Why take a field course?

- Real problems in real environments (contrasts with lack of labs or limitations of labs in other courses)
- Hands-on learning is different
- Closer contact with professors and other students
- Most students rate their field courses as the ‘best course I took at McGill’
Why study applied ecology?

• **Important problems for society**
  – Agriculture → Agro/ecological systems
  – Fisheries
  – Conservation management
  – Health → disease transmission
  – Pollution and remediation
• **Potential jobs for students in ecology**

Why study the tropics?

• **Different organisms and ecosystems**
• **High diversity**
• **Site of many practical problems**
Where is Barbados?
Facilities at Bellairs

Seabourne House
Shore at Bellairs

West block dorms
The board room
Conference room and library
Instructors

• Professor Laura Nilson
  – Molecular Biology
• Professor Neil Price
  – Biological oceanography
• Professor Frederic Guichard
  – Theoretical and marine ecology

Organization of the course

• Montreal
  – Readings
  – Take-home exam during the winter term
• Barbados
  – Arrival (Friday 3rd) and orientation (1 day)
  – Rotation among 3 modules (1 day each; total 3 days)
  – Collaborative research project (7 days; each student in one project only)
  – Travel to other areas of ecological interest on Barbados (2 days)
  – Packing and departure (Friday 17th)
**Tentative Schedule**

<table>
<thead>
<tr>
<th>AM</th>
<th>PM</th>
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<tbody>
<tr>
<td>Friday</td>
<td>Friday May 3 2019 Arrival</td>
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<tr>
<td>Saturday</td>
<td>Saturday May 4 2019 Orientation Residence</td>
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<tr>
<td>Sunday</td>
<td>Sunday May 5 2019 Module 1</td>
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<tr>
<td>Monday</td>
<td>Monday May 6 2019 Module 2</td>
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<tr>
<td>Tuesday</td>
<td>Tuesday May 7 2019 Module 3</td>
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<tr>
<td>Wednesday</td>
<td>Wednesday May 8 2019 North Point Welchman Gully (packed lunch)</td>
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<tr>
<td>Thursday</td>
<td>Thursday May 9 2019 St. Nicholas Abbey Lunch</td>
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<tr>
<td>Friday</td>
<td>May 10 2019 Projects Projects (dinner at fish market)</td>
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<tr>
<td>Saturday</td>
<td>May 11 2019 Projects Projects</td>
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<tr>
<td>Sunday</td>
<td>May 12 2019 Projects Projects</td>
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<tr>
<td>Monday</td>
<td>May 13 2019 Projects Projects</td>
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<tr>
<td>Tuesday</td>
<td>May 14 2019 Projects Projects</td>
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<tr>
<td>Wednesday</td>
<td>May 15 2019 Projects Projects</td>
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<tr>
<td>Thursday</td>
<td>May 16 2019 Projects Symposium - BBQ</td>
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<tr>
<td>Friday</td>
<td>May 17 2019 Clean up</td>
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</tbody>
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**Biological Oceanography**
Molecular ecology

Coral Reef ecosystem
East coast ecosystems

Barbados Sea Turtle Project
**Collaborative Projects**

- Intensive focus on one group project with professor(s)
- Related to modules but:
  - Can be conducted in different ecosystems (e.g. seagrass, different coral reefs around the island, agricultural)
  - Can integrate methods learned across modules (molecular, nutrient concentration, sampling design)
  - Can be applied (human impacts, conservation strategies, socio-economic components)

**Collaborative Project Organization**

- Organizing (often in collaboration with local experts or organization)
- Field and library research
- Analysis and interpretation of data
- Written and oral final report
Course Evaluation

- Take-home exam (30%)
- Participation in the modules (20%)
- Collaborative project (50%)
  - Participation
  - Report
  - Oral presentation

Costs

- Normal course costs
  - Tuition
  - Supplementary Fee ($1,636)
  - Two payments ($500 deposit in December and balance charged to your student account in the spring)
  - Covers room and board in Barbados, additional course expenses such as vehicle rental and boat use, but not tuition

- Additional personal costs
  - Airfare and meals in transit
  - Cancellation insurance, airport taxes, & taxi to and from Bellairs
  - Supplementary health insurance
  - Personal expenses
Getting more for your money

- Cheap holiday in Barbados before or after course
- NSERC summer research awards
- Gathering data for independent studies or honours projects
- Volunteer or paid research assistance

Warnings

- Pre-requisites: ecology and lab course and permission
- Timing of graduation
- Health
- Diet
- Swimming ability but not SCUBA diving
- Attitude
Key dates

- Dec 5, 2018  Application forms submitted to Prof Guichard
- ~Dec. 7, 2018  List of participants posted
- Dec. 19, 2017 Initial deposit due (balance billed on student accounts).
- *Feb. 2018  Take-home exam available
- *March, 2018  Planning meeting for all participants. Compulsory. N7/1, 17:30