**Course Outline**

**Introduction to Environmental Science 120**

**Mrs. Reynolds**

**McAdam High School 2016-2017 Semester I**

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**Course Objective:**

The objective of this course is for students to develop the knowledge base and skills for investigating and analyzing environmental issues and for communicating their knowledge and analysis to others.

**Performance Objectives**

By the end of this course, students will be able to:

1. Outline the ecological processes inherent in natural ecosystems and how these can be impacted by human activity

2. Characterize traditional Indigenous and historic European relationships with the environment in NB, and how those relationships have changed over time as reflected in current environmental policies and legislation

3. Identify the impact of personal behaviors on the environment, and recognize that caring for and sustaining natural environments is an element of responsible global citizenship.

4. Demonstrate an understanding of the importance of sustainable development, considering environmental, social, cultural, and economic aspects, to effectively resolve issues.

5. Analyze and propose solutions to current environmental issues through research, experimentation and a presentation of their findings with respect to the issue

Key to this learning will be the development of competencies in Critical Thinking and Creative Problem Solving, Collaboration, Communication, Personal Development and Self Awareness, and Global Citizenship

**Units of Study**

**Unit 1: An Overview of Environmental Science**

The Issues

* current understanding of issues – environmental, economic and social justice perspectives

Population Growth and Resource Limitations

* population dynamics in natural systems
* human population trends and influences
* resource limitations and carrying capacity

Researching Current Environmental Issues

* class investigation of current issues, modeling research and investigative skills
* start of student project

**Unit 2: Sustainable Development**

Ecology

* interrelated systems that support living systems
* human impact on natural systems

Environmental Awareness

Indigenous ways of knowing nature

* historic and current attitudes to the environment
* early European settlers’ attitude to the environment
* development of values for conservation and sustainability
* current land and water use
* history of the Western environmental movement

Sustainable Ecosystems and Communities

* dynamics of healthy and sustainable ecosystems
* principles of sustainable communities
* relationships between local, regional, and global ecosystems and societies
* principles of sustainable development

**Unit 3: Investigating Environmental Issues**

* defining the issue
* investigating the natural ecosystem and human impact
* considering social, cultural, and economic aspects
* investigating human and environmental perspectives and solutions

Possible issues: Agriculture, Forests, Fresh Water, Ocean Fisheries, Energy Resources, Climate Change, Water and Air Pollution

**Student Projects**

Independent research and report

* group/individual presentation with research summary, exploration of solutions, and class activity
* demonstration of personal appreciation of the environment, environmental stewardship through action, advocacy for the environment, and engagement of others in environmental inquiry.

**Evaluation of Student Achievement:**

Summative: final products like projects, presentations, research reports and tests (70%)

Exam = 30%

**Level 4:** Excelling / 80-100%

This student consistently achieves beyond and well beyond the expectations for the grade level.

**Level 3:** Meeting / 70-79%

This student consistently achieves the expectations for the grade level.

**Level 2:** Approaching Meeting / 60-69%

This student often achieves the expectations for their grade level but sometimes achieves below the standard.

**Level 1:** Working Below / -60%

This student consistently achieves well below the expectations for the grade level.

**Student Responsibilities**

MHS has a number of policies regarding attendance, dress code, behaviour, and student work. Please be respectful of these policies.

Time will be spent in class to discuss these policies and to co-construct standards for our classroom for this semester.