

**Complementary Courses** (21 credits)
21 credits in Biological Sciences including
- 12 credits selected from:
  - BIOL 200 (3) Molecular Biology
  - BIOL 201 (3) Cell Biology and Metabolism
  - BIOL 202 (3) Basic Genetics
  - BIOL 205 (3) Biology of Organisms
  - BIOL 206 (3) Methods in Biology of Organisms
- 9 credits selected from:
  - BIOL 303 (3) Developmental Biology
  - BIOL 306 (3) Neurobiology and Behaviour
  - BIOL 307 (3) Behavioural Ecology/Sociobiology
  - BIOL 324 (3) Ecological Genetics
  - BIOL 370 (3) Human Genetics Applied
  - BIOL 473 (3) Ecology of Aquatic Invertebrates
  - BIOL 520 (3) Gene Activity in Development
  - BIOL 530 (3) Neural Basis of Behaviour
  - BIOL 531 (3) Neurobiology Learning Memory

6 credits of any other Biological Sciences courses

9 credits of Mathematics including at least 3 credits selected from:
- MATH 314 (3) Advanced Calculus
- MATH 317 (3) Numerical Analysis
- MATH 319 (3) Partial Differential Equations
- MATH 327 (3) Matrix Numerical Analysis
- MATH 407 (3) Dynamic Programming
- MATH 423 (3) Regression and Analysis of Variance
- MATH 447 (3) Stochastic Processes

or other suitable mathematics courses chosen in consultation with the adviser.

Advisers: Drs. M. Mackey and L. Glass (Department of Physiology)
8.0 Rationale

BIOL 308 and BIOL 304 were added to the list of optional concentration courses. These are both courses that ought to have been offered in this program.

9.0 Approvals

<table>
<thead>
<tr>
<th>Routing Sequence</th>
<th>Name</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department</td>
<td>P LASKO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curric/Acad Committee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCTP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>APPC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senate</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Submitted by

| Name       | SUSAN GABE | Phone | 7045 | Email | SUSAN.GABE@MCGILL.CA | Submission Date |

To be completed by ARR:

CIP Code