Name: _____ Block: ____

Science for Citizens 11 Course Outline:

Mr. Barron

Three Big Ideas

Scientific processes and knowledge inform our decisions and impact our daily lives.

Personal/Home Science

- health science:
  - **nutrition and lifestyle**
  - **allergies and sensitivities**
  - **medications** and **supplements**
  - non-Western health practices, including First Peoples health and healing practices
- **safe use** and storage of **household chemicals**
- home technologies:
  - **home automation and safety alarms**
  - **home appliances**
  - **home electrics**
- **science literacy** and informed decision making: **pseudo-science** versus science

Scientific knowledge can be used to develop procedures, techniques, and technologies that have implications for places of employment.

Local/Workplace Science

- waste **recycling** and disposal:
  - **industrial and workplace**
  - recycling processes
  - **transfer stations and landfills**
  - impacts of personal choices
- chemicals commonly found in the workplace or in industrial products:
  - chemical safety, including disposal methods
  - current WHMIS and **other** standards
  - **components of mixtures**
  - **classes of hazardous chemicals**
- combustive and explosive materials:
  - combustible mixtures
  - explosive potential
  - safety
- forensic science:
  - **methodologies** and **technologies**
  - **forensic techniques and protocols**
  - **impact of advances in technology**

Scientific understanding enables humans to respond and adapt to changes locally and globally.

Global Science

- **extreme weather events:**
  - causes and impacts
  - weather and climate change
- disaster preparedness:
  - **natural** and **human-influenced** events
  - **survival needs**
- agriculture **practices and processes**:
  - chemicals used in agriculture
  - environmental impacts
  - impacts of personal choices
- **energy generation** and needs:
  - **production**
  - **economics**
  - environmental impacts
- sustainability of **resources**:
  - impacts of personal choices
  - First Peoples worldview and sustainability
  - **product life cycles**

Science Module		Technology Module	
Agriculture –	Elements of agricultural systems, Role of genetics, different methods of food production, changing technology in agriculture	**Computers - And Communication**	Basic computer components, impact of science on development of computers, Evaluate impact of computers on society
Chemistry -	Chemicals in household products, Disposal methods, synthesize a household product	**Home and - Technology**	Structural integrity of shelters, types of indigenous shelters, Role of building codes, current home technologies and impact on family life
Forensics -	Methods and technologies used to investigate a crime scene, collect evidence using forensic methods	**Personal - Technologies**	Investigate personal technologies used regularly, Relate pre-existing technology
Health -	Medical technologies in addressing different illnesses, role of science in development of medical technologies	**Space - Exploration**	Recent contributions to development of space exploration, spin-offs, future trends in technology
Natural - Resources And Environment	Major natural resources in BC, impact of society on natural resource management, impact of technologies on the environment	**Transportation**-	role of transportation in society Describe a transportation system, features incorporated into types of transportation

Note: The Science and Technology 11 outline is subject to change to accommodate the instructional time available. Optional topics may be included if time allows.

Evaluation:

Term Marks:

Title Page	4%
Science Module 1	16%
Science Module 2	16%
Science Module 3	16%
Technology Module 1	16%
Technology Module 2	16%
Technology Module 3	16%

Letter Grades:

A = excellent	86 – 100%
B = very good	73 – 85%
C+ = good	67 – 72%
C = satisfactory	60 – 66%
C- = minimally acceptable	50 - 59%
F = failing	0 – 49%