Focused on the future of learning.

Joshua Evans  
Course Coordinator & SME  
Faculty of Humanities & Social Sciences

Luis Guadarrama  
Learning Designer  
Centre for Learning Design and Development

Focused on the future of learning.
The Context...

Athabasca University – Undergraduate Model

- Open Education: older than 16, but no requirements
- Online Distance Education: no face-to-face experiences
- Continuous Enrollment: Students can start a course any month of the year – No cohort groups
- Self-paced, Individualized Studies: no deadlines
- 6 Months Contract with paid two-months extensions
- 1 Tutor Per Group: each group up to 30 students
- Study Guides, course materials, readings, etc.
- Tutors limited time: reply answers and mark assignments
The Context...

Human Geography 302

Overview

Geography 302: The Canadian North. This course is a senior-level undergraduate, three-credit course in human geography. It is suitable for students who are interested in the geography, culture, and sustainable development of Canada’s North. The course has been designed to link to and build from knowledge that you may have acquired in other courses, such as cultural geography, environmental studies, Canadian studies, and Native studies. It presents an overview of the human geography of the Canadian North, covering diverse topics such as:

- Imaginings of the North.
- The biophysical features of Canada’s North.
- The history of European exploration and contact with indigenous northern populations.
- Aboriginal culture and society.
- Political developments in the North.
- Natural resource developments in this region and their environmental impacts.
The Context...
Human Geography 302
Course Objectives

• Identify the basic geophysical and biological features of northern Canada and describe their regional specificity, variation, and commonalities.
• Describe and analyze the implications of the biogeography of northern Canada in terms of economic development and environmental management.
• Identify central aspects of the political, economic, and cultural history of northern Canada and describe how these affect current economies, governance, settlement, and conservation.
• Discuss the historical and contemporary circumstances of the indigenous peoples of the North in relation to other northern residents, populations in the south, natural resource development, and environmental issues.
• Discuss the major current development and environmental issues in Canada’s North and identify and compare how they are related to developments in other parts of Canada and beyond.
• **Apply the broad knowledge you gain about northern Canada to an in-depth analysis of a sub-region of northern Canada.**
Concerns...

Human Geography 302

- The course was print-based
- The course content was dated
- Students had no contact/interaction with others / total isolation
- Many times students were not even in touch with their tutor
- Regardless of the rich, diverse and vast content of the course, students were limiting their learning scope.
- Students where picking up the same traditional topics for analysis in their assignments
- Some students were not making sense of the cultural, historical, geographical, and economic richness of the Canadian North
- Students/Tutors frustrated when students selected the wrong topics for their assignments
- A new professor recently took over the coordination of the course. He brought new ideas and asked for an extensive revision
“Well-designed virtual cooperative learning environments build on a number of means that support individual flexibility and other means that facilitate affinity to a learning community. The Theory of Cooperative Freedom is based on the following three pillars:

1. Voluntary, but attractive participation
2. Means promoting individual flexibility
3. Means promoting affinity to learning community"

Morten Flate Paulsen (ICICTE 2012 Proceedings)
Collaborative Learning...
Cooperative Learning...

“Cooperative online learning facilitates individual freedom within a learning community in which online students serve as mutual resources without being dependent on each other.”

Morten Flate Paulsen (ICICTE 2012 Proceedings)

“In cooperative learning [...], students share learning and the group energy (synergy) produces a knowledge and experience greater than the sum of each individual. Students encounter new ideas, perspectives, and experiences with their peers.”

Linda S. Futch, 1999
Instead of submitting two large assignments, which were not necessarily related (old version), now students work in smaller hands-on assignments that build upon one another towards a final project.

In the final project students integrate:
- Their learning experience in the course
- Previous work developed for previous assignments
- The content of learning materials in the course
Mapping the North

Case Study Northern Biogeography

Choosing a Region and Topic for In-Depth Analysis

Aboriginal Culture

Northern Economic Development

Northern Sustainability

Major Research Paper

Part 1


Next, examine the six maps of the North linked to below. Select two maps to compare and, in your answer, indicate clearly which maps you have chosen.

Map 1: The Circumpolar North
Map 2: Major Northern Water Bodies
Map 3: Canada, Looking South from the North Pole
Map 4: The Permanent Ice Pack
Map 5: The Arctic Biome
Map 6: The Treeline

For each map that you select, describe what features have been used to decide what constitutes the North? What does this definition highlight well, and what does it overlook? Should it be used to define the North and, if so, why, or if not, why not?
Incremental approach...

- Mapping the North
- Case Study Northern Biogeography
- Choosing a Region and Topic for In-Depth Analysis
- Aboriginal Culture
- Northern Economic Development
- Northern Sustainability
- Major Research Paper

Part 2

Save this map to your hard drive. Use the painting graphics software of your preference to complete this assignment. If you are using a PC computer, you may want to use Paint, which is included in Microsoft Windows. If you are using a Macintosh computer, you may want to use Paintbrush, which is well-reviewed and freely available online (search for “Macintosh Paintbrush”). Of course, please feel free to use any of the many other excellent tools available, many of which are free online.

On your map, neatly mark and identify the boundaries of the three territories (delineate them clearly from each other and other geo-political areas)
- the three territorial capitals
- the Arctic Circle
- the tree line
- Banks Island
- the Mackenzie River and Mackenzie Delta
- Inuvik
- Great Bear Lake
- Aulavik National Park
- the magnetic North Pole
- Nahanni National Park Reserve
- Great Slave Lake
Choose an animal species (mammal, amphibian, bird, fish, or insect) found in the Canadian North that has not been discussed in any detail in the commentary or previously posted by other students on the interactive 3D Google Earth map on our course home page.

Once your selection is approved by your tutor, write a short report in which you:

• describe the physiological, morphological, and behavioural adaptations that your chosen species uses to survive in the North.

• identify the range that this species inhabits across the North. Has the range of this species or its numbers been affected significantly by increased human presence in the North or by climate change? If so, explain how. As appropriate, consult outside scholarly sources to complete this assignment.

Recommended reading:

Choose one of the regions below to serve as a focal point for the remainder of the course.

Once your tutor approves your selection, provide a 250- to 500-word description of the region you have chosen, explaining why you chose it, and identifying potential topic areas for your final research paper.

Through this regional analysis, you will explore some of the themes covered in the course as a way of understanding how they manifest in a specific locale. As well, for Assignment 4—the research essay or project—you will choose an issue, project, or event specific to your region and complete a research project on your chosen region.

Regions:
1. Yukon
2. Mackenzie Valley
3. Great Slave Region
4. Northeast Northwest Territories
5. Baffin/Qikiqtaaluk Region
6. Western Nunavut Region
Choose an Aboriginal group indigenous to the northern region you chose in Assignment 3, Section A, and identify where they currently live and where they have traditionally lived.

Write a short report focused on cultural activities of these indigenous peoples. For example, you may want to discuss the spiritual practices of the people; innovative adaptations to the northern climate; historical trade patterns with Europeans; or innovative contemporary economic strategies. Key in this portion of the assignment is your ability to write a focused, critical, and complete analysis of the topic and indigenous group you have chosen.

As appropriate, consult outside scholarly sources to complete this assignment.

Recommended Reading:
Mapping the North

Case Study Northern Biogeography

Choosing a Region and Topic for In-Depth Analysis

Aboriginal Culture

Northern Economic Development

Northern Sustainability

Major Research Paper

Option 1
Read Michael Robinson and Elmer Ghostkeeper’s “Native and Local Economies: A Consideration of Economic Evolution and the Next Economy.”

Choose a community in the northern focus region you chose in Assignment 3, Section A, and outline the kinds of renewable and non-renewable resource development in operation twenty-five years ago and today. Identify and explain the economic models that currently operate in the community, and suggest how the community might move toward a more post-industrial model.

Option 2
Write about a significant industrial project that has been conducted in the region you selected in Assignment 3, Section A, detailing

- the geographic location of the event or activity
- key ecological data about the region
- significant details about the industry and development
- some of the environmental, social, economic, and cultural impacts
- remediation or restoration that has occurred (if any)
Discuss what you see to be the main issues that need to be addressed for sustainability to be achieved in the region you chose in Assignment 3, Section A. Why are these issues key to moving toward sustainability?

As appropriate, consult outside scholarly sources to complete this assignment.
Using the focal region you chose in Assignment 3, Section A, compose a critical research paper about a specific northern event, activity, or issue of some contemporary or historical relevance to human geography that has not been covered in depth in our Study Guides. Combine at least two (and more, if possible and appropriate) of the major topic areas covered in the course. So, for example, you might combine biogeography, history, and a political analysis in the discussion of your specific topic. Discuss your topic or topic ideas with your tutor.

To complete this assignment, you are expected to consult academic materials beyond those provided as course materials. Consult a minimum of three academic, peer-reviewed articles, books, or both. You may also consult the Internet, but you are expected to be a critical user of such material, keeping in mind that much of the material on the web is not peer-reviewed. The onus is on you to select materials that are of academic merit.

You may include in your essay the materials you researched and prepared for various unit analyses; however, your report may not be simply a combination of those materials, but must extend substantially beyond them. Also, should you choose a topic covered in the course materials, you are expected to illuminate an aspect of it not already discussed, or to provide a much more in-depth analysis of the topic than what is already presented in your course materials.
Assignments Characteristics...

**Mapping the North**

**Case Study Northern Biogeography**

**Choosing a Region and Topic for In-Depth Analysis**

**Aboriginal Culture**

**Northern Economic Development**

**Northern Sustainability**

**Major Research Paper**

**Approval for assignments**

- Students have to seek tutors’ approval.
- Approval for assignments is mandatory.
- The approval process includes students reviewing previous assignment proposals approved by tutors.
- Students have to negotiate the content for their assignments.
- Instructions for assignments are designed in such a way that students pick up their own topic for discussion/analysis.
- Students’ outcomes are different from one another.
- The approval process is transparent and public.
- The approval process gives students the opportunity to get tutors’ feedback.
- The approval process gives tutors the opportunity to get familiarized with students work style.
- Tutors can track students’ work.
- As a result of the approval process student-tutor interaction become more productive and useful.
- **The approval process may limit academic misconduct and plagiarizing.**
Assignments Characteristics

Assignment 2 Northern Biogeography: The Canada Lynx
Wednesday, 14 May 2014, 11:36 AM GMT

The Canada Lynx is an astounding animal, adapted perfectly to living in the North. Analysis of the Lynx will include discussion of its home range. Where and how this range is threatened through various factors, such as climate change effecting its primary food source, the snowshoe hare. Also discussing the animals biology, its unique body build, and its paw size for example, that allow it to live in the North.

Tutor: Peter Slezak

Beluga Whales of Canada’s North An analysis of the Beluga Whale’s adaptations, range and position in climate change.
Sunday, 4 May 2014, 12:37 PM GMT

The animal species I have chosen for my assignment is a beluga whale. The Beluga whale is a mammal from the Cetacea (whales and dolphins) family, specifically the Odontoceti category (toothed whales). My analysis will be looking at the Beluga whale’s adaptations for life in the cold Arctic regions of Canada. I will also look at the range of this species across the north and the significance of its numbers. In addition, I will be looking at the impact of climate change on the Beluga whale species and their habitat.

Peter Slezak

Assignment #2
Sunday, 4 May 2014, 12:44 PM GMT

For assignment #2 I would like to do the Snowy Owl. I found this bird very intriguing considering all of the features and characteristics it needs to have to be able to survive in the North. Not even having to leave the north for breeding purposes, is extremely interesting for me and I am excited to further my knowledge on the behaviours and adaptations of the Snowy Owl. My tutor is peter slezak.

Comments (1)

myjudy
Sunday, 4 May, 12:41 GMT

The proposal is fine, go ahead with it.

Peter
Assignments Characteristics...

Mapping the North

Case Study Northern Biogeography

Choosing a Region and Topic for In-Depth Analysis

Aboriginal Culture

Northern Economic Development

Northern Sustainability

Major Research Paper

Instructions for assignments include:

- Teachers’ expectations
- General instructions
- Detailed information about the elements that the assignment should include
- Criteria for evaluation
- Rubrics (component & Evaluation Criteria)
- How to submit the assignment (Dynamic maps / Discussion forum)
Approval for Assignment 4: Major Research Paper

Due: After completing Unit 9 and before you work on Assignment 4: Major Research Paper

Weight: Pass / Fail

Requirements: Read the instructions for Assignment 4: Major Research Paper to complete this request

Length: Include in your request for approval

- a proposed title
- an introduction
  - a thesis: your introduction should contain your thesis and a statement of the problem, as well as the purpose of your discussion
  - a body: this should outline the arguments to support your thesis statement
  - a conclusion: this is an analytical summary of the arguments made in the body of your paper
- an annotated bibliography: this should consist of at least ten articles that you will use as references to support your paper. For each proposed paper include
  - a brief (3–5 line) summary of the source
  - the source’s strengths and weaknesses
  - its conclusions
  - why the source is relevant for your paper
  - its relationships to other studies in the field
Assignments Characteristics...

Mapping the North

Case Study: Northern Biogeography

Choosing a Region and Topic for In-Depth Analysis

Aboriginal Culture

Northern Economic Development

Northern Sustainability

Major Research Paper

Instructions for assignments include:

Assignment 4: Major Research Paper

Prerequisite: Before you work on Assignment 4, you must first get your tutor's approval for your chosen topic. To send your tutor a request for approval, please go to Approval for Assignment 4: Major Research Paper.

Weight: 25% of your final grade

Due Date: After completing Unit 9

Length: 3,000 to 3,750 words (approximately 12 to 15 double-spaced pages of text) not including the title page, table of contents, list of works cited, and appendices
Assignment 4: Major Research Paper

Instructions

Using the focal region you chose in Assignment 3, Section A, compose a critical research paper about a specific northern event, activity, or issue of some contemporary or historical relevance to human geography that has not been covered in depth in our Study Guides. Combine at least two (and more, if possible and appropriate) of the major topic areas covered in the course. So, for example, you might combine biogeography, history, and a political analysis in the discussion of your specific topic. Discuss your topic or topic ideas with your tutor.

To complete this assignment, you are expected to consult academic materials beyond those provided as course materials. Consult a minimum of three academic, peer-reviewed articles, books, or both. You may also consult the Internet, but you are expected to be a critical user of such material, keeping in mind that much of the material on the web is not peer-reviewed. The onus is on you to select materials that are of academic merit.

You may include in your essay the materials you researched and prepared for various unit analyses; however, your report may not be simply a combination of those materials, but must extend substantially beyond them. Also, should you choose a topic covered in the course materials, you are expected to illuminate an aspect of it not already discussed, or to provide a much more in-depth analysis of the topic than what is already presented in your course materials.

Your essay should include clear and properly referenced maps as appropriate, and be consistently and properly referenced. (For appropriate academic referencing styles see the Human Geography website.) If appropriate, you should also include a table of contents and appendices.
Assignment 4: Major Research Paper

Marking Rubric

Your assignment will be marked taking into account the following criteria:

a. identification of event, issue, or activity (15 marks)
b. application of course themes (30 marks)
c. research requirement/content (30 marks)
d. structure and grammar (15 marks)
e. documentation (10 marks)

Before you begin this assignment, please read the “Tips on Writing Essays” and the “Marking Criteria for Major Research Papers” chapters in the Course Information. Please also review the “Academic Integrity” section in the Student Manual.

To submit your assignment, please click on the link below “Submissions.”
Mapping the North

Case Study Northern Biogeography

Choosing a Region and Topic for In-Depth Analysis

Aboriginal Culture

Northern Economic Development

Northern Sustainability

Major Research Paper

Open/public submission of assignments

- The 5 assignments integrate students’ an in-depth analysis of a sub-region of northern Canada
- Students submit these assignments publicly
- Students use dynamic maps to submit their assignments
- Maps are updated over time by students
- Maps let students visualize all the participants’ learning experience
- Students have the opportunity to learn from one another
- Students’ learning experience get enriched, expanded, and diversified
- The knowledge posted on the maps represent an interesting summary of the group learning experience
Manual for students (maps)...

Note: Please note that if you have problems submitting your assignments, you may find that you have more success if you have a gmail (Google Mail) account, which will interface better with Google maps.

The Process

1. You will use the above 2D dynamic map to submit the following assignments: Assignment 2, Assignment 3, section A, Assignment 3, section B, Assignment 3, section C, and Assignment 3.

The 3D map on our course home page is a version of the above 2D map. When you input each of your assignments in the 2D map, the 3D map will be automatically updated.

When you post your assignment, make sure that you use the above placemark colour code. There is a distinct placemark colour for each assignment.

2. Before completing Assignment 2, and each of the four sections of Assignment 3 (A, B, C, and D), you must first get your tutor's approval for the subject you will focus on. You will find more information about this process on our course home page.

3. When you have completed Assignment 2, and when you have completed each section of Assignment 3, email your tutor to ask for access to the 2D map through which you will submit your assignments.
Assignments Characteristics

2. Click on the red "EDIT" button to post your assignment on the map. The "EDIT" button is on the upper-left side of the screen.

3. Insert a new placemaker on the map to submit your assignment:
   i. First, find the location on the map where you want to insert your placemaker. Zoom in on the map as much as possible to make sure that your placemaker is visible. If you need to, you can zoom in further by going to View > Zoom > In.
   ii. Click on the blue placemaker icon button. Once you start holding the blue placemaker, it will change into the icon with "X" crosshairs. The crosshairs indicate that you have selected the placemaker. Move your cursor to the location on the map where you want to insert the placemaker. The map will highlight the location of your placemaker with a blue circle.
   iii. Move the cursor to the appropriate location. If you want to dismiss this placemaker, press the Escape key. Click to insert your placemaker. It should appear at the location you selected.

Note: The blue placemaker is located on the upper-left side of your map.

Note: If you want to adjust the placement of your placemaker, you can drag it to the right location. Click on your icon and hold down your left mouse button while you are dragging. You can then move your cursor to the new location and release the left mouse button to place the placemaker.

Mapping

Case Study Northern Biogeography

Choosing a Region and Topic for In-Depth Analysis

Aboriginal Culture

Northern Economic Development

Northern Sustainability

Major Research Paper
Assignments Characteristics...

Mapping the North

Case Study Northern Biogeography

Choosing a Region and Topic for In-Depth Analysis

Aboriginal Culture

Northern Economic Development

Northern Sustainability

Major Research Paper
Mapping the North

Case Study Northern Biogeography

Choosing a Region and Topic for In-Depth Analysis

Aboriginal Culture

Northern Economic Development

Northern Sustainability

Major Research Paper

Learning with maps – future plans

• In future, the course coordinator is applying to obtain Google Earth – Pro version
• It will let students develop the basic mapping skills (latitude, coordinates, etc.).
• Once the Pro version is acquired, more interesting assignments will be integrated into the course
Assignments Characteristics...

- Mapping the North
- Case Study Northern Biogeography
- Choosing a Region and Topic for In-Depth Analysis
- Aboriginal Culture
- Northern Economic Development
- Northern Sustainability
- Major Research Paper

Final Assignment submission

Q&A discussion forum

- Students post their final paper in a Q&A discussion forum
- Before students submit, they cannot see/access any previous submission
- After students submit their assignment, there is a 30 minutes window for editing purposes
- During the 30 minutes period, students still cannot see/access any previous post
- After students submit they can’t edit or modify their assignment.
- Then, students will have the opportunity to consult other students’ assignments
- Marking is private
Instructions for tutors...

I. Why, when, and how would be the time for creating a new dynamic map for the course

1. Why at some point you may want to replace the dynamic map with a blank one
2. How to identify when to create a new dynamic map
3. How to create a new dynamic map

Final note: what happens if enrollments in the course go up?

II. Creating a new map: starting from scratch

1. Create a new map in Google
2. Request a minor course revision
3. Embed a new dynamic map in a new course revision

III. How the dynamic Google map works in the course

1. Students request tutors' approval for their intended topics and focus for

---

GEOGRAPHY 302

Everything about Using Dynamic Google Maps in GEOG 302

I. Why, when, and how would be the time for creating a new dynamic map for the course

Note: The whole section “Instructions for Tutors” is hidden from students. Despite the section and its links being visible to tutors, the Moodle “Student” view does not show any information in this section.

Introduction

The use of a Google dynamic map is one of the most significant new elements in GEOG 302; it was incorporated in the Summer 2013 revision. Coordinated by tutors, students across groups will use and share the same dynamic Google map to post Assignment 2 and Assignment 3, sections A, B, C, and D, which are an important focus of the course. However, instructions for these assignments are designed so that students' outcomes will be different from one another's. There is also an approval process for each assignment in which tutors ensure that the focus and perspective of a student's assignment differ from those of other students. So, students sharing assignments in a public space won't have any opportunity for copying or cheating. This cooperative learning strategy will expand, diversify, and enrich students' learning experience by providing them with an excellent opportunity for learning from one another. However, over time this map will become either too crowded, technically “full,” or the list of topics available for students will simply become exhausted. Thus, it is important to identify when would be the best time to replace a “full” map with a new blank one. This section explains why, when, and how to replace a dynamic Google map with a blank one.
Discussion for tutors...

Forum for Tutors

Note that this forum is hidden from students.

This forum is for private conversations among tutors managing groups in GEOG 302 and the course coordinator. Tutors are encouraged to use this forum to report issues or technical problems that may occur in this course.

Any comment posted in this forum can be read by all tutors and the course coordinator.

Also, tutors are encouraged to stay in touch through this forum and discuss teaching-learning strategies that could enhance the design and implementation of GEOG 302.

Add a new discussion topic

<table>
<thead>
<tr>
<th>Discussion</th>
<th>Started by</th>
<th>Replies</th>
<th>Unread</th>
<th>Last post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google Earth</td>
<td></td>
<td>0</td>
<td>0</td>
<td>Mon, 12 May 2014, 08:55 AM</td>
</tr>
<tr>
<td>Returning marked assignments</td>
<td></td>
<td>3</td>
<td>0</td>
<td>Wed, 12 Feb 2014, 09:20 AM</td>
</tr>
</tbody>
</table>
Course Evaluation

We want to survey students to learn about:

• Their learning experience
• Their interaction with the maps
• Their interaction with other students
• Their interaction with tutors
• Etc.
Thanks for your attention

Using Google Dynamic Maps for Enriching Cooperative Learning