


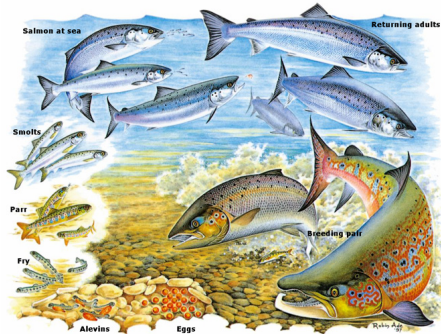
**Environmental Science 120**  
WITH A FOCUS ON  
'FISHERIES...Miramichi Watershed'



**Second Semester 2013**  
Mr. A. Hallihan



**GOAL...**  
Reduce  
Human  
Impact  
on the  
Environment





# Environmental Science 120

WITH A FOCUS ON  
'FISHERIES...Miramichi Watershed'



Second Semester 2013

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## Course content...

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### UNIT 1 - An Overview of Environmental Science

- Issues: Environmental/Economic/Social Justice
- Population Growth and Resource Limitations
- Research of Current NB Environmental Issues

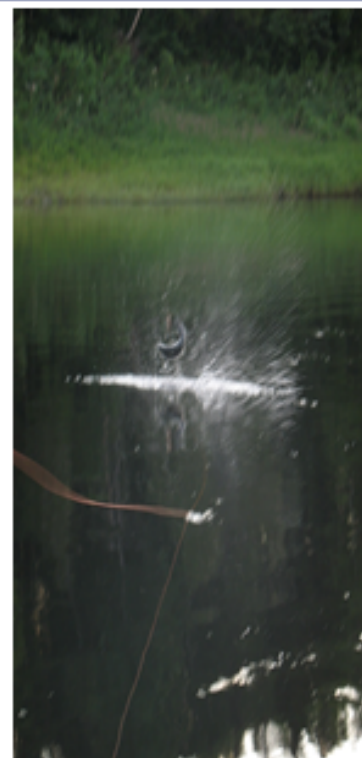
### UNIT 2 - Sustainable Development

- Ecology Around The Miramichi River
- Environmental Awareness (Historic vs Current)
- Sustainable Ecosystems and Communities

### UNIT 3 - Investigating Environmental Issues

#### THEME - Fisheries... Miramichi Watershed

- Conservation and Stewardship
- Species Identification and Role in Ecosystem
- Watershed Management and Freshwater Systems
- Reading the Water and Characteristics of the River
- Atlantic Salmon Anatomy, Life Cycle and Survival Requirements
- Fly Fishing: Rules, Regulations, Etiquette and Live Release
- Recreation: Fly Tying, Knot Tying and Casting Techniques



## Possible activities...

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- Multiple Guest Speakers
- Miramichi Salmon Association
- Population Estimation (DF0 Trapnets)
- Biology Lab with Smolt Dissection
- Fish Friends Salmon Aquarium/Leadership
- Debate on Environmental Issues
- Involvement in Dieppe Fly Fishing Forum
- A Day on the Miramichi River



## Student Project...

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### PART 1 – Independent Research Paper

- research environmental issue
- summarize findings and communicate results

### PART 2 – Collaborative Presentation

- team up with others to support a cause
- cohesive and collaborative presentation
- actively participate in other presentations

### PART 3 – Eco Challenge

- design activities that demonstrate...
  - ✓ Personal Appreciation of the Environment
  - ✓ Stewardship of the Environment
  - ✓ Advocacy for the Environment
  - ✓ Engagement of Others in Environmental Inquiry





## Partners in developing the course...

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- MSA, ASF, NB Salmon Council, DFO
- UNB (Biology Department)
- Ducks Unlimited Canada
- Hammond River Association
- Province of NB???
- \* Natural Resources
- \* Tourism and Recreation
- \* Environment
- \* Education



## *UNIT 1 - An Overview of Environmental Science*

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- *The Issues*
- *Population Growth and Resource Limitations*
- *Researching Current Environmental Issues*

## ACTIVITY...

- 1) On looseleaf, list any current environmental issues you are aware of.
- 2) Classify the issue as either: LOCAL / REGIONAL / GLOBAL
- 3) Using the marker provided, write your issue on the appropriate chart paper.

**NOTE:** If your issue is already there, put a check mark beside the issue.

## DISCUSSION... TOMORROW...

- ISSUES... 'Who, what, why, where and how'

\*\*\* Let's PRIORITIZE these issues...



