1.0 Degree Title
Bachelor of Science

1.1 Major (Subject)
Environment

1.2 Concentration (Option)
Renewable Resource Mgmt
(Note: This is a Domain in the Major Program in Environment, and is offered by both Agricultural & Environmental Sciences and by Science.)

1.3 Minor

1.4 Category
Major Program

1.5 Complete Program Title
B.Sc.; Environment; Renewable Resource Management Domain

2.0 Administering Faculty
Arts

Offering Faculty
Science

3.0 Effective Term of Revision: 200509
(eg. 200409)

4.0 Existing Credit Weight: 63
Proposed Credit Weight: 63

5.0 Description (150 words max)
no change to program description

6.0 Existing and Proposed program course lists
Additions are in **Bold Italics**, and deletions are in *Strikeout*. Numbered changes refer to items in the Rationale and the consultation list. Courses offered at Macdonald Campus are marked with (M).

<table>
<thead>
<tr>
<th>Current Program</th>
<th>Proposed Program</th>
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</thead>
<tbody>
<tr>
<td><strong>Core: Required Courses</strong> (18 credits)</td>
<td><strong>Core: Required Courses</strong> (18 credits)</td>
</tr>
<tr>
<td>ENVR 200 (3) The Global Environment</td>
<td>ENVR 200 (3) The Global Environment</td>
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<tr>
<td>ENVR 201 (3) Society and Environment</td>
<td>ENVR 201 (3) Society and Environment</td>
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<tr>
<td>ENVR 202 (3) The Evolving Earth</td>
<td>ENVR 202 (3) The Evolving Earth</td>
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<tr>
<td>ENVR 203 (3) Knowledge, Ethics and Environment</td>
<td>ENVR 203 (3) Knowledge, Ethics and Environment</td>
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<tr>
<td>ENVR 301 (3) Environmental Research Design</td>
<td>ENVR 301 (3) Environmental Research Design</td>
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<tr>
<td>ENVR 400 (3) Environmental Thought</td>
<td>ENVR 400 (3) Environmental Thought</td>
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<tr>
<td><strong>Core: Complementary Course – Senior Research Project</strong> (3 credits*)</td>
<td><strong>Core: Complementary Course – Senior Research Project</strong> (3 credits*)</td>
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<tr>
<td>AGRI 519 (6) Sustainable Development Plans (in Barbados)</td>
<td>AGRI 519 (6) Sustainable Development Plans (in Barbados)</td>
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<tr>
<td>ENVR 401 (3) Environmental Research</td>
<td>ENVR 401 (3) Environmental Research</td>
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<tr>
<td>ENVR 451 (6) Research in Panama (in Panama)</td>
<td>ENVR 451 (6) Research in Panama (in Panama)</td>
</tr>
<tr>
<td>ENVR 466 (6) Research in Atlantic Canada (at Bay of Fundy)</td>
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<tr>
<td>* Only 3 credits will be applied to the program; extra credits will count as electives.</td>
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<tr>
<td><strong>Domain: Complementary Courses</strong> (42 credits)</td>
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<tr>
<td>9 credits basic principles of ecosystem processes and</td>
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Program Revision
ENVRMajorRenewableResourceAC-04-105.doc
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Notes</th>
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<tbody>
<tr>
<td>WILD 200</td>
<td>Comparative Zoology (M)</td>
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<tr>
<td>or BIOL 305</td>
<td>Animal Diversity</td>
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<tr>
<td>or PLNT 201</td>
<td>Comparative Plant Biology (M)</td>
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<tr>
<td>WILD 205</td>
<td>Principles of Ecology (M)</td>
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<tr>
<td>or BIOL 308</td>
<td>Ecological Dynamics</td>
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<tr>
<td>GEOG 305</td>
<td>Soils and Environment</td>
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<tr>
<td>or SOIL 210</td>
<td>Principles of Soil Science (M)</td>
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<td>WILD 205</td>
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<tr>
<td>GEOG 305</td>
<td>Soils and Environment</td>
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<tr>
<td>or SOIL 210</td>
<td>Principles of Soil Science (M)</td>
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</tbody>
</table>

6 credits statistics and GIS methods
- ABEN 430 (3) GIS for Bioresource Management (M)
- or GEOG 201 (3) Introductory Geo-Information Science
- AEMA 310 (3) Statistical Methods 1 (M)
- or BIOL 373 (3) Biometry

6 credits advanced ecosystem components
- PLNT 358 (3) Flowering Plant Diversity (M)
- or BIOL 358 (3) Canadian Flora
- BIOL 553 (3) Neotropical Environments (in Panama)
- SOIL 326 (3) Soil Genesis and Classification (M)
- WILD 307 (3) Natural History of Vertebrates (M)

6 credits advanced ecological processes
- ABEN 217 (3) Hydrology and Water Resources (M)
- or GEOG 322 (3) Environmental Hydrology
- BIOL 432 (3) Limnology
- or NRSC 315 (3) Science of Inland Waters (M)
- BIOL 465 (3) Conservation Biology
- GEOG 372 (3) Running Water Environments
- GEOG 497 (3) Ecology of Coastal Waters (at Bay of Fundy)
- MICR 331 (3) Microbial Ecology (M)

6 credits social processes:
- AGEC 242 (3) Management Theories and Practices (M)
- AGEC 333 (3) Resource Economics (M)
- or ECON 405 (3) Natural Resource Economics

ANTH 339 (3) Ecological Anthropology
- CANS 407 (3) Understanding Atlantic Canada (at Bay of Fundy)
- ENV 465 (3) Environment and Social Change (at Bay of Fundy)
- GEOG 498 (3) Humans in Tropical Environments (in Panama)
- RELG 270 (3) Religious Ethics and the Environment
- SOCI 565 (3) Social Change in Panama (in Panama)
- WILD 415 (2) Conservation Law (M)

9 credits ecosystem components or management of ecosystems:
- AGRI 435 (3) Soil and Water Quality Management (M)
- AGRI 550 (3) Sustained Tropical Agriculture (in Panama)

AGRI 435 (3) Soil and Water Quality Management (M)
- AGRI 452 (3) Water Resources in Barbados (in Barbados)

9 credits ecosystem components or management of ecosystems:
- AGRI 435 (3) Soil and Water Quality Management (M)
- AGRI 452 (3) Water Resources in Barbados (in Barbados)
GEOG 302 (3) Environmental Management 1
GEOG 404 (3) Environmental Management 2 (in Panama)
NRSC 437 (3) Assessing Environmental Impact (M)
PLNT 300 (3) Cropping Systems (M)
SOIL 335 (3) Soil Ecology and Management (M)
WILD 401 (4) Fisheries and Wildlife Management (M)
WOOD 441 (3) Integrated Forest Management (M)

GEOG 302 (3) Environmental Management 1
GEOG 380 (3) Adaptive Environmental Management
GEOG 404 (3) Environmental Management 2 (in Panama)
NRSC 437 (3) Assessing Environmental Impact (M)
PLNT 300 (3) Cropping Systems (M)
SOIL 335 (3) Soil Ecology and Management (M)
WILD 401 (4) Fisheries and Wildlife Management (M)
WOOD 441 (3) Integrated Forest Management (M)

7.0 Consultation with Related Units
2. Anne Comeau, Biology Dept.
3 – 7. Joann Whalen, Domain advisor
5, 6. Robert Bonnell, Barbados Field Study Semester Coordinator

8.0 Rationale
1. ENVR 466 is being retired.
2. BIOL 358 is being retired.
3. GEOG 372 examines the effect of stream morphology on habitats. This course will allow students on the downtown campus to satisfy part of the requirements for this section on their home campus.
4. NRSC 333 examines the sources, transport and degradation of pollutants (such as xenobiotics, pesticides and other wastes) in soils, waterways and the atmosphere. Therefore, it is relevant to this section of this domain.
5. AGRI 413 is part of the Barbados Field Study Semester, and is relevant to this section.
6. AGRI 452 is part of the Barbados Field Study Semester, and is relevant to this section.
7. GEOG 380 is a new course that is relevant to this section. It does not duplicate the content of GEOG 302 Environmental Management.
## 9.0 Approvals

<table>
<thead>
<tr>
<th>Routing Sequence</th>
<th>Name</th>
<th>Signature</th>
<th>Date</th>
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<tbody>
<tr>
<td>Department</td>
<td>Nigel Roulet</td>
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<td>Curric/Acad Cmty</td>
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<td>Senate</td>
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**Submitted by:**
Pete Barry, MSE Program Coordinator, Tel. 4306  Fax 1643, Pete.barry@mcgill.ca

Submission Date:

To be completed by ARR:

CIP Code: