



#### Western University Faculty of Health Sciences School of Kinesiology

#### KIN 2992A - Fitness Assessment and Strength Training (FAST) Fall 2024

Instructor: Dr. Kevin Boldt Office: Thames Hall 4178 Email: <u>kboldt@uwo.ca</u> Phone: 519-661-2111 Ext.86957 Office Hrs: TBD	Lectures: Laboratories: TH 2100 Lab 2 Lab 3 Lab 4	
TAs:	Lab 5 Lab 6 Lab 7 Lab 8 Lab 9	
	Instruction Mode: In-person 1h/week in-person lecture 2h/week in-person lab	

**NOTE:** All course information including grades, assignment outlines, deadlines, etc. are available via <u>OWL Brightspace</u>. Download the Brightspace Pulse App to stay up-to-date on course communication and enable your notification settings within "Communications" in the top toolbar. Check the website regularly for course announcements.

#### 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.

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. Along with an introduction to client screening, client history, fitness assessment, and behaviour change theories, students will learn about muscle physiology and how muscle adapts to imposed training demands. This will be applied to evidence-informed training principles to optimize muscle adaptation to strength training, including prescription parameters, ergogenic aids, and periodization. Through

scenario-based laboratory experiences, students will learn to properly execute and safely coach novice exercisers through the primary movement patterns. In combination with an introduction to theory, students will be expected to learn and implement techniques used to develop muscular endurance, strength, hypertrophy, power and cardiorespiratory fitness.

# Learning Outcomes

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

- 1. Understand the Canadian 24-h Movement Guidelines and apply them to provide healthcentered 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. Understand the components of an exercise prescription, including key parameters and components of a workout, and how to incorporate principles of overload, progression, specificity, and individualization.
- 5. **Communicate** evidence-informed exercise training principles in clear **non-technical language** to a "lay" audience without a background in kinesiology.
- 6. **Formulate** and **communicate** effective constructive feedback to **coach** other individuals through a variety of exercises based on the **primary movement patterns.**
- 7. **Apply** goal setting theory and **program design** concepts to **individualized** conditioning programs to improve the following: muscular endurance, strength, hypertrophy, power, speed and agility and cardiorespiratory fitness.
- 8. **Summarize, apply, and communicate** the role of ergogenic aids and other novel concepts in the fitness industry.

Week	Lecture Topic	Lecture Date	Lab Topic
Week 1	Intro & 24H Movement Guidelines	September 9	
Week 2	Primary Movement Patterns, Spotting/safety	September 16	Client Consultation/screening
Week 3	Components of Fitness & Fitness Assessment	September 23	Technique and Spotting
Week 4	Principles of Training*	September 30	Fitness Assessments and HBR
Week 5	Muscle Physiology	October 7, 3	
Reading Week		October 12-20	
Week 6	Resistance Exercise Prescription	October 21	Prescription 1
Week 7	Aerobic Exercise Prescription	October 28	Prescription 2
Week 8	Facilitating Behaviour Change	November 4	Prescription 3
Week 9	Periodization	November 11	Prescription 4
Week 10	Flexibility Training Prescription	November 18	Coaching Evaluation
Week 11	Ergogenic Aids	November 25	Coaching Evaluation
Week 12	Fitness Fads	December 2	

#### Course Schedule:

\*Week 4 (Principles of Training) will be posted as a virtual (asynchronous) lecture on September 27<sup>th</sup> to allow for observance of the National Day for Truth and Reconciliation on September 30<sup>th</sup>.

#### **Required Course Material:**

There is no required textbook for this course.

## Course Evaluation:

The following assessments have been carefully designed to engage learners and facilitate achievement of the learning outcomes. The assignments incorporate autonomy where students will have the opportunity to select the direction of their projects through selecting the topics and creative approaches that are meaningful to them.

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. Accommodations for assignments and examinations must be made through the Academic Support and Engagement office.

Assessment	Weight	Date
Weekly Laboratory Assignments	10%	Ongoing in-laboratory
Training Principle Assignment	20%	October 25
Program Design Assignment	25%	November 25
Practical Coaching Evaluation	15%	In-lab weeks of November 18 and 25
Final Exam	30%	Scheduled by Registrar
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.

**Training Principle Assignment (20%):** Students will work in partners to develop either social media–style "fitness influencer" videos or infographics that highlight the importance of one of the fundamental training principles (progression, overload, specificity, individualization). The media are intended for a general audience, so although they are expected to reflect the science of the principle, students will be assessed on their ability to communicate in an *accessible* way to a broad audience.

Al Program Design Assignment (25%): Students will instruct artificial intelligence (AI; Chat GPT) to design a 6-week 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 students 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 in-lab during the weeks of November 18 and 25.

**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. Per University policy, makeup examinations for the final exam (i.e., during the December exam periods) are held on the Thursday of the first week of classes in January (for first-term courses).

## **Course Details:**

## Course-Specific Conditions:

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 a variety of movements, in real time. There are 8 in-person labs in the term. Lab participation is mandatory.

If faced with extenuating medical or compassionate circumstances, **students can miss one lab without academic penalty and without explanation or submission of documentation to anyone (instructor or advisor)**. If a student is absent for more than one lab, they are required to submit formal documentation and obtain accommodations through a Kinesiology academic advisor <u>https://www.uwo.ca/fhs/kin/undergrad/academic/index.html</u>, otherwise lab participation for that lab will be zero.

Including the one missed lab provided without penalty, students who miss 25% (3 labs for this course) 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.

Students who miss any labs are expected to connect with peers to review missed content. Lab tasks must be completed on a subsequent week as time allows or on the student's own time, as the lab task permits. Completion of weekly lab tasks will directly impact the student's ability to perform well on the practical assessment. Students are encouraged to seek peer and TA feedback on lab tasks during lab time to enhance understanding and to promote final assessment performance.

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:** Due to the nature of this course, including the requirement for active participation, please dress accordingly (e.g., running shoes, shorts or gym pants/leggings, and t-shirts) for labs.

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 KIN 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.

Students are expected to be prepared and on-time for their scheduled lab, to demonstrate effortful engagement and professional and collaborative conduct.

Course/University Policies The website for Registrarial Services is http://www.registrar.uwo.ca.

# 1. Email

In accordance with <u>policy</u>, 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 his/her official university address is attended to in a timely manner.

# 2. 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, in the <u>Academic Calendar</u> (westerncalendar.uwo.ca).

## 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).

## **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.

# 3. 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 during ANY tests, quizzes, midterms, examinations, or other in-class evaluations.

**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. **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.** 

**Personal Response Systems** ("clickers") may be used in some classes. For those classes in which we use this technology, it is your responsibility to ensure that the device is activated and functional. You must speak with the course instructor immediately, if you have any concerns about whether or not your clicker is malfunctioning.

You must use only your own clicker. For all components of this course in which clicker records are used to compute a portion of the grade:

• The use of somebody else's clicker in class constitutes a scholastic offence;

• The possession of a clicker belonging to another student will be interpreted as an attempt to commit a scholastic offense

# 4. Academic Considerations and Absences from Lectures and Assessments *Religious Accommodation*

When a course requirement conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request (in writing) any necessary academic considerations at least two weeks prior to the holiday to the academic counsellors in their Home Department. Additional information is provided in the <u>Western Multicultural Calendar</u>.

#### Academic Accommodation

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. Students with ongoing accommodation needs within this course are also encouraged to contact <u>Accessible Education</u>, which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The policy on Academic Accommodation for Students with Disabilities can be found <u>here</u>.

#### Academic Consideration

The University recognizes that a student's ability to meet their academic responsibilities may, on occasion, be impaired by extenuating circumstances that are medical or compassionate in nature. These extenuating circumstances may be acute (short term), or it may be chronic (long term), or chronic with acute episodes. In all cases, students are advised to consult with the academic counsellors in their home units, at their earliest opportunity. Academic counsellors may refer students to <u>Accessible Education</u> for ongoing academic accommodations.

Most forms of academic consideration require documentation, and this documentation is to be submitted to academic counsellors within five (5) business days of their return to academic responsibilities. Any such documents will be retained in the student's file, and will be held in confidence in accordance with the University's <u>Official Student Record</u> <u>Information Privacy Policy</u>. Once the petition and supporting documents have been received and assessed, appropriate academic considerations shall be determined by academic counseling, in consultation with the student's instructor(s). Academic considerations may include extension of deadlines, waiver of attendance requirements for classes/labs/tutorials, arranging Special Exams or Incompletes, re-weighting course requirements, or granting late withdrawals without academic penalty. Academic considerations shall be granted only where the documentation indicates that the onset, duration and severity of the illness are such that the student could not reasonably be expected to complete their academic responsibilities. (Note – it will not be sufficient to provide documentation indicating simply that the student "was seen for a medical reason" or "was ill.").

Whenever possible, students who require academic considerations should provide notification and documentation in advance of due dates, examinations, etc. Under no circumstances are students expected to submit rationales for (or documentation of) any absences, to course instructors. Students are, however, required to follow-up with course instructors, in a timely fashion, to identify the ways in which the academic consideration will be implemented.

#### **Examination Conflicts**

A student completing tests or examinations with flexible submission times (e.g., where one or more evaluation is a take-home assessment) cannot request alternative arrangements unless a conflict cannot be avoided by rescheduling writing the exam to a different time

within the window specified by the instructor. This applies to direct conflicts as well as "heavy load" conflicts (e.g., three exams within a 23-hour period). The student should discuss any concerns about a potential conflict and/or request academic considerations with their academic counselling unit prior to the deadline to drop a course without academic penalty

In the case of online tests and examinations, use of a "Conflict Room," wherein student can write two proctored exams concurrently, will be interpreted as arrangements for continuous proctoring.

# 5. 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 OWL 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.

## 6. 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: <u>https://remoteproctoring.uwo.ca</u>.

## 7. 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 12<sup>th</sup>, 2024 (for first term half-courses)
- December 2<sup>nd</sup>, 2024 (for full-year courses)
- □ March 7<sup>th</sup>, 2025 (for second term half-courses)

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

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. <u>Please don't ask me to do this for you; the response will be "please review the course outline where this is presented".</u>

## 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 31<sup>st</sup> (for first-term half courses) or June 30<sup>th</sup> (for second-term half courses or full-year courses

# 8. Support Services

## Health and Wellness:

Information regarding health and wellness-related services available to students may be found at <u>http://www.health.uwo.ca/.</u>

Students who are in emotional/mental distress should refer to Mental Health@Western (<u>http://www.health.uwo.ca/)</u> for a complete list of options about how to obtain help. There are various support services around campus and these include, but are not limited to: *Student Development Centre -- <u>http://www.sdc.uwo.ca/ssd/</u> <i>Ombudsperson Office -- <u>http://www.uwo.ca/ombuds/</u>* 

## 9. 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 <u>https://www.uwo.ca/univsec/pdf/board/code.pdf</u>