COLLEGE *of* SOCIAL AND APPLIED HUMAN SCIENCES

DEPARTMENT OF FAMILY RELATIONS
AND APPLIED NUTRITION

NUTR*3070 Nutrition and Physical Activity Interventions
COURSE OUTLINE – WINTER 2020

1. CALENDAR DESCRIPTION

This course examines the development, implementation, and evaluation of: a) integrated interventions to improve both nutrition and physical activity behaviours and b) interventions to improve physical activity behaviours of people of different ages in various settings. Various theories and models used to develop nutrition and physical activity interventions will be examined.

Credit Weight: 0.5 credits
Course Hours: 3-0 (36 lecture; 0 lab/seminar)
Pre-Requisite(s):   FRHD*3070, NUTR*2050
Co-Requisites(s):   none
Restriction(s):   Registration in the B.A.Sc. program

2. COURSE DESCRIPTION

This course examines the development, implementation, and evaluation of theory-based interventions to improve both nutrition and physical activity behaviours. The course will first examine fundamental content about promotion of physical activity and non-sedentary behaviours and then focus on various behaviour change theories and models used to develop nutrition and physical activity interventions.

3. TIMETABLE

Lecture: Tuesday and Thursday, 4:00 - 5:20 pm
Location: MacKinnon Building, room 120
Final Exam: Monday, April 13, 8:30 - 10:30 am, location TBD

4. INSTRUCTIONAL SUPPORT

Course Instructor: Dr. John Dwyer
Email: dwyer@uoguelph.ca
Telephone: 519-824-4120 ext. 52210
Office: Macdonald Institute Building, room 227B
Office Hours: By appointment

Teaching Assistant: Amar Laila
Email: alaila@uoguelph.ca
Office: Macdonald Stewart Hall, room 329
Office Hours: By appointment

The TA will be available by appointment to meet with you if you have questions related to lectures, readings, and exams. If you are meeting to discuss lectures, bring your written lecture notes. It is not feasible for the TA to discuss course content via email because this discussion often requires considerable time and elaboration.

5. LEARNING RESOURCES

Required Resource(s):

 A.   DiClemente, R. J., Salazar, L. F., & Crosby, R. A. (2019). Health behavior theory for public health: Principles, foundations, and applications (2nd edition). Burlington, MA: Jones & Bartlett Learning.

Textbook can be purchased at the university bookstore located in the MacNaughton Building.

B.   Journal articles (i.e., readings)

Articles are available through the library via e-journals: http://www.lib.uoguelph.ca/

Recommended Resource(s):
 American Psychological Association (APA) website provides APA (2020) style guidelines for citing and listing references):
https://apastyle.apa.org/?_ga=2.117336910.938872995.1573824301-816953024.1573593608&_gac=1.238167732.1573824304.EAIaIQobChMIjKmKr6js5QIVC5yzCh08hQJIEAAYASAAEgJvGfD_BwE

Library resources / guides (e.g., American Psychological Association (2020) style for citing and listing references).

Jacqueline Kreller-Vanderkooy (Librarian, Learning and Curriculum Support, McLaughlin Library, U of G) is available for individual research consultations if you require help finding, using, or evaluating sources for your assignment. You can make an appointment by emailing her at jkreller@uoguelph.ca. You can also get help at the library by dropping in, chatting online, or calling. Visit the Ask Us page for more information: http://www.lib.uoguelph.ca/ask-us.

Staff in the Data Resource Centre (DRC) in the library are available to provide statistics consultation to students in this course. I strongly encourage you to make an appointment with DRC staff if you want assistance to enhance your understanding of the statistics used in the required readings. DRC staff will not provide consultation on research methodology. To request DRC consultation, (a) go to the library website (http://www.lib.uoguelph.ca), (b) click get assistance > map, GIS, & data > book maps, GIS, & data appointments, and (c) in the message, state that you are a student in Dr. Dwyer's course (NUTR*3070) and are requesting statistics consultation.

A. LEARNING OUTCOMES

At the completion of the course, successful students will be able to:

1. Identify (a) how physical activity and sedentariness are conceptualized, (b) the benefits of being physically active and not sedentary, (c) how physical activity and sedentary behaviours are measured, (d) measurement issues common to physical activity, sedentary and nutrition behaviours, and (e) recommendations regarding level of physical activity and sedentary behaviours.
2. Apply exercise prescription guidelines during in-class discussions.
3. Apply various approaches, theories, and models used to develop, implement, and evaluate interventions for improving nutrition, physical activity and sedentary behaviours during in-class activities.
4. Communicate effectively (in writing) about scientific research via a written assignment.
5. Develop a theory- and empirical-based intervention framework for improving nutrition, physical activity and sedentary behaviours.

B. TEACHING AND LEARNING ACTIVITIES

Date	Topic	Required readings
Tues. Jan. 7	Overview of the course; conceptualizing physical activity and sedentariness; relationship between physical activity and sedentary behaviours and health	DiClemente et al. (2019), chapter 1: Health behavior in the context of the "new" public health Amagasa, S., Machida, M., Fukushima, N., Kikuchi, H., Takamiya, T., Odagiri, Y., & Inoue, S. (2018). Is objectively measured light-intensity physical activity associated with health outcomes after adjustment for moderate-to-vigorous physical activity in adults? A systematic review. International Journal of Behavioral Nutrition and Physical Activity, 15(July 9), article 65 [13 pages].
Thurs. Jan. 9	Measuring physical activity and sedentary behaviours	Sylvia, L. G., Bernstein, E. E., Hubbard, J. L., Keating, L., & Anderson, E. J. (2014). Practical guide to measuring physical activity. Journal of the Academy of Nutrition and Dietetics, 114(2), 199-208.
Tues. Jan. 14	Measuring physical activity and sedentary behaviours (cont.)	Kang, M., & Rowe, D. A. (2015). Issues and challenges in sedentary behavior measurement. Measurement in Physical Education and Exercise Science, 19(3), 105–115.
Thurs. Jan. 16	Recommendations regarding level of physical activity and sedentary behaviours; prevalence of physical activity and sedentariness	Tudor-Locke, C., Craig, C. L., Brown, W. J., Clemes, S. A., De Cocker, K., Giles-Corti, B., Hatano, Y., Inoue, S., Matsudo, S. M., Mutrie, N., Oppert, J.-M., Rowe, D. A., Schmidt, M. D., Schofield, G. M., Spence, J. C., Teixeira, P. J., Tully, M. A., & Blair, S. N. (2011). How many steps/day are enough? For adults. International Journal of Behavioral Nutrition and Physical Activity, 8(July 28), article 79 [17 pages].
Tues. Jan. 21	Exercise prescription	Crisford, P., Winzenberg, T., Venn, A., Schultz, M., Aitken, D., & Cleland, V. (2018). Factors associated with physical activity promotion by allied and other non-medical health professionals: A systematic review. Patient Education and Counseling, 101(10), 1775-1785.

Date	Topic	Required readings
Thurs. Jan. 23	Exercise prescription (cont.)	Wong, J. N., McAuley, E., & Trinh, L. (2018). Physical activity programming and counseling preferences among cancer survivors: A systematic review. International Journal of Behavioral Nutrition and Physical Activity, 15(June 7), article 48 [21 pages].
Tues. Jan. 28	Social cognitive theory	DiClemente et al. (2019), chapter 2: How theory informs health promotion and public health practice DiClemente et al. (2019), chapter 7: Social cognitive theory applied to health behavior
Thurs. Jan. 30	Integrative model of behavioral prediction (extends on theory of planned behavior)	DiClemente et al. (2019), chapter 4: Value-expectancy theories
Tues. Feb. 4	Integrative model of behavioral prediction (cont.)	Kim, J., Dunn, E., Rellinger, K., Robertson-Wilson, J., & Eys, M. (2019). Social norms and physical activity in American and Canadian contexts: A scoping review. International Review of Sport and Exercise Psychology, 12(1), 26–48.
Thurs. Feb. 6	Program logic model	No readings
Tues. Feb. 11	Overview of literature search and literature review (if you have a laptop, bring it) • Guest presenter: Jacqueline Kreller-Vanderkooy, Librarian, Learning and Curriculum Support, McLaughlin Library, U of G	No readings
Thurs. Feb. 13	Midterm exam	No readings
Mon. - Fri., Feb. 17-21, Winter Break: No classes scheduled		
Tues. Feb. 25	Transtheoretical model	DiClemente et al. (2019), chapter 6: Stage models for health promotion

Date	Topic	Required readings
Thurs. Feb. 27	Transtheoretical model (cont.)	Romain, A. J., Caudroit, J., Hokayem, M., & Bernard, P. (2018). Is there something beyond stages of change in the transtheoretical model? The state of art for physical activity. Canadian Journal of Behavioural Science, 50(1), 42-53.
Tues. Mar. 3	Self-determination theory	Burn, N., & Niven, A. (2019). Why do they do (h)it? Using self-determination theory to understand why people start and continue to do high-intensity interval training group exercise classes. International Journal of Sport and Exercise Psychology, 17(5), 537–551.
Thurs. Mar. 5	Self-determination theory (cont.)	Donnachie, C., Wyke, S., Mutrie, N., & Hunt, K. (2017). 'It's like a personal motivator that you carried around wi' you': Utilising self-determination theory to understand men's experiences of using pedometers to increase physical activity in a weight management programme. International Journal of Behavioral Nutrition and Physical Activity, 14(May 5), article 61 [14 pages].
Tues. Mar. 10	Health belief model	DiClemente et al. (2019), chapter 5: Models based on perceived threat and fear appeals
Thurs. Mar. 12	Social ecological model	DiClemente et al. (2019), chapter 9: Ecological and structural approaches to improving public health
Tues. Mar. 17	Social ecological model (cont.)	Abdulwasi, M., Bhardwaj, M., Nakamura, Y., Zawi, M., Price, J., Harvey, P., & Banerjee, A. T. (2018). An ecological exploration of facilitators to participation in a mosque-based physical activity program for South Asian muslim women. Journal of Physical Activity and Health, 15(9), 671–678.

Date	Topic	Required readings
Thurs. Mar. 19	Intervention mapping (steps such as (a) needs assessment, (b) preparing matrices of change objectives, and (c) selecting theory-informed intervention methods and practical applications)	DiClemente et al. (2019), chapter 13: Learning to combine theories: An introduction to intervention mapping
Tues. Mar. 24	Intervention mapping (cont.)	Westgarth, C., Christley, R. M., & Christian, H. E. (2014). How might we increase physical activity through dog walking? A comprehensive review of dog walking correlates. International Journal of Behavioral Nutrition and Physical Activity, 11(August 20), article 83 [14 pages].
Thurs. Mar. 26	Intervention mapping (cont.)	Jiménez-Aguilar, A., Rodríguez-Oliveros, M. G., Uribe-Carvajal, R., González-Unzaga, M. A., Escalante-Izeta, E. I., & Reyes-Morales, H. (2019). Design of an educational strategy based on intervention mapping for nutritional health promotion in child care centers. Evaluation and Program Planning, 76, article 101672 [11 pages].
Tues. Mar. 31	Village on a Diet (intervention)	No readings
Thurs. Apr. 2	TBA	TBA

Note: This is a tentative schedule. Due to various unknown factors, there may be changes. Any changes will be announced during class and an announcement will be posted on the CourseLink website.

C. ASSESSMENT DETAILS

Assessment	LOs addressed	Due date	% of final
Midterm exam Exam will consist of multiple-choice questions based on the lectures, class discussions and activities, and required readings, during Jan. 7 to Feb. 6.	1-3	Feb. 13	35
Final exam Exam will consist of multiple-choice questions based on the lectures, class	2-3	Monday, April 13, 8:30 - 10:30 am, location TBD	40

Assessment	LOs addressed	Due date	% of final
discussions and activities, and required readings, during Feb. 11 to Apr. 2.			
Assignment Student enrolment will be considered to determine the group size for the assignment (small group of perhaps 3 students). Contact the TA by Feb. 11 to provide group members' names and to obtain approval of your topic before you go ahead to complete the assignment. After this date, I will assign students who are not in groups to specific groups.	4-5	Mar. 19 (in class)	25
		Total:	100%

Note: Calculators are not to be used during the exams. If exam questions require math, it will be basic elementary arithmetic that entails addition, subtraction, multiplication, and division, which can be done manually. An excellent math resource is Khan Academy: https://www.khanacademy.org

Assignment description:

Use Dwyer's (2013) program logic model template as a framework to diagrammatically conceptualize an intervention / program, which is based on **integrative model of behavioral prediction** discussed in lectures**,** to improve either physical activity, sedentary, or nutrition behaviours among a specific target group in a specific setting in Ontario. Integrative model of behavioral prediction extends on theory of planned behavior. Your logic model should be based on both theory (i.e., integrative model of behavioral prediction) and research literature.

- Select only one of these 3 behavioural outcomes.
- Specific target groups may relate to gender, age group, ethnicity, overweight and obese people, people with specific chronic diseases, etc..
- Intervention must relate to a specific setting (e.g., home-based; worksite-based; church-based; community-wide; etc.).
- Intervention must not focus on the specific topic covered in the illustration used during lectures for the logic model and integrative model of behavioral prediction (e.g., don't select a school-based intervention).

The general format for your assignment topic is:

_____ intervention (specify the specific setting such as worksite-based, church-based, etc.) to _____ (specify the direction for behaviour change such as increase, decrease, etc.) _____ (specify the specific behavioural outcome such as leisure-time physical activity, fruit and vegetable consumption, etc.) among _____ (specify the target group such as females, adults, etc.).

Show the logic model as a combination of a summarized general diagram and a single table of detailed activities for specific strategies. The logic model is a stand-alone product that should detail the intervention, so do not attach additional text to conceptualize the intervention.

Intervention activities should be a combination of (a) activities that you generated on your own and (b) activities identified in or adapted from journal articles (e.g., research examining the effectiveness of interventions) published in the last 10 years. To differentiate these two sets of activities, you are to provide citations in the logic model (e.g., "our idea"; Sallis et al., 2019; adapted from Davis et al., 2018).

Your group is to complete the assignment independently. Don't collaborate with other groups on the assignment (it is not an inter-group effort).

Checklist for the assignment:
- ☑ Should have (a) a separate title page, (b) both a diagram and a single table for the logic model, (c) Appendix A that lists the references [adhere to APA (2020) style] for why the intervention is needed, and (d) Appendix B that clearly shows where you obtained intervention activities identified in research literature (see the grading rubric for details)
- ☑ Use the style in the American Psychological Association's (2020) Publication manual of the American Psychological Association (APA) (7th ed.) for citing and listing references. You don't have to use the APA style for writing other elements of the assignment
- ☑ No page limit for the logic model
- ☑ 8.5" x 11" paper or 8.5" x 14" paper
- ☑ Printed on 1 side of page
- ☑ Title page should include the following: Your assignment topic; group members' names; Department of FRAN, University of Guelph; NUTR*3070 Nutrition and Physical Activity Interventions (Winter 2020); Dr. John Dwyer; and March 19, 2020. At the bottom of the title page, briefly list each group member's contribution to completing the assignment. This is for my review to determine whether each member contributed substantially. Double-spaced for the title page
- ☑ Single-spaced for the logic model and reference section
- ☑ 2.5 cm. margins
- ☑ Times New Roman font and 10-point font size (for easy reading)
- ☑ Not stapled (using a paper clip is fine)

Both a paper copy and an electronic copy of the assignment are due by Mar. 19, 4:00 pm. Late submissions have a 10% (out of 100) per day penalty.

- When you submit your paper copy on behalf of your group, sign a form that will be available.
- Upload the electronic copy (Microsoft Word or PowerPoint only) in Dropbox in CourseLink (don't submit it to my email address).

Assignment grading rubric:

Use Dwyer's (2013) program logic model template as a framework to diagrammatically conceptualize an intervention / program based on **integrative model of behavioral prediction.** This template consists of: why the intervention is needed, target group(s), strategies, intervention activities, desired outcomes (shorter-term; longer-term), and goal.

Component	%
In the logic model, present results from research literature to clearly summarize why the intervention is needed. • Present citations for research that provide rationale as to why the intervention is needed (e.g., prevalence of the behavioural outcome). • In Appendix A, list the reference [adhere to APA (2020) style] that matches each citation.	/ 5
Operationalize the target group(s).	/ 5
Specify appropriate strategies that fit with integrative model of behavioral prediction and relate well with the intervention activities.	/ 5
Provide a comprehensive and detailed description of intervention activities that you generated on your own.	/ 15
Provide a comprehensive and detailed description of intervention activities that you identified in research literature (e.g., research examining the effectiveness of interventions). • Cite references [adhere to APA (2020) style] in the logic model for specific activities identified in research literature.	/ 15
Specify an appropriate goal. Also, clearly specify desired outcomes that fit with the constructs in integrative model of behavioral prediction and any other relevant constructs. Further, show a clear and logical relationship among the desired outcomes (e.g., shorter-term and longer-term desired outcomes).	/ 15
Show a clear and logical relationship between the intervention activities and desired outcomes.	/ 15
Your writing style, organisation, and grammar. Show the logic model, as an integration of a diagram and a single table, in a clear and organized way.	/ 15
In Appendix B, clearly show where you obtained intervention activities identified in research literature. Specifically, for each journal article in your literature review, provide a screenshot or photocopy (that is readable from the paper copy) of (a) the full reference information for the journal article (i.e., authors; year; title	/ 10

Component	%
of article; journal title; volume and issue; page numbers), (b) the abstract, and (c) the page(s) that describes the specific activity (highlight with colour or underline this text). Arrange the screenshots or photocopies in the appendix in alphabetical order by the surname of the first author.	
Total	/ 100%

D. COURSE STATEMENTS

Course website:

There is a course website at http://courselink.uoguelph.ca. Often, your questions about administration matters will be answered by referring to the syllabus and/or CourseLink. Announcements, updated schedules, grades, and other information will be posted on CourseLink. You should regularly check your grade for each seminar posted on CourseLink.

I aim to upload PowerPoint slides from lectures, with photos and clip art removed (pdf format), on CourseLink within 24 hours after lectures. I will not upload slides before lectures because I often refine slides shortly before lectures and I sometimes modify slides (e.g., omit slides) during lectures to accommodate situations (e.g., expanding on content that students are particularly interested in; spending time responding to students' questions).

Protocol:

Please come to class on time, turn off your cell phone, and refrain from conversations with your classmates during class. These activities (including texting in class) disrupt class, distracting me from teaching and making it difficult for your classmates to focus on the information presented. So please be considerate of others.

My lectures are my intellectual property. You are explicitly forbidden to post any components of the course (including but not limited to lectures) on the internet or sell these materials online.

I anticipate that the small groups for the logic model assignment will function well and that group members will contribute substantially. However, if there are group conflicts that cannot be resolved within the group, then arrange a meeting with me to discuss the matter.

Grading system:

The grading system described in the undergraduate calendar will be used:
https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-grds.shtml

E. UNIVERSITY STATEMENTS

E-mail communication:

As per university regulations, all students are required to check their <uoguelph.ca> e-mail account regularly: e-mail is the official route of communication between the University and its students.

When you cannot meet a course requirement:

When you find yourself unable to meet in-course requirements due to illness or compassionate reasons, please advise the course instructor (or designated person, such as a teaching assistant) in writing with name, ID#, and email contact. See the undergraduate calendar for information on regulations and procedures for Academic Consideration.

Drop date:

Students have until the last day of classes to drop courses without academic penalty. The regulations and procedures for Dropping Courses are available in the Undergraduate Calendar.

Copies of out-of-class assignments:

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

Accessibility:

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required, however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to book their exams at least 7 days in advance, and not later than the 40th Class Day.

More information: www.uoguelph.ca/sas

Academic misconduct:

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the

responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar.

Recording of materials:

Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

Resources:

The Academic Calendars are the source of information about the University of Guelph's procedures, policies and regulations which apply to undergraduate, graduate and diploma programs.

Appendix:

For those students enrolled in the Area of Emphasis in Dietetics: The Integrated Competencies for Dietetic Education and Practice (2013; http://www.pdep.ca/):

Foundational Knowledge Specifications (FKS) that are met by this course:

Foundational Knowledge Specification	Complexity Level (1, 2, 3)	How FKS is met in this curriculum
3. Communication		
3c) Strategies for effective written communication	3	Assignment
8. Human Nutrition Across the Lifespan		
8d) Physical activity and energy balance	3	Exam
9. Interprofessional Collaboration		
9d) Team functioning	3	Assignment
12. Nutrition Assessment		
12b) Environmental and individual factors affecting food intake	2	Exam
16. Professional Practice in Dietetics		
16h) Role of research and new knowledge	3	Exam

Foundational Knowledge Specification	Complexity Level (1, 2, 3)	How FKS is met in this curriculum
17. Population and Public Health		
17a) Frameworks for population and public health	2	Exam
17b) Strategies for public and population health including health promotion, education, advocacy, community development and partnerships	3	Assignment
17e) Program planning in public and population health	3	Assignment
17f) The determinants of health	3	Assignment; exam
18. Research and Evaluation		
18a) Theoretical foundations of research	3	Exam
18b) Qualitative, quantitative and mixed methodologies	3	Exam
18c) Ethics in research	1	Exam
18d) Evidence-informed practice	3	Exam
18e) Literature search strategies	3	Assignment
18f) Systematic review and critical appraisal of literature	2	Exam
19. Social and Psychological Foundations		
19a) Behavioural theories relevant to eating and food choice	3	Exam
19b) Social and psychological aspects of eating and food choice, in health and disease	3	Exam

Performance Indicators (PI) that are met by this course:

Performance Indicator	How PI is met in this curriculum
1. Professional Practice	
1.06e Obtain and interpret evidence	Assignment: Students do a literature review to report and interpret findings
1.13a Demonstrate knowledge of research and evaluation principles	Assignment: Students read the literature and interpret to complete assignment
2. Communication and Collaboration	
2.02e Write in an organized and logical fashion	Assignment: Students present a written description of intervention in logic model
2.02f Provide accurate and relevant information in written material	Assignment: Students present a written description of intervention in logic model
2.02g Ensure that written material facilitates communication	Assignment: Students present a written description of intervention in logic model
2.06e. Identify ways to draw upon the expertise of others	Assignment: Students work as a team
3. Nutrition Care	

Performance Indicator	How PI is met in this curriculum
3.02c Demonstrate knowledge of ways to identify and select appropriate nutrition interventions	Assignment
3.03a Identify ways to implement nutrition interventions	Assignment
4. Population and Public Health	
4.01a Demonstrate knowledge of types and sources of information to assess food and nutrition-related issues of groups, communities and populations	Assignment: Students identify these needs as part of assignment
4.01c Demonstrate knowledge of ways to determine key stakeholders and obtain relevant information	Assignment: Students identify stakeholders for the intervention they are proposing, as part of assignment
4.01g Demonstrate knowledge of sources of and methods to obtain health status data	Assignment: Students look at nutrition and physical activity prevalence data for target population of the intervention
4.01i Demonstrate knowledge of sources of and methods to obtain information relating to the determinants of health	Assignment
4.02a Demonstrate knowledge of ways to establish appropriate goals and objectives for population health related to food and nutrition	Assignment
4.02f Demonstrate knowledge of common monitoring approaches related to population health	Exam
4.04a Demonstrate knowledge of common processes and outcomes used to evaluate the effectiveness of population health activities	Assignment
5. Management	
5.01s Demonstrate knowledge of principles to evaluate effectiveness in achieving goals and objectives	Assignment
5.02a Demonstrate knowledge of ways to define common goals and objectives for programs and projects	Assignment
5.02d Demonstrate knowledge of typical components of an action plan for a program or project	Assignment