

WHAT LIES UPSTREAM



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WHAT LIES UPSTREAM

Directed by Cullen Hoback

2017 | USA | 60 min

TEACHER'S GUIDE

This guide has been designed to help teachers and students enrich their experience of *What Lies Upstream* by providing support in the form of questions and activities. There are a range of questions that will help teachers frame discussions with their class, activities for before, during and after viewing the film, and some weblinks that provide starting points for further research or discussion.

The Film

What begins as a few cases of smelly tap water in West Virginia quickly streams into a stinking tide of unprecedented failure to protect America's drinking water in filmmaker Cullen Hoback's latest exposé. On the heels of his unsettling look at the deterioration of privacy in *Terms and Conditions May Apply*, he turns his investigative focus to the increasingly private interests that control public water. Hoback's dogged research turns up jaw-dropping disregard for science and human safety from chemical companies. But as the crisis in Flint, Michigan, deepens he arrives at more damning sources of contamination: the Environmental Protection Agency and the Centers for Disease Control. The very regulatory agencies and government officials sworn to safeguard the country's most vital resource may now be as corrosive as the chemicals poisoning the public. Provocative and scandalous, *What Lies Upstream* is a social justice watershed. **Myrocia Watamaniuk**

Source: <http://www.hotdocs.ca>

The Filmmaker

Cullen Hoback is an investigative filmmaker from Los Angeles. *What Lies Upstream* was released theatrically in early 2018. Previous documentaries include *Monster Camp* (2007) and *Terms and Conditions May Apply* (2013). Hoback has appeared on MSNBC, CNN, NPR, Fox, HuffPo Live and others, and has written op-eds for *The Guardian* and other major media outlets. He is also a Film Independent fellow.

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VIEWING THE FILM WITH STUDENTS

The following three subsections are intended to provide you with a range of Pre-Viewing, Viewing and Post-Viewing activities. They are followed by a set of questions based upon the film's larger thematic domains, some follow-up questions and quotations, sample curricular outcomes and a page of weblinks for further investigation.

Pre-Viewing Activities

Have students consider the title of the documentary, *What Lies Upstream*. Have students make predictions about: What kinds of images, potential issues (social, economic and/or political) or groups of people may be associated with the title of the film?

Have students watch the trailer for *What Lies Upstream* (<http://www.whatliesupstream.com>). Ask students to make predictions about what the film may be about; or confirm if any of their predictions were correct from the first activity; or if they want to refine any of their predictions to form new ones before watching the film.

Have students watch the trailer for *What Lies Upstream* (<http://www.whatliesupstream.com>) and complete a See, Think, Wonder chart. In a three-column chart, include the headings: What do you see and notice? What are you thinking? Make connections, inferences, predictions. What are you wondering? Include, "I wonder" statements or ask questions.

Have your class familiarize themselves with a few or all of the following terminology, assigning keywords to small groups using the Frayer-model template. Consider keywords such as stakeholder, legislation, water source, corporation, policy, politics, lobbyist, pandemic, regulation, industry, etc. Google search "Frayer model instructional strategy" if unfamiliar or require additional info.

Use Google Maps or Google Earth and their associated features (satellite imaging, street view, images, etc.) to develop a sense of place for Charleston, West Virginia, where the initial chemical spill took place. Ask students to independently or in small groups notice the human and natural characteristics of the city and complete the ICQ table: What do they find interesting? What connections can they make? What questions do they have?

In small groups or as a class, have students research the chemical released into the Elk River called 4-methylcyclohexanemethanol (MCHM). Ask students to record one idea per sticky note and then categorize their ideas. Potential categories may be chemical structure, industrial uses, impact on humans, etc. Ask groups to present their finding to the class and discuss how they categorized their ideas.

Viewing Activities

Have students complete the PBS viewing guide on documentaries (<http://www.pbs.org/pov/docs/Copies%20of%20Viewing%20Guide.pdf>). Students can revisit their completed documents as a Post-Viewing Activity.

Have students jot down three to five ideas for discussion or questions that the film raises. As an Extension and/or Post-Viewing Activity, students can enter their questions into an online response or polling system and can vote on the questions or issues they would like to explore in further detail. Encourage students to use multiple levels of Bloom's Taxonomy.

Have students independently create a timeline recording key dates (e.g., days, weeks, years, etc.) noted in the film and pertinent details associated with the contamination spill and effects on society. Key details may include event(s) taking place, identifying stakeholders involved in the issue and their role, their opinions, evidence or data gathered, etc.

There are a variety of stakeholders identified in the film involved in the drinking water contamination in West Virginia, in either a negative or positive way. Ask students to select a web organizer of their choice (e.g., flow chart, bubble map, cause and effect, etc.) to organize the various stakeholders involved in this issue and any relevant information to understand the issue more in-depth. Consider recording the following details: identifying the stakeholder's name and role, identifying their point of view from a social, economic or political perspective, assessing their involvement to determine if they have a positive or negative influence in society and making inferences as to why these stakeholders are involved in the issue.

Have students independently record any social, economic or political issues they notice in the film. In small groups, ask students to share their list of issues and notice similar ideas or themes.

Have students keep track of any words or terms they don't understand. After viewing the film, have students look up the word(s) to find their definitions.

Post-Viewing Activities

In a circle conversation or in small groups, have students discuss the film. Note: this film is a broadcast version, shorter than the feature length. Some discussion points may include: What is their initial reaction to the film? What did they learn? What did they like/dislike about the film? What do they think was the filmmaker's motivation to make the film? Are there issues in the film that relate to their own community? Why should they care if this does not directly influence their lives?

Ask students for their takeaway, describing the film in one sentence. Have students share their takeaways in pairs or small groups, and then as a class. What are the similarities and differences between the students' takeaways? You may also wish to enter all the takeaways into a word-cloud generator (for example, <http://www.wordle.net> or <https://www.wordclouds.com>) to see the frequency of certain words used by students in their takeaways.

Have students write a review of the documentary, touching on the following questions: Why was this film created? What was done well? What could have been improved? What was missing from the film? What will viewers learn from this story? How might the issue(s) in the film promote positive or negative change in society? Do you feel that there was any bias in the film?

Have students compile a list of the ways this unsafe drinking water is similar to and/or different from the drinking water issues in their own community. As a group, students can make connections between what they noted in the film and their own experiences.

Have students independently complete an exit note. The exit note should contain one takeaway or idea learned from the film, as well as a question that they still have about the film.

In small groups or as a class, have students collaboratively create a timeline, recording key dates (e.g., days, weeks, years, etc.) noted in the film along with any important details associated with the contamination spill and its effects on society. Important details may include event(s) taking place, identifying stakeholders involved in the issue and their role, their opinions shared, evidence or data gathered, etc. Student may also include drawings or images to enhance the visual elements of their timeline.

Independently or in pairs, have students analyze the social, economic and political issues presented in the film by critically thinking about both sides of one issue of their choice presented in the film. Create a two-column table with several rows that includes this question at the top of the page: Should American citizens be worried about their water resources? Label each column of the chart with "Evidence in Favour" and "Evidence Against." Under each heading, students can provide notes related to both sides by including quotations from the stakeholders, paraphrased words from stakeholders, key ideas, events, actions, statistics, data, etc.

Director Cullen Hobach narrates the film and notes at the end, "Bottled water is even less regulated than tap water and bottled water is often made from tap water." In small groups, have students discuss this statement and how this information may influence their own decisions around purchasing bottled water.

In small groups or as a class, ask students to complete the Four Corners activity by posing a question and then allowing students to consider their position: strongly agree, agree, strongly disagree or disagree by moving around the room to where these positions are located or by organizing themselves into a line based on where they fall in the spectrum of beliefs. Have students work through some or all of the following prompts: Is Freedom Industries responsible for the drinking water contamination in Charleston? Is the CDC responsible for the drinking water contamination in Charleston? Is the DEP responsible for the drinking water contamination in Charleston? For more information on how to structure the activity: <https://www.facinghistory.org/resource-library/teaching-strategies/four-corners>

Discuss with students: What are some misconceptions the film brings to the surface? Why did the filmmaker want to share this story? How will this information affect your own life? Is this issue one of local, provincial, national or global significance? How do you know?

In small groups, ask students to evaluate a stakeholder of their choice from the film by considering the following prompts: What is the stakeholder's point of view on the issue? What facts has the stakeholder omitted? What words, expressions or ideas did the stakeholder use to create a positive or negative impression? Did their words, expressions or ideas change your thinking in any way? Why or why not? What is the stakeholder's political point of view? What does the stakeholder have to gain by sharing their thoughts in this film?

Print several of the questions and/or quotations from the Extensions Activities section of this guide onto individual sheets of paper. Have students follow the "Save the Last Word for Me" protocol to deepen their understanding of the issues in the film. For more information on how to structure the protocol, visit https://www.nsrharmony.org/system/files/protocols/save_last_word_0.pdf

WEBSITES AND ONLINE RESOURCES

About the Film

<http://www.whatliesupstream.com>

Twitter: [@LiesUpstream](https://twitter.com/LiesUpstream)

Facebook: www.facebook.com/whatliesupstream

Additional Resources

Centers for Disease Control and Prevention (CDC): Learn more about the CDC, a stakeholder featured in the film.
<https://www.cdc.gov>

MSNBC: Learn more about Freedom Industries, the corporation responsible for the chemical spill, by watching the report "Who Is Freedom Industries?" on YouTube.
<https://www.youtube.com/> Type the title of the item into the search function of the website.

Classroom Edition: This lesson plan is based on a Globe and Mail article called "Cape Town at Risk of Becoming First Major City in the World to Run Out of Water," which offers some global context that can be compared or differentiated with the experiences shared in the documentary.
<http://classroomedition.ca/> Type "Cape Town" into the search function of the website for the lesson plan and a link to the article.

The Globe and Mail: The February 20, 2017, article, "Unsafe to Drink: Water Treatments Fail on Canadian Reserves, Globe Review Finds," written by Matthew McClearn, looks at water issues in Indigenous communities.
<http://theglobeandmail.com/> Type the title of the article into the search function of the website.

Human Rights Watch: Check out the article "Canada: Water Crisis Puts First Nations Families at Risk."
<http://www.hrw.org/> Type the title of the article into the search function of the website.

Human Rights Watch: Check out the HRW report entitled "Make it Safe: Canada's Obligation to End the First Nations Water Crisis."
<http://www.hrw.org/> Type the title into the search function of the website.

National Resource Defense Council (NRDC): This website has resources related to the Flint Water Crisis.
<https://www.nrdc.org/> Type "Flint Water Crisis" into the search function of the website.

TED Talk: TED offers a series of talks related to water in a playlist called "Talks on Water" that offer a variety of perspectives related to water issues and management of this precious resource.
<https://www.ted.com/> Type the playlist name "Talks on Water" into the search function of the website.

United Nations Sustainable Development Goals Water and Sanitation: This website has several resources related to water issues on a global scale and organizations working to remedy water issues.
<http://www.un.org/sustainabledevelopment/water-and-sanitation>

US Environmental Protection Agency (EPA): Learn more about the EPA, a stakeholder featured in the film.
<https://www.epa.gov>

The Water Project: This website offers water resources for educators, including lesson plans.
<https://thewaterproject.org/> Click on Learn, and then Teaching Tools, then the appropriate grade level.

West Virginia Department of Environmental Protection (DEP): Learn more about the DEP, a stakeholder featured in the film.
<https://dep.wv.gov>

American Chemical Society: In "Healthy, Tasty or Toxic: A Chemist's View of Drinking Water," Dr. David Sedlak explores the chemistry of drinking water.
<https://www.youtube.com/> Type the title of the video into the search function of the website.

EXTENSION ACTIVITIES

Have students research Canada's protocol for responding to chemical contamination spills that affect drinking water. Have students critically think about their research by responding in a short 250-word reflection, answering some or all of the following prompts: Are there Canadian protocols that exist to protect our water resources? If so, what are they? Do you feel Canada protects our water resources well? Explain why or why not. What else could Canada do to protect its water? Why should Canada develop regulations and enforce policies related to protecting our water resources?

As a class, research to discover if Canada has encountered any chemical contamination spills that have affected drinking water to support students making their own connections to the U.S based film and allow them to analyze Canadian protocols for responding to these water crises. Search "Canada Chemical Contamination Spills Drinking Water" in Google.

Have students debate who is responsible for the chemical spill affecting the citizens' health in either Charleston, West Virginia, or Flint, Michigan.

Have students roleplay key people/positions/organizations mentioned in the film by following the Think, Note, Pair, Share strategy. If you were a (insert role here), how would you respond to the contamination of drinking water? Possible roles to include are citizen, CDC, Freedom Industry CEO, West Virginia DEP, President, Mayor of Charleston, etc.

Have students search in Google for "Eastman's Chemical Company Crude MCHM MSDS PDF" and review the report. What do you notice about the findings? What reactions did you have reading this information? What information is missing? Why is this information important? Why should you care about this information? What will you take away from this information? If there was a contamination spill in your community, who would you expect to respond and why?

Share a personal experience when you encountered water that was undrinkable. How did it affect your life? How did you cope? How did you feel during and after the experience?

Questions for Pre-Viewing or Post-Viewing Activities

What are the different social, economic or political issues presented in this film?

What human rights violation(s) did you notice in the film?

Imagine today that you go home and are told that your drinking water is unsafe in your community because of a chemical contamination spill mismanaged by several governmental entities who are responsible for protecting their citizens. How would you feel? What are some of the fears you would have? How would this news influence your daily life? What civic action would you take and why?

At one point in the film, the director/narrator, Cullen Hobach says, "It seemed that the EPA and CDC were too busy protecting their own reputations to be trusted. If this was true, what would the net affect be on the institution of science?" What does he mean by this? What concerns do you have about this statement? How does his perspective influence your own on this issue?

The citizens who live in Charleston, West Virginia, and Flint, Michigan, pay the most for the mismanagement of water contamination. What are the challenges these citizens experience because of living in these communities?

There are drinking water contamination issues across the United States. Why do you think the filmmaker chose Charleston, West Virginia, and Flint, Michigan, as locations on which to focus?

In the film, viewers see several perspectives related to the mismanagement of water in the United States. What are potential solutions? Who should be responsible for ensuring safe drinking water? What needs to change so water is a safe, sustainable and renewable resource? Why is it important citizens are informed about the management of drinking water?

What can be done at the local, national and international levels to prevent drinking water contamination?

What did the film teach you about chemical contamination spills that affect drinking water?

Have students comment on the thoughts shared by a local citizen of Charleston when he said, "We live in chemical valley." What do you think he meant by this statement? Do you think he finds it acceptable to be exposed to chemicals in his drinking water because of where he lives? Explain why or why not.

QUOTATIONS FROM THE FILM TO EXPLORE

1. *"Nearly three weeks had gone by and yet for some reason the water still had a smell, so people didn't trust it. And they also didn't trust the state or federal officials who are saying the water was safe to drink."* Narrator Cullen Hobach
2. *"Regulation without enforcement is pointless."* Erin Brocovich
3. *"There is simply not a lot of data associated with what chemicals are in water ways and water sources, and the drinking water industry, we are looking for that one device that can tell us everything. Because that doesn't exist, we have to rely on multiple devices to tell us a little bit of information about the water that we are looking at."* Dr. Andy Whelton
4. *"MCHM has an extremely rare quality. You can smell it in the parts per billion. It's like putting one drop of MCHM into a 50,000-litre fish tank. So imagine without the smell, the chemical would have gone unnoticed. People would have drunk MCHM without knowing and the CDC would never have had to determine that one part per million was safe."* Narrator Cullen Hobach
5. *"It is very important that we keep scientific evidence in front and centre of every policy making and not go in reverse, because that is exactly what sometimes the other side is trying to do. Bad guys aren't your traditional bad guys here. And traditional good guys aren't the good guys."* Dr. Rahul Gupta
6. *"Perhaps he [Dr. Rahul Gupta] couldn't speak freely because there was a government handler in the room."* Narrator Cullen Hobach
7. *"Did you see what hit the news the other day—right? The National Toxicology Program was requested to conduct replication testing of Eastman Chemical's data. They now have classified this as a reproductive toxin. Many people weren't drinking the water but they were all bathing in it."* Dr. Andy Whelton
8. *"His muscle development was a bit off... but he's fine now, but he was about six months behind in muscle development for a while."* Elizabeth Walters, wife of Chris Walters, Republican State Senator, West Virginia
9. *"So we had our study peer-reviewed and we sent to CDC a copy of the report. The CDC refused to comment on it. 'On your data, the study proving that MCHM is twice as toxic?' That's right. There is no data to support either of those statements, which means that this organization is making stuff up. So the type of phenomenon that you think happens in corporations may also be happening in government."* Dr. Andy Whelton
10. *"I had fought a 12-year battle in Washington, D.C. exposing government science agency corruption, the Centers for Disease Control, the US EPA, the environmental policeman we pay to protect us were actually the environmental criminals. I mean, I no longer trust the CDC. Why? Because the upper levels of CDC [are] proving themselves untrustworthy too. The amount of harm in Washington, D.C. is 30 times worse than what happened in Flint, Michigan. You see, they poisoned thousands of children, covered it up for about seven years. I had to betray some of my best friends, people I had went to graduate school with who were working with the EPA and creating fabricated reports."* Dr. Marc Edwards
11. *"Looking back at the data from the river, it now made sense. All of these little peaks, they represented chemicals. Instead of there being huge amounts of just a few chemicals, there were small amounts of hundreds if not thousands, and they couldn't be identified because we didn't know what to look for. Very little research is being done in this field. However, there were a number of studies that looked for levels of drugs appearing in rivers. Drugs that people consumed and then flushed down the drain. Antidepressants, steroids, antibiotics, even meth. Every drug researchers had looked for were in the river in the parts per billion range."* Cullen Hobach
12. *"But there are still thousands of chemicals that they system couldn't find a match for. Chemicals you couldn't smell and we don't know if they are harmful or not, because the studies are all confidential and the science could be fake like it was with MCHM. Besides, who is going to look for something they don't want to find?"* Cullen Hobach

CULMINATING ACTIVITY: EXPLORING POLITICAL PERSPECTIVES

In the film *What Lies Upstream*, you encountered many stakeholders who share their point of view on the unsafe drinking water in regions of the United States. In this culminating activity, we learn to analyze the roles, responsibilities and the beliefs and values of various stakeholders related to the West Virginia chemical spill in the Elk River, Charleston's drinking water source, in order to gain a deeper understanding of how social, economic or political ideologies can influence one's perspective on or in response to an issue.

Each student will choose one stakeholder (e.g., person, government, organization, corporation, etc.) from the film to analyze and then share their analysis in a creative way, in a format of your choice. You can use the organizer provided to guide your critical-thinking processes.

Possible presentation formats are an interview, YouTube-style video, presentation using Google Slides, Prezi or PowerPoint, radio spot, letter to the editor, press release, talk-show presentation or short essay or your choice, but with approval from the teacher. Remember to honour your chosen format and meet the following success criteria:

- One stakeholder from the film is selected
- Your analysis includes a variety of critical thinking skills related to the stakeholder's role, responsibilities, beliefs and values, point of view, bias, positive or negative influence in society, etc.
- Your presentation format includes pertinent details to make it authentic, such as colour, titles, images, research, media format, voice, tone, audience, etc.
- You have clearly communicated in writing, visually or orally your analysis of one stakeholder from the film

Once your presentation is complete, consider sharing it with your peers.

| | What Lies Upstream |
|-------------|---|
| Stakeholder | Stakeholder's Name: Role: (job title or position held) Direct/indirect quotation from the film: Additional details about the stakeholder from the film: Identify the stakeholder's beliefs based on his/her political viewpoint shared in the film. Share specific details from the film to support your answer. |
| Analysis | Answer any four of the following prompts: What stakeholders from the film have similar or dissimilar beliefs to your identified stakeholder? Why is this information important? Compare and contrast how different stakeholders responded to the chemical spill causing unsafe drinking water. Why do you think the stakeholder became involved in the issue? Consider possible environmental, social or political lenses. Was this stakeholder involved in pushing for political change? Justify your answer with evidence from the film. Identify any political courses of action the stakeholder took in the film. Do you feel the stakeholder's actions were convincing or effective? |
| Conclusion | What have you learned that is significant? How has your thinking changed? Why should anybody care about how water is developed, managed and/or regulated? How does this issue connect to other water issues or concepts? |

ACTIVITY RUBRIC: POLITICAL PERSPECTIVES PRESENTATION

Knowledge and Understanding

| | 2.5 | 2.9 | 3.0 | 3.4 | 3.5 | 3.9 | 4.0 | 5 | |
|---|---|-----|--|-----|--|-----|---|---|----|
| Understanding of chemical spill affecting water sources in Charleston | Student demonstrates limited understanding of the issue | | Student demonstrates some understanding of the issue | | Student demonstrates considerable understanding of the issue | | Student demonstrates exceptional understanding of the issue | | /5 |

Thinking and Inquiry

| | 2.5 | 2.9 | 3.0 | 3.4 | 3.5 | 3.9 | 4.0 | 5 | |
|---|--|-----|---|-----|---|-----|---|---|----|
| Use of processing skills to critically analyze a stakeholder's role, responsibilities, and beliefs and values | Student uses processing skills to critically analyze a stakeholder's role, responsibilities, and beliefs and values with limited effectiveness | | Student uses processing skills to critically analyze a stakeholder's role, responsibilities, and beliefs and values with some effectiveness | | Student uses processing skills to critically analyze a stakeholder's role, responsibilities, and beliefs and values with considerable effectiveness | | Student uses processing skills to critically analyze a stakeholder's role, responsibilities, and beliefs and values with a high degree of effectiveness | | /5 |

Application

| | 2.5 | 2.9 | 3.0 | 3.4 | 3.5 | 3.9 | 4.0 | 5 | |
|--|--|-----|---|-----|---|-----|---|---|----|
| Making connections within and between various contexts | Student makes connections within the issue/stakeholder to draw relevant conclusions with limited effectiveness | | Student makes connections within the issue/stakeholder to draw relevant conclusions with some effectiveness | | Student makes connections within the issue/stakeholder to draw relevant conclusions with considerable effectiveness | | Student makes connections within the issue/stakeholder to draw relevant conclusions with a high degree of effectiveness | | /5 |

Communication

| | 2.5 | 2.9 | 3.0 | 3.4 | 3.5 | 3.9 | 4.0 | 5 | |
|---|--|-----|---|-----|---|-----|---|---|----|
| Communicates analysis of a stakeholder to intended audience and purpose in oral, visual or written form | Student communicates analysis of a stakeholder to intended audience with limited effectiveness | | Student communicates analysis of a stakeholder to intended audience with some effectiveness | | Student communicates analysis of a stakeholder to intended audience with considerable effectiveness | | Student communicates analysis of a stakeholder to intended audience with a high degree of effectiveness | | /5 |

Comments:

Total ____ /20 = ____ /100

EXAMPLES OF CURRICULUM EXPECTATIONS

| COURSE | OVERALL EXPECTATIONS |
|---|---|
| Grade 7 & 8 Languages | <ul style="list-style-type: none"> • listen in order to understand and respond appropriately in a variety of situations for a variety of purposes. • use speaking skills and strategies appropriately to communicate with different audiences for a variety of purposes. • create a variety of media texts for different purposes and audiences, using appropriate forms, conventions, and techniques. |
| Grade 9–12 English | <ul style="list-style-type: none"> • listen in order to understand and respond appropriately in a variety of situations for a variety of purposes. • use speaking skills and strategies appropriately to communicate with different audiences for a variety of purposes. • create a variety of media texts for different purposes and audiences, using appropriate forms, conventions, and techniques. |
| Grade 11 Equity, Diversity and Social Justice | <ul style="list-style-type: none"> • demonstrate an understanding of the dynamics of power relations in various social contexts. • demonstrate an understanding of the impact individual action can have on equity, social justice and environmental issues, and of how the media can create awareness of these issues. |
| Grade 12 Equity and Social Justice: From Theory to Practice | <ul style="list-style-type: none"> • demonstrate an understanding of a range of perspectives on and approaches to equity and social justice issues, and of factors that affect inequity and social injustice. • analyze, in historical and contemporary contexts, the dynamics of power relations and privilege as well as various factors that contribute to power or marginalization. • analyze a range of historical and contemporary equity and social justice issues and the impact of economic and environmental factors on these issues. • evaluate the contributions of individuals and groups and/or movements identified with specific aspects of the struggle for equity and social justice. • demonstrate an understanding of how personal values, knowledge and actions can contribute to equity and social justice, and assess strategies that people use to address equity and social justice concerns. |
| Grade 10 Civics and Citizenship | <ul style="list-style-type: none"> • analyze key rights and responsibilities associated with citizenship, in both the Canadian and global context, and some ways in which these rights are protected. |
| Grade 11 The Individual and the Economy | <ul style="list-style-type: none"> • analyze how various factors, including practices of different stakeholders, affect markets and the value of goods. |
| Grade 12 Analyzing Current Economic Issues | <ul style="list-style-type: none"> • analyze how economic and political ideas and various socio-cultural factors affect economic decision making. |
| Grade 12 Making Personal Economic Choices | <ul style="list-style-type: none"> • analyze a variety of economic issues from the perspectives of different stakeholders. • analyze some responsibilities and business practices of, and some regulations affecting producers. |
| Grade 11 Regional Geography | <ul style="list-style-type: none"> • analyze issues associated with sustainability and stewardship of natural resources in the selected region. • analyze the role and involvement of intergovernmental organizations in the selected region. • analyze aspects of economic, social and political conflict and cooperation in the selected region. |
| Grade 11 Forces of Nature: Physical Processes and Disasters | <ul style="list-style-type: none"> • analyze issues relating to natural and human impacts on the environment and the sharing of natural resources between population groups. • analyze impacts of physical processes and disasters on human and natural systems, locally, nationally and globally. |

| | |
|--|--|
| Grade 12 World Issues: A Geographic Analysis | <ul style="list-style-type: none"> • analyze strategies and initiatives that support environmental stewardship at a national and global level, and assess their effectiveness in promoting the sustainability of the natural environment. • analyze issues relating to the use and management of common-pool resources. • analyze issues relating to human rights, food security, health care and other challenges to the quality of life of the world's population. |
| Grade 12 World Geography: Urban Patterns and Population Issues | <ul style="list-style-type: none"> • describe ways in which human societies modify their local environments in order to meet economic, social, political and other needs, and assess the effects of these modifications on sustainability. • analyze impacts of public opinion and policy on interactions within and between ecumenes. • Assess from a geographic perspective the effectiveness of solutions to issues affecting the build environment. |
| Grade 12 World Geography: Human Patterns and Interactions | <ul style="list-style-type: none"> • explain the influence of social, political, cultural, economic and environmental factors on human environments and activities. |
| Grade 12 The Environment and Resource Management | <ul style="list-style-type: none"> • analyze the roles and contributions of individuals, governments and organizations with respect to the sustainable management of the world's natural resources. • assess the availability of various natural resources, and analyze factors affecting their exploitation and use. • analyze impacts of various human behaviours on the natural environment, and assess the role of behaviour, ethics and technology in reducing these impacts. |
| Grade 12 Politics in Action: Making Change | <ul style="list-style-type: none"> • explain the political importance of some current issues and analyze various perspectives associated with these issues. • analyze some issues of political importance in terms of their causes, their impact and ways in which they have been addressed. • analyze the objectives and strategies, and assess the influence, of individuals and groups in addressing issues of political importance. |
| Grade 12 Canadian and International Politics | <ul style="list-style-type: none"> • analyze the role of civic awareness and responsibility among citizens and non-governmental stakeholders in the national and international community. • demonstrate an understanding of key challenges relating to various issues of national and global political importance and of the strategies and effectiveness of various non-governmental stakeholders, including NGOs, in addressing them. • assess the importance of the contributions of individuals and other non-governmental stakeholders to national and global communities. |

The Overall Expectations listed above are from the *Ontario Curriculum*. Complete course descriptions, including all Overall and Specific Expectations, can be found at: <http://www.edu.gov.on.ca/eng/teachers/curriculum.html>