# 16:709:531 Theories, Models, and Concepts in Food and Nutrition (2) Fall 2016 216 Davison Hall Tuesday 3-6 PM

### **Instructor**

Carol Byrd-Bredbenner, PhD, RDN, FAND 211 Davison Hall 848-932-0965

Email for correspondence related to this course: <a href="mailto:bredbenner@aesop.rutgers.edu">bredbenner@aesop.rutgers.edu</a>
Email is the VERY BEST way to contact the course instructor. Please be sure to include a descriptive subject line in every email. Regarding your spam/junk mail filters, etc: Please be certain that you permit the receipt of emails from Rutgers' addresses! Emails will be answered as quickly as possible; please allow approximately 48 hours for a reply to your email.

**Prerequisites:** Nutrition Counseling and Communication (16:709:441) or equivalent Community Nutrition (16:709:442) or equivalent

**Required Text:** Glanz K, Rimer BK, & Viswanath K; Health Behavior: Theory, Research, and Practice, **5**<sup>th</sup> Edition, Jossey-Bass, 2008. **Be SURE to get the 5**<sup>th</sup> **Edition.** 

**Course Description:** Critical examination of theories, models, and concepts from social & behavioral sciences to increase the understanding of individual and environmental factors affecting food and nutrition issues.

**Course Objectives:** After completing this course, students will be able to:

- describe key theories, models, and concepts used in applied and community nutrition.
- apply the theories, models, and concepts to applied community nutrition programs and research.

# **Basis for Course Grade**

**25% Class Participation:** Students are expected to attend all classes, do all assigned readings prior to the class for which they are assigned, and actively participate in class discussions. Please arrive to class on time and ready to work.

**30% Course Presentation:** Each student will be assigned theories or models to present in class. Presentations should last about 45 minutes with 15 additional minutes for discussion.

• **Presentation Content:** The presentation should include (at a minimum) an overview of the theories/models, discussion of the key constructs (also called concepts) in the theories/models, strengths and limitations of the theories/models, examples of how researchers have assessed each construct of the theories/models (including scales [items] with good reliability, preferably related to nutrition), and provide at least 3 examples of application of the theories/models in nutrition programs (one example should be discussed in detail using the journal article identified on the syllabus; one example should be for an obesity prevention program; also try to find an article that addresses the application of the theories/models with a diverse population).

- **Article Analysis:** The presentation also should include an analysis of the journal article identified on the syllabus vis-à-vis the theory/model used, its application, measurement, and study findings (with an emphasis on the findings related to the theories/models).
- **Handouts:** The presentation should be accompanied by handouts (distributed via email at least 24 hours before class so that class members can print copies for class or by printed copies distributed in class). Handouts should include a) presentation slides; b) a graphic representation of the theories or models; c) glossary for all constructs that comprise the models or theories; d) brief descriptions & reference of 3 studies that used the theories; and e) examples of scales/items used to evaluate constructs from the theories/models (including references for these items).
- **References:** In addition to the course text (chapter(s)) on the specific theories/models, at least 3 other references focusing on the theories/models should be cited in the presentation.
- Written portion: Please visit Wikipedia.org and see what is written about your theories/models. Based on what you discovered in your research for the course presentation, please write an entry for Wikipedia. For example, the entry might discuss the use of the theories/models in nutrition, summarize studies that applied the theories/models, describe how to assess related constructs. The entry should be accompanied by references using the style of Wikipedia. The entry should be about 300 words (not counting the references).

**20% Journal Article Analyses:** Each of the journal articles identified on the syllabus should be analyzed before class using the form posted on Sakai. The article analysis is due at the beginning of the class for which the article was assigned. Bring 2 copies of the analysis—one to hand in at the start of class and one to refer to during the discussion.

25% Proposal Project: Students will prepare (4 page maximum, single-spaced, 1-inch margins, 12 pt type, not including references) and present a theory-based proposal for an applied/community nutrition intervention and research project that tests a theory and an intervention. The proposal should include: background and significance, specific aims & rationale (be sure to check to see how your rationale supports the future research section in the chapter[s] focusing on the theory/theories you plan to use), audience, and method, with particular emphasis on how the methods are based on or will test the selected theories/models. A separate page (page 5) should be a logic model for the project (logic model template is on Sakai). Proposals will be presented in class and discussed (20 minute presentation; 10 minute discussion). Proposals will be distributed to class members at least 3 days in advance of the presentation. An electronic and hard copy of the proposal must be turned in to the instructor. Please carefully observe all policies with regard to plagiarism (see http://academicintegrity.rutgers.edu/ for more information); proposals will be checked with software such as Turn It In.

### References that may be useful include:

- Lytle LA, Perry CL. Applying research and theory in program planning: an example from a nutrition education intervention. *Health Promo Pract.* 2001; 2:68-80.
- Byrd-Bredbenner, C. and Finckenor, M. (2000) Putting the Transtheoretical Model into practice with type 2 diabetes mellitus patients. *Top Clin Nutr.* 15:44-58.
- Kok G, Schaalma H, Ruiter RAC, and Van Empelen P. Intervention mapping: A protocol for applying health psychology theory to prevention programmes. *J Health Psych.* 2004; 9:85-98.

- Byrd-Bredbenner, C. (2010, 5<sup>th</sup> Edition) Building grantsmanship skills, pgs 587-625. In: *Community Nutrition in Action, An Entrepreneurial Approach*, 4<sup>th</sup> Edition by M.A. Boyle and D.H. Morris, Belmont, CA: West/Wadsworth, ITP.
- Bartholomew K, Parcel GS, Kok G, Gottlieb NH. *Planning health promotion programs*. San Francisco: Jossey-Bass, 2006 (library)
- Smedley BD and Syme SL. *Promoting health: intervention strategies from social and behavioral research.* Washington DC: Institute of Medicine, 2000. Available at:http://www.nap.edu/openbook.php?isbn=0309071755
- National Cancer Institute, Health Behavior Constructs: Theory, Measurement, and Research. Available at: cancercontrol.cancer.gov/brp/constructs/

**Readings** 

• Glanz Ch 2

 National Cancer Institute: www.cancer.gov/cancertopics/cancerlibrary/pinkbook/Pink\_Book.pdf

Date\*

Week 1:

**Topic** 

Course Overview

September 13	Why and How Social Science Theories are used in Applied & Community Nutrition Theory Building: Grounded Theory & Naturalistic Inquiry	• Achterberg C, Miller C. Is one theory better than another in nutrition education? A viewpoint: More is better. <i>J Nutr Educ Behav</i> 2004; 36:40-42.
Week 2: September 20	Ecological Models#  Stage-based Theories Transtheoretical Model	<ul> <li>Glanz Ch 3</li> <li>https://health.gov/dietaryguidelines/2015/guidelines/chapt er-3/social-ecological-model/</li> <li>Manuscript Analysis: Balcazar H et al. An ecological model using promotores de salud to prevent cardiovascular disease on the US-Mexico border: The HEART project. Preventing Chronic Dis. 2012, 9.</li> <li>Presenter Readings:</li> <li>Mistry, KB et al. A New Framework for Childhood Health Promotion: The role of policies and programs in building capacity and foundations of early childhood health. Am J Public Health. 2012; 102:1688-1696.</li> <li>Maziak W and Ward KD. From health as a rational choice to health as an affordable choice. Am J Public Health; 2009:2134-2139.</li> <li>Newes-Adeyi G, Helitzer DL, Caulfield LE and Bronner Y. Theory and practice: applying the ecological model to formative research for a WIC training program in New York State. Health Ed Res. 2000; 15:283-291.</li> <li>Davison KK and Birch LL. Childhood overweight: a contextual model and recommendations for future research. Obesity Reviews, 2001;2:159-171.</li> <li>Glanz Ch 4 &amp; 7</li> <li>Manuscript Analysis: Fortier, MS et al Selfdetermination and exercise stages of change: Results form</li> </ul>
		the diabetes aerobic and resistance exercise trial. J Health Psychol 2012; 17:87-99.

<ul> <li>Presenter Readings:</li> <li>Wright, JA et al Validation of 5 stage-of change measures for parental support of healthy eating and activity. JNEB, 2015; 47:134-142.</li> <li>Nitzke S et al. A Stage-tailored Multi-modal Intervention Increases Fruit and Vegetable Intakes of Low-income Young Adults. Am J Health Promo. 2007; 22:6-14.</li> <li>Tuah NAA et al. Transtheoretical model for dietary and physical exercise modification in weight loss management for overweight and obese adults. Cochrane Reports, 2011.</li> <li>Brug, J et al. The Transtheoretical model and stages of change: a critique. Health Educ Res, 2005; 20:244-258.</li> <li>Mochari-Greenberger H et al. Does stage of change modify the</li> </ul>
effectiveness of an educational intervention to improve diet among family members of hospitalized cardiovascular disease patients? <i>J Am Diet Assoc.</i> 2010; 110:1027-1035.

Week 3:	Explanatory Theories	• Glanz Ch 5
September	Health Belief Model &	• Manuscript Analysis: James DCS et al. Using the Health
27	Protection Motivation Theory	Belief Model to Develop Culturally Appropriate Weight-Management Materials for African-American Women. JAND, 2012;112:664-670.
		<ul> <li>Presenter Readings:</li> <li>Jeihooni, AK et al. The effect of a prevention program based on health belief model on osteopporosis. J Res Health Sci, 2015;15:47-53.</li> <li>Witte K and Roberto AJ. Fear appeals and public health: managing fear and creating hope. In Routledge Handbook of Applied Communication; Frey LA and Cissna KN, eds. 2009; p. 584.</li> <li>McKay DL et al Communicating Cardiovascular Disease Risk Due to Elevated Homocysteine Levels: Using the EPPM to Develop Print Materials. <i>Health Educ &amp; Behav</i>. 2004; 31:355-371.</li> <li>Plotnikoff &amp; Trihn. Protection motivation theory. <i>Exer Sport Sci</i>.</li> </ul>
	Theory of Descend Action	2010; 38:91-98 • Glanz Ch 6
	Theory of Reasoned Action /Theory of Planned Behavior /Integrated Behavioral Model	<ul> <li>Glanz Ch 6</li> <li>Sweitzer, SJ et al. Psychosocial Outcomes of "Lunch is in the Bag", a Parent Program for Packing Healthful Lunches for Preschool children. 2011. <i>J Nutr Ed Behav</i>. 43:536-542.</li> <li>Manuscript Analysis: Chase K, Reicks M, Jones J.</li> </ul>
		Applying the theory of planned behavior to promotion of whole-grain foods by dietitians. <i>J Am Diet Assoc.</i> 2003; 103:1639-1642.
		<ul> <li>Presenter Readings:</li> <li>Branscum P and Sharma M. Comparing the utility of the theory of planned behavior between boys and girls for predicting snack food consumption: implications for practice. Health Promo Prac., 2014; 15:134-140.</li> <li>Riebl, SK et al A systematic literature review and meta-analysis: the theory of planned behaviors' application to understand and predict nutrition-related behaviors in youth. 2015; 18:160-178.</li> <li>Booth-Butterfield S, Reger B. The message changes belief and the rest is theory: the "1% or less" milk campaign and reasoned action.</li> </ul>

		<ul> <li>Godin G and Kok G. The Theory of Planned Behavior: A Review of its Applications to Health-Related Behaviors. <i>Am J Health Promo</i>. 1996; 11:87-98.</li> <li>McConnon A et al. Application of the Theory of Planned Behaviour to weight control in an overweight cohort. Results from a pan-European dietary intervention trial (DiOGenes). <i>Appetite</i>. 2012; 58:313-318.</li> </ul>
Week 4:	Social Cognitive Theory	• Glanz Ch 8 & 9
October 4		Manuscript Analysis: Lubans et al. Explaining dietary
		intake in adolescent girls from disadvantaged secondary
		schools. A test of Social Cognitive Theory. Appetite, 2012
		58.517 425

Week 4:	Social Cognitive Theory	• Glanz Ch 8 & 9
October 4		<ul> <li>Manuscript Analysis: Lubans et al. Explaining dietary intake in adolescent girls from disadvantaged secondary schools. A test of Social Cognitive Theory. Appetite, 2012 58:517-425.</li> <li>Presenter Readings: <ul> <li>Springer AE et al. Promoting energy-balance behaviors among ethnically diverse adolescents: Overview and baseline findings of the central Texas CATCH middle school project. Health Ed &amp; Behav. 2012:40:559-570.</li> <li>Poddar KH et al. Dairy intake and related self-regulation improved in college students using online nutrition education. JAND, 2012; 112:1976-1986.</li> <li>Anderson ES et al. Self-Regulation, Self-Efficacy, Outcome Expectations, and Social Support: Social Cognitive Theory and</li> </ul> </li> </ul>
	Proposal Project Discussion	Nutrition Behavior. Ann Behav Med. 2007;34:304-312.
	Logic Model#	<ul> <li>Medieros LC et al. A Logic Model Framework for Community Nutrition Education. <i>J Nutr Ed Behav</i>. 2005; 37: I 97-202.</li> <li>Arteaga, SS et al The Healthy Communities Study: Its Rationale, Aims, and Approach. Am J Prev Med. 2015; 49:615-623.</li> <li>Visit &amp; review: www.uwex.edu/ces/pdande/evaluation/evallogicmodel.html</li> </ul>

Week 5:	Stress & Coping	• Glanz Ch 12
October 11		• Manuscript Analysis: Balantekin, K.N., Roemmich, J.N. 2012. Children's coping after psychological stress: choices among food, physical activity, and television. Appetite. 59:298-304.
		Presenter Readings:  • Shah, BM et al. Depressive symptoms in patients with type 2 diabetes mellitus: Do stress and coping matter. Stress and Health, 2011; 28:111-122.  • <a href="http://www.kon.org/urc/v7/crooks.html">http://www.kon.org/urc/v7/crooks.html</a> • Skinner EA and Zimmer-Gembeck MJ. (2007) The Development of Coping. Annu. Rev. Psychol. 2007. 58:119–144.  • Skinner EA and Edge K Searching for the Structure of Coping: A

	<ul> <li>Review and Critique of Category Systems for Classifying Ways of Coping. Psychological Bulletin 2003; 129:216–269.</li> <li>Byrd-Bredbenner, C et al Relationships of cognitive load on eating and weight-related behaviors of young adults. Eating Behav. 2016; 21:89-94.</li> </ul>
Social Networks & Support	• Glanz Ch 11
	• Manuscript Analysis: Kulik, N. L., Fisher, E. B., Ward, D. S., Ennett, S. T., Bowling, J. M., & Tate, D. F. (2014). Peer Support Enhanced Social Support in Adolescent Females During Weight Loss. <i>American journal of health behavior</i> , 38(5), 789-800.
	<ul> <li>Presenter Readings:</li> <li>Poirier &amp; Cobb, Social Influence as a Driver of Engagement in a Web-Based Health Intervention. J Med Internet Res 2012, 14:e36.</li> <li>Verheijden MW et al. Role of social support in lifestyle-focused weight management interventions. <i>Eur J Clin Nutr</i>. 2005; 59:S179–S186.</li> <li>Neumark-Sztainer D, Wall M, Perry C, Story M. Correlates of fruit and vegetable intake among adolescents. Findings from Project EAT. <i>Prev Med</i>. 2003; 37:198-208.</li> <li>Maturo CC and Cunningham SA. Influence of Friends on Children's Physical Activity: A Review Am J Public Health. 2013; 103:e23-e38.</li> </ul>

Week 6:	Implementation, Dissemination,	• Glanz Ch 16
October 25	and Diffusion of Public Health Information	• Manuscript Analysis: Thurber MD and Fahey JW. Adoption of <i>Moringa oleifera</i> to combat under-nutrition viewed through the lens of the "Diffusion of Innovations" theory. <i>Ecol Food Nutr.</i> 2009; 48: 212–225
		<ul> <li>Presenter Readings:</li> <li>https://www.nlm.nih.gov/hsrinfo/implementation_science.html</li> <li>Sekhobo JP et al. Evidence of the adoption and impelementation of a statewide childhood obesity prevention initiative in the New Your state WIC program: The NY FIT WIC process evaluation. Health Ed Res. 2012; 27:281-291.</li> <li>Steenhuis IHM, Van Assema P, and Glanz K. Strengthening environmental and educational nutrition programmes in worksite cafeterias and supermarkets in the Netherlands. <i>Health Promo Int.</i> 2001; 16:21-33.</li> <li>Sanson-Fisher RW. Diffusion of innovation theory for clinical change. Med J Aust 2004; 180 (6): 55.</li> <li>Kerner J, Rimer B, Emmons K. Introduction to the special section on dissemination: Dissemination research and research dissemination: how can we close the gap? <i>Health Psychology.</i> 2005;24:443-446.</li> </ul>
	Applications/Planning Models Planning Models for Theory- Based Health Promotion Interventions	<ul> <li>Glanz Ch 18 &amp; 19</li> <li>Manuscript Analysis: Kattelmann, K., et al (2014) Development of Young Adults Eating and Active for Health (YEAH) internet-based obesity prevention intervention via a community based participatory research model. J Nutr Educ Behav, 46:S10-S25.</li> </ul>
		Presenter Readings:

	<ul> <li>Kattelmann, K., et al (2014) The Effects of Young Adults Eating and Active for Health (YEAH): A Theory-Based Web-Delivered Intervention. Journal of Nutrition Education and Behavior, 46:S28-41</li> <li>Kuo T et al. Menu labeling as a potential strategy for combating the obesity epidemic: A health impact assessment. <i>Am J Public Health</i>. 2009;99:1680-1686.</li> <li>Linnan LA et al. Working with licensed cosmetologists to promote health: Results from the North Carolina BEAUTY and health pilot study. <i>Prev Med</i>. 2001;33:606-612.</li> <li>Green LW. What can we generalize from research on patient education and clinical health promotion to physician counseling on diet? <i>Eur J Clin Nutr</i>. 1999; 53 Suppl 2:S9-18. Review</li> <li>Horacek T et al. Development of a Peer Nutrition Education Program Applying Precede-Procede. <i>Top Clin Nutr</i>. 2000;15:19-27.</li> </ul>
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Week 7:	Communication Theories	• Glanz Ch 17
November 1	Communication Theory & Media Studies	• Manuscript Analysis: Valente TW et al. Evaluating a Minor Storyline on ER About Teen Obesity, Hypertension, and 5 A Day. Journal of Health Communication, 12:551–566, 2007
		<ul> <li>Presenter Readings:</li> <li>Fishbein M and Cappella JN. The role of theory in developing effrective health communications. J Communication. 2006; 56:S1-S17.</li> <li>Petty, RE et al The elaboration likelihood mode of persuasion. In Emerging theories in Health Promotion Practice and Research, 2<sup>nd</sup> Ed; Diclemente, RJ et al. San Francisco: Jossey Bass, 2009.</li> <li>Auld, G., Chipman, H et al. Audience responses to a risk communication message in four media formats, Journal of Nutrition Education 1996 28(3): 133-139.</li> <li>Gillespie AH and Yarbrough P. A conceptual model for communicating nutrition . 1984. Journal of Nutrition Education. 16:168-172</li> <li>Gillespie AH. Applying Communication Theory in Nutrition Education Research. 1981, 13:S29-233.</li> <li>www.cancer.gov/cancertopics/cancerlibrary/pinkbook/Pink_Book.pdf</li> </ul>
	Campaigns: Social Marketing	• Glanz Ch 21 • Manuscript Analysis: Snow & Benedict http://www.joe.org/joe/2003december/a4.php
		<ul> <li>Presenter Readings:</li> <li>Perez-Escamilla, R. Breastfeeding social marketing: Lessons learned from USDA's "Loving Support" Campaign. Breastfeeding Medicine, 2012;7:359-363.</li> <li>Evans WD, Necheles J, Longjohn M, and Christoffel KK. The 5-4-3-2-1 go! intervention: Social marketing for nutrition. <i>J Nutr Ed Behav</i>. 2007; S55-S59.</li> <li>Snyder LB. Health communication campaigns and their impact on behavior. <i>J Nutr Ed Behav</i>. 2007; 39:S32-S40.</li> <li>Francis, SL et al A social marketing theory-based diet-education program for women ages 53 to 84 years improved dietary statys. J Am Diet Assoc; 2009;2052-2056.</li> <li>http://www.orau.gov/cdcynergy/soc2web/default.htm</li> </ul>

Week 8:	Proposal presentations	
November 8		
Week 9:	Proposal presentations	
November 15		
Week 10:	Proposal presentations	• Spahn JM et al. State of the evidence regarding behavior
November 29	Evaluation of Theory Based	change theories and strategies in nutrition counseling to
	Programs	facilitate health and food behavior change. J Am Diet Assoc.
		2010;110:879-891.

### ACCOMODATIONS FOR STUDENTS WITH DISABILITIES

Please follow the procedures outlined at <a href="https://ods.rutgers.edu/students/registration-form">https://ods.rutgers.edu/students/registration-form</a>. Full policies and procedures are at <a href="https://ods.rutgers.edu/">https://ods.rutgers.edu/</a>

# **ACADEMIC INTEGRITY**

The university's policy on Academic Integrity is available at http://academicintegrity.rutgers.edu/academic-integrity-policy. The principles of academic integrity require that a student:

- properly acknowledge and cite all use of the ideas, results, or words of others.
- properly acknowledge all contributors to a given piece of work.
- make sure that all work submitted as his or her own in a course or other academic activity is produced without the aid of impermissible materials or impermissible collaboration.
- obtain all data or results by ethical means and report them accurately without suppressing any results inconsistent with his or her interpretation or conclusions.
- treat all other students in an ethical manner, respecting their integrity and right to pursue their educational goals without interference. This requires that a student neither facilitate academic dishonesty by others nor obstruct their academic progress.
- uphold the canons of the ethical or professional code of the profession for which he or she is preparing.

Adherence to these principles is necessary in order to ensure that

- everyone is given proper credit for his or her ideas, words, results, and other scholarly accomplishments.
- all student work is fairly evaluated and no student has an inappropriate advantage over others.
- the academic and ethical development of all students is fostered.
- the reputation of the University for integrity in its teaching, research, and scholarship is maintained and enhanced.

Failure to uphold these principles of academic integrity threatens both the reputation of the University and the value of the degrees awarded to its students. Every member of the University community therefore bears a responsibility for ensuring that the highest standards of academic integrity are upheld.

# STUDENT WELLNESS SERVICES

Just In Case Web App http://codu.co/cee05e

Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.

Counseling, ADAP & Psychiatric Services (CAPS) (848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901/ www.rhscaps.rutgers.edu/

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

### Violence Prevention & Victim Assistance (VPVA)

(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / <a href="www.vpva.rutgers.edu/">www.vpva.rutgers.edu/</a> The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

# **Disability Services**

(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / https://ods.rutgers.edu/

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: https://ods.rutgers.edu/students/documentation-guidelines. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: https://ods.rutgers.edu/students/registration-form.

### **Scarlet Listeners**

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Free and confidential peer counseling and referral hotline, providing a comforting and supportive safe space.