

# Computer Mapping

## GEOG 2304(3)-001 Fall 2021 Course Outline

**Professor:** Dr. Christopher D Storie  
**Office:** 5L03  
**Phone:** 204.789.1495  
**Office Hours:** T-10:00-11:00am  
(or by appointment)

**E-Mail:** [c.storie@uwinnipeg.ca](mailto:c.storie@uwinnipeg.ca)

**Course Date & Time:** T/Th – 8:30-9:45am  
**Course Location:** 5L24

**Lab Date & Time:** T 1:00-2:50pm  
F 9:30-11:20am  
F 1:00-2:50pm

**Lab Location:** 5L23

### Course Description and Objectives

This course introduces the theory, practice, and methods of computer mapping. Students make use of existing cartographic and statistical data bases, as well as input information through digitizing and scanning, to construct thematic maps using various microcomputer software packages.

The general goals of the course are:

1. Students will be exposed to cartographic information and will develop map reading skills, ranging from the simple reckoning of locations to the understanding of the spatial structure and process that maps can represent.
2. Students will become familiar with standard quantitative and qualitative methods, enabling them to accurately understand the meaning of information and how this information can be used to understand economic and social issues.
3. In addition to the ability of understanding and reading maps, students will develop cartography skills and will be able to create maps on their own.
4. Students will learn how to use ArcMap GIS software particularly for the purpose of qualitative and quantitative information presentation. ArcMap will be the main tool in which students will apply the geographical methodology.

## Student Evaluation and Grading

The course is broken down into two major components. A theoretical component which comprises classroom materials and their associated tests and exams (60% of course grade) and an applied component represented by the laboratory assignments and exam (40% of course grade).

There are eight (6) lab assignments each for a total of 40% of your final grade. Lab assignments are due at the beginning of the student's lab session (unless otherwise specified) on the due date specified in the assignment handout. **NO LATE SUBMISSIONS WILL BE ACCEPTED.**

Component	Date (Due)	Percent of Final Grade
Test #1	Thursday October 7, 2021	15%
Test #2	Thursday November 18, 2021	15%
Lab Assignments	As specified in lab assignment	40%
Final Exam	T.B.A.	30%

\*Dates and times are subject to change. Where a discrepancy exists the official university final exam schedule will supersede the above date (<http://www.uwinnipeg.ca/exam-schedules/>)

The following grade distribution by letter grade will be used for this class.

A+	A	A-	B+	B	C+	C	D	F
90-100	84-89	80-83	76-79	70-75	66-69	55-65	50-54	<50

\*\*The numeric boundaries separating letter grades may be altered at the demand of the Department Review Committee or University Senate.

### Significant Dates<sup>1</sup>

- Lectures Begin: Tuesday, September 7, 2021
- Truth and Reconciliation Day: Thursday, Sept. 30, 2021 (Uni Closed)
  - Makeup Day: Tuesday, December 7, 2021
- Fall Term Reading Week: Sunday, October 10, 2021 to Saturday, October 16, 2021
- Remembrance Day: Thursday, November 11, 2021 (Uni Closed)
  - Makeup Day: Wednesday, Dec. 8, 2021
- Final Withdrawal Date: Tuesday, November 16, 2021
- Lectures End for Regularly scheduled classes: Monday, December 6, 2021
- Exams: Thursday, December 10, 2021 to Wednesday, December 23, 2021

### Course Textbook and Resources

There is no official textbook for the course. Additional materials related to this course will be available on Nexus. All materials posted on NEXUS within the course content areas are required reading unless otherwise stated. Students should consider all posted materials as suitable content for exams.

**Suggested Texts (for those that wish to use one): If you are a student who wishes to have a textbook to support your learning please contact me and I can direct you to accessible and affordable resources.**

If you are having difficulties with Nexus contact the help desk at 204-786-9149 or [servicedesk@uwinnipeg.ca](mailto:servicedesk@uwinnipeg.ca).

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<sup>1</sup> ***Class make-up days are scheduled at the end of term for courses that conflict with holidays.***

## Course Organization

The following course organization outlines the topics to be discussed during lectures. The order, dates, and proposed content of the presentations are subject to change as circumstances dictate. We may also not be able to cover the entire curriculum due to the interest of the class in examining in more detail some of the topics compared to others.

Week Of	Date	Topic	Lab Assignment
<b>Sept 6 (1)</b>	Tuesday	Introduction and Course Overview	Labs Start Week of September 13
	Thursday	What is Cartography?	
<b>Sept 13 (2)</b>	Tuesday	History of Cartography	Lab #1: Mental Mapping (4%)
	Thursday		
<b>Sept 20 (3)</b>	Tuesday	Geodesy and Map Projections	Lab #2: Using ArcGIS (8%)
	Thursday		
<b>Sept 27 (4)</b>	Tuesday	The Map Design Process	Lab #2: Using ArcGIS*
	Thursday	<i>Truth and Reconciliation (No classes)</i>	
<b>Oct 4 (5)</b>	Tuesday	The Map Design Process (Continued)	Lab #3: Designing Your First Map (4%)
	Thursday	<b>Test #1</b>	
<b>Oct 11 (6)</b>	Tuesday	<i>Fall Reading Break (No Classes)</i>	<i>No Lab Assigned</i>
	Thursday		
<b>Oct 18 (7)</b>	Tuesday	Making the Map Legible (Type and Colour)	Lab #4: The "7 Second" Map (4%)
	Thursday		
<b>Oct 25 (8)</b>	Tuesday	Spatial Data and Map Representation (Choropleth, Dot Density, Proportional Symbol)	Lab #5: Thematic Mapping (10%)
	Thursday		
<b>Nov 1 (9)</b>	Tuesday	Spatial Data and Map Representation (Three Dimensions, Cartograms, Flow)	Lab #5: Thematic Mapping
	Thursday		
<b>Nov 8 (10)</b>	Tuesday	Map Production	Lab #5: Thematic Mapping*
	Thursday	<i>Remembrance Day (No Classes)</i>	
<b>Nov 15 (11)</b>	Tuesday	Map Production	Lab #6: B&W versus Colour (10%)
	Thursday	<b>Test #2</b>	
<b>Nov 22 (12)</b>	Tuesday	How to Lie with Maps	Lab #6: B&W versus Colour
	Thursday		
<b>Nov 29 (13)</b>	Tuesday	Geospatial Technologies and the Future	Lab #6: B&W versus Colour
	Thursday		
<b>Dec 6 (14)</b>	Tuesday	What's Next?	
	Wednesday	<b>Final Exam Review</b>	

*\*As a result of Truth and Reconciliation Day and/or Remembrance Day, formal labs for the week of September 27 and November 8 are suspended. Students are expected to continue working on their maps independently. The TA will be available during Friday labs for support. Labs are still due as specified in each assignment*

## Course Rules and Guidelines

1. When it is necessary to **cancel a class** due to exceptional circumstances, I will make every effort to inform students via uwinnipeg email (and/or using the preferred form of communication, as designated in this outline), as well as the Departmental Assistant and Chair/Dean so that class cancellation forms can be posted outside classrooms.
2. Students are reminded that they have a responsibility to **regularly check their uwinnipeg** e-mail addresses to ensure timely receipt of correspondence from the University and/or their course instructors.
3. Please note that **withdrawing** before the VW date does not necessarily result in a fee refund. The first day of class is Tuesday September 7, 2021. Last class will be held on December 6 with make-up classes for Remembrance Day on Tuesday December 8 and Truth and Reconciliation Day will be Wednesday, Dec. 7, 2021. Evaluation period is December 10-23, 2021. There is no final exam scheduled for this course [See <https://www.uwinnipeg.ca/academics/calendar/docs/dates.pdf> for all dates]
4. Students with documented disabilities, temporary or chronic medical conditions, requiring **academic accommodations** for tests/exams or during lectures/laboratories are encouraged to contact Accessibility Services (AS) at 204.786.9771 or <https://www.uwinnipeg.ca/accessibility-services/> to discuss appropriate options. All information about a student's disability or medical condition remains confidential.
5. Reference to the appropriate items in the Regulations & Policies section of the Course Calendar, including Senate **appeals and academic misconduct** (e.g. plagiarism, cheating) <https://www.uwinnipeg.ca/academics/calendar/docs/regulationsandpolicies.pdf> Instructors should become familiar with the procedures for dealing with alleged academic misconduct at <https://www.uwinnipeg.ca/institutional-analysis/docs/policies/academic-misconduct-procedures.pdf>
6. **Avoiding Academic and Non-academic Misconduct.** Students are encouraged to familiarize themselves with the Academic Regulations and Policies found in the University Academic Calendar at: <https://uwinnipeg.ca/academics/calendar/docs/regulationsandpolicies.pdf>. Particular attention should be given to subsections 8 (Student Discipline), 9 (Senate Appeals), and 10 (Grade Appeals). Please note, in particular, the subsection of Student Discipline pertaining to plagiarism and other forms of cheating.
  - a. Detailed information can be found at the following:
    - i. The University of Winnipeg library video tutorial "Avoiding Plagiarism" <https://www.youtube.com/watch?v=UvFdxRU9a8g>
    - ii. Academic Misconduct Policy and Procedures: <https://www.uwinnipeg.ca/institutional-analysis/docs/policies/academic-misconduct-policy.pdf> and <https://www.uwinnipeg.ca/institutional-analysis/docs/policies/academic-misconduct-procedures.pdf>
    - iii. Non-Academic Misconduct Policy and Procedures: <https://www.uwinnipeg.ca/institutional-analysis/docs/student-non-academic-misconduct-policy.pdf> and <https://www.uwinnipeg.ca/institutional-analysis/docs/student-non-academic-misconduct-procedures.pdf>
7. **Misuse of Filesharing Sites.** Uploading essays and other assignments to essay vendor or trader sites (filesharing sites that are known providers of essays for use by others who submit them to instructors as their

own work) involves “aiding and abetting” plagiarism. Students who do this can be charged with Academic Misconduct.

8. Avoiding **Copyright Violation**. Course materials are owned by the instructor who developed them. Examples of such materials are course outlines, assignment descriptions, lecture notes, test questions, and presentation slides. Students who upload these materials to filesharing sites, or in any other way share these materials with others outside the class without prior permission of the instructor/presenter, are in violation of copyright law and University policy. Students must also seek prior permission of the instructor /presenter before photographing or recording slides, presentations, lectures, and notes on the board.
9. **Research Ethics**. Students conducting research interviews, focus groups, surveys, or any other method of collecting data from any person, including a family member, must obtain research ethics approval before commencing data collection. Exceptions are research activities done in class as a learning exercise. For submission requirements and deadlines, see <http://www.uwinnipeg.ca/research/human-ethics.html> .
10. All students, faculty and staff have the right to participate, learn, and work in an environment that is free of harassment and discrimination. The **UW Respectful Working and Learning Environment Policy** may be found at <https://www.uwinnipeg.ca/respect/>.
11. **Indigenous students** seeking additional supports, academic or other, are encouraged to contact the Aboriginal Student Services Centre (ASSC). The ASSC offers a variety of support services, and was created to maintain a safe, educational and culturally sensitive environment for all Aboriginal students (First Nation, Metis and Inuit) as they pursue their academic studies at The University of Winnipeg. More information can be found at: <http://www.uwinnipeg.ca/assc/> .
12. **Exam/Test Policies**: As a result of on-line instruction, students may be asked to turn on their camera and show their face alongside their university ID to prove their identity.
13. **Missed Test/Exam Policy**: There are six acceptable excuses for an individual missing an exam or test. They are:
  - a. **Illness**: I will need an official certificate from your doctor verifying that you have a medical condition that precluded you from writing the schedule exam/test. ***The note must indicate either the day(s) you were unable to attend class and/or the return to work/school date, not simply the day you were seen by the medical practitioner.*** You will also be required, within reason, to notify the instructor as early as possible prior to, or immediately after the scheduled date. An email will suffice.
  - b. **Funeral Attendance**: I will need proof of funeral attendance with the date of the ceremony clearly listed.
  - c. **Mandatory Courtroom Appearance**: I will need a copy of your official court summons with the date of attendance clearly listed.
  - d. **Athletic Participation and other Approved University Activities**: I will need a signed letter from a member of the senior coaching staff, program director, instructor, or other supervisory individuals indicating the day(s) you will be absent.
  - e. **Inclement Weather**: Bad weather happens, if you are held up because of poor travel conditions contact the instructor as soon as possible to make alternate arrangements. In this situation the test/exam will be made-up later the same day or the following day, whenever possible.
  - f. **Religious Holiday**: Students may choose not to attend classes or write examinations on holy days of their religion, but they must notify their instructors at least two weeks in advance. Instructors will then provide opportunity for students to make up work examinations without penalty. A list of religious

holidays can be found in the 2020-2021 Undergraduate Academic Calendar.

<http://uwinnipeg.ca/academics/calendar/docs/important-notes.pdf>.

14. In all situations, the makeup test/exam will occur **within 5 school days** of the missed date. In the event of illness this deadline will be **within 5 school days** from the “**return to work**” date noted on the medical certificate. It is the student’s responsibility to schedule the makeup exam. Failure to schedule within the defined timeline will result in a grade of zero (0) for that test/exam.
15. Final Exam Deferrals: A legitimate exam conflict is defined as two (2) exams scheduled at the same time. You need to identify early any conflicts that may exist. Conflicts should attempt to be resolved by the student and the instructor(s), if a resolution cannot be reached students must submit the appropriate formal appeal (<http://www.uwinnipeg.ca/index/exam-conflict>). It is the student's responsibility to initiate the resolution of any conflicts. **Personal conflicts such as travel plans, and work schedules do not warrant a change in examination times. The date, time and location of the final exam are contained in this syllabus.**
16. **Late Penalties:** Assignments submitted late (and without a valid excuse) will be assessed a late penalty of 10%/day reduction in grade to a maximum of a 50% reduction whereby the assignment will be awarded a grade of zero (0).
17. **Course Communication:** Students are reminded that only their University of Winnipeg email address will be used for course related correspondence or through the email system on NEXUS. **The instructor will not respond to messages that do not originate from either of these sources.** Students have the responsibility to regularly check their UWinnipeg e-mail addresses to ensure timely receipt of correspondence from the University and/or their course instructors.
18. **Make-Up or Bonus Work:** There will be NO make-up work or bonus material of any kind.

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*The information presented in this course is the intellectual property of the instructor(s) and is presented for the benefit of registered students only. Any audio, video, or virtual reproduction of the lectures or labs, either in whole or in part, without the express written consent of the instructor(s) is strictly prohibited. In the event of extenuating circumstances, I reserve the right to make changes to any information presented in this document, after consulting with, or with the approval of, the class. Changes in test dates require the unanimous approval of those who were in attendance in class when the changes were discussed.*