Tufts University, Friedman School of Nutrition Science and Policy

NUTR 0273 – Applying Social Psychological Principles and Technology Innovation Methods to Address Public Health Nutrition Problems
Spring 2018

Class Meetings: Thursdays
9:00am – 12:00pm
Jaharis 155

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Graduate Credits: 1 credit

Prerequisites: None required.
Recommended: NUTR 0211 Theories of Theories of Behavior Change and Their Application in Nutrition and Public Health Interventions

Course Description: The goal of this course to apply current social psychological research to public health issues (e.g. obesity, health care access). Strategies from the technology industry will be used to facilitate innovation and transformational learning.

Course Objectives:
• Summarize current research on topics in social psychology that are relevant to public health
• Analyze public health problems using social psychological frameworks
• Understand the connection between public health goals and civic engagement
• Cooperate and communicate effectively on a team
• Critically evaluate peer projects, providing praise for key strengths and constructive criticism for weaknesses
• Generate insights about a particular public health problem, such as clarifying the scope of the problem or proposing a novel solution
Texts or Materials:  Readings in the course will be from one primary text, supplemented by peer-reviewed journal articles and some reports from public health organizations.


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 (http://students.tufts.edu/student-affairs/student-life-policies/academic-integrity-policy). 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.

Assessment and Grading:

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memos; participation in discussions of course readings; peer feedback on student projects*</td>
<td>20%</td>
</tr>
<tr>
<td>Hackathon: participation and project^</td>
<td>40%</td>
</tr>
<tr>
<td>Innovation Time Off project^</td>
<td>40%</td>
</tr>
</tbody>
</table>

* determined by peer and instructor ratings
^ determined by peer, instructor and public health representative ratings

Assignments and Submission Instructions

Participation: Discussions and memos. Students play a very active role in this class. Doing the readings before class and thinking about them beforehand is very important. We will have in-class activities that allow you participate with smaller groups and with the whole class. You will also submit memos periodically throughout the course, which are based on the readings, and will aid you in evaluating the readings before class. Memos will allow you to compare, contrast and/or synthesize learnings from two topics at a time, throughout the semester. In class, if you need to take time before speaking to prepare your thoughts, please do so. If you have a difference of opinion, please raise your point. This class is a welcome, open forum, and we aim to seek out, encourage and support diversity and inclusivity.
A goal of this course is to generate innovation and transformational learning of social psychology by applying two industry innovation methods—hackathon, innovation time off—to solving public health nutrition issues.

**Hackathon**

Students will be assigned to small teams for the hackathon event. The kick-off of the Hackathon will be a short presentation by a guest speaker, a representative from a community public health organization confronting a real-world public health nutrition problem. Teams will be tasked with solving this problem. The rest of the class period will be devoted intensive problem-solving work. During the week between the two class periods, teams may meet and continue working on the project. The next class period will also be devoted to an intensive problem-solving session. Integrating course content with previous knowledge, students will move through at least the first 3 of 5 steps in the Design Sprint process (Understand the problem, Devise multiple solutions, Select one to move forward, Create a prototype, and Test with a real audience). At the end of the second class period, teams will give a short report of their solution to the group and summarize how they completed each step of the decision-making process (i.e., widening the options, reality testing assumptions, attaining distance from the situation, and preparing for the event of a failure; Heath & Heath, 2013). A formal presentation is not needed; a verbal report is fine. Peers, instructors and the representative from a community public health organization will be provided with a rubric to evaluate how closely the team followed the process and how well the solution addresses the problem overall. The following day, a written report will be due, documenting the team’s process and solution. Instructors will grade the written component using a check plus/check/check minus system. Students will evaluate group members on teamwork using a rubric provided and discussed beforehand. Evaluations will be completed anonymously at the end of the first and second days of the Hackathon. Results will be compiled, and aggregated results will be shared among team members during a discussion aimed at improving team functioning. Only instructor evaluations will be used to determine the course grade.
## Grading rubric for Hackathon

<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>Report is submitted on time.</td>
<td>Report is submitted late.</td>
<td>Report is submitted very late (one day or more after due).</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 inquiry into problem &amp; effort toward devising a solution</td>
<td>Demonstrates clear implementation of the design process &amp; serious contemplation of the best solution, synthesized from the process. Shows original thought.</td>
<td>Demonstrates that the design process was followed and the proposed solution shows some integration of the process.</td>
<td>Design process was cursorily included, but report gives little indication that it was followed very carefully or that the proposed solution aligns with the results of the process.</td>
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### Innovation Time Off (ITO) project

The ITO project may be completed alone or in a self-selected group of up to 3 students over 4 class periods (and outside of class). This will be done during the third segment of the semester. A wide range of projects could be acceptable, such as a video for children aiming to change eating behavior, a redesigned government form to affect SNAP benefit uptake, or a PowerPoint deck suggesting evidence-based techniques to address weight stigma. For the project, students will direct their own learning toward a public health nutrition problem of personal interest. On the last day of class, students will give a formal presentation of their projects (ex. PowerPoint). Both the in-class presentation and written report will be the final deliverables. The presentation will be evaluated by course instructors, peers, and a representative from a public health organization, who will consider how closely students followed the decision-
making process; at least the first three steps in the Design Process; and how well the solution addresses the problem. Students will be provided this feedback, but only instructor evaluations will be used to calculate the presentation grade. The written report will be graded by course instructors using these same criteria in addition to logical organization and clarity of writing.

Late policy
Assignments received after their deadline will not be accepted or graded unless extension is approved in advance. Students who are unable to complete an assignment on time for any reason should notify the instructor by email, text message or phone call prior to the deadline, with a brief explanation for why the extension is needed.

Diversity Statement: 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. If assignment due dates 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.

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.

Tufts WebEx: Please note Friedman’s on-campus courses may be offered by Tufts WebEx (https://it.tufts.edu/webex) on days when the Boston campus is closed due to weather or a temporary cancellation issue. Students should expect to be notified by email in the event that class is cancelled and will be provided with the WebEx link for students to use for any remote class sessions. Also, any relevant course slides or materials will be made available on Canvas. The WebEx conference will be recorded and posted on Canvas when completed. If an on-campus Examination or Presentation was scheduled on a day when the Boston campus is closed due to weather or a temporary cancellation issue, the examination/presentation will be rescheduled for an alternate on-campus class session date.
## Course Topics, Learning Objectives and Assignments

**This schedule is subject to modification at the instructor’s discretion.**

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Class deliverable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jan. 18</td>
<td>Overview</td>
<td>Case study #1 (in class)</td>
</tr>
<tr>
<td>2</td>
<td>Jan. 25</td>
<td>Person perception and individual differences</td>
<td></td>
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<tr>
<td>3</td>
<td>Feb. 1</td>
<td>Cross-cultural social psychology</td>
<td>Memo #1 due</td>
</tr>
<tr>
<td>4</td>
<td>Feb. 8</td>
<td>Social cognition</td>
<td></td>
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<tr>
<td>5</td>
<td>Feb. 15</td>
<td>The self</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Feb. 22</td>
<td>No class due to holiday schedule</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Mar. 1</td>
<td>Problem-solving processes</td>
<td>Memo #2 due</td>
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<tr>
<td>7</td>
<td>Mar. 8</td>
<td>^Hackathon: kick off</td>
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<tr>
<td></td>
<td></td>
<td>Guest speaker: TBD from a community organization</td>
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<tr>
<td>8</td>
<td>Mar. 15</td>
<td>^Hackathon: wrap up and presentations</td>
<td>Informal presentation of each team’s process and solution</td>
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<td></td>
<td>Mar. 16</td>
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<tr>
<td></td>
<td>Mar. 22</td>
<td>SPRING RECESS — NO CLASS</td>
<td></td>
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<tr>
<td>9</td>
<td>Mar. 29</td>
<td>Stereotyping &amp; prejudice (Part 1: Weight)</td>
<td>Case study #2 (in class)</td>
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<tr>
<td></td>
<td></td>
<td>(20 minutes ITO time)</td>
<td></td>
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<tr>
<td>10</td>
<td>Apr. 5</td>
<td>Stereotyping &amp; prejudice (Part 2: Race &amp; Gender) (20 minutes ITO time)</td>
<td></td>
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<tr>
<td>11</td>
<td>Apr. 12</td>
<td>Social influence (20 minutes ITO time)</td>
<td>Memo #3 due</td>
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<tr>
<td>12</td>
<td>Apr. 19</td>
<td>Guest speaker (20 minutes ITO time)</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Apr. 26</td>
<td>ITO presentations</td>
<td>ITO presentation and written report due</td>
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<td></td>
<td>May 10</td>
<td>Final exam: 9:00am – 12:00pm</td>
<td>Case study #3 (in class)</td>
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^Attendance on these days is required. If you are unable to make these course sessions, please speak with the instructor as soon as possible. Teamwork is critical piece of the learning experience and the grade. This week of the course will be particularly busy with extra group meetings in between the kick-off and the wrap-up. Please plan to allow extra time in your schedule.
**Week 1: Course introduction and overview**  
Thurs. Jan. 18

**Learning objectives:**
Upon completion of this week, students will be able to:
1) Describe core motives as conceptualized by social psychology
2) Explain an application of behavioral psychology to designing population-level behavioral nutrition interventions

**Required readings:**
1) Fiske, Chapter 1: Introduction: Adaptive motives for social situations, via cultures and brains
2) 2016 Annual Report, Social and Behavioral Sciences Team, White House -sections on public health and Nutrition Assistance

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Week 2: Person perception and individual differences
Thurs. Jan. 25

Learning objectives:
Upon completion of this week, students will be able to:
1) Describe patterns in how people tend to infer causes of their own and other’s behavior
2) Understand the difference between internal and external attributions
3) Identify how causal attributions and biases may affect eating and feeding behavior

Required readings:
1) Fiske, Chapter 3: Ordinary Personology: Figuring out why people do what they do

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Week 3: Cross-cultural Social Psychology
Thurs. Feb. 1

Learning objectives:
Upon completion of this week, students will be able to:
1) Describe differences between individualistic and collectivistic cultures
2) Understand issues of study population selection related to cultural representativeness
3) Evaluate cross-cultural relevance of study measures and intervention components

Required readings:

Due: Memo #1

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Week 4: Social cognition  
Thurs. Feb. 8

Learning objectives:  
Upon completion of this week, students will be able to:
1) Describe how social cognitive biases may affect eating behavior  
2) Explain the difference between implicit and explicit food attitudes

Required readings:  
1) Fiske. Chapter 4: Social Cognition: Making Sense of Others  

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**Week 5: The self**  
Thurs. Feb. 15

**Learning objectives:**
Upon completion of this week, students will be able to:
1) **Describe** key constructs and processes related to the self, such as self-esteem, self-discrepancy, self-regulation and social comparison
2) **Evaluate** implications of self-regulation and self-presentation goals on dietary intake

**Required readings:**
1) Fiske. Chapter 5. The Self: Social to the core

***
**Week 6: Problem solving processes**  
Thurs. Mar. 1

**Learning objectives:**
Upon completion of this week, students will be able to:

1) Identify steps in the Design process
2) Identify potential biases in decision making and strategies to adjust for them
3) Research public health nutrition statistics and locally-available resources (e.g. community food bank)

**Required readings:**


*Optional:* Brief summary video of the Design Sprint Process  
[https://www.youtube.com/watch?v=-ivb5R-44ww](https://www.youtube.com/watch?v=-ivb5R-44ww)

**Due:** Memo #2
Weeks 7 & 8: Hackathon
Thurs. Mar. 8 & 15
Guest speaker: TBD; Representative from a community health organization

Learning objectives:
Upon completion of this week, students will be able to:
1) Generate multiple proposed solutions to a public health nutrition problem
2) Evaluate strengths and weaknesses of proposed solutions
3) Cooperate and communicate effectively on a team
4) Understand the connection between public health goals and civic engagement

Required readings:
None

Due:
March 15: present team results to group (informal)
March 16: - write-up of Hackathon process and outcome
- Peer-evaluations

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Week 9: Stereotyping and Prejudice: Weight stigma & ITO
Thurs. Mar. 29

Learning objectives:
Upon completion of this week, students will be able to:
1) Identify domains in which weight bias has been found to occur
2) Consider how weight bias may operate in the design and implementation of nutrition interventions

Required readings:

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Week 10: Stereotyping and Prejudice: Race and gender & ITO
Thurs. Apr. 5

Learning objectives:
Upon completion of this week, students will be able to:
1) Describe how stereotype activation may relate to eating behavior
2) Discuss ways to minimize bias in intervention design and implementation

Required readings:

Preparation for class:
Complete an implicit association task. Any one is fine, but Weight, Gender and Race are particularly relevant.
https://implicit.harvard.edu/implicit/selectatest.html

***
Week 11: Social influence & ITO
    Thurs. Apr. 12

Learning objectives:
    Upon completion of this week, students will be able to:
    1) Understand how the actual or implied presence of others has been linked to eating behavior
    2) Compare and contrast potential effects of culture on food-related social comparisons

Required readings:
    1) Fiske. Chapter 13: Social Influence: Doing what others do and say

Due: Memo #3

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Week 12: Guest speaker & ITO
   Thurs. Apr. 19
   Guest speaker: To be determined; Representative from a community public health organization

Learning objectives:
   Upon completion of this week, students will be able to:
   1) Generate insights about a public health problem of personal interest, such as clarifying the space of the problem or proposing a novel solution
   2) Analyze real-world public health nutrition problems using social psychological frameworks

Required readings:
   1) No readings.

***
Week 13: ITO presentations
    Thurs. Apr. 26

Learning objectives:
    Upon completion of this week, students will be able to:
    1) Summarize current research on topics in social psychology relevant to public health (e.g. stereotyping, pro-social behavior, social cognition, persuasion)
    2) Identify strengths and weaknesses of projects aimed at improving public health nutrition
    3) Critically evaluate peer projects, providing praise for key strengths and constructive criticism for weaknesses

Required readings:
    1) No readings.

Due:
    ITO presentation to class
    Written report of ITO

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