Instructor: James Pytko  
Office: Dow 286  
Office Phone: (989)774-7347  
E-mail: pytkolja@cmich.edu  
Office Hours: M/W 10:00 to 12:00, Friday by appointment

Prerequisites: None

Course Reference Numbers: GEO105 22133081

Meeting Times: Monday, January 10, 2011 through Friday, March 4, 2011

Required Text:

- Physical Geography: A Landscape Appreciation 10th ed. by McKnight And Hess, ISBN# 0-13-223901-9

Required Supplies:

- Basic Calculator (no need for graphing or scientific)
- For labs have three colored pencils, regular pencils, a ruler (English and Metric) and your calculator.

Course Catalog Description:

An introduction to the physical processes of the atmosphere, hydrosphere, lithosphere and biosphere and the global distribution of climate, soils and vegetation

Major Objectives:

- Explain scientific concepts, laws or principles relating to physical geography and to be able to demonstrate an understanding of the basic differences between scientific and non-scientific knowledge.
- Use the language of science to describe physical events and features.
- To be familiar with the basic assumptions of science.
- Observe and appreciate the interrelationships of the Earth’s physical systems.
- Demonstrate knowledge of the relationships between the Earth and the Sun, and how they produce day and night and seasonality.
- Identify weather and climatic controls.
- Analyze the interrelationship of the atmosphere, hydrosphere and lithosphere variables that produce the daily weather.
- Demonstrate knowledge of how long term daily weather data is analyzed to produce climate types.
- Demonstrate knowledge of the distribution of global climates by analyzing the importance of latitude, land water contrast, global wind patterns, and global ocean currents.
- Demonstrate knowledge of the relationship between the distribution of global climates and the major soil types.
- Read and interpret different types of maps, and understand the role of scale.
Student Success

This course requires a high level of self discipline in order to stay on track. You must motivate yourself to complete readings and assignments on time. That being said, you do have a lot of flexibility in this online setting but you still need to devote a regular set of hours per week for this course.

Communication

The lines of communication are always open between us. There are several ways to be in contact. Email is the best way to contact me; I will respond to all e-mails within 24 to 48 hours. Also, I will be available by phone during my regular office hours. Finally, we will have several Wimba chat sessions available each week. These chats allow you to ask me about any material or assignment that you are having trouble with.

E-Mail and Blackboard:

When I send out E-mails to the entire class through Blackboard they will be sent to your cmich.edu e-mail account. Please keep track of this account otherwise you may miss important information. You can access the school mail system through iCentral which is

http://icentral.cmich.edu

Blackboard may be accessed through iCentral or at

http://blackboard.cmich.edu

A grade book will be maintained on Blackboard, and course documents and notices will be posted there as well.

Office Hour Policy for Phone Calls:

If you are unable to call me during regular office hours send me an email with 3 times that week that you are available to meet by phone. I will return your email in a timely manner and let you know which time I can make.

Working Ahead

All materials and weekly assignments are posted at the beginning of the class. You are strongly encouraged to work ahead.

Online Etiquette

All members of the class are expected to follow rules of common courtesy in all e-mail messages, threaded discussions and chats. Respect each other in discussion board and chat sessions. Please write your name at the end of discussion postings and e-mail messages so we know who has contributed to the learning process. During Wimba chat sessions utilize the ‘raise your hand’ option; it keeps track of who has a question and the order in which questions are asked.

Late Work and Make Up Exams:

All consideration will be given for legitimate documented need for a make up exam. All lab assignments without such a reason are deducted 20% per day late.

Check Your Grades

I will post your grades on discussion responses, chat participation, assignments, etc. as soon as I can. If you find any errors or missing scores in your gradebook, please feel free to e-mail me. I will correct my mistakes.
Announcements

I highly recommend you to read Announcements every other day. All important reminders, updates, questions and answers, etc. are posted there because this is the first page when you log into the class. If you happen to miss any days, please scroll down on the page to get yourself caught up.

Exams, Quizzes and Lab Assessments

These assessments will be set up through Blackboard. Exams and quizzes will include forms such as multiple choice, true/false, matching etc. You can retake quizzes a second time but you can take exams only once. Quizzes will be 25 questions for a total of 50 points and exams will be 50 questions for a total of 75 points. The lab assessments will ask you about specific answers from the assigned labs. You can take the lab assessments a total of 3 times each.

Discussion Boards

You are required to respond to my posting and at least one of your classmate's. Discussion postings are seen by everyone in the class so please respect each other and take this opportunity to learn from each other. Discussion postings will be evaluated with the following rubric.

<table>
<thead>
<tr>
<th>Content and Critical Thinking</th>
<th>Distinguished</th>
<th>Proficient</th>
<th>Basic</th>
<th>Poor Below</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three resources are used: 1) quotes from two research articles, 2) material from the textbook, and 3) two terms from module study guide. Demonstrated a critical analysis of the topic as evidenced by specific content quotes cited from two outside articles with the name of the author and year of the article properly cited. The articles come from peer reviewed journals. (See Finding_Peer_Reviewed_Resources under FAQ) and not magazines or web sites. No web resource is used. Also cites material from the textbook (with page number). Finally, correctly uses two terms, highlighted in bold, from a specific term found in the module study guide. The post does not exceed 1000 words (about the length of a one page, single spaced essay) but is greater than 800 words. All references are correctly cited at the end of the essay (References and title are not counted in word page limit). (27 pts.)</td>
<td>Revealed an adequate understanding of the topic. Provided justification/explanation by citing one outside magazine or non peer reviewed article. No web resource is used. Material from the textbook (with page number) is cited. Uses examples to support argument. Did not cite reference properly either in the reference section or within the body of the text. The post exceeds 1200 words or is less than 600 words. All references are cited but there are one or two errors in the citation at the end of the essay (References and title are not counted in word page limit). (24 pts.)</td>
<td>Revealed an adequate understanding of the topic limited to information that could be derived from prior posts or from the textbook. May cite material from textbook but the material has no page number reference. Uses web resources to support arguments. The post exceeds 1400 words or is less than 400 words. A reference is missing. One or more errors in the citation are found at the end of the essay (References and title are not counted in word page limit). (21 pts.)</td>
<td>Message was unrelated to discussion or provided no evidence of agreement or disagreement with existing discussion. Relies mainly on opinion. The post exceeds 1600 words or is less than 200 words. More than one reference is missing. Three or more errors in the citation are found at the end of the essay (References are not counted in word page limit). (19 pts. or below).</td>
<td></td>
</tr>
</tbody>
</table>
Course Outline

Objectives for Week 0

- To be prepared and ready to start work as soon as the course begins

Week 0 – Getting Started

- Set up your computer for Bb and Wimba
- Purchase a globe or set your computer up with GoogleEarth
  - Globes are preferred, just a basic 9 to 12 inch globe with well labeled lines
- Read the course syllabus
- Review course introduction
- Take course syllabus and introduction quiz

Objectives for Week 1

- Gain a basic understanding of the Earth and its properties
- Understand the relationship between the Earth and the Sun
- Learn to calculate local time for any location on Earth
- Understand the properties of 3-dimensional globes and 2-dimensional maps
• Gain exposure to remote sensing techniques and displays
• Understand the basic organization of a Geographic Information System

**Week 1- Describing the Earth**

• Read Chapters 1 and 2
• Review slidelectures for chapters 1 and 2
• Complete the following labs along with online lab assessments
  
  o Lab 2 - Location (parts 1 and 2)
  o Lab 7 - Earth/Sun Relations (parts 1 and 2)
  o Lab 3 - Time (parts 1 and 2)
  o Lab 4 - Map Scale (parts 1 and 2)
  o Participate in Wimba Chat

**Objectives for Week 2**

• Be able to describe the structure of the atmosphere
• Understand current composition of the atmosphere and how that has changed over time
• Observe human alteration of the atmosphere
• Understand the Coriolis Effect
• Understand methods of heat transfer
• Map out what happens to solar radiation as it comes to the Earth
• Understand reasons for global temperature patterns

**Week 2-Temperature, Heat and Heating**

• Read chapters 3 and 4
• Review slidelectures for chapters 3 and 4
• Complete the following labs along with online lab assessments
  
  o Lab 9 Insolation (parts 1 and 2)
  o Lab 10 Temperature Patterns (parts 1 and 3)
• Complete exam 1 (covers chapters 1-4)
• Participate in Wimba Chat

**Objectives for Week 3**

• Understand the basic nature of atmospheric pressure
• See how atmospheric pressure sets up global winds
• Map out the Earth’s primary wind systems
• Observe how the Coriolis Effects applies to wind
• View localized wind systems
• Gain an understanding of El Nino and other teleconnections

**Week 3- Air Pressure and Wind**

• Read chapter 5
• Review slidelectures for chapter 5
• Complete the following labs along with online lab assessments
  - Lab 11 - Air Pressure (parts 1 and 2)
  - Lab 12 - Wind (parts 1 and 2)
• Complete online quiz 2
• Participate in Wimba chat

**Objectives for Week 4**

• Understand the basic properties of water
• Follow the hydrologic cycle
• Measure water vapor within the atmosphere
• Be able to classify clouds
• Understand the different types of atmospheric lifting
• Look at the formation of precipitation

**Week 4- Atmospheric Pressure**

• Read chapter 6
• Review slidelectures for chapter 6
• Complete the following labs along with online lab assessments
  - Lab 13 Humidity (parts 1,2,3 and 4)
  - Lab 14 Adiabatic Processes (parts 1,2,3 and 4)
• Complete exam 2
• Participate in Wimba Chat
Objectives for Week 5

- Observe the different types of air masses
- Understand what happens when dissimilar air masses collide
- Follow the life cycle of a midlatitude cyclone
- Be able to interpret weather maps and satellite images
- Observe localized storm systems

Week 5 - Atmospheric Disturbances

- Read chapter 7
- Review slidelectures for chapter 7
- Complete the following labs along with online lab assessments
  - Lab 16 Midlatitude Cyclones (parts 1 and 2)
  - Lab 17 Weather Maps (parts 1, 2 and 3)
  - Lab 18 Weather Satellite Images (parts 1 and 5)
- Complete quiz 3
- Complete discussion board module 1
- Participate in Wimba Chat

Objectives for Week 6

- Understand how and why we classify climates
- Calculate the Koppen climate classification for any place on Earth
- Observe how climates change over time
- Explore ways to understand past climate
- Think about the global warming debate

Week 6 - World Climates

- Read chapter 8
- Review slidelectures for chapter 8
- Complete the following lab
  - Lab 21 Climate Classification (parts 1, 2 and 3)
- Complete discussion board module 2
- Complete exam 3
Objectives for Week 7

- Gain exposure to botany and zoology
- Understand classification of living organisms
- Observe how living organisms adapt
- View the characteristics of world zoogeographic regions
- Understand how we divide the world into biomes and characteristics of biomes
- Gain knowledge on how humans modify the natural distribution of organisms

Week 7- Terrestrial Flora and Fauna

- Read chapter 11
- Review slidelectures for chapter 11
- Complete quiz 4
- Complete discussion board module 3
- Participate in Wimba Chat

Objectives for Week 8

- See how soils form over time
- Describe the basic properties of soil
- Look at the major soil formation regimes
- Understand basic soil classification
- Map out how soils are distributed worldwide

Week 8- World Soils

- Read chapter 12
- Review slidelectures for chapter 12
- Complete exam 4
- Complete discussion board module 4
- Complete end of course survey
- Participate in Wimba Chat
Grading:

14 OnLine Lab Assessments at 20 points each
4 Quizzes at 50 points each
4 Exams at 75 points each
4 Discussion Board posts at 25 points each
8 Wimba coffeehouse meetings at 10 points each

Academic Integrity and Electronics:

Written or other work which a student submits must be the product of her/his own efforts. Plagiarism, cheating and other forms of academic dishonesty, including dishonesty involving computer technology, are prohibited. Further information on Academic Dishonesty can be found in the current Bulletin at http://www.cmich.edu. Any instances of cheating or plagiarism will be referred to the appropriate university official.

ADA Statement

CMU provides individuals with disabilities reasonable accommodations to participate in university activities, programs and services. Individuals with disabilities requiring accommodations to participate in class activities or meet course requirements should contact Susie Rood, Director of Student Disability, at (800) 950-1144, extension 3018 or e-mail her at roodlse@cmich.edu at least 4 weeks prior to registering for class. Students may find additional information and forms at www.cmich.edu/student_Disability_Services.htm. Note to faculty: CMU Administration will notify you if applicable; otherwise, the student will provide a “Notification Letter to the Instructor” outlining the accommodations the student is approved to receive.