

The University of British Columbia
SCHOOL OF KINESIOLOGY

KIN 424 – Medical Aspects of Sport and Exercise
(Formerly KIN 471)
2022W Term 2

Course Format:

- Lectures will be delivered in person almost every week, on Mondays from 5pm until 7:30 pm.
- The class will include a live presentation as well as review of clinical cases as a group. These are case discussions relevant to the week's presentation material. We will occasionally have a guest (either a content expert or a patient)
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- These sessions take place:
 - **Mondays, 5:00pm-7:30pm PST in Woodward Lecture Hall 2**

Instructor:
Michael Koehle MD PhD

YOUR TA IS YOUR FIRST POINT OF CONTACT.

Teaching Assistants (TAs):

TA: Rachel Jackman

*If your last name begins with the letters A through Dos, please communicate with Rachel
You can contact Rachel using the messaging function on Canvas or at: rajackma@student.ubc.ca

TA: Jem Arnold

*If your last name begins with the letters Dre through Lin, please communicate with Jem
You can contact Josh using the messaging function on Canvas or at jem.arnold@ubc.ca

TA: Angus Chan

*If your last name begins with the letters Liu through San, please communicate with Angus
You can contact Angus using the messaging function on Canvas or at: angus.chan@ubc.ca

TA: Patrik Vojtisek

*If your last name begins with the letters Sap through Z, please communicate with Patrik
You can contact Angus using the messaging function on Canvas or at: patrik.vojtisek@ubc.ca

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COURSE OVERVIEW

Clinical sports medicine is a multidisciplinary field practiced by various registered clinical professions. Key skills of sports medicine clinicians include being able to make a diagnosis (based on a knowledge of sports injury epidemiology, appropriate physical tests, and investigations), deciding upon treatment with interpretation of the literature and the principles of 'evidence-based practice', and assisting athletes in returning to sport. The course covers common non-musculoskeletal conditions and prevalent disorders encountered in sports medicine.

COURSE TOOLS AND RESOURCES

There is no required textbook for this course. Reading materials are mostly published research articles available through the UBC Library website.

Canvas: Information about this course, lectures, and important reminders will be made available on the course website. This information can be accessed on Canvas, so please check the site regularly.

ATTENDANCE

You should plan to attend the in-class session each week. You are responsible for all material covered in our class sessions and any information given whether you are present or not. You are also responsible for all of the content covered in our recorded lecture videos.

If you miss a quiz or exam **without advanced notice and proper declaration**, you cannot make up that assessment and will be given a mark of zero. If you have a reasonable academic concession request (medical issue, compassionate grounds, etc.), you should self-declare that, using the procedures outlined in the COURSE EVALUATION section of this course outline.

CONTACT

Attempting to teach or explain material over e-mail can be difficult and ineffective. **If you have questions about course material or concepts** (e.g. "I wasn't quite sure what you meant when you said..." or "Can you explain how that concept would work in this situation..."), **those questions should be addressed during office hours with the teaching assistants or posted on the class discussion boards linked to the appropriate topic (on Canvas).** Furthermore, **Dr. Koehle will remain after class for as long as it takes to answer any student questions. This is a good opportunity to ask course related and non-course-related questions.**

Your TAs are your first point of contact for all emails – their contact details are available above.

E-mail to Dr. Koehle should only be used in cases of emergency that may cause you to miss an exam or quiz. It may take up to 24 hours to respond to your email during the week and I **do not** check my email on weekends, nor will your teaching assistant. Please keep this in mind around exam time. Please include "KIN 424" in the subject line of emails.

OFFICE HOURS

If you aren't comfortable speaking up during our live classes, questions about course material are best handled during office hours with your Teaching Assistant, the discussion boards or with Dr. Koehle after class every week. If

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something is unclear, you should seek clarification within that week. Do not wait until the week before an exam to review material that was unclear weeks before. Office hours are a good option for seeking clarification or further understanding on course concepts. Setting up a meeting during office hours is also a good way to get to know your teaching assistant.

COURSE NOTES

Class notes from the lectures will be made available through the course website on Canvas. Please keep in mind that these notes and lectures do not contain information related to discussions or detailed examples that occur during class.

COPYRIGHT

As the instructor, I hold the copyright to the lectures and all course materials presented in class, unless otherwise noted. The copyright also extends to student notes and summaries that substantially reflect these lectures or materials. Materials are made available to students for personal use only. Students may not distribute or reproduce the materials for commercial purposes without my express written consent. **No classroom content should be posted to CourseHero or other similar websites.**

UNIVERSITY POLICIES

It is your responsibility to become familiar with the University of British Columbia's Academic Honesty and Plagiarism Policies, as well as the Student Declaration and the consequences of violating these policies.

UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious and cultural observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available here (<https://senate.ubc.ca/policiesresources-support-student-success>).

COURSE EVALUATION

The breakdown of marking for the course is as follows:

| | |
|--------------------|-----|
| Midterm: | 40% |
| Quizzes: | 10% |
| Final Exam: | 50% |

If an absence is anticipated before an assessment, please speak to your teaching assistant or instructor to discuss your personal situation **before you miss the class**. Exams will not be rescheduled for any reason other than self-declared medical circumstances, compassionate grounds, or conflicting responsibilities. Please review those policies here: <https://kin.educ.ubc.ca/undergraduate/bkin/academic-concession/>. Please keep in mind that things like vacationing are not a valid excuse to miss an assessment.

There is no individual extra credit in this course. Please keep that in mind from the beginning of the course. In the

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instance that an extra credit opportunity is made available, it will be made available to everyone in the class.

QUIZZES

There are two quizzes in this course, which will focus on the assigned reading for that week. The format may be multiple choice, fill in the blank, or short answer. Each quiz is worth 5% of your overall grade.

Missed quizzes are subject to the policies outlined in the section titled "Course Evaluation." In some circumstances, the value of a missed quiz may be re-weighted onto the other quizzes, but only in the case of self-declared conflicts for which the student has provided advanced notice.

EXAMS

There are two exams in the course and are worth 40% and 50% of your overall mark. The Midterm will cover material presented in the first half of the course. Sample questions will be discussed in class prior to the exams.

The final exam is **CUMULATIVE**. Exams will be a combination of multiple choice, true-false, and fill-in-the-blank questions.

Please be advised that is never appropriate to ask the instructor what will or will not be on an exam. All material covered in the class room is eligible to be on an exam.

NOTE: the TAs will mark the exams initially. They will be instructed to be particularly generous with part-marks. If students are disputing the marking, then Dr. Koehle will mark the entire examination/assignment in full.

As per UBC policy, the final exam can only be reviewed after the fact for pedagogical purposes. Students who would like to dispute their mark must follow the UBC policy on "Review of Assigned Standing."

Public Health Measures

The course is currently planned to be given live, but if public health situations change, there is a possibility that University policy will necessitate this course to be given online. If this is the case, we will adapt, and the course will be switched to an online format.

NOTE: Dr. Koehle is not your physician. You all have access to excellent physicians at Student Health. Use them.

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COURSE SCHEDULE

| Date | Lecture | Due | Notes |
|-------------|--|-------------------------------|---|
| 9-Jan | Course Introduction/ Evidence-Based Practice | | |
| 16-Jan | Respiratory Issues in Sport | | |
| 23-Jan | Physiology and Medicine of Diving and Immersion | | No in-class! Recorded Lecture-Sorry! |
| 30-Jan | Air Pollution and Exercise | Quiz 1 (Air Pollution) | |
| 6-Feb | Exercise in Heat & Cold | | |
| 13-Feb | Exercise and Altitude | | |
| 20-Feb | No Class – Reading Break | | |
| 27-Feb | MIDTERM | | |
| 6-Mar | Sudden Cardiac Death - Relative Energy Deficit in Sport - RED-S | | |
| 13-Mar | Vascular Issues in Athletes | | Jem lecture – vascular |
| 20-Mar | GI Issues in Athletes | | |
| 27-Mar | Overtraining/Travel with Athletes | Quiz 2 (Overtraining) | |
| 3-Apr | Concussion | | |

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Readings

- Koehle, M.S.M.S., Cheng, I., Sporer, B., 2014. Canadian Academy of Sport and Exercise Medicine Position Statement: Athletes at High Altitude . Clin. J. Sport Med. 24, 120–127.
- Meeusen, R., Duclos, M., Foster, C., Fry, A., Gleeson, M., Nieman, D., Raglin, J., Rietjens, G., Steinacker, J., Urhausen, A., Science, E.C. of S., Medicine, A.C. of S., 2013. Prevention, diagnosis and treatment of the overtraining syndrome: Joint consensus statement of the European College of Sport Science (ECSS) and the American College of Sports Medicine (ACSM). Eur. J. Sport Sci. 13, 1–24.
- Mountjoy, M., Sundgot-Borgen, J.K., Burke, L.M., Ackerman, K.E., Blauwet, C., Constantini, N., Lebrun, C., Lundy, B., Melin, A.K., Meyer, N.L., Sherman, R.T., Tenforde, A.S., Torstveit, M.K., Budgett, R., 2018. IOC consensus statement on relative energy deficiency in sport (RED-S): 2018 update. Br. J. Sports Med. 52, 687–697.
- Hung A*, Koch S, Bougault V, Gee CM, Bertuzzi R, Elmore M, McCluskey P, Hidalgo Lopez L, Garcia-Aymerich J, **Koehle MS**, (In Press) Personal strategies to mitigate the effects of air pollution exposure during sport and exercise: a narrative review and position statement by the Canadian Academy of Sport and Exercise Medicine and the Canadian Society for Exercise Physiology. British Journal of Sports Medicine.

*Former KIN 424 student