

GEOGRAPHY-NIES 120
Course Title: Global Physical Environments
Spring 2009

INSTRUCTORS: Jack Williams, 208 Science Hall (first half of the semester), knox@geography.wisc.edu
Jim Knox, 234 Science Hall (second half of the semester), jww@geography.wisc.edu

REQUIREMENTS: Lecture 2 hours per week and discussion section 1 hour per week. Discussion sections elaborate the principal points of class lectures and provide opportunities to discuss topics of student interest related to lecture material.

CREDITS: 3 credits in physical science.

TEXT: Required *Physical Geography: A Landscape Appreciation*, McKnight and Hess, Prentice-Hall, 2008; Either loose leaf edition or regular hardback 9th edition acceptable.

EXAMINATIONS: Four 50-minute in-class examinations will be given at roughly 4-week intervals. The last exam will be on the last day of instruction. Each exam will stress the material covered since the previous exam. There is no final comprehensive exam during the end-of-semester examination week.

GRADING: The final grade will be determined from a curve of cumulative points achieved on the class examinations and the discussion section. Each class exam will be worth approximately 30 points and the discussion section grade will count 50 points. Discussion section points will be earned from worksheets and activities described on the syllabus provided by the TAs at the first section meeting. The potential total number of points for the course is 170.

TENTATIVE LECTURE TOPICS:

Week 1	W	Jan	21	1) Introduction to Physical Geography and Earth System Science, Chapter: 1
Week 2	M W	Jan	26 28	2) Solar Radiation & Earth-Sun Relations; Chapters 1, 4 3) Atmosphere: Composition and Structure, Chapter 3
Week 3	M W	Feb	02 04	4) Earth's Energy Balance, Chapter 4 5) Earth's Energy Balance, Chapter 4
Week 4	M W		09 11	6) Thermal Environments: Chapter 4 7) Atmospheric Moisture: Chapter 6
Week 5	M W		16 18	8) *** FIRST EXAM *** 9) Atmospheric Forces and Motion I: Chapter 5
Week 6	M W		23 25	10) Atmospheric Forces and Motion II: Chapter 5 11) Air Masses, Fronts, and Mid-latitude Cyclones: Chapter 7
Week 7	M W	Mar	02 04	12) Global Climate Change, Chapter 8 13) Vegetation and Environmental Relationships I, Chapters 10, 11
Week 8	M W		09 11	14) Vegetation and Environmental Relationships II, Chapters 10, 11 15) *** SECOND EXAM ***

Spring Recess ----March 14 – March 22

Week 9	M	Mar	23	16) Soil Systems & Soil Forming Environments, Chapter 12 and Chapter 18
	W		25	17) Surficial Properties & Characteristics of Earth's Surface, Chapter 13
Week 10	M	Mar	30	18) Surficial Properties & Characteristics of Earth's Surface, Chapters 13 and 17
	W		Apr	01
Week 11	M		06	20) Earth's Tectonic Systems, Chapter 14
	W		08	21) Volcanic and Earthquake Hazards, Chapter 14
Week 12	M		13	22) *** THIRD EXAM ***
	W		15	23) Mud & Debris Flows, Landslides & Related Natural Hazards: Chapter 15
Week 13	M		20	24) Hydrologic Cycle, Runoff, and Floods, Chapter 16
	W		22	25) River Processes and River Morphologies, Chapter 16
Week 14	M		27	26) Responses of Rivers to Human and Natural Environmental Changes: Chapter 16
	W		29	27) Responses of Glacier Systems to Global Environmental Change, Chapter 19
Week 15	M	May	04	28) Glacier Landforms and Sediments, Chapter 19
	W		06	29) *** FOURTH EXAM ***