

## **EFFECTIVE: JANUARY 2003 CURRICULUM GUIDELINES**

Α.	Division:	INSTRUCTIONAL DIVISION	E	frective Date:		JANUARY 2003	
В.	Department / Program Area:	GEOGRAPHY FACULTY OF HUMANITIES & SOCIAL SCIENCES		evision	X	New Course	
				Revision, Section(s)		F, M, N, O, P, Q, R	
			D	evised: ate of Previous Revisio ate of Current Revision		March 1994 September 2002	
C:	GEO	G 230 D: BIOGEO	OGRA	РНҮ		E: 3	
	Subject & O			ve Title		Semester Credits	
F:	Calendar Description: Have you wondered how so many different living organisms developed? Are you curious about what factors limit their growth and spread or about what human activity is affecting biodiversity? Biogeography examines the geographic distribution of plants and animals and the causes of these patterns. It focuses on the physical and biological factors that control community distribution and development from both an historical perspective and an ecological one. In this course we examine a variety of climatic, tectonic, soil, biological and anthropogenic controls on patterns of life. Several of the laboratory assignments include field work in the local area.						
G:	Allocation of Contact Hours to Type of Instruction / Learning Settings		Н:	,		ecommended but not	
		Primary Methods of Instructional Delivery and/or Learning Settings:		required)			
	Lecture Lab		I:	Course Corequisites:			
	Number of Contact Hours: (per week / semester for each descriptor)		J.	<b>J:</b> Course for which this Course is a Prerequisite			
	Lecture Lab	2 hrs. per week 2 hrs. per week		NONE	o Court	se is a ricrequisite	
	Number of Weeks per Semester: 14		K:	Maximum Class Size	e:		
				35			
L:	PLEASE INDICATE:						
	Non-Cred	lit					
	College C	Credit Non-Transfer					
	X College Credit Transfer:						
	SEE BC TRANSFER GUIDE FOR TRANSFER DETAILS (www.bccat.bc.ca)						

## M: Course Objectives / Learning Outcomes

At the conclusion of the course the student will be able to:

- 1. Describe and use the frameworks of science applicable to 2nd-year physical geography.
- Think critically and examine biogeographical concepts at population, community, ecosystem and biome levels.
- 3. Describe and explain the major biotic and abiotic influences on organism growth and distribution that occur within earth's atmosphere, hydrosphere and biosphere systems, and identify and describe interactions among these systems.
- 4. Communicate effectively using the language, graphical presentation methods and quantitative methods employed in physical geography.
- 5. Connect theoretical applications to "real-world" observations and measurements.

## N: Course Content

- 1. Introduction
  - a) Spatial concepts in Geography and Biogeography
  - b) The Science of Biogeography
  - c) Taxonomic, ecological and trophic hierarchies
- 2. Organization of Life
  - a) Populations, communities, ecosystems and biomes
  - b) Vegetation structure and formations
  - c) Realms, regions and provinces
- 3. The Physical Environment and the Distribution of Life
  - a) Patterns and influences of solar radiation, temperature, moisture and soil
  - b) Interacting physical controls on geographic distributions
- 4. Biological Interactions and the Distribution of Life
  - a) Predation competition, symbiosis
  - b) Combined physical and biological controls on geographic distribution
  - c) Environmental gradients and Ssecies' niches
- 5. Temporal/Historical Influences on the Distribution of Life
  - a) Plate tectonics and continental drift
  - b) Past and future climate change
  - c) Dispersal, colonization and invasion
  - d) Evolution, speciation and extinction
- 6. Description and Interpretation of Biogeographic Distributions
  - a) Geographic range
  - b) Mapping biogeographic distributions
  - c) Endemism, provincialism and disjunction
  - d) Models of Historical Biogeography
  - e) Reconstructing biogeographic histories
- 7. Contemporary Patterns and Processes
  - a) Island Biogeography Theory and applications
  - b) Disturbance
  - c) Human impacts on the distribution of life
  - d) Biogeography and conservation planning

Dean / Director

O:	Methods of Instruction					
	This course will employ a variety of instructional methods to accomplish its objectives, including some of the following:					
	- Lecture					
	- Labs					
	- Field Work					
	- Slides/Videos					
	<ul><li>Individual and/or Team Projects</li><li>Small Group Discussions</li></ul>					
	- Map and Air Photo Analysis					
	•					
<b>P</b> :	Textbooks and Materials to be Purchased by Students  Texts will be updated periodically. A typical example of a text would be:					
	MacDonald, Glen. (2003). <u>Biogeography:</u> Sons, Inc., New York.	Introduction to Space, Time and Life. New York: John Wiley and				
Q:	Means of Assessment					
	The evaluation will be based on course objectives and will be carried out in accordance with Douglas C policy. The instructor will provide a written course outline with specific evaluation criteria during the fi week of classes.					
	An example of an evaluation scheme would be:					
	Labs	30%				
	Field Trip Report	10%				
	Project	20%				
	Midterm Exam	20%				
	Final Exam	20%				
R:	Prior Learning Assessment and Recognition: specify whether course is open for PLAR					
	Yes, students may take a challenge exam to apply for recognition of prior learning.					
Cours	se Designer(s): Susan Smythe	Education Council / Curriculum Committee Representative				

Registrar