

DEPARTMENT OF KINESIOLOGY AND HEALTH SCIENCES

COURSE OUTLINE – Fall 2023

PE2400 (A2): Introduction to Athletic Injuries – 3 credits (3-0-2) 75 Hours for 15 Weeks

Northwestern Polytechnic acknowledges that our campuses are located on Treaty 8 territory, the ancestral and present-day home to many diverse First Nations, Metis, and Inuit people. We are grateful to work, live and learn on the traditional territory of Duncan's First Nation, Horse Lake First Nation and Sturgeon Lake Cree Nation, who are the original caretakers of this land.

We acknowledge the history of this land and we are thankful for the opportunity to walk together in friendship, where we will encourage and promote positive change for present and future generations.

INSTRUCTOR:	Alexander Villafranca, Ph.D.	PHONE:	780-539-2971
OFFICE:	K220	E-MAIL:	avillafranca@nwpolytech.ca
OFFICE HOURS:	By appointment		

CALENDAR DESCRIPTION:

The course introduces practical and theoretical concepts of athletic injury. This includes an overview of athletic therapy and the prevention, assessment, acute management, and rehabilitation of injuries.

PREREQUISITE(S)/COREQUISITE:

Prerequisite: PE 1000 Human Anatomy or equivalent.

REQUIRED TEXT/RESOURCE MATERIALS:

- Sports Medicine Council of Alberta's Sports taping and strapping manual. Available for purchase directly from the SMCA (<https://www.sportmedab.ca/>)
- Sports Medicine Council of Alberta's Athletic injury management manual. Available for purchase directly from the SMCA (<https://www.sportmedab.ca/>)
- Principles of athletic training: A guide to evidence-based clinical practice, 17th edition. International student version. McGraw-Hill. 2021. Available for purchase from the NWP bookstore.

- Other select readings, as specified (provided at no cost on Brightspace/D2L).

DELIVERY MODE(S):

This course will involve lectures, case studies, online activities, tests, labs, and group discussion. All students should have a computer or smartphone for classroom activities. In class use of an NWP laptop can be arranged in advance, if required. Technological support is available through helpdesk@nwpolytech.ca.

LEARNING OUTCOMES:

Students who successfully complete this course will be able to:

- Understand and explain core concepts related to athletic injury assessment, prevention, acute management, and rehabilitation.
- Describe the roles and responsibilities of different sports medicine professionals, including athletic therapists.
- Evaluate athletic injuries and provide acute treatment within the scope of first aid.
- Refer injured athletes to appropriate healthcare providers based on the type and severity of injury.
- Use pre-rehabilitation exercises and other practices to reduce the risk of athletic injury.
- Tape and strap athletes to prevent athletic injury/reinjury, at a proficiency congruent with the Sports Medicine Council of Alberta (SMCA) Sports Trainer credential.

TRANSFERABILITY:

Please consult the Alberta Transfer Guide for more information. You may check to ensure the transferability of this course at the Alberta Transfer Guide main page <http://www.transferralberta.ca>.

**** Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability**

EVALUATIONS:

Task	Percent of final mark
Participation in class discussions	5%
Lecture midterm (Oct 16th/ 2023)	20%
Lab midterm (written, Oct 4th or 6th, during the respective lab section)	20%
Completion of weekly quizzes	5%
Practical final exam	20%
Lecture final exam	30%

Students must pass both the lecture and lab components to successfully pass the class.

GRADING CRITERIA:

Alpha Grade	4-point Equivalent	Percentage Guidelines		Alpha Grade	4-point Equivalent	Percentage Guidelines
A+	4.0	90-100		C+	2.3	67-69
A	4.0	85-89		C	2.0	63-66
A-	3.7	80-84		C-	1.7	60-62
B+	3.3	77-79		D+	1.3	55-59
B	3.0	73-76		D	1.0	50-54
B-	2.7	70-72		F	0.0	00-49

COURSE SCHEDULE/TENTATIVE TIMELINE:**Lecture:****M 13:00-14:20****F 11:30-12:50****Labs:****L1- W 14:30-16:20****L2- F 8:00-09:50**

Topics that will be covered include injury prevention, injury mechanism and classification, injury assessment, taping theory and practice, and extensive coverage of important sport injuries that affect different regions of the body. The instructor reserves the right to alter the pace, scope, and/or breadth of the topics covered to facilitate student learning and to cohere with the natural progression of class discussions.

Theme
Unit 1A- Introduction, Injury prevention
Unit 1B- Situational awareness
Unit 2A- Injury mechanisms and classification
Unit 2B- Tissue response to injury
Unit 3A- On field assessment (primary and secondary)
Unit 3B- Off-field assessment
Unit 4A- Environmental injuries
Unit 4B- General health conditions
Unit 5A- Introduction to taping, effect of taping on muscle activation, pain, and proprioception

Unit 6A- Skull and brain injuries
Unit 6B- Facial injuries
Unit 7A- Infectious disease
Unit 7B- Spinal injuries
Lecture midterm (Oct 16th/2023)
Unit 8A- Thoracic injuries
Unit 8B- Abdominal injuries
Unit 9A- Shoulder injuries
Unit 9B- Shoulder injuries (continued), brachium injuries
Unit10A- Elbow injuries, forearm injuries
Unit 11A- Wrist injuries
Unit 11B- Hand injuries
Unit 12A- Hip and pelvis injuries
Unit 12B- Hip and pelvis injuries (continued), thigh injuries
Unit 13A- Knee injuries
Unit 13B- Knee injuries (continued), shank injuries
Unit 14A- Ankle injuries
Unit 14B- Foot injuries

***On lecture days with statutory holidays, students will be expected to review the material for the lecture independently to maintain the pace of the course.**

Labs

In person attendance at labs is mandatory. Each unexcused absence will result in a 10% reduction from the final lab mark. Students who miss 3 or more labs without permission will be required to withdraw from the course due to truancy.

Module	Week	Topic(s)
	1	First week, no lab
1	2	Emergency care 1- Primary assessment Intro to wrapping- ankle wrapping Intro to taping- buddy taping
	3	Emergency care 2- Secondary assessment Preparticipation screening- Garrick ortho screen
	4	Shoulder wrapping, elbow hyperextension taping
	5	Lab midterm, written (Oct 4th for L1 and Oct 6th for L2)

	6	Wrist: hyperextension taping, hyperflexion taping, contact wrist taping
2	7	Thumb: Peppard taping (refresher), contact thumb taping
	8	Groin wrapping and thigh wrapping
	9	Knee 1: Hyperextension taping, general knee support (MCL, LCL, ACL) taping
	10	Knee 2: Patellar tilt taping, patellar glide taping, patellar external rotation taping
	11	Fall break, No lab
3	12	Ankle 1: Ankle taping, open basketweave taping
	13	Ankle 2: Closed basketweave taping
	14	Foot: Arch technique taping, Achilles tendon taping
	15	No lab

STUDENT RESPONSIBILITIES:

Note: Students must show proof of certification in “Standard First Aid with CPR C and AED” from an organization on the Canadian First Aid and CPR Guidelines Consensus Task Force (e.g. Red cross, St. John ambulance, Heart and stroke foundation, etc.) to pass the course. There will be additional costs borne by the student for this certification.

- Students are required to come to class prepared
- Regular attendance is critical to succeed in this class. Students should contact the instructor in advance if they are unable to attend.
- Any student who misses 8 or more classes or 3 or more labs without approval will be unable to sit for the remaining theoretical and practical exams due to truancy.
- If a student misses tests for medical reasons, a doctor’s note must be provided
- Late assignments will be deducted 10% per day submitted past the deadline
- Assignment details will be provided on D2L

CREDIT FROM THE SPORTS MEDICINE COUNCIL OF ALBERTA:

Students who receive a final mark of **B-** or better in this course will be eligible to apply for the SMCA’s Sports trainer certificate. An additional fee that is directly payable to the SMCA will apply (approximately \$10). Students are not obligated to purchase the certification, but it is highly recommended due to its utility and low cost.

STATEMENT ON ACADEMIC MISCONDUCT:

Academic Misconduct will not be tolerated. For a more precise definition of academic misconduct and its consequences, refer to the Student Rights and Responsibilities policy available at <https://www.nwpolytech.ca/about/administration/policies/index.html>.

**Note: all Academic and Administrative policies are available on the same page.

POLICY ON RECORDING TEACHING ACTIVITIES:

Students may not record classroom activities (such as lectures, group activities, group presentations delivered in class, etc.) without the advance written permission of the instructor. This policy is set to protect the privacy and reputation of students, to uphold the copyrights of the instructor and other content creators, and to facilitate free and open discussion of ideas. The classroom is meant to be a psychologically safe environment, where students are free to explore and think through new and controversial ideas without fear of public repercussions. Recording lectures can undermine this goal. If permission to record an activity is granted, the recorded material can only be used for the student's own private use and is not to be posted online or otherwise distributed. In the case of student presentations, the recording student must show proof that the presenting student(s) have agreed to be recorded before the instructor will grant permission.

COPYRIGHT NOTIFICATION:

Any course material created by your instructor is his intellectual property and is provided to you based upon your registration for this class. As such, the material is for your private use only. It is not to be distributed, publicly exhibited, or sold without the permission of the instructor. Third party materials (such as assigned readings) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law.