NORTHWESTERN POLYTECHNIC

DEPARTMENT OF KINESIOLOGY AND HEALTH SCIENCES

COURSE OUTLINE – FALL 2022

PA1981 A2: INTRODUCTION TO THE BASICS OF CARDIOVASCULAR TRANING 3(0-0-3)45h / 15 W

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.

INSTRUCTORS:	Fabio Minozzo	**PHONE:**	780532058
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CLASSES:

Mondays: Most Mondays will be lectures or activities in class (J201)

Wednesdays: Outdoors, gym, and fitness centre *(*Note: your instructor will let you know where to meet at the beginning of each week)*

CALENDAR DESCRIPTION:

- Acquisition of theoretical knowledge and personal skills used in the instruction of the basics of aerobic training.

DELIVERY MODE(S):

- Lecture, small group discussion, and active participation
- Theoretical Exploration of Cardiovascular Training Methods.
- Skill development and acquisition through active learning and exploration.

POLICY ON THE RECORDING OF TEACHING ACTIVITIES: Students may not record classroom activities (such as lectures, group activities, 3rd party presentations, etc.) without instructor's consent. 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. Students will be notified in advance by the instructor when someone has been granted permission to record a classroom activity. Students will also be given the option of being excused from actively participating in recorded activities. 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.

POLICY ON INSTRUCTIONAL RESOURCES AND MATERIALS: Any course resource/material should be properly used: the content created by your instructor is his/her 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, videos, et cetera) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law.
**Note: posting instructional personal notes or slides before or after classes is at discretion of your instructor.*

PREREQUISITE(S)/COREQUISITE: none

REQUIRED TEXT/RESOURCE MATERIALS: there is no required textbook book, but additional readings and resources will be assigned by the instructor.

ANCILLIARY TEXT/RESOURCE MATERIALS:

- Noakes, T. (2004). *Lore of running.* Cape Town, South Africa: Human Kinetics.
- Reuter, B. (2012). *Developing endurance.* Champaign, IL: Human Kinetics.
- Burke, E. (2002*). Serious Cycling*. Champaign, IL: Human Kinetics.
- Brooks, G. (2004). *Exercise Physiology: Human Bioenergetics and Its Applications*. Berkeley, CA. McGraw-Hill Higher Education
- Rebie, R. et al (2018). *ACSM's Guidelines for Exercise Testing and Prescription, 10th edition*. Philadelphia, PA: Wolkers Kluwer

COURSE OBJECTIVES:

1. To provide a definition of cardiovascular/ aerobic/ endurance exercise;
2. To identify the benefits of regular exercise;
3. To identify and utilize methods of monitoring exercise intensity for the purposes of increased performance and health;
4. To examine the different methods of training and evaluating cardiovascular fitness;
5. To calculate target training zones using different psycho-physiological parameters;
6. To expose different types of endurance training programs (i.e. types of periodization);
7. To participate in daily fitness endurance exercises (running, cycling, cross training, etc).

LEARNING OUTCOMES:

1. The student will become more proficient in cardiovascular training methods;
2. The student will increase physical competency in participating in various cardiovascular training modalities;
3. The student will improve ability to critically analyze and amend endurance training programs;
4. The student will gain greater competency for the use of psycho-physiological measurements (e.g., heart rate, perceived effort, etc.) and cardiovascular equipment (e.g., treadmill).

CLASS SCHEDULE: Mondays and Wednesdays: 14:30 – 15:50

PA1981 CARDIOVASCULAR TRAINING 2022 SCHEDULE (Tentative)			
MONDAYS	**TOPIC**	**WEDNESDAYS**	**TOPIC**
29-Aug-22	No Classes	31-Aug-22	Orientation day
5-Sep-22	No Classes	7-Sep-22	L1 - Endurance Training
12-Sep-22	L2 - Training Zones	14-Sep-22	L3 -Table of Training Intensity
19-Sep-22	L4 -Principles of Training	21-Sep-22	A1- Table of intensity (build your own)
26-Sep-22	L5 - Models of Periodization	28-Sep-22	T1 - 2.4K ACSM Test
3-Oct-22	Training Program Design Project	5-Oct-22	A2- Running workouts
10-Oct-22	**FALL BREAK**	12-Oct-22	**FALL BREAK**
17-Oct-22	L6 - Interval Training	19-Oct-22	L7- Training in the water
24-Oct-22	L8- Warm up and cooldown	26-Oct-22	A3- Cycling (fitness centre)
31-Oct-22	A4 - Pre-project / Backgorund	2-Nov-22	T2 -"Beep" Test
7-Nov-22	A5 - Pre-project / Table	9-Nov-22	A6 - Pre-project / Macro
14-Nov-22	L8 - about CPET	16-Nov-22	T3 - "CPET Test" (M119)
21-Nov-22	Project Presentations	23-Nov-22	Project Presentations
28-Nov-22	Project Presentations	30-Nov-22	Project Presentations
5-Dec-22	Review Activity	7-Dec-22	Review Activity
12-Dec-22	EXAM PERIOD	14-Dec-22	EXAM PERIOD

**Note: Activates will take place at various locations; students will be informed ahead of time.*

***Note: Some of these dates may vary to facilitate student learning*

EVALUATION:

20% Final Project Presentation

20%	Test application (T1, T2, and T3)
36%	Activities (A1, A2, A3, A4, A5, and A6)
30%	Final Exam
106%	**Total** *(note: 6% extra - you may miss one activity)*

GRADING CRITERIA: (The following criteria may be changed to suite the particular course/instructor)
Please note that most universities will not accept your course for transfer credit **IF** your grade is **less than C-**. This means **DO NOT GET LESS THAN "C-" IF YOU ARE PLANNING TO TRANSFER TO A UNIVERSITY.**

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

STUDENT RESPONSIBILITIES: Regular attendance and participation is expected at ALL sessions as much of the information provided cannot be obtained in any other way. Students who miss more than 10% of the total number of classes may NOT be granted permission to write the final exam, and/or asked to withdraw from the course. Students who miss class due to medical reasons MUST present medical verification to their instructor. Notify the instructor of any allergies or medical conditions. Dress in appropriate clothing and footwear for all activity sessions.

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.transferalberta.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**

STATEMENT ON PLAGIARISM AND CHEATING:

Cheating and plagiarism will not be tolerated and there will be penalties. For a more precise definition of plagiarism and its consequences, refer to the Student Conduct section of the Northwestern Polytechnic Calendar at https://www.nwpolytech.ca/programs/calendar/ or the Student Rights and Responsibilities policy which can be found at https://www.nwpolytech.ca/about/administration/policies/index.html

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

Additional Information:

- As this is an activity class students will be expected to participate in the physical activities required to learn about and experience cardiovascular exercise. Students missing more than 3 classes will be warned and any further absences will result in the student being removed from the class.
- Students seeking the excellent rating should be able to illustrate good training behavior, by being appropriately dressed, punctual, good attendance, considerate towards others, have a good work ethic, and help to create a good learning environment for the class. This will be determined from the student attendance records, and in-class observation of each student.
- Please note that several activity classes will take place off-campus. Students will be expected to provide their own transportation and meet at the off-campus location at the specified time.