

A. Division: Academic Date: July 9, 1986

B. Department: Social Sciences New Course:

Revision of Course Information Form:

Dated: July 9, 1986

C. GEOG 321 D. Introduction to Hydrology E. 3

Subject & Course No. Descriptive Title Semester Credits

F. Calendar Description:

This course involves the study of the hydrologic cycle, its dynamics and component parts, but with emphasis on the terrestrial phase. Field and lab work will involve measurement techniques and the analysis of hydrologic data. Emphasis will also be placed on a description of Canada's water resources and their management.

Summary of Revisions:
(Enter date and Section Revised)
e.g. 1982-08-25
Section C,E,F, and R.

G. Type of Instruction: Lecture <u>4</u> Hrs. Laboratory _____ Hrs. Seminar _____ Hrs. Clinical Experience _____ Hrs. Field Experience _____ Hrs. Practicum _____ Hrs. Shop _____ Hrs. Studio _____ Hrs. Student Directed Learning _____ Hrs. Other (Specify) _____ Hrs. Total <u>4</u> Hrs.	H. Course Prerequisites: GEOG/GEOL 120, GEOG 110	
	I. Course Corequisites: -	
	J. Courses for which this Course is a Pre-requisite: -	
	K. Maximum Class Size: 35	
	L. College Credit Transfer <input checked="" type="checkbox"/> College Credit Non-Transfer <input type="checkbox"/> Non-Credit <input type="checkbox"/>	M. Transfer Credit: Requested <input checked="" type="checkbox"/> Granted <input type="checkbox"/> (Specify Course Equivalents or Unassigned Credit as Appropriate) U.B.C. GEOG 205 (1.5) S.F.U. Phys Geog (3) U. Vic. Geog (1.5) 200 level Other

Elizabeth Peerless
 Course Designer(s)
Elizabeth Peerless
Kathleen Heggie
 Director / Chairperson
Kathleen Heggie

B.M. Selgan
 Divisional Dean
P.H. Angus
 Registrar

- N. Textbooks and Materials to be Purchased by Students (Use Bibliographic Form):
 Ward, R.C. Principles of Hydrology 2nd Edition, McGraw Hill,
 London, 1975.

Complete Form with Entries Under the Following Headings: O. Course Objectives; P. Course Content;
 Q. Method of Instruction; R. Course Evaluation

O. COURSE OBJECTIVES

By the end of the course the student will

- have become familiar with the hydrologic cycle and the variety of processes involved within it.
- be able to describe and to use maps and air photographs to identify and illustrate the variety of landforms involved in the terrestrial stage of the cycle.
- be able to utilize, through lab and field work, the routine methods for measuring hydrologic flow and storage.
- have used, through map and field work, some methods of analysing hydrological data.
- be aware of the extent of Canada's water resources and aspects of their management.

P. Course Content

The definition and scope of hydrology
 The hydrologic cycle
 Global and regional water balances
 Precipitation - regional variations, mechanisms, measurement
 Interception, infiltration
 Evaporation, evapotranspiration
 Snow and ice
 Soil moisture
 Groundwater
 Run off - stream flow, basins, watershed models
 Surface water storage
 Inventory of Canadian water resources
 Water quality, water management

Q. METHOD OF INSTRUCTION

Lectures, in class and in the field, will constitute the main method of presentation, with class projects and class and field laboratory assignments incorporated.

Films and slides will be used where appropriate.

Readings will be assigned to supplement the text book and the lectures.

An "open lab period" will be scheduled as needed.

Subject and Course Number

R. COURSE EVALUATION

Essay	15%
Research project involving field work and lab analysis	20%
Lab exercises	40%
Final examination	25%

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