

Western HealthSciences

School of Kinesiology

KIN 2992A - Fitness Assessment and Strength Training (FAST) Spring 2025

Instructor: Dr. Kevin Boldt Office: Thames Hall 4178 Email: kboldt@uwo.ca Phone: 519-661-2111 ext. 86957 Office Hrs: by appointment	Lectures: Virtual asynchronous (2 per week). Labs: TH 2100 Lab 2 Tu 6:00 pm- 9:00 pm Lab 3 W 6:00 pm- 9:00 pm Instruction Mode: Blended 2h/week virtual asynchronous lecture 3h/week in-person lab
---	---

NOTE: This course will be run through OWL **Brightspace**. All course information including grades, assignment outlines, deadlines, etc. are available via OWL Brightspace. Check the website regularly for course announcements, and consider downloading the Brightspace Pulse App.

Calendar Course Description (including prerequisites/anti-requisites):

This course is an introduction to the basic knowledge and techniques essential in designing exercise programs for beginners. Students will be expected to learn and put into practice techniques used to develop muscular strength, power, hypertrophy, speed/agility, flexibility and cardiovascular fitness.

Antirequisite(s): The former Kinesiology 2961A/B.

Prerequisite(s): Completion of the first year Kinesiology program and registration in the School of Kinesiology **.

****This prerequisite is waived for the Spring semester.**

You are responsible for ensuring that you have successfully completed all course pre-requisites, and that you have not taken an anti-requisite course.

Statement on Prerequisite Checking

Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

NOTE: If you wish to enroll in this course without the stated pre-requisite(s), you must obtain written approval from the course instructor. The approval should then be forwarded to your academic counsellor.

My Course Description:

This is an activity-centered movement course. It is an introduction to the foundation of knowledge essential in designing individualized strength and conditioning programs. The primary theoretical focus of the course is understanding **how muscle adapts, and how those different adaptations can be stimulated by manipulating key parameters for targeted exercise prescriptions**. In addition to exercise prescription theory, students will participate in **scenario-based hands-on practical laboratory experiences**, where they will learn and demonstrate competencies related to safely and effectively coaching (and spotting) exercisers through the primary movement patterns. Students will be assessed both on the theoretical knowledge underpinning exercise prescription, and on practical skills related to developing, communicating, and coaching comprehensive exercise programs.

Learning Outcomes:

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

1. Communicate the Canadian 24-h Movement Guidelines and apply them to provide health-centered exercise prescriptions.

2. **Conduct** a thorough **client history** and evaluate a client's readiness to participate in exercise through the collection of subjective and objective **fitness assessment protocol**.
3. **Evaluate** fitness assessment data to **inform individualized exercise**.
4. **Instruct** proper technique to resistance training **primary movement patterns** and demonstrate effective spotting and coaching during training sessions.
5. Describe the basic function of muscle related to muscle strength, endurance, power, and flexibility.
6. Describe the **adaptive pathways for muscle** from: stimulatory factors, to key proteins, to muscle synthesis/growth and adaptation.
7. Explain the importance of the key **training principles** of overload, progression, specificity, and individualization.
8. **Design comprehensive exercise programs** (including the components of an exercise prescription and key parameters) that target a range of goals including strength, hypertrophy, endurance, power, flexibility, and aerobic conditioning.
9. **Communicate** evidence-informed exercise training principles in clear **non-technical language** to a "lay" audience/client.
10. **Summarize, apply, and communicate** the role of ergogenic aids, periodization, and other novel concepts in the fitness industry.

Course Schedule:

Week		Lecture 1	Lecture 2	Lab Topic
1	May 5-9	Intro & 24H Movement Guidelines	Primary Movement Patterns & Spotting	Technique and Spotting
2	May 12-16	Components of Fitness & Fitness Assessment	Principles of Training	Fitness Assessments and Prescription 1
3	May 19-23	Muscle Physiology	Muscle Adaptation	Prescription 2
4	May 26-30	Resistance Exercise Prescription - <u>I</u>	Resistance Exercise Prescription – <u>F</u> <u>TT</u>	Prescription 3
5	June 2-6	Periodization	Aerobic Exercise Prescription	Coaching Evaluation
6	June 9-13	Flexibility Training Prescription	Ergogenic Aids	No Labs

Course Details:

Attendance: This is a movement course. The laboratories within this course are designed to provide students with the opportunity to apply concepts discussed in lecture. It is important that all students in this course observe, analyze and take part in in-lab activities, in real time. There are five in-person labs in the summer term and students are expected to attend and fully participate in all labs.

Students must attend a minimum number of in-person labs to pass the course (4 of 5). If a student misses a lab for extenuating medical or compassionate circumstances, they can request academic consideration by completing a request at the central academic consideration portal. Otherwise, lab participation for that lab will be zero.

Students who miss one or more laboratories without appropriate academic consideration or accommodation will be debarred from writing the final exam and will receive an F for this course.

Due to a strict maximum number of students in each laboratory section, students are not permitted to attend alternate lab sections. YOU MUST ATTEND THE SESSION YOU ARE REGISTERED FOR.

Laboratory Preparation: You should expect to do physical activity/exercise in labs. ***You are welcome to wear whatever you feel most comfortable doing physical activity in,*** (shorts or gym pants/leggings, and t-shirts, or any clothing that you feel comfortable being active/moving in), as long as you can be physically active. Please also wear ***indoor running/gym/cross-training/tennis/athletic shoes.***

If you wish to change prior to class, please arrive early and use the single person changeroom located across the hall from TH 2100 or use any of the stalls in the gender-neutral washrooms located throughout Thames Hall.

Outdoor shoes and bags will not be allowed in the lab space. Bring a lock to secure your belongings in one of the lockers located in the hallway beside TH 2100. Note: To allow for all students to access these lockers during labs, the contents must be removed at the end of each lab. There is no food or drink in labs.

Course Conduct: Students are expected to be prepared and on-time for their scheduled lab, and to demonstrate effortful engagement and professional and collaborative conduct. At all times, I expect students and instructors to be respectful and supportive of each other.

Required Course Material:

There is no textbook for the course.

Course Evaluation:

Due dates are provided below and will be communicated on OWL Brightspace. Assigned work, including formal assignments and lab work documentation are due as communicated below and in OWL Brightspace. Assignments are due before the date and time listed. ***Failure to submit assignments by posted due dates and times will result in a late penalty of 10% per day.*** Assignments will not be accepted after class feedback/grades have been released.

Assessment	Weight	Date
Weekly Laboratory Assignments	10%	Ongoing in-laboratory
Science Communication Assignment	20%	May 23
Program Design Assignment	25%	June 13
Practical Coaching Evaluation	15%	In-lab week June 3-4
Final Exam	30%	June 17 th 6-8pm
Total	100%	

Laboratory Assignments (10%): Each week students will complete a weekly assignment, either in lab or in preparation for the lab session. These formative assignments will be evaluated by the instructor and the students will receive feedback that they can incorporate into the summative Program Design Assignment and Coaching Evaluation.

Science Communication Assignment (20%): Students will work in pairs (2 students, from the same lab section) to write a mock magazine article (*Men's Health, Women's Fitness, Self, etc.*) on a hot topic in strength training, that highlights recent research on strength and conditioning. The article is intended for a general audience, so although they are expected to accurately reflect the science, students will be assessed on their ability to creatively and effectively communicate in an *accessible* way to a broad audience.

AI Program Design Assignment (25%): Students will instruct artificial intelligence (AI; Chat GPT) to design a resistance training program for a mock client of their design. Students will develop an AI "prompt" that specifies key criteria for the prescription (goals of the client, limitations, equipment, etc.) and will then provide a critical appraisal of the AI's exercise prescription based on evidence-informed principles discussed over the course of the semester in lectures.

Practical Coaching Evaluation (15%): Students will be evaluated on their ability to monitor and coach a mock client through the primary movement patterns. Students will be evaluated during the last week of labs in the term (June 3-4). ***The in-person practical coaching evaluation is the designated assessment, meaning you cannot use an undocumented absence if you require consideration.***

Final Exam (30%): The ***in-person final exam*** will be a combination of multiple choice and short/long answer questions. The exam will be cumulative. Makeup examinations (in-person) for the final exam will be scheduled for one week after the scheduled Final.

Faculty of Health Sciences Academic Policies and Statements

Support Services

There are various support services around campus and these include, but are not limited to:

1. Academic Support and Engagement - <http://academicsupport.uwo.ca>
2. Wellness and Well-being - <https://www.uwo.ca/health/>
3. Registrar's Office -- <http://www.registrar.uwo.ca/>
4. Ombuds Office -- <http://www.uwo.ca/ombuds/>

The websites for Registrarial Services (<http://www.registrar.uwo.ca>), and the same for affiliated university colleges when appropriate, and any appropriate Student Support Services (including the services provided by the USC listed here: <http://westernusc.ca/services/>) and the Student Development Services, should be provided for easy access.

Students who are in emotional/mental distress should refer to Mental Health@Western (<https://www.uwo.ca/health/>) for a complete list of options about how to obtain help.

Statement on Gender-Based and Sexual Violence

Western is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced sexual or gender-based violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts at: https://www.uwo.ca/health/student_support/survivor_support/get-help.html.

Student Code of Conduct

The purpose of the Code of Student Conduct is to define the general standard of conduct expected of students registered at Western University, provide examples of behaviour that constitutes a breach of this standard of conduct, provide examples of sanctions that may be imposed and set out the disciplinary procedures that the University will follow. For more information, visit <https://www.uwo.ca/univsec/pdf/board/code.pdf>

Absence from Course Commitments

Students must familiarize themselves with the Policy on [Academic Consideration – Undergraduate Students in First Entry Programs](#)

Students missing course work for medical, compassionate, or extenuating circumstances can request academic consideration by completing a request at the central [academic consideration portal](#). Students are permitted one academic consideration request per course per term **without** supporting documentation. Note that supporting documentation is **always** required for academic consideration requests for examinations scheduled by the office of the registrar (e.g., December and April exams) and for practical laboratory and performance tests (typically scheduled during the last week of the term).

Students should also note that the instructor may **designate** one assessment per course per term that requires supporting documentation. This designated assessment is described elsewhere in this document. Academic consideration requests may be denied when flexibility in assessment has already been included. Examples of flexibility in assessment include when there are assessments not required for calculation of the final grade (e.g. 8 out of 10 quizzes), when there is flexibility in the submission timeframe (e.g. 72 hour no late penalty period), or when timed assessments (e.g., quizzes) are available over an extended period of time (e.g., when you are given a 72 hour time period to start – and finish – the assessment).

Please note that any academic considerations granted in this course will be determined by the instructor of this course, in consultation with the academic advisors in your Faculty of Registration, in accordance with information presented in this course syllabus. Supporting documentation for academic considerations for absences due to illness should use the [Student Medical Certificate](#) or, where that is not possible, equivalent documentation by a health care practitioner.

Accommodation for Religious Holidays

Students should review the policy for [Accommodation for Religious Holidays](#). Where a student will be unable to write examinations and term tests due to a conflicting religious holiday, they should inform their instructors as soon as possible but not later than two weeks prior to writing the examination/term test. In the case of conflict with a midterm test, students should inform their instructor as soon as possible but not later than one week prior to the midterm.

Special Examinations

A Special Examination is any examination other than the regular examination, and it may be offered only with the permission of the Dean of the Faculty in which the student is registered, in consultation with the instructor and Department Chair. Permission to write a Special Examination may be given on the basis of compassionate or medical grounds with appropriate supporting documents. To provide an opportunity for students to recover from the circumstances resulting in a Special Examination, the University has implemented Special Examination dates. The Faculty of Health Sciences has set School-specific dates for these Special Examinations. Please speak with your instructor about the date on which the Special Examination for this course will be held.

Academic Offences

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following website: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf.

Plagiarism

Student work is expected to be original. Plagiarism is a serious academic offence and could lead to a zero on the assignment in question, a zero in this course, or your expulsion from the university. You are plagiarizing if you insert a phrase, sentence or paragraph taken directly from another author without acknowledging that the work belongs to him/her. Similarly, you are plagiarizing if you paraphrase or summarize another author's ideas without acknowledging that the ideas belong to someone else. All papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between Western University and Turnitin.com (www.turnitin.com).

Use of Artificial Intelligence for the Completion of Course Work

Within this course, you may only use artificial intelligence tools (e.g., "ChatGPT") in ways that are specifically authorized by the course instructor. All submitted work must reflect your own thoughts and independent written work.

Re-submission of Previously Graded Material

Without the explicit written permission of the instructor, you may not submit any academic work for which credit has been obtained previously, or for which credit is being sought, in another course or program of study in the University or elsewhere.

Use of Statistical Pattern Recognition on Multiple Choice Exams

Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

Accessibility Statement

Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Accessible Education (AE) at 661-2111 x 82147 for any specific question regarding an accommodation or review [The policy on Accommodation for Students with Disabilities](#)

Correspondence Statement

The centrally administered e-mail account provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at their official university address is attended to in a timely manner. Students are further expected to attend to announcements presented through Brightspace, and to read emails generated in this way.

Use of Electronic Devices

During Exams

Unless you have medical accommodations that require you to do so, or explicit permission from the instructor of the course, you may not use any electronic devices (e.g., cell phones, tablets, cameras, smart glass, smart watches, or iPods) during ANY tests, quizzes, midterms, examinations, or other in-class evaluations. **These devices MUST either be left at home or with your belongings at the front of the room. They MUST NOT be at your test/exam desk or in your pocket. Any student found with a prohibited device will receive an automatic grade of zero on the test or exam.**

During Lectures and Tutorials

Although you are welcome to use a computer during lecture and tutorial periods, you are expected to use the computer for scholastic purposes only, and refrain from engaging in any activities that may distract other students from learning. From time to time, your professor may ask the class to turn off all computers, to facilitate learning or discussion of the material presented in a particular class.

Copyright and Audio/Video Recording Statement

Course material produced by faculty is copyrighted and to reproduce this material for any purposes other than your own educational use contravenes Canadian Copyright Laws. Unless explicitly noted otherwise, you may not make audio or video recordings of lectures – nor may you edit, re-use, distribute, or re-broadcast any of the material posted to the course website.

Contingency Plan for an In-Person Class Pivoting to 100% Online Learning

In the event of a situation that requires this course to pivot to online content delivery, all remaining course content will be delivered entirely online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on Brightspace for students to view at their convenience). The grading scheme will **not** change. Any remaining assessments will also be conducted online as determined by the course instructor

Note that disruptive behaviour of any type during online classes, including inappropriate use of the chat function, is unacceptable. Students found guilty of Zoom-bombing a class or of other serious online offenses may be subject to disciplinary measures under the Code of Student Conduct.

Online Proctoring

Tests and examinations in this course may be conducted using a remote proctoring service. By taking this course, you are consenting to the use of this software and acknowledge that you will be required to provide **personal information** (including some biometric data) and the session will be **recorded**. Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. More information about this remote proctoring service, including technical requirements, is available on Western's Remote Proctoring website at: <https://remoteproctoring.uwo.ca>.

Grades

Where possible assignment objectives and rubrics will be posted on OWL.

Generally, students can expect some form of feedback on their performance in a course before the drop date.

- November 13th, 2024(for first term half-courses)
- November 30th, 2024(for full-year courses)
- March 7th, 2025 (for second term half-courses)

A+	90-100	<i>One could scarcely expect better from a student at this</i>
A	80-89	<i>Superior work that is clearly above average</i>
B	70-79	<i>Good work, meeting all requirements and eminently satisfactory</i>
C	60-69	<i>Competent work, meeting requirements</i>
D	50-59	<i>Fair work, minimally acceptable.</i>
F	below 50	<i>Fail</i>

Rounding of Grades (for example, bumping a 79 to 80%): This is a practice some students request. The final grade documented is the grade that you have achieved. There is no rounding to the next grade level, or 'giving away' of marks. Please don't ask me to do this for you; the response will be "please review the course outline where this is presented"

Appealing a Grade Within this Course

You have the right to appeal any grade within this course. The grounds for a grade appeal may be one or more of: medical or compassionate circumstances, extenuating circumstances beyond the student's control, bias, inaccuracy, or unfairness. All grounds advanced in a request for relief must be supported by a clear and detailed explanation of the reasons for the request together with all supporting documentation.

Appeals generally proceed in this order:

1. Course instructor (informal consultation)
2. Department Chair (submission of written request)
3. The Dean of the Faculty (submission of written request)

In the case of perceived procedural unfairness, steps 2 and 3 are carried out within the Department and Faculty offering the course. In the case of extenuating medical or compassionate circumstances that impact on a grade, steps 2 and 3 are carried out within a student's Home Department and Faculty.

A request for relief against a mark or grade must be initiated with the instructor as soon as possible after the mark is issued. In the event that the instructor is not available to the student, or fails to act, or if the matter is not resolved satisfactorily with the instructor, a written request for relief must be submitted to the Chair of the Department within three weeks of the date that the mark was issued. In the case of a final grade in a course, the written request for relief must be submitted to the Chair of the department by January 31st (for first-term half courses) or June 30th (for second-term half courses or full-year courses).