

PSIA-NRM  
Cross Country  
Levels 2&3  
Certification Workbook

Professional Development &  
Skills Proficiency Log<sup>1</sup>

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

HOME PHONE \_\_\_\_\_

SKI SCHOOL/CLUB \_\_\_\_\_

# W orkbook --- Cross Country Levels 2/3

Welcome to the wonderful world of Cross Country ski instruction! This Certification workbook is designed to help you monitor the development of your skiing ability, technical knowledge, and teaching performance on your path to become a Level 2 or 3 Certified Cross Country Instructor. Use this Workbook to actively log your progress in each area, record feedback you have received, and track your current level of understanding. Please have your Nordic Education Staff Member look over your workbook daily at your XC Level 2/3 Certification Exam. Ed Staff Members will check your notes, initial off areas in which you meet the Level 2 or Level 3 standards, and provide feedback and coaching for improved performance. This workbook is divided into two parts:

(1) **Candidate Section:** This section is designed to help you to develop your understanding and demonstrate your skiing, technical, and teaching knowledge. Please answer these questions before the Level 2/3 Certification Exam.

(2) **Joint Section:** In this section you will write development suggestions for each item on the three checklists based on verbal comments from the Nordic Education Staff Members during the Certification Exam. Nordic Education Staff Members working your event will write and initial the Level you have attained in each item.

You should be able to perform each of the skiing maneuvers listed in the Skiing Checklist (Part 1, section A) before coming to the Certification Exam. Be aware that to obtain Level 2 certification, you must be a strong intermediate skier (or better), and you must be able to teach a solid intermediate classical and skating lesson. To achieve Level 3 certification you must have completed all of the Level 2 and 3 candidate sections in this workbook, and you must be verified by the Nordic Education Staff at the Level 3 standard in your Skiing, Technical Knowledge and Teaching. A Level 3 instructor skis at an advanced level and is able to effectively coach advanced students.

**Note:** Please remember the Learner's Responsibility Code; ***I am responsible for my own learning!*** You are expected to take responsibility for your own learning, Make sure you learn what you need to learn, ask the questions to get the answers you need, and use this Workbook to track your learning and what you need to work on.

Useful references include; the *PSIA Nordic Technical Manual: Skiing and Teaching Skills*, *PSIA-NRM Nordic Handbook*, *PSIA Core Concepts Manual*, *Alpine Technical Manual*, PSIA-NRM web pages ([www.psia-nrm.org](http://www.psia-nrm.org)) and your fellow instructors. *The Master Skier* magazine, [www.xcski.org](http://www.xcski.org), [www.crosscountryskier.com](http://www.crosscountryskier.com), [www.skitrax.com](http://www.skitrax.com), [www.fasterskier.com](http://www.fasterskier.com) all provide articles and discussions on the latest racing techniques and are of special interest to intermediate and advanced skiers. Be an active learner!

## Part 1: Candidate Section

### A. Skiing

What cues can you use to determine if you are achieving one-ski balance with each stride/skate? \_

---

---

Explain a drill that would help a student move completely from ski-to-ski. \_\_\_\_\_

---

---

In terms of the Cross Country Skiing Skills (body position, timing and propulsion) describe the similarities that you feel in your skiing between skating and classical techniques.

---

---

---

---

---

In your opinion what distinguishes the classical skiing of a Level 3 XC instructor from that of a Level 2 XC instructor?

---

---

---

---

---

Are you skiing at the Level 2 or Level 3 standard? Explain your answer.

---

---

---

---

---

**Level 3 questions:**

The skills for Skate and Cross-Country skiing as explained in the PSIA-NRM Nordic Handbook are body position, timing and propulsion. Describe the similarities that you feel when you are doing a V-1 and the diagonal stride using these terms.

---

---

---

---

---

What is the difference between a skill, a movement and a maneuver? \_\_\_\_\_

---

---

Why is practicing kick-double pole without poles useful for improving diagonal stride?

---

---

---

**B. Technical Knowledge**

What is the difference between grip wax and glide wax? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

How do you apply Klister to a ski? How do you get it off? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

What does Thicker, Longer, Change (TLC) mean with reference to waxing? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Do you recommend waxable or pattern-based skis for your intermediate classic students? In terms that your client can understand explain your answer. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Match the condition with the preferred choice for classic skiing.

- |   |                                |
|---|--------------------------------|
| ___ fresh cold snow; Temperature is 15° F       | a. red Klister                 |
| ___ varying spring snow conditions              | b. hard wax                    |
| ___ granular in the shade; wet in the sun       | c. binder with hard wax on top |
| ___ 30 K race, fresh snow; Temperature is 25° F | d. hard wax over soft wax      |
| ___ icy tracks; Temperature is 32° F            | e. waxless skis                |
|   | f. fluorocarbon wax            |

**Complete the chart below:**

Physical problem	Symptoms	Prevention	Treatment
Altitude sickness			
		Drink water before during and after skiing	
Hypothermia			
	White spots on the face and nose. (It's not sunscreen!)		

What are the steps you use for Movement Analysis? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Movement Analysis- Complete the missing areas in the chart below:

Effect: problem description (What you see)	Cause: skiing skill or movement that is weak or lacking	Prescription for practice and change
"slipping" in diagonal stride, wax is good and ski is not too stiff		
	Lack of ski to ski balance in skating or diagonal stride	
You hear ski slapping noise during diagonal skiing		
Student has skis in a small wedge position. The knees and thighs are together and the skis are on the inside edges, but the student cannot stop		
		Practicing the V1 in a flat area with poles but without skis.
	Lack of balance in V2 skate	
Hips are back in the diagonal stride and when skating		

What is the difference between V1 and V2 skating? \_\_\_\_\_

---

---

---

---

Why is gliding on one ski important in cross country skiing? \_\_\_\_\_

---

---

---

---

**Level 3 questions:**

How do you find the grip wax pocket on a pair of waxable classic skis? \_\_\_\_\_

---

---

---

---

What is structure on a ski base? Describe how, when, and why you would use it. \_\_\_\_\_

---

---

---

---

---

---

Describe the movements of the hip, knee and ankle joints during the diagonal stride push-off. \_\_\_\_\_

---

---

---

---

Describe three visual clues you would use to determine whether or not a guest is using his/her poles effectively. \_\_\_\_\_

---

---

---

---

---

---

When swinging the pole forward, beginning students often move their arms from the elbow joint. Why is this inefficient? \_\_\_\_\_

---

---

---

---

---

---

Explain how advanced skiers should move their arms for maximum propulsion during poling.

---



---



---



---



---

Why do you think that "body position", "timing", and "propulsion" should be considered the Skiing Skills of Cross Country skiing? \_\_\_\_\_

---



---



---



---



---



---



---



---



---

**B. Teaching Knowledge**

In the chart below list the seven points of the Snowsports Safety code. Give an example of how you would apply each in your lessons. (See PSIA-NRM Nordic Handbook or any mountain resort lift ticket.) The first point of the code has been done for you.

Responsibility Code	Application
1. Stay in control and be able to stop or avoid people or objects.	Teach students half- wedge, wedge and step turns. Practice avoiding cones in an obstacle course
2.	
3.	
4.	
5.	
6.	
7.	

**Teaching Styles**

Summarize the primary teaching styles in your own words.

1. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
3. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

For each lesson situation in the chart that follows, chose one or two of the primary teaching styles that you would use during most of your lesson time. Then in the space provided explain briefly why this teaching style would work best for you under that circumstance.

Your lesson situation is:	Teaching style(s) you would use during most of your lesson time	Why you would use this style
1 1/2 hour lesson. Your students are advanced adults, some of whom are citizen racers		
Afternoon lesson of an all day adult intermediate skating clinic		
2 hour morning kids group with skills ranging from advanced beginner to advanced		
After noon two hour session of the above group		
1 1/2 hour clinic: Adult intermediate classic skiers who want to experience something new and better in their skiing		
1 hour private lesson with a timid lady who wants to work on her downhill technique		

**Teaching Model Application: Using the information given below, follow the numbered steps to create a two hour skating lesson plan.**

**1. Assess the student:** You have a small class of 3 students as follows:

**Hank** is a 30 something professional who is an amateur bicycle racer in the Bozeman area in the summer. He's already tried skating a few times himself, but he says he feels inefficient. He is skiing on decent rental equipment.

**Brenda** is a 21-year-old area employee. She is an avid snowboarder, but wants to try something else to get away from the crowds on the weekends. She has only been cross country skiing a few times on waxless skis in the woods. She is skiing on her friend's "combi" equipment.

**Stan**, a pilot from Chicago is in his 50's. He recently decided that he liked cross country skiing when he visited Norway. He has read some books about skating and definitely wants to learn, especially since his doctor advised him that it would be good for his heart in his slightly overweight condition. He has the latest top-of-the-line skating gear that he just bought this morning.

What are some other questions that you would ask these people as you introduce yourself and begin your lesson? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. What are your initial skiing goals for these people as a group? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

3. **Present/Share information/ Practice:** Use the following chart to write your lesson plan for teaching skating to your class of 3 from the moment that you greet them. They have their equipment in hand. You have two hours to teach them. Describe the terrain at your home area, where you would teach each part of your progression, and the amount of practice time needed for each learning segment. List the Skiing Skill focus for each part of your progression.

Skiing Skill Focus	Drill/ Explanation/ Maneuver	Terrain Description	Time (i.e. 10 min; 20 min)

4. **Checking for understanding, giving feedback and prescribing practice:**  
 Brenda has been asking a lot of questions. You have explained everything about the V1 skate to her and she has practiced with the other students, but every time she tries to use her poles she gets all mixed up.

- What type sensory preference (VAK) do you think she has? \_\_\_\_\_
- What Skiing Skill (s) is she lacking? \_\_\_\_\_
- Briefly describe 2 drills/ exercises that you could use to help her. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Hank is ready to get moving. He really wants you to just watch him ski and give him a few pointers. His problem is that he "waddles" when he does the V1.

- What type sensory preference (VAK) do you think he has? \_\_\_\_\_
- What Skiing Skill (S) is he lacking? \_\_\_\_\_
- Briefly describe 2 drills/ exercises that you could use to help him. \_\_\_\_\_

---



---



---



---

Hank is thrilled with the progress that he has made in your lesson. He has improved his V1, and now he wants to learn the other skating strokes. There are 20 minutes remaining in your lesson. Based on what you have taught him so far, write a 3 to 5 step progression for the skating stroke that you would teach him next.

---



---



---



---



---

Stan has been watching you carefully. He can V1 for a few yards and then he lapses into a V2 with short glides. Only problem is that he gets tired easily.

- What type of sensory preference (VAK) do you think he has? \_\_\_\_\_
- Explain what teaching style you would use with this student. \_\_\_\_\_
  
- What Skiing Skill (s) is he lacking? \_\_\_\_\_
- In terms of his equipment what could be the reason for his short glides? \_\_\_\_\_
  
- What are some additional considerations that you need to keep in mind with Stan?

---



---



---

**5. Summary:**

By the end of 2 hours Brenda can no-pole skate but she still can't V1 with poles. What will you say to her in your lesson summary? \_\_\_\_\_

---



---



---

What can you say in your lesson summary that will encourage these students to take a private lesson from you in the future?

---



---



---



---

**Additional questions:**

Which teaching styles seem to work best when teaching the more advanced levels of Nordic skiing?  
Why? \_\_\_\_\_

\_\_\_\_\_

What are some important points to consider when teaching small children? \_\_\_\_\_

\_\_\_\_\_

What is lateral learning? Give an example of how you would use it during a lesson. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Level 3 questions:**

Give 2 exercises/ drills that will:

Improve wax set in the Diagonal stride on uphill

1.....

2.....

Improve push-off in the various skating techniques

1.....

2.....

Improve push (kick) Double Pole

1.....

2.....

Improve double poling in Skating.

1.....

2.....

Explain the difference between teaching using progressions and coaching. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

What is the difference between a sensory preference and a learning style preference?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Thank you** for participating in the PSIA Level 2/3 Cross Country certification program. It is our hope that this process has stimulated your thinking and your desire to be the best instructor you can be. In a like manner, we are constantly striving to improve our educational programs and materials. Please feel free to contact the addresses below with your feedback and suggestions.

- For comments or questions regarding PSIA NRM cross country education program contact:  
Angela Patnode, Nordic Chairperson; [angelapatnode@yahoo.com](mailto:angelapatnode@yahoo.com)

**Part 2: Joint Section:** Please bring checklists and writing device with you on snow

Candidates Name \_\_\_\_\_ Date \_\_\_\_\_

Nordic Education Staff \_\_\_\_\_

**A. Skiing Checklist**

Candidate's understanding of Nordic Ed Staff feedback	Nordic Ed Staff	
	Level	Initial
Diagonal stride		
Uphill diagonal stride.		
Double pole		
Kick double pole		
Step turn		
Transitions		
Diagonal V skate		
V 1 skate		
V 2 skate		
V 2 alternate		
Wedge turn / wedge Christie		
Open parallel turns		
Recommended Drills to Practice		
• No pole skiing		
• Uphill diagonal without poles		
• Gliding on one ski in the tracks on a slight downhill		

Candidates Name \_\_\_\_\_ Date \_\_\_\_\_

Nordic Education Staff \_\_\_\_\_

**B. Technical Knowledge Checklist**

Candidate's understanding of Nordic Ed Staff feedback	Nordic Ed Staff	
	Level	Initial
Understands ski preparation / waxing for classic skis		
Understands ski preparation / waxing for skating skis		
Accurate Movement Analysis description: Intermediate Level 2, Advanced Level 3		
Accurate Movement Analysis cause and effect		
Accurate Movement Analysis prescription		
Lesson content is technically sound		
Knows and applies skiing skills and movements:		
• Body Position		
• Timing		
• Propulsion		

**General Technical Development Suggestions:**

---



---



---



---



---



---



---



---

