Tufts University, Friedman School of Nutrition Science and Policy

NUTR 211 - Theories of Behavior Change and Their Application in Nutrition and Public Health Interventions

FALL 2021

Class Meetings: Monday 9 AM – 12 PM Jaharis 118

Instructor:
Sara C. Folta, Ph.D.
sara.folta@tufts.edu; except in unforeseen circumstances, I will respond to email within 24 hours
617-636-3423 (office) – leave a message and I will respond within 24 hours
Office hours: By appointment

Teaching Assistants:
Dolapo Anyanwu
oyedolapo.anyanwu@tufts.edu
Office hours: By appointment

Ana Maafs
ana.maafs@tufts.edu
Office hours: By Appointment

Semester Hour Units: 3.0

Prerequisites: Graduate standing or instructor consent.

Course Description and Goals:
Welcome to this class exploring theories of behavior change. This course will be conducted in a workshop format rather than a lecture format because theories are best learned by discussion and experience. We will generally be covering one theory per class session. The theories we will be covering are some of the most widely used in public health. Each week, you will read about the theory and write a memo with your thoughts about the theory as it applies to a research or clinical situation (you will choose this situation during the first week of classes). This semester, the class will incorporate a service-learning component, in which a small group within the class will be partnered with a community organization to work on a particular situation throughout the semester. Class sessions will generally include a small-group discussion based on the memos and other thoughts and questions about the theory, including strengths and limitations of each theory. We will also engage in activities, either as small groups or as a class, that are related to the theory. Examples of these activities include creating public service announcements or other messaging based on the theory or role-playing one-on-one counseling sessions using the theory’s tenets. The second to last class will include a discussion of the ethics of behavior change, and
the final class will consist of student presentations based on a short paper describing your application of a theory or theories to a research project, program intervention, or clinical case, and how these theories might inform the design of your project.

In the fields of nutrition, food intake, and physical activity behavior, any attempts to design interventions aimed at changing individuals’ behavior are best when based on theory. Without a theory framework, any changes in behavior of individuals or populations will be difficult to explain, and therefore will not be easily generalized to other individuals and populations. In fact, in the research community, most granting agencies will not fund studies unless they are theory-driven. To design sound program interventions and behavioral research, students need to discover what behavior theories are available, what aspects of behavior each theory attempts to explain, and how to apply theory to inform their research and intervention designs. There are larger forces at play that influence behavior, and social determinants of health are critical to keep in mind. However, this course focuses on theories that explain individual behavior from a psychological perspective. The interaction between individual psychology and these larger forces may most fully explain behavior.

**Service-Learning Component:**
For this semester, we are establishing a partnership with a community organization to allow this class to offer an optional pilot service-learning component. Service-learning is defined as a structured learning and teaching strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities1.

The partnership will allow students who choose this option to apply the different theories to a real-life scenario, working closely with our partner and receiving their feedback throughout the semester. Being part of the service-learning experience will not change the course goals or learning objectives, as activities and deliverables will be the same as for the rest of the class.

Before the first class, you will be given a survey so you can indicate your level of interest in participating in the service-learning component. Those who are interested will form a small group that will work together during the semester on a particular situation relevant to the community partner’s needs. The weekly memos will address this situation according to the theory that is being reviewed each week. Small-group discussions will provide an opportunity to discuss the theories in detail, in relation to the partners’ assets and characteristics. Furthermore, a representative from the community organization will be present for most of these discussions to provide input and feedback. The group will work collaboratively to create the final memo, in which they will describe the best theory(ies) that can be applied to the organization’s situation, properly addressing their needs.

Students who wish to be part of the pilot service-learning component will be provided with an informed consent form to participate. Evaluation of this component will also take place during the semester, but will not impact the course’s grade in any way.

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Course Objectives:
By the end of the course, students will be able to:

- Know the fundamental features of the major theories related to health behavior change
- Understand how to apply health-related behavior theory to the student’s own research, clinical cases, or evaluation-based program intervention of interest
- Know how to challenge theories and describe their strengths and limitations in relation to particular research, organizational, and clinical contexts
- Understand the ethical implications of using theory to change human behavior
- Learn how to learn new theories
- Continually question, in work and in general life, what drives people to do what they do

Additional learning objectives for students in the service-learning group:

- Describe and reflect upon the impact or service-learning on community partners and learning experiences;
- Understand details, structures, functions and benefits of a partnership between the University and a Community organization.


The course website, on Canvas (https://canvas.tufts.edu) lists all other course materials.

Academic Conduct:
Each student is responsible for upholding the highest standards of academic integrity, as specified in the Friedman School’s Policies and Procedures manual (http://nutrition.tufts.edu/student/documents) and Tufts University policies (https://students.tufts.edu/student-affairs/student-code-conduct/academic-integrity-resources). It is the responsibility of each student to understand and comply with these standards, as violations will be sanctioned by penalties ranging from failure on an assignment and the course to dismissal from the school.

Classroom Conduct:
Participation Policy
A major part of your learning will take place within the classroom, and this is why class attendance is a significant part of your grade. You can still get full credit for up to two missed classes if you schedule a tutorial session with one of the TAs. If you think it is likely that you will have to miss more than two class sessions, you would be much better off taking the course at another time.

Please contact me if you need time extensions or need to do make-up work. These will be granted for most personal situations that have impacted your ability to do your work as usual. These will not be granted because you have a lot of work in other classes and haven’t planned your time well. Requests for an Incomplete in the course must be made in advance, in writing, to
the Academic Dean and must have prior approval, in writing, of the academic advisor and the instructor.

**Assessment and Grading:**

<table>
<thead>
<tr>
<th>Assessment Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>10 weekly memos</td>
<td>50%</td>
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<tr>
<td>Participation in discussions – thoughtful</td>
<td>35%</td>
</tr>
<tr>
<td>comments on other memos, follow up to continue</td>
<td></td>
</tr>
<tr>
<td>dialogue</td>
<td></td>
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<tr>
<td>Final 1-2-page paper and presentation</td>
<td>15%</td>
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</tbody>
</table>

**Class memos**
I believe that learning is best undertaken as a continuous dialogue, not as a one-way flow of information. To begin that dialogue, you will be required to write a short reflection paper, or memo, that helps you explore how the ideas covered in the readings influence your thinking about your own specific research project, program intervention, organization’s, or clinical situation. (You do not need to have a behavior or situation ready for the first class; we will discuss this further then).

Another purpose of the weekly memos is to address the course objective of helping you to learn how to learn theory. With the reading/memo structure, you will be teaching yourself theory with “training wheels.” That is, we have cultivated the reading list and will provide lots of feedback. By the end of the semester, you will have a good sense of where to start with the literature if you need to teach yourself a new theory, and you will have the skills to navigate that literature. The objective is that, as you go forth with your careers, you will never meet a theory that you can’t figure out for yourself!

The reflection paper can be short– around one page is appropriate. It should be informal but thoughtful. These will be the primary writing assignments you will have for the entire course; there will be no lengthy papers and no exam. However, because of that, these weekly writings will be very important.

In the memos, please describe how you would apply the week’s theory to your professional situation. You can assume that you have already done some background work and have a good sense of the thoughts and beliefs of your target audience, whether that is an individual or a group. Walk through the theory’s constructs – what does your case or group think for each? For a group, you can also assume that there are some general common beliefs. Based on this analysis, does the theory explain what they are currently doing? How would you intervene to change the constructs and therefore the behavior? Finally, what do you think about this theory? You might consider the following prompts:

- What struck me the most about the theory as I was doing the readings was...
- The part of this theory that made the most sense to me was...
- The part of this theory that was most confusing was...
- The part of this theory that I most take issue with is...

As you apply and discuss the theory, you should demonstrate that you have done the readings – the main readings and the selected reading.
For Week 2 through Week 12, you will submit the memo by the Saturday prior to class at 5 PM. Memos may be submitted any time prior to this deadline. This would make 11 memos total. After Memo #3 on Self-Efficacy, you may choose any week as a “pass” week. During the pass week, you may forego submitting a memo. You must let the instructors know prior to the deadline that you are using your pass week. If you choose to complete all 11 memos, you will receive extra credit.

Grading criteria:

<table>
<thead>
<tr>
<th>Components</th>
<th>Expected Level of Competence (“check-plus”)</th>
<th>Moving Towards Expected Level of Competence (“check”)</th>
<th>Below Expected Level of Competence (“check-minus”)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timely submission of assignment</td>
<td>Complete memo on time each week.</td>
<td>Memo is submitted late, but within 24 hours of the due date/time.</td>
<td>Memo is submitted more than 24 hours from due date/time. (If not submitted at all, receives a “0”).</td>
</tr>
<tr>
<td>Style guidelines</td>
<td>Writing is clear and succinct. Demonstrates care in writing, which may be informal, but thoughtful. The memo has a smooth flow of ideas and is well organized and logical.</td>
<td>Writing lacks clarity in some places. Flow of ideas could use some improvement.</td>
<td>Writing lacks clarity throughout. Flow of ideas is rough. Memo is not well organized.</td>
</tr>
<tr>
<td>Demonstrates careful reading &amp; inquiry into subject</td>
<td>Demonstrates serious contemplation of the readings and provides evidence of having completed all the readings (required and selected). Shows original thought that goes beyond the obvious.</td>
<td>Demonstrates reading was completed but relies primarily on summary rather than integration of information. Ideas and application rely on main text (i.e., Glanz), and other readings not appropriately incorporated.</td>
<td>Reading assignment scanned, but not read carefully or gives little indication that readings were completed.</td>
</tr>
<tr>
<td>Application of theory to professional situation</td>
<td>Articulates strengths and limitations of theory’s application to professional context. Elaborates statements with accurate explanations, reasons, or evidence.</td>
<td>Provides general discussion of theory’s application but with little evidence or explanation. Examples to support points are not well integrated or not effective.</td>
<td>Missing or limited theory application. Little evidence used to support points or evidence is out of context.</td>
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</tbody>
</table>

Class attendance and participation in discussions
The class will be in a workshop format, with an emphasis on discussion and experiential learning activities. Because of this, a significant portion of your grade will be based on class attendance and participation.

Why is there so much emphasis on discussion and participation in this course?
• The discussion and activities are designed to help you gain a better understanding of the theories – we want you to come away with a living, breathing appreciation for them.
• You all engage in health behaviors (or sometimes don’t!), and have all experienced the joys and frustrations of others’ behavioral decisions, either professionally and/or with family and friends. Therefore you are all experts on behavior and have a tremendous amount to learn from each other. Within the class there will be both commonalities and diverse perspectives – these will enrich your learning and understanding of behavioral theory. In interacting with others, you will learn to identify and confront your own assumptions.
• Many of the professional situations that you will encounter in your future work will not offer easy solutions. The class will afford you practice in exploring ambiguity and complexity in a “safe” situation, as you discuss your hypothetical professional situations.
• It helps you further develop your communications skills.

This may be worrying for some of you. However I want to stress how important it is to have your voice (and all voices) in the discussion. It doesn’t matter if you don’t have much professional experience, because you bring a lifetime of experience. It doesn’t matter if you are not entirely facile with English, because the insights you bring about these theories and culture is critical, it is gold. If you are an introvert and need to take time to think through your response, you can and should take it. Each of you has something critical to offer in our collective learning. The goal of learning behavioral theory is for you to become change agents in public health, whether you are working at the individual, group, or population level. So my goal is for you to have your voice, learn what you most need to learn, and learn in a way that will change and challenge how you think. That will not happen if I am a mere depositor of knowledge.

Grading criteria for attendance and participation:
• Arrived on-time to best of ability
• Attended all classes, barring exceptional unforeseen circumstances
• Contributed to discussion at least once per class, and/or actively participated in small groups
• Listened actively to others
• If disagreed, did so respectfully
• Did not dominate the discussion
• Asked all genuine questions, even if they seemed simple or obvious

Final Paper and Presentation
For the last day of the class, a final memo (1-2 pages, no more) is due, describing the theory or theories that you are considering applying to your research project, program intervention, or clinical case, and how these theories might inform the design of your project or case (complete with citations and references). This is due at 5 PM on the Sunday before the final class (so Sunday 12 December at 5 PM). In addition, in the last class each of you will spend 3-5 minutes summarizing the memo for the class.

Grading criteria:
- Background: Provided appropriate background to the behavioral issue, including some (brief) statistics to contextualize it.
- Rationale: Provided a clear and compelling rationale for choice of theory or theories, and was able to effectively defend choice.
- Plan: Provided examples of specific and appropriate strategies based on theories chosen, and was able to synthesize what was learned over the semester into an integrated plan.
- Formally written with appropriate use of references.

**Instruction for Submission of Assignments:**
Please see the Course Schedule below and the course website for a list of assignments and due dates. Late memos will be penalized per the grading rubric above. Students who are unable to complete a memo on time should notify the instructor by email prior to the deadline. Extensions will be granted only for exceptional circumstances.

**Diversity Statements:**
*Instruction Team*
We believe that the diversity of student experiences and perspectives is essential to the deepening of knowledge in this course. We consider it part of our responsibility as instructors to address the learning needs of all of the students in this course. We will present materials that are respectful of diversity: race, color, ethnicity, gender, age, disability, religious beliefs, political preference, sexual orientation, gender identity, socioeconomic status, citizenship, language, or national origin among other personal characteristics.

Assignments are due weekly. If this will present a conflict with your religious observances at any point, please let us know as soon as possible so that we can work together to make arrangements.

We welcome any suggestions that you have about other ways to include the value of diversity in NUTR 211.

*Sara*
Diversity, inclusion, and equity are values that I deeply hold. In my role as Associate Dean for Diversity and Inclusion at Friedman, I have heard feedback from students about upsetting experiences in the classroom. Hearing these always makes me realize how difficult it is to live up to these ideals, even when one is philosophically on board. I want to assure students that I am philosophically on board, but I am also human and come with my own set of experiences, beliefs, and prejudices. I work hard to challenge these within myself, but like any human being I am a work in progress, and it is often only through being challenged from the outside that meaningful change can happen within. I strongly adhere to the "growth mindset" and hope that all of us, myself included, will take opportunities to learn from our mistakes. It is my hope that unsettling comments that may be insensitive to differences and lived experiences will be openly addressed in my classroom, without labelling, which takes an absolute, "fixed" stance. I hope that everyone in the classroom, myself most notably included given my leadership position, will be open to learning and change through honest dialogue and deep respect for the experiences of others.
**Dolapo**
We tend to assume that the burdens of social justice, inclusion and diversity are one directional. However, in my experience as a member of the minority group, I realize that we all have a role to play. Everyone, irrespective of race, class, religion, or philosophical persuasion, needs to have their inner searchlight on at all times to identify ways that they have or might have made others around them to feel under-valued and excluded. I commit to keeping this searchlight on in myself and I invite you to do so as well.

**Ana**
As a Latino graduate student, I am aware of the challenges that international students and minorities face in a classroom, and the importance of active listening to create a true inclusive environment. I am also aware of the different roles that an individual plays, depending on the setting or place, as those roles are not absolute. Hence, I am committed to continually reflect upon my own biases, the different roles I play, and the efforts I make to promote equity and inclusion.

**Accommodation of Disabilities:**
Tufts University is committed to providing equal access and support to all students through the provision of reasonable accommodations so that each student may access their curricula and achieve their personal and academic potential. If you have a disability that requires reasonable accommodations, please contact the Friedman School Assistant Dean of Student Affairs at 617-636-6719 to make arrangements for determination of appropriate accommodations. Please be aware that accommodations cannot be enacted retroactively, making timeliness a critical aspect for their provision.

**Online Contingency:**
Friedman’s on-campus courses may be offered by Zoom (https://tufts.zoom.us/) on days when the Boston campus is closed due to weather, a surge in infectious disease, or other issues. Students should expect to be notified by email in the event that class is cancelled and will be provided with the Zoom link for any remote class sessions. Also, any relevant course slides or materials will be made available on Canvas.
Course & Assignment Schedule:
This schedule is subject to modification at the instructor’s discretion. Please refer to the Canvas site for the very latest information on readings and assignments.

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic and Class Notes</th>
<th>Assignments Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 13, 2021</td>
<td>What is “Theory”? Why do we need it? Usefulness of Theory</td>
<td></td>
</tr>
<tr>
<td>September 20, 2021</td>
<td>Health Belief Model</td>
<td>Memo #1 DUE by Saturday 9/18 at 5pm EST</td>
</tr>
<tr>
<td>September 27, 2021</td>
<td>Theory of Reasoned Action/Theory of Planned Behavior</td>
<td>Memo #2 DUE by Saturday 9/25 at 5pm EST</td>
</tr>
<tr>
<td>October 4, 2021</td>
<td>Self-efficacy</td>
<td>Memo #3 DUE by Saturday 10/2 at 5pm EST</td>
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<tr>
<td>October 11, 2021</td>
<td>NO CLASS – Indigenous People’s Day</td>
<td></td>
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<tr>
<td>October 18, 2021</td>
<td>Transtheoretical Model/Stages of Change</td>
<td>Memo #4 DUE by Saturday 10/16 at 5pm EST</td>
</tr>
<tr>
<td>October 25, 2021</td>
<td>Self Determination Theory and Motivational Interviewing</td>
<td>Memo #5 DUE by Saturday 10/23 at 5pm EST</td>
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<tr>
<td>November 1, 2021</td>
<td>Social Cognitive Theory</td>
<td>Memo #6 DUE by Saturday 10/30 at 5pm EST</td>
</tr>
<tr>
<td>November 8, 2021</td>
<td>Social Support/Social Networks, Diffusion of Innovations</td>
<td>Memo #7 DUE by Saturday 11/6 5pm EST</td>
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<tr>
<td>November 15, 2021</td>
<td>Dual-Process Models</td>
<td>Memo #8 DUE by Saturday 11/13 at 5pm EST</td>
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<tr>
<td>November 22, 2021</td>
<td>Behavioral Economics</td>
<td>Memo #9 DUE by Saturday 11/20 at 5pm EST</td>
</tr>
<tr>
<td>November 29, 2021</td>
<td>Eco-Social Models</td>
<td>Memo #10 DUE by Saturday 11/27 at 5pm EST</td>
</tr>
<tr>
<td>December 6, 2021</td>
<td>Ethics of Behavior Change</td>
<td>Memo #11 DUE by Saturday 12/04 at 5pm EST</td>
</tr>
<tr>
<td>December 13, 2021</td>
<td>Student Presentations</td>
<td>Final paper DUE by Sunday 12/12 at 5pm EST</td>
</tr>
</tbody>
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Weekly Readings and Learning Objectives

Week 1: What is “Theory”? Why do we need it?
September 13th, 2021

Learning Objectives: Upon completion of this class, students will be able to:

- Explain the concept of a behavioral theory and how theory can inform research and practice
- Explain what a construct is
- Discuss the limitations of behavioral theory in terms of race, class, and culture

Required Readings:


Week 2: Health Belief Model
September 20th, 2021

Learning Objectives: Upon completion of this class, students will be able to:
- Explain the concepts of perceived severity, perceived susceptibility, barriers, benefits
- List examples of cues to action
- Discuss the strengths and weaknesses of the HBM
- Describe key concepts related to construct measurement and validation

Required Readings (all students must read these):


Selected Readings (choose one of the following):


Assignments for this week:
- Memo #1, due Saturday September 18th, 2021 at 5:00 pm EST
Week 3: Theory of Reasoned Action/Theory of Planned Behavior  
September 27th, 2021

Learning Objectives:
- Understand what expectancy-value theory is
- Understand the TRA/TPB constructs and the relationships among them
- Understand how to apply TRA/TPB to clinical and research situations
- Discuss the limitations of the TRA/TPB
- Compare and contrast the TRA/TPB with the HBM

Required Reading (all students must read these):


Selected Readings (choose one of the following):


Assignments for this week:
- Memo #2, due Saturday September 25th, 2021 at 5:00 pm EST
Week 4: Self-Efficacy
October 4th, 2021

Learning Objectives: Upon completion of this class, students will be able to:
- Describe different methods of increasing self-efficacy
- Distinguish self-efficacy from self-esteem or self-confidence
- Examine the confluence of outcome expectations and self-efficacy in predicting behavior

Required Readings (all students must read these):


Selected Readings (choose one of the following):


Assignments for this week:
- Memo #3, due Saturday October 2nd, 2021 at 5:00 pm EST
Week 5: Transtheoretical Model/Stages of Change
October 18th, 2021

Learning Objectives: Upon completion of this class, students will be able to:
- Describe the different stages of change
- Describe the processes of change
- Describe how identifying stages can be used for intervention targeting
- Explain the non-linear nature of progression through the stages

Required Readings (all students must read these):


Selected Readings (choose one of the following):


Assignments for this week:
- Memo #4, due Saturday October 16th, 2021 at 5:00 pm EST
Week 6: Self Determination Theory and Motivational Interviewing
October 25th, 2021

Learning Objectives: Upon completion of this class, students will be able to:
- Understand different levels of internalization of motivation and the influence of external rewards on behavior
- Understand the basic principles of motivational interviewing
- Describe the relationship between the SDT and MI

Required Readings (all students must read these):


Selected Readings (choose one of the following):


Assignments for this week:
- Memo #5, due Saturday October 23rd, 2021 at 5:00 pm EST
- Midterm evaluations
**Learning Objectives:** Upon completion of this class, students will be able to:

- Understand the basics of inter-personal behavioral theory and the influence of the immediate environment on behavior
- Apply the concepts of observational learning and reciprocal determinism
- Describe the place of self-efficacy in the SCT

**Required Readings (all students must read this):**

**Selected Readings (choose one of the following):**


**Assignments for this week:**
- Memo #6, due Saturday October 30th, 2021 at 5:00 pm EST
Week 8: Social Support/Social Networks, Diffusion of Innovations
November 8th, 2021

Learning Objectives: Upon completion of this class, students will be able to:
• Enumerate the attributes of an innovation that make it more likely to diffuse
• Explain the mechanisms through which social support may influence individual behavior
• Introduce the role of social network characteristics in determining social support, diffusion of behaviors and norms, and social capital

Required Readings (all students must read these):


Selected Readings (choose one of the following):


Assignments for this week:
• Memo #7, due Saturday November 6th, 2021 at 5:00 pm EST
**Week 9: Dual-Process Models**

November 15th, 2021

**Learning Objectives:** Upon completion of this class, students will be able to:

- Explore the role of emotions and the unconscious in determining behavior
- Discuss the strength of habit in determining behavior and the benefits and drawbacks of habit replacement

**Required Readings (all students must read these):**


**Selected Readings (choose one of the following):**


**Highly Recommended Reading for Nail Biters:**


**Assignments for this week:**

- Memo #8, due Saturday November 13th, 2021 at 5:00 pm EST
Week 10: Behavioral Economics
November 22nd, 2021

Learning Objectives: Upon completion of this class, students will be able to:
- Understand basic tenets of behavioral economics
- Apply concepts within appropriate individual and group interventions
- Compare and contrast behavioral economics principles with concepts from other theories

Required Readings (all students must read these):


Selected Readings (choose one of the following):


Assignments for this week:
- Memo #9, due Saturday November 20th, 2021 at 5:00 pm EST
Week 11: Eco-Social Models  
November 29th, 2021

Learning Objectives: Upon completion of this class, students will be able to:
- Distinguish between different levels of influence on individual behaviors
- Give examples of ways the community, political, social, and built environment can influence individual behavior
- Discuss potential methods of intervening at each of these levels to change health behavior

Required Readings (all students must read these):

Selected Readings (choose one of the following):


Assignments for this week:
- Memo #10, due Saturday 27th, 2021 at 5:00 pm EST


Week 12: Ethics of Behavior Change
December 6\textsuperscript{th}, 2021

\textit{Learning Objectives:}
- Consider the ethical implications of behavior change in a wide range of settings

\textbf{Required Readings (all students must read these)}:


\textbf{Selected Readings (choose one of the following)}:


\textbf{Assignments for this week:}
- Memo #11, due Saturday December 4\textsuperscript{th}, 2021 at 5:00 pm EST
Week 13: Student Presentations
December 13th, 2021

Learning Objectives:
• Synthesize what has been learned and choose the most applicable behavioral theory/ies for a particular public health intervention or research question, and describe how the concepts might be applied

Required Readings:
NO READINGS REQUIRED.

Assignments for this week:
• Final Memo, due Sunday December 12th, 2021 at 5:00 pm EST
• Presentation