**Course Syllabus**

Course title Clinical aspects of aging

Prerequisites Understand and speak academic-level English

Course coordinator Deborah Jehu, PhD

E-mail: [deb.jehu@ubc.ca](mailto:deb.jehu@ubc.ca)

Office hours By appointment

Course Website https://connect.ubc.ca/webapps/login/login.jsp

**Course description**

*VSP Part II: Clinical aspects of aging*

This course will provide an introduction to clinical aspects of aging as well as factors that promote healthy aging, such as reducing cognitive decline, mobility disability, and falls. It will present an overview of age-related peripheral and central nervous system changes that contribute to cognitive and mobility impairment. It will also outline various preventative strategies to mitigate the effects of aging and age-related diseases, such as exercise, stress reduction, sleep promotion, and cognitive enrichment. Students will gain an understanding of how to implement these preventative strategies using novel knowledge translation interventions such as telehealth approaches. Students will use a variety of interactive methods to understand the content, including small group lectures, group presentations, and case studies. The group presentation component will provide students with the opportunity to practice critical appraisal of clinical aging research through both an oral presentation as well as through peer-evaluation. Students will also visit several state-of-the-art research laboratories at the Center for Hip Health and Mobility, where they be provided with hands-on opportunities.

**Objectives of the course**

By the end of the course, students will be able to: 1) Identify the role of healthcare professionals (e.g., physicians, nurses, physical therapists, technicians) in the assessment and rehabilitation of the aging population; 2) Measure clinical components of aging using relevant equipment and standardized assessments; 3) Describe the influence of aging on clinical aspects of aging; and 4) Discuss relevant intervention strategies to reduce the healthcare burden of aging.

**Course materials**

There is no required textbook for this course. Students will be provided online and/or hardcopy access to original research articles that correspond to the lectures, lecture slides, and handouts.

**Evaluation**

30% Exam: Clinical aspects of aging

30% Group presentation

20% Jury member

20% Quizzes

**Description of evaluation**

Exam

The exam format will include multiple choice and short answer questions taken from the lectures. Should you have any questions about concepts covered during the lectures, please contact the corresponding lecturer.

Group Presentation and Jury Member

Groups of students will present and critically appraise an original research article (approved by Deborah Jehu & Teresa Liu-Ambrose) that describes best practices for therapeutic interventions for a specific population with a pathological condition (e.g., Alzheimer’s disease, osteoarthritis) and assess the chosen article according to the PEDro guidelines.

The presentation should: 1) describe the clinical element affecting aging as it relates to the body, individual, and society; 2) critically appraise the quality of the research; and 3) explain intervention strategies to specifically target the impairment.

The research presentation must follow a scientific conference format, i.e., 10 min. presentation time, followed by a 15 min question and answer period from the three jury members. Following this period, the research paper will be opened for questions to all other students for 5 min. Fellow classmates must read the papers which will be presented by their peers, thus presentation topics must be decided on and approved at least one week in advance.

The evaluation will be on the content of the presentation, the visuals of the presentation (i.e., PowerPoint materials used), the actual communication of the presentation, as well as the performance of answering the questions. Each student will be graded for one presentation; the average of the score from the jury will count for 5 % while the score from the professor will count for 15 % of the mark. The marking rubric for the jury members as well as the one for the professor is provided on Canvas.

Quizzes

Students will be provided with 3 questions before each laboratory visit and they will submit their answers by 11:59 pm on the day of the laboratory online on Canvas.

**Attendance**

Attendance at lectures and laboratories is mandatory. Students who are absent from the laboratory visits without a justified absence will not be permitted to submit the quiz for that day. Justified absences include: a death in the family (funeral notice, paper clipping including your name), and sickness (medical certificate).

**Tardiness**

Late submission of quizzes due to illness or exceptional personal circumstances must be justified; otherwise, students will be penalized 20 % per day (including weekends).

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| **Clinical aspects of aging** | | | | | | |
| Date | Time | Activity | Title | Location | Professor leading | Contact information |
| 07/29 | 9:00-12:00 | Lecture | Falls and Fractures: Risk Factors & Interventions | Friedman Lecture Hall | Deborah Jehu | deb.jehu@ubc.ca |
| 07/29 | 13:30-16:30 | Lecture | Falls and Head Trauma: Risk Factor & Interventions | Friedman Lecture Hall | Deborah Jehu | deb.jehu@ubc.ca |
| 07/30 | 9:00-12:00 | Laboratory | Mobility in Aging: Measurement & Interpretation | CHHM | Deborah Jehu, Daniel Backhouse | deb.jehu@ubc.ca |
| 07/30 | 13:30-16:30 | Lecture | Physical Activity for Healthy Aging | Friedman Lecture Hall | Ryan Falck | [ryan.falck@hiphealth](mailto:Ryan.falck@hiphealth) ca |
| 07/31 | 9:00-12:00 | Free study | Students Prepare for Their Presentations | NA | NA | NA |
| 07/31 | 13:30-16:30 | Laboratory | Cognition: Measurement & Interpretation | Plinth laboratory (204 Friedman Building) | Lisanne Ten Brinke  Rachel Crockett | lisanne.tenbrinke@ubc.ca |
| 08/01 | 9:00-12:00 | Lecture | Research Design and Appraisal in Clinical Research | Friedman Lecture Hall | Carole Lunny | carole.lunny@ti.ubc.ca |
| 08/01 | 13:30-16:30 | Laboratory | Critical Appraisal and Quality Assessment of the Literature | LSC 1312 | Carole Lunny | carole.lunny@ti.ubc.ca |
| 08/02 | 9:00-12:00 | Lecture | Healthy Cognitive and Brain Aging | Friedman Lecture Hall | Teresa Liu-Ambrose | teresa.ambrose@ubc.ca |
| 08/02 | 13:30-16:30 | Group presentations | Group Presentations | Friedman Lecture Hall | Deborah Jehu | deb.jehu@ubc.ca |
| 08/06 | 9:00-12:00 | Lecture | Evaluating Efficiency of Healthcare Interventions | Friedman Lecture Hall | Jennifer Davis | jennifer.davis@ubc.ca |
| 08/06 | 13:30-16:30 | Lecture | Knowledge Translation | Friedman Lecture Hall | Clayon Hamilton | chamilton@arthritisresearch.ca |
| 08/07 | 9:00-12:00 | Laboratory | Exercise Prescription in Older Adults | Friedman Gym | Ryan Falck | r  [yan.falck@hiphealth.ca](mailto:yan.falck@hiphealth.ca) |
| 08/07 | 13:30-16:30 | Free study | Free Study | NA | NA | NA |
| 08/08 | 9:00-12:00 | Exam and course evaluations | Clinical Aspects of Aging | Friedman Lecture Hall | TBD |  |