

# COURSE SYLLABUS



COURSE TITLE: SPMA 220 Sport Technology

CLASS SECTION: 001

TERM: Fall 2022

COURSE CREDITS: 3

DELIVERY METHOD(S): In person Lecture & Lab

Camosun College campuses are located on the traditional territories of the Lək̓ʷəŋən and W̱SÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here.

Learn more about Camosun's [Territorial Acknowledgement](#).

For COVID-19 information please visit <https://legacy.camosun.ca/covid19/index.html>.

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*Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable explanation in advance, you will be removed from the course and the space offered to the next waitlisted student.*

## INSTRUCTOR DETAILS

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NAME: Graham Frost

EMAIL: [frostg@camosun.ca](mailto:frostg@camosun.ca)

OFFICE: PISE 317

HOURS: Wednesdays 11:30-12:30

*As your course instructor, I endeavour to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me. Camosun College is committed to identifying and removing institutional and social barriers that prevent access and impede success.*

## CALENDAR DESCRIPTION

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Students will study and investigate leading edge technologies as they relate to sport and their impact on performance. Students will interact with a range of equipment technologies, software, data tools and platforms. Students will also study and compare the impacts and ethics of current and emerging technologies.

PREREQUISITE(S):

CO-REQUISITE(S):

EXCLUSION(S):

## COURSE LEARNING OUTCOMES / OBJECTIVES

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Upon successful completion of this course students will be able to:

- Utilize leading edge sports performance technologies in a practical setting.
- Provide examples of different types of ethical sports technologies that support the enhancement of sport performance.

- Compare and contrast current sport technologies with emerging technologies
- Demonstrate an understanding of the positive and negative impacts of sport related technologies.
- Provide examples of the ethics of using technology advancements to enhance sport performance.
- Discuss the importance of fan oriented social technologies and platforms.
- Apply good working knowledge of emerging player and athlete development software for performance management.
- Discuss and provide examples of the importance of adaptive sports technologies.
- Demonstrate the use of specific computer software programs in a sport setting including program and client registration, and facility bookings.

#### REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

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(a) Texts – To be provided.

(b) Other – A notebook, computer, assigned readings or handouts, smart device, and access to D2L are required for this course. Additional miscellaneous supplies are based on the student choice of materials for their group projects.

#### COURSE SCHEDULE, TOPICS, AND ASSOCIATED PREPARATION / ACTIVITY / EVALUATION

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The following schedule and course components are subject to change with reasonable advance notice, as deemed appropriate by the instructor.

Lectures: Wednesdays 2:30pm – 4:20pm (PISE 329B) Fridays 8:30am – 10:20pm (CBA 201)

Week	Date	Topic	Additional Detail
1	Wed Sept 7	<b>Introduction to Sport Technology</b>	Lecture Questionnaire
1	Fri Sept 9	<b>Technology Scavenger Hunt</b>	Lab
2	Wed Sept 14	<b>Sport Technology Basics</b>	Lecture
2	Fri Sept 16	<b>Lab #1: Evaluating Athlete Performance (Jump Height)</b>	Lab
3	Wed Sept 21	<b>Deterministic Models</b>	Lecture
3	Fri Sept 23	<b>Lab #2: Video Analysis – Novice vs. Advanced</b>	Lab
4	Wed Sept 28	<b>Measuring Sport Performance &amp; Biomechanics</b>	Lecture
4	Fri Sept 30	<b>National Day for Truth and Reconciliation (No Class)</b>	-
5	Wed Oct 5	<b>Sensory Technology</b>	Lecture
5	Fri Oct 7	<b>Lab #3: Physiology / Heart Rate (TBD)</b>	Lab
6	Wed Oct 12	<b>Innovation and Design Thinking</b>	- Lecture
6	Fri Oct 14	<b>Lab #4: Design Thinking and Prototyping</b>	Lab
7	Wed Oct 19	<b>Talent Identification and Athlete Evaluation</b>	Lecture
7	Fri Oct 21	<b>Speed Mechanics: Talent Identification and Athlete Evaluation</b>	Lab-Speed Mechanics

<b>Lab #5: Talent Identification Camps</b>			
<b>Week</b>	<b>Date</b>	<b>Topic</b>	<b>Additional Detail</b>
8	Wed Oct 26	<b>Excel Basics</b>	Lab Lecture
8	Fri Oct 28	<b>Guest Lecturer: Athlete Selection and Performance Management</b>	Lab
<b>Lab #6: Race Performance</b>			
9	Wed Nov 2	<b>Sport Analytics: Gap Analysis, Descriptive and Inferential Statistics</b>	Lecture
9	Fri Nov 4	<b>Team Strategy: Turning Data Analysis into Wins</b> Pre-Work: Excerpt from <u>Chasing Perfection: A Behind-the-Scenes Look at the High-Stakes Game of Creating an NBA Champion</u>	
		<b>Lab #7: Sabermetrics and Sport</b>	Lab
10	Wed Nov 9	<b>Equipment: Textiles and Smart Garments</b>	Lecture
10	Fri Nov 11	<b>Remembrance Day (No Class)</b>	-
11	Wed Nov 16	<b>Group Projects: Sport Reinvented</b>	Group Presentations
11	Fri Nov 18	<b>Equipment: Advanced Materials and Safety</b>	Lecture
12	Wed Nov 23	<b>Guest Lecturer: Research and Innovation in Adaptive Sport</b>	Guest Lecture
12	Fri Nov 25	<b>Lab #8: Injury Prevention</b> Predictive, preventative, and recovery-based technology	Lab
13	Wed Nov 30	<b>Stadium Technology and the Fan Experience Referee / Umpire Assistance Technologies</b>	Lecture
13	Fri Dec 2	<b>Lab #9: App Development</b>	Lecture
14	Wed Dec 7	<b>Individual Projects: Technology Prototype</b>	Individual Presentations
14	Fri Dec 9	<b>Individual Projects: Technology Prototype</b>	Individual Presentations
	Mon Dec 12	<b>Exams Begin (SPMA 220 Exam Date TBD)</b>	

Students registered with the Centre for Accessible Learning (CAL) who complete quizzes, tests, and exams with academic accommodations have booking procedures and deadlines with CAL where advanced notice is required. Deadlines can be reviewed on the [CAL exams page](http://camosun.ca/services/accessible-learning/exams.html). <http://camosun.ca/services/accessible-learning/exams.html>

## EVALUATION OF LEARNING

DESCRIPTION	WEIGHTING
Shotgun Presentation	10
Lab Assignments (4)	30
Individual Project	20
Group Project	20

DESCRIPTION	WEIGHTING
Final Exam (During exam block. Date TBA)	20
<b>TOTAL</b>	<b>100%</b>

If you have a concern about a grade you have received for an evaluation, please come and see me as soon as possible. Refer to the [Grade Review and Appeals](http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf) policy for more information.  
<http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf>

## COURSE GUIDELINES & EXPECTATIONS

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Attendance in course lectures & labs is expected. Any missed content as a result of a missed lecture or lab is the responsibility of the student to make up. Lab equipment will not be provided outside of laboratory time, unless arranged by the student, and agreed to by the course instructor, in advance.

## SCHOOL OR DEPARTMENTAL INFORMATION

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## STUDENT RESPONSIBILITY

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Enrolment at Camosun assumes that the student will become a responsible member of the College community. As such, each student will display a positive work ethic, assist in the preservation of College property, and assume responsibility for their education by researching academic requirements and policies; demonstrating courtesy and respect toward others; and respecting expectations concerning attendance, assignments, deadlines, and appointments.

## SUPPORTS AND SERVICES FOR STUDENTS

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Camosun College offers a number of services to help you succeed in and out of the classroom. For a detailed overview of the supports and services visit <http://camosun.ca/students/>.

Support Service	Website
Academic Advising	<a href="http://camosun.ca/advising">http://camosun.ca/advising</a>
Accessible Learning	<a href="http://camosun.ca/accessible-learning">http://camosun.ca/accessible-learning</a>
Counselling	<a href="http://camosun.ca/counselling">http://camosun.ca/counselling</a>
Career Services	<a href="http://camosun.ca/coop">http://camosun.ca/coop</a>
Financial Aid and Awards	<a href="http://camosun.ca/financialaid">http://camosun.ca/financialaid</a>
Help Centres (Math/English/Science)	<a href="http://camosun.ca/help-centres">http://camosun.ca/help-centres</a>
Indigenous Student Support	<a href="http://camosun.ca/indigenous">http://camosun.ca/indigenous</a>
International Student Support	<a href="http://camosun.ca/international/">http://camosun.ca/international/</a>
Learning Skills	<a href="http://camosun.ca/learningskills">http://camosun.ca/learningskills</a>

Support Service	Website
Library	<a href="http://camosun.ca/services/library/">http://camosun.ca/services/library/</a>
Office of Student Support	<a href="http://camosun.ca/oss">http://camosun.ca/oss</a>
Ombudsperson	<a href="http://camosun.ca/ombuds">http://camosun.ca/ombuds</a>
Registration	<a href="http://camosun.ca/registration">http://camosun.ca/registration</a>
Technology Support	<a href="http://camosun.ca/its">http://camosun.ca/its</a>
Writing Centre	<a href="http://camosun.ca/writing-centre">http://camosun.ca/writing-centre</a>

If you have a mental health concern, please contact Counselling to arrange an appointment as soon as possible. Counselling sessions are available at both campuses during business hours. If you need urgent support after-hours, please contact the Vancouver Island Crisis Line at 1-888-494-3888 or call 911.

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## COLLEGE-WIDE POLICIES, PROCEDURES, REQUIREMENTS, AND STANDARDS

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### Academic Accommodations for Students with Disabilities

The College is committed to providing appropriate and reasonable academic accommodations to students with disabilities (i.e. physical, depression, learning, etc). If you have a disability, the [Centre for Accessible Learning](#) (CAL) can help you document your needs, and where disability-related barriers to access in your courses exist, create an accommodation plan. By making a plan through CAL, you can ensure you have the appropriate academic accommodations you need without disclosing your diagnosis or condition to course instructors. Please visit the CAL website for contacts and to learn how to get started: <http://camosun.ca/services/accessible-learning/>

### Academic Integrity

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.13.pdf> for policy regarding academic expectations and details for addressing and resolving matters of academic misconduct.

### Academic Progress

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.1.pdf> for further details on how Camosun College monitors students' academic progress and what steps can be taken if a student is at risk of not meeting the College's academic progress standards.

### Course Withdrawals Policy

Please visit <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <http://camosun.ca/learn/fees/#deadlines>.

### Grading Policy

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf> for further details about grading.

### Grade Review and Appeals

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf> for policy relating to requests for review and appeal of grades.

### Mandatory Attendance for First Class Meeting of Each Course

Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable reason in advance, you will be removed from the course and the space offered to the next waitlisted student. For more information, please see the “Attendance” section under “Registration Policies and Procedures” (<http://camosun.ca/learn/calendar/current/procedures.html>) and the Grading Policy at <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf>.

### Medical / Compassionate Withdrawals

Students who are incapacitated and unable to complete or succeed in their studies by virtue of serious and demonstrated exceptional circumstances may be eligible for a medical/compassionate withdrawal. Please visit <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.8.pdf> to learn more about the process involved in a medical/compassionate withdrawal.

### Sexual Violence and Misconduct

Camosun is committed to creating a campus culture of safety, respect, and consent. Camosun’s Office of Student Support is responsible for offering support to students impacted by sexual violence. Regardless of when or where the sexual violence or misconduct occurred, students can access support at Camosun. The Office of Student Support will make sure students have a safe and private place to talk and will help them understand what supports are available and their options for next steps. The Office of Student Support respects a student’s right to choose what is right for them. For more information see Camosun’s Sexualized Violence and Misconduct Policy: <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.9.pdf> and [camosun.ca/sexual-violence](http://camosun.ca/sexual-violence). To contact the Office of Student Support: [oss@camosun.ca](mailto:oss@camosun.ca) or by phone: 250-370-3046 or 250-3703841

### Student Misconduct (Non-Academic)

Camosun College is committed to building the academic competency of all students, seeks to empower students to become agents of their own learning, and promotes academic belonging for everyone. Camosun also expects that all students to conduct themselves in a manner that contributes to a positive, supportive, and safe learning environment. Please review Camosun College’s Student Misconduct Policy at <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf> to understand the College’s expectations of academic integrity and student behavioural conduct.

**Changes to this Syllabus:** Every effort has been made to ensure that information in this syllabus is accurate at the time of publication. The College reserves the right to change courses if it becomes necessary so that course content remains relevant. In such cases, the instructor will give the students clear and timely notice of the changes.