

**UNIVERSITY OF MANITOBA
CHR FACULTY OF EARTH, ENVIRONMENT, AND RESOURCES
DEPARTMENT OF ENVIRONMENT AND GEOGRAPHY**

**GEOG 1290 A01 INTRODUCTION TO PHYSICAL GEOGRAPHY
COURSE OUTLINE: FALL 2016**

GENERAL INFORMATION

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Phone: (204) 474-8483

Office hours: Tuesday and Thursday 8:30-9:30 am, or by appointment.

Course website: umlearn.ca

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COURSE DESCRIPTION

Studies in PHYSICAL GEOGRAPHY are focused upon the thin surface layer of the earth where land, air, and water meet. The topics included in this introductory course appear as parts of many disciplines such as: Geology, Meteorology, Climatology, Biology, Pedology and Oceanography; but the basic concern of those who study Physical Geography is to investigate the ways in which phenomena associated with these various disciplines interact with one another. Humans are becoming increasingly aware of the significance of changes that occur in the physical environment. We are at last beginning to realize that we too have an impact upon the environment, and that the consequences of our actions may have a positive or a negative effect. *My goal for this course is to make sure every student receives an excellent final grade and each student live up to their full potential.*

LEARNING OBJECTIVES

- Understand the main spheres or realms of the Earth system including the atmosphere, lithosphere, hydrosphere and biosphere
- Describe the global energy budget and the meteorological/climatological variables of the Earth's atmosphere
- Examine the volcanic/tectonic and external forces that create the physical features on the Earth's surface
- Explain the role water plays in the various Earth processes
- Discuss the spatial distribution of plants and animals on the Earth's surface and the factors/processes that control this distribution
- Develop an understanding of the complex relationships among the basic elements of our physical environment
- Gain an awareness of the increasing impact of our activities upon the ever-changing Earth

TEXTBOOK

Required: Gervais, B. 2015. *Living Physical Geography*, MacMillan Education ISBN: 9781464106644.

EVALUATION

Term Tests (x2): 50% (25% each test)

Final Exam: 40%

Learning Curve Quizzes: 10% (total)

FINAL GRADE ALLOCATION

A+	90% or above	C+	65% - 69%
A	80% - 89%	C	60% - 64%
B+	75% - 79%	D	50% - 59%
B	70% - 74%	F	49% or below

STUDENT RESPONSIBILITIES

- A high level of student cooperation and participation, involving asking and answering questions during the lectures.
- **Cell phones and portable music players must be turned off during lectures. Students are also required to remove earphones. NO TEXTING DURING CLASS.** Students may use laptops/tablets to take course notes in class. Student should not participate in personal direct electronic messaging / posting activities (e-mail, texting, video or voice chat, wikis, blogs, social networking (e.g. Facebook) online and offline “gaming” during scheduled class time. If student is on call (emergency) the student should switch his/her cell phone on vibrate mode and leave the classroom before using it.
- Students are required to attend all lectures and take notes. Students are expected to be punctual for classes. Not all material presented in the lectures is covered in the text. *If you miss a lecture, make arrangements to get notes from a fellow student, not from instructor!* Lecture slides will not be provided on UMLearn (the learning management tool). Failure to attend lectures will result in a poor class participation grade.
- The individual student is required to read the assigned chapters of the textbook *prior to class*. Not all the textbook will be covered in the lectures but may be covered on the quiz or exam.
- Students are required to complete the necessary quizzes individually and on time, unless otherwise stated. Failure to do so will result in a penalty (see section of course outline on Academic Integrity)
- The University requires all students to activate an official University email account. For full details of the Electronic Communication with Students please visit:
http://umanitoba.ca/admin/governance/media/Electronic_Communication_with_Students_Policy_-_2014_06_05.pdf
- Please note that all communication between myself and you as a student must comply with the electronic communication with student policy (http://umanitoba.ca/admin/governance/governing_documents/community/electronic_communication_with_students_policy.html). You are required to obtain and use your U of M email account for all communication between yourself and the university.

VOLUNTARY WITHDRAWAL DATE

The voluntary withdrawal date is the last date for withdrawing from this course without academic penalty. The voluntary withdrawal date for this course is November 18, 2016. Evaluative feedback for term test will be provided prior to this date.

COURSE POLICIES

Audio/Video Recording: John Iacozza and the University of Manitoba hold copyright over the course materials, presentations and lectures which form part of this course. No audio or video recording of lectures or presentations is allowed in any format, openly or surreptitiously, in whole or in part without permission by John Iacozza. Course materials (both paper and digital) are for the participant’s private study and research.

Feedback: formative (i.e. comments) and summative (i.e. grade) feedback will be provided to the student within two weeks of the term test (or as soon as possible). This feedback will be provided through via paper.

Questions/Concerns: If you are having a problem and want to discuss something, please feel free to see me before/after class, during my office hours or make an appointment at a more convenient time. I can be reached through phone or email (preferred method).

Emails: Ensure that the course name and number are included in the subject line for all emails. Please make sure emails are written in a professional manner, including complete sentences and do not use text language (I am not fluent in shorthand). Please address the email to John or Dr. Iacozza (not Buddy or any similar terms). Emails must be sent from University of Manitoba email accounts; emails from other

accounts (such as gmail) will not be responded to. Emails will typically be responded to during regular office hours. You should not expect a response on weekends or in the evenings (i.e. after 4 pm).

Academic Integrity: Academic dishonesty (plagiarism, cheating) is a very serious matter in any academic institution and is dealt with severely at the University of Manitoba.

Plagiarism or any other form of cheating in examinations, term tests or academic work is subject to serious academic penalty (e.g. suspension or expulsion from the faculty or university). Cheating in examinations or tests may take the form of copying from another student or bringing unauthorized materials into the exam room (e.g., crib notes, pagers or cell phones). Exam cheating can also include exam personation (see below). A student found guilty of contributing to cheating in examinations or term assignments is also subject to serious academic penalty, including a grade of zero on the assignment/exam, a final grade of F in the course or expulsion from the University (based on severity of offense).

To plagiarize is to take ideas or words of another person and pass them off as one's own. In short, it is stealing something intangible rather than an object. Plagiarism applies to any written work, in traditional or electronic format, as well as orally or verbally presented work. Obviously it is not necessary to state the source of well-known or easily verifiable facts, but students are expected to appropriately acknowledge the sources of ideas and expressions they use in their written work, whether quoted directly or paraphrased. This applies to diagrams, statistical tables and the like, as well as to written material, and materials or information from Internet sources. Students must use either APA or Chicago styles to properly reference work. Students will be penalized 20% if another style or footnotes are used in the assignment. Information on the acceptable styles is available through the UM Libraries at: <http://libguides.lib.umanitoba.ca/c.php?g=298394>

To provide adequate and correct documentation is not only an indication of academic honesty but is also a courtesy which enables the reader to consult these sources with ease. Failure to provide appropriate citations constitutes plagiarism. It will also be considered plagiarism and/or cheating if a student submits a term paper written in whole or in part by someone other than him/herself, or copies the answer or answers of another student in any test, examination, or take-home assignment.

Working with other students on assignments, laboratory work, take-home tests, or on-line tests, when this is not permitted by the instructor, can constitute Inappropriate Collaboration and may be subject to penalty under the Student Discipline By-Law.

An assignment which is prepared and submitted for one course should not be used for a different course. This is called "duplicate submission" and represents a form of cheating because course requirements are expected to be fulfilled through original work for each course.

Please familiarize yourself with the University policy on academic dishonesty found on the following website: http://www.umanitoba.ca/student/resource/student_advocacy/cheating_plagiarism_fraud.html. When in doubt about any practice, ask your professor or instructor.

Examinations Personations is when a student who arranges for another individual to undertake or write any nature of examination for and on his/her behalf, as well as the individual who undertakes or writes the examination, will be subject to discipline under the university's Student Discipline Bylaw, which could lead to suspension or expulsion from the university. In addition, the Canadian Criminal Code treats the personation of a candidate at a competitive or qualifying examination held at a university as an offence punishable by summary conviction. Section 362 of the code provides:

Personation at Examination

362. Everyone who falsely, with intent to gain advantage for him/herself or some other person, personates a candidate at a competitive or qualifying examination held under the authority of law or in connection with a university, college or school or who knowingly avails him/herself of the results of such personation is guilty of an offence punishable on summary conviction. 1953-54, c.51, s.347.

Both the personator and the individual who avails him/herself of the personation could be found guilty. Summary conviction could result in a fine being levied or up to two years of imprisonment.

A complete copy of the Final Examination Procedures is available at:

http://umanitoba.ca/admin/governance/governing_documents/academic/final_examinations_procedures.html

Students are encouraged to review the University policy on Responsibilities of Academic Staff with Regards to Students (ROASS): umanitoba.ca/admin/governance/governing_documents/students/278.html

TESTING

The tests and final exam will consist of multiple choice and short answer questions. These questions will be based on lectures, assigned readings and class discussion. No extraneous devices (i.e. dictionaries, cell phones, notes, textbooks, etc.) will be allowed for the tests or final exam. You will need to bring a writing utensil (i.e. pencil/pen) and a form of identification (Student ID card preferred). The term tests will be written during class time and the final exam in December during the exam period. The tests will not be cumulative, but the final exam will be based on the entire course material. (The final exam is broken down based on: 25% of the exam will be based on material from the first test, 25% from the second test material, and 50% from material not covered on either test).

The student is responsible for providing written proof of either illness or compassionate distress in order to be allowed to write a make up test. Please let me know of your situation promptly and present written proof within five (5) working days. Please see list below for acceptable and unacceptable reasons for rewriting the term tests.

Reasons for granting an extension (term test): a death in your immediate family, an illness in either yourself or in a dependent (requires written note from a doctor dated BEFORE the assignment is due), and required to travel for work. The Instructor will not accept a note dated AFTER the due date.

Reasons for not granting an extension: having another assignment due at a similar time/day, being away from the university for a personal reason (i.e. holiday or personal vacation), being too busy with other course work (i.e. having a midterm that same day or week), not attending the lectures due to personal or compassionate reasons (or other reasons), car broke down and could not submit assignment on time, computer is not working properly and you lost the assignment, or any other reason deemed inappropriate by the instructor. This is not an exhaustive list. Please don't ask for an extension if any of these or similar reasons apply. If you know that you will be away, you MUST submit the assignment before the due date.

If you miss the final exam due to illness or compassionate reasons, you **must** make arrangements with your own Faculty office.

SPECIAL NEEDS

Students with disability-related needs or are experiencing difficulty should discuss issues with a councillor in one of the following Student Affairs offices as soon as possible. You can also discuss any issues with your instructor, who can direct you to appropriate institutional resources. Student accessibility services (SAS) can facilitate any necessary accommodations for the student. If applicable, please see the Instructor regarding the accommodations recommended by SAS.

- Student Accessibility Services: 155 University Center, 204-474-6213, 204-474-9790 (TTY)
- Learning Assistance Center: 201 Tier Building, 204-480-1481
- Student Counselling and Career Centre: 474 University Center, 204-474-8592

USING COPYRIGHTED MATERIAL

Please respect copyright. We will use copyrighted content in this course. I have ensured that the content I use is appropriately acknowledged and is copied in accordance with copyright laws and University guidelines. Copyrighted works, including those created by me, are made available for private study and research and must not be distributed in any format without permission. Do not upload copyrighted works to a learning management system (such as UM Learn), or any website, unless an exception to the Copyright Act applies or written permission has been confirmed. For more information, see the University's Copyright Office website at <http://umanitoba.ca/copyright/> or contact um_copyright@umanitoba.ca.

TENTATIVE DATES (please note that the dates may change):

<i>TESTS</i>	<i>DATE</i>
Term Test #1 (introduction to atmospheric moisture)	October 13, 2016
Term Test #2 (weather to tectonic activity)	November 15, 2016
Final Exam	Scheduled through SRO

COURSE/READING SCHEDULE

LECTURE TOPIC		READINGS		
INTRODUCTION	Introduction	Geography and Physical Geography	pp. 4-18	
		Spheres of Earth system		
		System, feedback and models		
	Earth In Space	Latitude and longitude		
		Revolution, rotation and axial tilt		pp. 61-66
		Circle of illumination and insolation		
Seasons				

ATMOSPHERE	Introduction to the Atmosphere	Weather vs. climate	pp. 36-53; 66-68; 75-84	
		Atmospheric composition		
	Radiation and Energy Balance	Structure of the atmosphere		
		Radiation balance		
		Energy transfer mechanisms		
		Surface energy balance		
	Temperature	Greenhouse effect		
		Cycles in temperature		pp. 68-75
		Factors that influence temperature		
		Temperature inversions		
	Global temperature variations			
	Air Pressure and Winds	Wind and pressure definition		pp. 126-134; 142-148
		Pressure and altitude		
		Air movement in atmosphere		
		Geostrophic and frictional surface winds		
		Local wind systems		
		Cyclones and anticyclones		
	Circulation Patterns	Surface circulation		pp. 134-142
		Upper atmosphere circulation		
	Atmosphere Moisture	Humidity and Types		pp. 99-115
Stability and adiabatic processes				
Clouds and fog				
Precipitation types and formation				
Thunderstorms				
Orographic precipitation				
Frontal precipitation				
Airmass				

LECTURE TOPIC		READINGS		
ATMOSPHERE (CON'T)	Weather Systems	Low-latitude systems	pp. 160-184	
		Mid- and high-latitude systems		
	Severe Weather Systems	Winter season		
		Summer season		
	Climate Classification	Temperature and precipitation patterns		pp. 192-215
		Koppen Classification system		
	Climate Change: Past and Current	Evidence of climate change		pp. 248-259
		Climate history of the Earth		
Mechanisms of climate change				
Climate future				

LITHOSPHERE	Introduction to Lithosphere	Internal layers of the Earth	pp. 364-380
		Outer layer of the Earth	
		Lithosphere and crustal surface	
		Ocean floor	
		Rocks	
	Lithospheric Plates	Continental drift	pp. 386-409
		Distribution of plates	
		Movement of plates	
	Volcanism	Distribution of activity	pp. 444-458
		Types of volcanoes and landforms	
	Tectonics	Earthquakes and distribution	pp. 458-468
		Fault structures	
		Fold structures	
	Weathering and Erosion	Denudation	pp. 480-485
		Chemical and physical weathering	
	Slope Processes	Introduction	pp. 491-500
		Slope movement	
		Mass movement processes	
		Hill slope processes	
	Fluvial Processes	Water flow in streams	pp. 510-534
Streams and basin			
Streams as a system			
Stream function			
Factors in stream erosion			
Types of streams			
Drainage patterns			
Landforms			

LECTURE TOPIC		READINGS	
LITHOSPHERE (CON'T)	Glacial Processes	Introduction	pp. 550-568
		Glaciers of the past	
		Formation of glaciers	
		Glacier movement and mass balance	
		Continental ice sheet landforms	
		Alpine glacier landforms	
	Periglacial Processes	Introduction	pp. 546-550
		Permafrost	
		Geomorphological processes	
		landforms	
BIOSPHERE	Introduction to Biogeography	Introduction	pp. 224-247
		Dynamics of biosphere	
		Biogeochemical cycles	
		Plant succession	
		Geographical dispersion	
	Phytogeography	Biomes	pp. 256-285
		Terrestrial biomes	
	Zoogeography	Process of evolution	
		Zoogeographical realms	
		Island zoogeography	
	Pedology	Formation of soil	pp. 296-318
		Processes in soil	
		Soil profiles	
		Soil regimes	
Soil characteristics			
HYDROSPHERE	Introduction to Hydrosphere	Introduction	pp. 95-99
		Evaporation	
		Surface water balance	
		Water at the surface	
		Water beneath the surface	
GEOMATICS	Introduction to Geomatics	Maps and cartography	pp. 95-99
		Geographic information system	
		Remote sensing	

UNIVERSITY POLICIES AND PROCEDURES

A list of academic supports available to Students:

Writing and Learning Support

The Academic Learning Centre (ALC) offers services that may be helpful to you throughout your academic program. Through the ALC, you can meet with a learning specialist to discuss concerns such as time management, learning strategies, and test-taking strategies. The ALC also offers peer supported study groups called Supplemental Instruction (SI) for certain courses that students have typically found difficult. In these study groups, students have opportunities to ask questions, compare notes, discuss content, solve practice problems, and develop new study strategies in a group-learning format.

You can also meet one-to-one with a writing tutor who can give you feedback at any stage of the writing process, whether you are just beginning to work on a written assignment or already have a draft. If you are interested in meeting with a writing tutor, reserve your appointment two to three days in advance of the time you would like to meet. Also, plan to meet with a writing tutor a few days before your paper is due so that you have time to work with the tutor's feedback.

These Academic Learning Centre services are free for U of M students. For more information, please visit the Academic Learning Centre website at: <http://umanitoba.ca/student/academiclearning/>

You can also contact the Academic Learning Centre by calling 204-480-1481 or by visiting 201 Tier Building.

University of Manitoba Libraries (UML)

As the primary contact for all research needs, your liaison librarian can play a vital role when completing academic papers and assignments. Liaisons can answer questions about managing citations, or locating appropriate resources, and will address any other concerns you may have, regarding the research process. Liaisons can be contacted by email or phone, and are also available to meet with you in-person. A complete list of liaison librarians can be found by subject: <http://bit.ly/WcEbA1> or name: <http://bit.ly/1tJ0bB4>. In addition, general library assistance is provided in person at 19 University Libraries, located on both the Fort Garry and Bannatyne campuses, as well as in many Winnipeg hospitals. For a listing of all libraries, please consult the following: <http://bit.ly/1sXe6RA>. When working remotely, students can also receive help online, via the Ask-a-Librarian chat found on the Libraries' homepage: www.umanitoba.ca/libraries.

Referral information for mental health resources and support:

For 24/7 mental health support, contact the Mobile Crisis Service at 204-940-1781. You may also find the following resources helpful:

Student Counselling Centre

Contact SCC if you are concerned about any aspect of your mental health, including anxiety, stress, or depression, or for help with relationships or other life concerns. SCC offers crisis services as well as individual, couple, and group counselling. Student Counselling Centre:

<http://umanitoba.ca/student/counselling/index.html>

474 University Centre or S207 Medical Services

(204) 474-8592

Student Support Case Management

Contact the Student Support Case Management team if you are concerned about yourself or another student and don't know where to turn. SSCM helps connect students with on and off campus resources, provides safety planning, and offers other supports, including consultation, educational workshops, and referral to the STATIS threat assessment team.

Student Support Intake Assistant <http://umanitoba.ca/student/case-manager/index.html>

520 University Centre

(204) 474-7423

University Health Service

Contact UHS for any medical concerns, including mental health problems. UHS offers a full range of medical services to students, including psychiatric consultation.

University Health Service <http://umanitoba.ca/student/health/>

104 University Centre, Fort Garry Campus
(204) 474-8411 (Business hours or after hours/urgent calls)

Health and Wellness

Contact our Health and Wellness Educator if you are interested in information on a broad range of health topics, including physical and mental health concerns, alcohol and substance use harms, and sexual assault. Health and Wellness Educator <http://umanitoba.ca/student/health-wellness/welcome.html>

Katie.Kutryk@umanitoba.ca

469 University Centre

(204) 295-9032

Live Well @ UofM

For comprehensive information about the full range of health and wellness resources available on campus, visit the Live Well @ UofM site: <http://umanitoba.ca/student/livewell/index.html>

Copyright

All students are required to respect copyright as per Canada's Copyright Act. Staff and students play a key role in the University's copyright compliance as we balance user rights for educational purposes with the rights of content creators from around the world. The Copyright Office provides copyright resources and support for all members of the University of Manitoba community. Visit <http://umanitoba.ca/copyright> for more information.

Your Rights and Responsibilities

As a student of the University of Manitoba you have rights and responsibilities. It is important for you to know what you can expect from the University as a student and to understand what the University expects from you. Become familiar with the policies and procedures of the University and the regulations that are specific to your faculty, college or school.

The Academic Calendar <http://umanitoba.ca/student/records/academiccalendar.html> is one important source of information. View the sections University Policies and Procedures and General Academic Regulations.

While all of the information contained in these two sections is important, the following information is highlighted.

- If you have questions about your grades, talk to your instructor. There is a process for term work and final grade appeals. Note that you have the right to access your final examination scripts. See the Registrar's Office website for more information including appeal deadline dates and the appeal form <http://umanitoba.ca/registrar/>
- You are expected to view the General Academic Regulation section within the Academic Calendar and specifically read the Academic Integrity regulation. Consult the course syllabus or ask your instructor for additional information about demonstrating academic integrity in your academic work. Visit the Academic Integrity Site for tools and support <http://umanitoba.ca/academicintegrity/> View the Student Academic Misconduct procedure for more information.

Respectful Work and Learning Environment

The University is committed to a respectful work and learning environment. You have the right to be treated with respect and you are expected to conduct yourself in an appropriate respectful manner. Policies governing behavior include the:

Respectful Work and Learning Environment

Please refer to the document:

http://umanitoba.ca/admin/governance/governing_documents/community/230.html

Student Discipline

Please refer to the document:

http://umanitoba.ca/admin/governance/governing_documents/students/student_discipline.html

Violent or Threatening Behaviour

Please refer to the document:

http://umanitoba.ca/admin/governance/governing_documents/community/669.html

Sexual Assault

If you experience Sexual Assault or know a member of the University community who has, it is important to know there is a policy that provides information about the supports available to those who disclose and outlines a process for reporting. The Sexual Assault policy may be found at:

http://umanitoba.ca/admin/governance/governing_documents/community/230.html More information and resources can be found by reviewing the Sexual Assault site <http://umanitoba.ca/student/sexual-assault/>

Intellectual Property

For information about rights and responsibilities regarding Intellectual Property view the policy http://umanitoba.ca/admin/governance/media/Intellectual_Property_Policy_-_2013_10_01.pdf

For information on regulations that are specific to your academic program, read the section in the Academic Calendar and on the respective faculty/college/school web site <http://umanitoba.ca/faculties/>

Contact an Academic Advisor within our faculty/college or school for questions about your academic program and regulations <http://umanitoba.ca/academic-advisors/>

Student Advocacy

Contact Student Advocacy if you want to know more about your rights and responsibilities as a student, have questions about policies and procedures, and/or want support in dealing with academic or discipline concerns.

<http://umanitoba.ca/student/advocacy/>

520 University Centre

204 474 7423

student_advocacy@umanitoba.ca