



**Faculty of Applied Health Sciences**

**Department of Health Sciences**

Course Number: HLSC 4P80

Term/Year/Duration: Fall 2018 D2

Course Title: Physical Activity in Child Health and Disease

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Contact: By e-mail  
Teaching Assistant: Maram Livermore

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**Times and Locations:**

**Lectures:** *Fridays 10:00 AM – 1:00 PM in TH 240.*

*(September 7<sup>th</sup> – November 30<sup>th</sup> inclusive [no class on October 12<sup>th</sup> for Fall Reading Week])*

**Office Hours:** *Email for an appointment*

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**Course Calendar Description:**

Physical activity and sedentary behaviour among children and youth. Their role in health and chronic disease, psychosocial and environmental determinants, and a critical evaluation of public health, community, and individual-level interventions. Delivered in a problem-based, self-directed adult learning format.

**Course Prerequisites (if any):** HLSC (CHSC) 3P80

**Learning Objectives/Outcomes:**

Upon completion of this course students will be able to:

1. Explain the benefits of physical activity, the measurement and definitions of related concepts, and the movement guidelines for children and youth.
2. Describe trends and inequities in physical activity among Canadian children and youth.
3. Identify common barriers and supports to being physically active from the early years to adolescence and within specific groups, applying a socioecological perspective.

4. Summarize and critically evaluate the research literature regarding strategies to promote physical activity among children and youth in various contexts.
5. Develop effective knowledge translation products and public health approaches to engage various target audiences for the promotion of physical activity.

### Course Communication: |

**Students should log on to Sakai frequently** as lecture materials, readings, course announcements (including any course cancellations [e.g., due to weather]), marks/grades, and other course-related content will be posted and updated online throughout the term. Students are welcome and encouraged to communicate with me in-person (in class or by appointment) or via e-mail with any questions, concerns, or feedback about the course. I will check Sakai regularly, but for the fastest response, e-mail is the best method to contact me ([kpatte@brocku.ca](mailto:kpatte@brocku.ca)). Students can expect a response within 24-hours on weekdays.

### Evaluation Components and Due Dates

Component	Grade Weight	Due Date
Participation	15%	Ongoing
Critical Analysis	15%	Thursday September 27 <sup>th</sup> by 11:59PM on SAKAI
COMPASS KT	20%	In class or on SAKAI by 10AM Friday, October 19 <sup>th</sup>
Active School Travel Project (groups of 3-4)	50% (10% Presentation + 15% Literature Review, 25% Walkabout Audit + Strategy)	<b>Literature Review:</b> Thursday, November 8 <sup>th</sup> by 11:59PM on SAKAI <b>Presentation &amp; Full Project Due Date:</b> Friday, November 23 <sup>rd</sup> in class
<b>Total</b>	<b>100%</b>	

### Critical Analysis on Physical Activity and Mental Health (15%)

Physical activity has been referred to as one of the most underutilized tools for the promotion of mental health and the prevention and management of mental illness; however, the mental health benefits of being physical active are increasingly recognized, as evidenced by the Expert Statement on Physical Activity and Brain Health in Children and Youth included in the 2018 ParticipACTION Report Card on Physical Activity for Children and Youth. Pathstone Mental Health – the primary provider of mental health treatment for children in Niagara Region – is interested in adding physical activity programming into their services.

Students are to select a peer-reviewed study related to mental health and physical activity among children and/or youth (e.g., a study on the mental health benefits of physical activity or on a physical activity intervention(s) for the promotion of mental health or the prevention or management of a mental illness among children/youth) and write and submit an overview of the article (e.g., rationale and research question, what the study involved [e.g., sample,

methods, etc.], and what was found), a critical analysis (e.g., strengths and limitations of the study, strength of evidence in supporting conclusions), and implications for practice and/or next research steps. The analysis can be written in the form of a blog post, overviews the evidence interpreting the meaning of the results for the relevant knowledge users (e.g., clinicians, families, etc.).

The critical analysis should be a maximum of 2 pages double-spaced with a title page. A rubric will and further instructions will be provided.

### **COMPASS Knowledge Translation Project (20%)**

The COMPASS study annually collects data from over 70,000 students in grades 9 through 12 at 120+ secondary schools across Canada. Two of the key domains of interest include physical activity and sedentary behaviour (screen time). Knowledge Translation and Exchange (KTE) is central to the study to ensure evidence is effectively communicated to target audiences and used to inform practice for the improvement of youth health in the school environment. Using the provided aggregate data on Canadian youth participating in the COMPASS study, students (individually or in groups of 2) will create a KTE product (e.g., infographic, pdf e-poster, video, visual abstract, research brief, e-newsletter, e-zine, blog post) to quickly and effectively translate the evidence for a chosen target audience (e.g., educators/school administrators, students, parents, policy makers).

Included information should be based on scientific research; however, the product should be developed to be suitable for the intended audience. Students need to set a tone, level of communication, and use a design/medium that are clearly understood, accessible, and effective their target audience.

#### *Objectives for the KT product:*

- A. To effectively portray “at a glance” the physical activity or sedentary behaviour levels of youth (or a specific subgroup at-risk) and the meaning (i.e., adherence to guidelines/recommendations, comparisons to provincial/national norms, etc.).
- B. To engage the target audience on the importance of being physical active or minimizing sedentary behaviour/screen time among youth (i.e., benefits/potential harms)
- C. To recommend key strategies for action appropriate for the school context and resources available

Products should be designed to be:

- Engaging (e.g., attractive, impactful)
- Appropriate for the target audience
- Simple, clear, and understandable (message easy interpreted “at a glance” with minimal explanation or time required)

- Professional/polished
- Free of grammatical or spelling errors
- Accurately portrayals of the evidence

Aggregate data, further information on the COMPASS study, and a marking rubric will be provided. With permission, the top most effective KT products will be shared by the COMPASS team on social media platforms, with appropriate acknowledgement given to the student authors/creators.

### **Active School Travel Project (50%)**

Niagara Region Public Health is working to increase active school travel across Niagara and needs to develop messaging and strategies to more effectively engage students, parents, and schools and encourage physical activity. Lisa Gallant (a Health Promoter at NRPH) will be presenting on active school travel and her work within Niagara Region on October 19<sup>th</sup> and will return to class on November 23<sup>rd</sup> for students to present their ideas. Case studies in terms of target audiences (elementary vs. older students, parents, schools) and contexts (e.g., lower SES, downtown vs. rural) will be determined in class.

In groups of 3-4, students are to develop the following components:

1. **Literature Review** (4 pages double-spaced maximum):  
An overview of the barriers specific to selected context/audience, evidence for strategies, and how to effectively engage the target audience.
2. **Walk Around Audit:** (~3-5 pages double-spaced):  
Students are to visit the area and refer to maps/data to assess the context (e.g., number of students, number in walk vs. bus zone), built environment, and barriers/supports to active travel. The assessment should consider subjective reactions (e.g., would you feel content, safe and comfortable walking here?) and an objective audit to assess barriers/supports (e.g., presence and condition of sidewalks/paths, safety, traffic density and speed, street connectivity, cycling infrastructure, green spaces, destinations of interest, zoning/land use, etc.). Visuals and environmental scan tools are encouraged to augment the Walk About report. NOTE: Students should not visit areas alone or at night, or go to unsafe areas.
3. **Strategy/Action Plan:**  
The strategy should engage the target audience (students, parents, schools) in a format/medium that is likely to be appropriate and effective based on the literature review. Students should use a format/medium (e.g., social media messages, events, videos, posters, emails/e-newsletters, etc.) and delivery/implementation (e.g., timing, frequency, etc.); however, the strategy should be effective, accessible, and appropriate for the target population.

#### 4. Presentation to class and Niagara Region Public Health:

Presentations should be no more than 10 minutes and include (i) a brief overview of the audience and context/environment, (based on the walk around audit, barriers, etc.) (ii) the strategy/action plan, and (iii) why the strategy (medium, frequency/timing, message, visuals, etc.) was chosen for the particular audience/context.

### PARTICIPATION (15%)

Contribution to in-class discussion and activities throughout the term. Class attendance is necessary for participation grades, but not sufficient. Students are expected to be prepared, engaged (i.e., not multi-tasking on screens/social media, etc.), and actively participate throughout the term.

### REFERENCES:

Students are expected to follow all guidelines for proper citations, referencing, etc. consistent with meeting academic integrity (see below). References should be in recognized and consistent format (e.g., APA or AMA; See Brock library for style guides: <https://researchguides.library.brocku.ca/c.php?g=99833&p=646076>). Students should use published peer-reviewed research journal articles. Some recognized websites (e.g., Public Health Agency of Canada or Health Canada, etc.) may be acceptable for introduction material. Marks will be deducted for inappropriate references (e.g., Wikipedia, personal blogs, popular magazines, etc.).

### Late Submission Policy:

Failure to appear on the scheduled date of a presentation without discussion with the instructor will result in the loss of presentation marks. **There will be no make-up presentation dates.**

The penalties for late submission of assignments is **10%** per day (24-hour period), unless accompanied by medical documentation. See Medical Exemption Policy and the medical health certificate at <https://brocku.ca/registrar/toolkit/forms/>

Students are expected to attend all classes and must submit all assignments in order to pass this course.

### Important dates:

**November 6, 2018** is the date for withdrawal from the course without academic penalty.

By *October 30, 2018* you will be notified of 15% of your course grade.

*October 9 - 12, 2018* is the Fall Reading Week (no class on October 12<sup>th</sup>)

*December 4, Last day of lectures*

*December 5 & 6, 2018* are set aside for designated reading days (these may be used to cover classes missed because of adverse weather)

*December 7- 20, 2018* is set aside for formal examinations.

## ACADEMIC POLICIES

### **Academic Integrity:**

Academic misconduct is a serious offence. The principle of academic integrity, particularly of doing one's own work, documenting properly (including use of quotation marks, appropriate paraphrasing and referencing/citation), collaborating appropriately, and avoiding misrepresentation, is a core principle in university study. Students should consult Section VII, "Academic Misconduct", in the "Academic Regulations and University Policies" entry in the Undergraduate Calendar, available at <http://brocku.ca/webcal> to view a fuller description of prohibited actions, and the procedures and penalties. Information on what constitutes academic integrity is available at <https://brocku.ca/academic-integrity/>

### **Intellectual Property Notice:**

All slides, presentations, handouts, tests, exams, and other course materials created by the instructor in this course are the intellectual property of the instructor. A student who publicly posts or sells an instructor's work, without the instructor's express consent, may be charged with misconduct under Brock's Academic Integrity Policy and/or Code of Conduct, and may also face adverse legal consequences for infringement of intellectual property rights.

### **Special Accommodation:**

The University is committed to fostering an inclusive and supportive environment for all students and will adhere to the Human Rights principles that ensure respect for dignity, individualized accommodation, inclusion and full participation. The University provides a wide range of resources to assist students, as follows:

a) If you require academic accommodation because of a disability or an ongoing health or mental health condition, please contact Student Accessibility Services at [askSAS@brocku.ca](mailto:askSAS@brocku.ca) or 905 688 5550 ext. 3240.

b) If you require academic accommodation because of an incapacitating medical condition, you must, as soon as practicable, inform your instructor(s) of your inability to complete your academic work. You must also submit a Brock University Student Medical Certificate (found at <https://brocku.ca/registrar/toolkit/forms>). The University may, at its discretion, request more

detailed documentation in certain cases. If you are unable to write a scheduled examination due to an incapacitating medical condition, you must follow the process set out in the [Faculty Handbook III:9.4.1](#).

c) If you are experiencing mental health concerns, contact the Student Wellness and Accessibility Centre. There are a range of services available (free of charge and completely confidential) to help you through the semester. To learn more about the mental health services offered on campus through Student Wellness and Accessibility Center (formerly known as: personal counseling, student health services, and services for students with disabilities), visit: <http://brockmentalhealth.ca/>. *Good2Talk* is a service specifically for post-secondary students, available 24/7, 365 days a year, and provides anonymous assistance: <http://www.good2talk.ca/> or call **1-866-925-5454**. For information on wellness, coping and resiliency, visit: <http://brockmentalhealth.ca/mental-well-being/>.

d) If you require academic accommodation on religious grounds, you should make a formal, written request to your instructor(s) for alternative dates and/or means of satisfying requirements. Such requests should be made during the first two weeks of any given academic term, or as soon as possible after a need for accommodation is known to exist.

e) If you have been affected by sexual violence, the Human Rights & Equity Office offers support, information, reasonable accommodations, and resources through the Sexual Violence Support & Education Coordinator. For information on sexual violence, visit [Brock's Sexual Assault and Harassment Policy](#) or contact the Sexual Violence Support & Response Coordinator at [humanrights@brocku.ca](mailto:humanrights@brocku.ca) or 905 688 5550 ext. 4387.

f) If you feel you have experienced discrimination or harassment on any of the above grounds, including racial, gender or other forms of discrimination, contact the Human Rights and Equity Office at [humanrights@brocku.ca](mailto:humanrights@brocku.ca).

You are encouraged to discuss any accommodations with the instructor well in advance of due dates and scheduled assessments.

### **Reading/Writing Services:**

This is a reading, writing, and presentation intensive course. Students who require assistance will find support - including workshops and individual tutoring - through Brock University's A-Z Learning Services (at the Student Development Centre). For more information: <http://www.brocku.ca/learning-skills>.

## COURSE SCHEDULE

Week & Date	Topic, Presenter(s), Readings, Class Activities, & Assessments
Week 1 September 7 <sup>th</sup>	Introductions & Course Overview  Reading: Course Syllabus
Week 2 September 14 <sup>th</sup>	Topic: Physical Activity in the Early Years  <b>Guest Speaker:</b> Dr. Leigh Vanderloo, Sick Kids Hospital & ParticipACTION  Reading: ParticipACTION 2018 Report Card
Week 3 September 21 <sup>st</sup>	Topic: Physical Activity in the Canadian Context  Reading: A Common Vision for Increasing Physical Activity and Reducing Sedentary Living in Canada: Let's Get Moving. Federal, provincial and territorial governments. 2018.
Week 4 September 28 <sup>th</sup>	Topic: Physiological adaptations to exercise and training during growth and development  <b>Guest Speaker:</b> Dr. Pangioti Klentrou, Brock University  <b>DUE: Critical Analysis <u>Thursday, September 27<sup>th</sup></u> by 11:59PM on SAKAI</b>
Week 5 October 5 <sup>th</sup>	Topic: Physical Activity in the School Environment  Reading: TBD
October 12 <sup>th</sup>	FALL READING WEEK – NO CLASS
Week 6 October 19 <sup>th</sup>	Topic: Active School Travel & the Built Environment  <b>Guest Speaker:</b> Lisa Gallant, Niagara Region Public Health  <b>DUE: COMPASS KT Project Due in class <u>Or</u> on SAKAI by <u>10AM</u></b>
Week 7 October 26 <sup>th</sup>	Topic: Exercise in Children with Congenital Heart Disease  <b>Guest Speaker:</b> Liisa Wainman, Brock University



<p>Week 8 November 2<sup>nd</sup></p>	<p>Physical Literacy</p> <p>Reading: TBD</p> <p><b>DUE: Active School Travel Literature Review <u>Thursday, November 8th</u> by 11:59PM on SAKAI</b></p>
<p>Week 9 November 9<sup>th</sup></p>	<p>Topic: Physical Activity, Obesity, And Body Image</p> <p>Reading: TBD</p>
<p>Week 10 November 16<sup>th</sup></p>	<p>Topic: Sedentary Behaviour &amp; Screen Use</p> <p><b>Guest Speakers:</b> Maria Ramos &amp; Linda Bell, Pediatric Speech Language Pathologists, Speech Services Niagara, Niagara Children's Centre</p> <p>Reading: TBD</p>
<p>Week 11 November 23<sup>rd</sup></p>	<p><b>DUE: Active School Travel Presentations &amp; Final Projects Due <u>in class</u></b></p>
<p>Week 12 November 30<sup>th</sup></p>	<p>Topic: Inclusive Physical Activity</p> <p><b>Guest Speakers:</b> Archie Allison (and colleagues TBA), Variety Village, ParaSport Ontario Board Member, Canadian Paralympics Committee</p> <p><i>*Wear comfortable clothing that you can move in*</i></p>

The instructor reserves the right to alter the schedule as deemed necessary.