




### Environmental Science 120

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

 **Second Semester 2014**  
Mr. A. Hallihan



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





# Environmental Science 120

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'FISHERIES...Miramichi Watershed'



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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

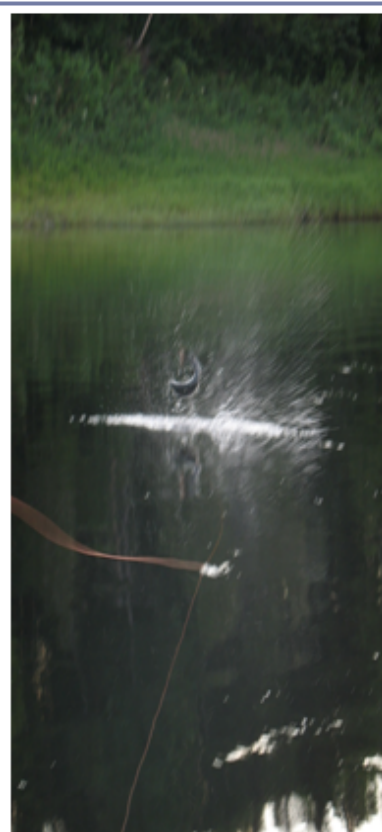
### UNIT 2 – Sustainable Development

- 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
- Population Estimation (DF0 Trapnets)
- Lab with Salmon Scales/Age Determination
- Lab with Salmon Dissection (Cooke Aqua.)
- Fish Friends Salmon Aquarium/Leadership
- ASF/MSA Salmon Tagging Research
- Miramichi Salmon Association Tour
- 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



## Evaluations...

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### [Env. Sci. 120 Course Outline Winter 2014.doc](#)

Tests/Quizzes/Assignments/Labs...	40 %
Eco-Challenge Project.....	30 %
Final Exam.....	30 %



## THEME: Watersheds...Environmental Science?

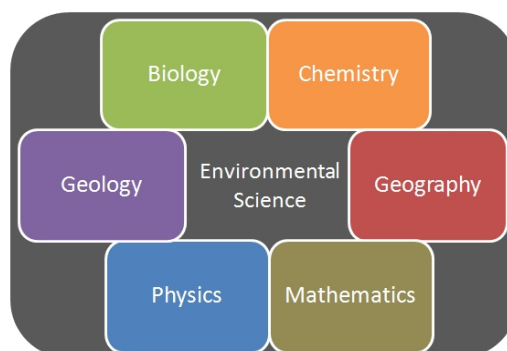


# What is Environmental Science?



Environment literally means surroundings. Everything that affects an organism during its lifetime is collectively known as its environment.


It is the study of how humans interact with the environment







# Homework...

 Worksheet - Simon Says.pdf

## Attachments

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Env. Science 120 Jan. 2014.ppt

Env. Sci. 120 Course Outline Winter 2014.doc

Activity - Simon Says.pdf