

JAN 16 2001

Grande Prairie Regional College  
Department of Physical Education, Athletics and Kinesiology  
PA 1810 Cross Country Skiing  
Winter 2001

**1.0 Course Description**

Acquisition of theoretical knowledge and personal skill in ski skating, classical cross country skiing, downhill techniques in cross country skiing equipment, waxing techniques and related winter environmental concerns is the goal of the course.

**2.0 Learning Objectives**

- 2.1 To demonstrate basic cross country skiing skills on a variety of terrain.
- 2.2 To discuss the basic principles involved in the theory of cross country skiing.
- 2.3 To demonstrate a positive attitude toward cross country skiing.
- 2.4 To demonstrate the principles of safe cross country skiing.
- 2.5 To discuss information useful in the care, selection and waxing of cross country skiing equipment.

**3.0 Instructor:** David Kay, Office: K215, phone: 539-2034, email: [kay@gprc.ab.ca](mailto:kay@gprc.ab.ca)

**4.0 Transfer of Credit**

University of Alberta PAC 181 (1.5)  
University of Calgary OPAT 259 / Jr.OPAT (1.5)  
University of Lethbridge PHAC 2xxx (1.5)

**5.0 Course Format:**

The course will meet in Portable F three times each week.  
The skiing instruction will be based on the weather and snow type for that day. In cold dry conditions classical skiing will be the focus; on days with warm/icy/moist conditions skating or hill technique will be the focus.

**6.0 Practical Content**

<b>Classical skiing</b>	<b>Skating skiing</b>	<b>Hill technique</b>
basic diagonal stride	free skate	down hill running
basic double poling	basic off set skate	snow plow stop
basic one step double pole	basic two skate	basic high speed step turn
basic diagonal stride uphill	basic one skate	snow plow turn
	half skate	basic christie
	diagonal skate	basic telemark turn

## 7.0 Cognitive Content

Dressing for cross country skiing	Trail etiquette
Equipment for cross country	Waxing theory and practice
Hypothermia and frostbite	Day trip planning, equipment, repair kits
History of nordic skiing	

## 8.0 Evaluation

### 6.1 Practical skill evaluation 50%

\* 5 cross country skiing skills will be evaluated at 10% each; the skills to be tested include:

Classical	Skating	Hill
basic diagonal stride	basic offset skate	snow plow turn
basic double poling	basic two skate	

\* practical skills will be evaluated according to the evaluation criteria used by the Canadian Association of Nordic Ski Instructors (Cansi)

### 6.2 Video critique: 15%

Students will select one cross country skiing video from the GPRC Library and do a critique. Choose one of the following videos:

- \* XC skating Technique and Exercises, gv.855.5.t73x2
- \* Ski Faster with Olympic Champion Bjorn Daehlie, gv.855.5.t73
- \* Ski Waxing-technique gv.855.5.w39

Video critique due: March 19, 2001.

( must have: title page, a maximum of 3 double spaced typed pages )

### 6.3 Final exam 30%

### 6.4 Equipment Care: 5%

Students will assessed on their care of the GPRC skiing equipment, cleaning up waxing left overs, checking out and returning equipment in good condition.

## 8.0 Required Text

Gullion, L. (1993) Nordic Skiing Steps to Success, Human Kinetics, Windsor

### Reference Titles:

Gillette, Ned and J. Dostal (1988) Cross Country Skiing, 3rd., The Mountaineers, Seattle

Canadian Association of Nordic Ski Instructors, (revised 1996) The Instructor's Manual for Teaching Nordic Skiing, Cansi, Willowdale, Ont.

## **9.0 Attendance**

Unexcused absences of more than 10% for this class is considered to be insufficient attendance. Students with **three** or more unexcused absences may be barred from writing the final examination.

## **10. Skiing evaluation criteria is based on the following:**

### **a) Basic Diagonal Stride:**

- \* Complete weight transfer at the end of the push phase
- \* Body moves forward and across to balance over a relatively straight leg over the gliding ski
- \* Arms and legs move in a continuous and fluid motion opposite one another
- \* Hips are over the ankle joint at the legs together position
- \* Recovery foot contacts the snow beside or ahead of the gliding foot
- \* Arms are slightly flexed when the poles are planted
- \* Some rear arm extension is evident as the arms move straight front-to-back from the pull/push force applied to the pole

### **b) Basic Double Pole:**

- \* The body moves forward during the recovery phase so that the hips are over the ankle joint at the initiation of the push phase
- \* Poles are planted with flexed arms
- \* As the poles are planted the torso flexes at the waist to apply force to the poles
- \* Upper body flexes at the waist between 45 degrees and 90 degrees to the snow
- \* Some rear arm extension is evident as arms move straight front-to-back from the pull/push force applied to the poles
- \* The overall movement is continuous and fluid

**c) Basic Offset Skate:**

- \* A three point touch is used
- \* Complete weight transfer onto a flat ski
- \* Double poling action is initially in the direction of the gliding ski
- \* Body is projected in the direction of the flat gliding ski during the push phase
- \* Body weight is balanced on a relatively straight support leg at slower tempos
- \* Soon after making the three-point touch the torso rotates as it is projected into the direction of the other ski
- \* The weighted ski rolls gradually onto the inside edge
- \* Full extension of the pushing leg is demonstrated at the end of the push phase
- \* The recovery foot returns under the body to a position slightly ahead of the foot carrying the body weight with feet almost touching
- \* Both legs push equally
- \* During the push phase some hip rotation is evident as the torso is projected into the direction of the other ski
- \* The elbows are slightly flexed when the poles are planted
- \* Both hands are positioned approximately shoulder width apart
- \* Some rear arm extension is evident as the arms move straight front-to-back from the pull/push force applied to the pole

**d) Basic Two-skate:**

- \* Complete weight transfer onto a flat ski
- \* Double poling action is initiated with the upper body
- \* Double poling action is initially in the direction of the gliding ski
- \* Upper body flexes during the poling action to approximately 45 degrees
- \* The body is projected in the direction of the flat gliding ski during the push phase
- \* The body weight is balanced on a relatively straight support leg at slower tempos
- \* The hips are positioned over the ankles at the beginning of the poling phase
- \* There is smooth continuous poling action in the direction of the glide ski
- \* The weighted ski rolls gradually onto the inside edge
- \* As the hands approach the hips the torso rotates into the direction of the other ski
- \* During the push phase the body is projected into the new direction
- \* Full extension of the legs is demonstrated at the end of the push phase
- \* Some rear extension is evident as the arms move straight front-to-back from the pull/push force applied to the poles
- \* The recovery foot returns under the body to a position slightly ahead of the glide ski with feet almost touching
- \* Both legs push equally

**e) Basic Snow Plow Turn:**

- \* Balanced stance with more weight transferred to the outside ski
- \* There is consistent steering with a wedge throughout the turn
- \* There is a consistent steering action of both feet throughout the turn
- \* The upper body and hips are slightly open to the fall line
- \* There is continuous and fluid range of motion with flexion and extension demonstrated at the appropriate time