

(H) Number of Credits*	Class Hours:3 Lab Hours:0 Credits:3
(I) Prerequisite(s)	FDNT 145 or 212 and MATH 214 or 216 or 217, or Department Permission
(J) Co-requisite(s)	<i>This means that another course must be taken in the same semester as the proposed course</i>
(K) Additional Information	

(N) Student Learning Outcomes*

These should be measurable, appropriate to the course level, and phrased in terms of student achievement, not instructional or content outcomes

If dual listed, indicate additional learning objectives for the higher level course.

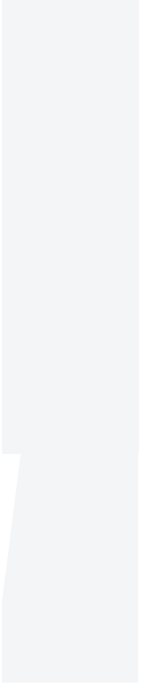
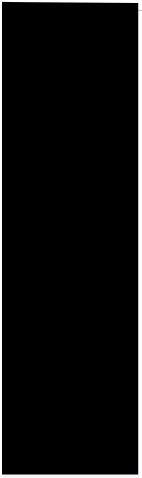
FDNT 422:

1. Identify key methodological issues when assessing dietary intake, biochemical and anthropometric indicators, and their implications for assessing nutrition and disease relationships.
2. Describe and analyze nutrition-related morbidity and mortality using epidemiological principles.
3. Apply a systematic approach to nutrition and health inequalities.
4. Describe the applicability of epidemiological methods to public health nutrition practice and food and nutrition policy.

FDNT 522 (all of the above PLUS):

1. Interpret statistical findings of nutrition-related primary research.
2. Use sample data to engage in the process of program planning and evaluation including: assessment; setting priorities/goals/objectives; program implementation and monitoring; and evaluation.
3. Advocate for population-based policies to improve health and nutrition status.

1.
 - a.
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Brief Course Outline

Give an outline of sufficient detail to communicate the course content to faculty across campus. It is not necessary to include specific readings, calendar or assignments

As outlined by the federal definition of a "credit hour", the following should be a consideration regarding student work - For every one hour of classroom or

direct faculty instruction, there should be a minimum of two hours of out of class student work.

- a. Overview of Public Health Nutrition
 - i. History of public health nutrition (including examples in the context of rural, urban, national/USA, global)
 - ii. Food and nutrition policy and recommendations
 1. Global (e.g., World Health Organization Global Nutrition Policy)
 2. National (e.g., Dietary Guidelines for Americans, Healthy People)
 - iii. Ethics in public health nutrition
 - iv. Applying nutrition science to public health
- b. Nutritional Epidemiology
 - i. Types of studies to address the fundamental question, Does diet or nutrition make a difference to health and disease? (e.g., cross-sectional, surveillance, cohort, case-control, randomized control trials)
 - ii. Measuring exposure, outcomes, and associations
 - iii. Interpreting data and expressing results
- c. Assessment of Nutritional Status of Individuals and Populations
 - i. Dietary assessment
 - ii. Use of biomarkers
 - iii. Anthropometric and other other clinical measures
 - iv. Nutrition surveillance (e.g., National Health and Nutrition Examination Survey - NHANES)
 1. Methodological issues
 2. Datasets (e.g., National Nutrition Monitoring; World Health Organization)
- d. Public Health Nutrition Strategies for Intervention - reaching out to those at the highest nutritional risk
 - i. Guidance for the Design, Implementation, and Evaluation of Programs
 1. Ecological Model (intrapersonal, interpersonal, community/institution, and macro/public policy)
 2. Individual Level
 - a. Programs of supplementary feeding, foods or nutrients
 - b. Changing behavior
- e. Public Health Aspects of Malnutrition: Overnutrition and Undernutrition
 - i. Definitions
 - ii. Etiology: determinants and conditional factors
 - iii. Epidemiology of Overnutrition: macronutrients, excess energy intake
 1. Overweight and obesity
 - iv. Epidemiology of Undernutrition: micronutrient deficiencies
 1. Iron, vitamin D, vitamin A, etc.
 2. Fortification programs
 - v. Policy and programmatic issues in preventing and reversing overnutrition and undernutrition
- f. Protecting the Public's Nutritional Health: Food Security
 - i. Securing adequate food and water
 - ii. Safeguarding the food and water supply
 1. Food safety, hazards to the food and water supply
 2. Bioterrorism preparedness
- g. Shaping Food and Nutrition Policies that Affect the Public's Health
 - i. Key constituencies at the rural, urban, national, and global levels
 - ii. Translating scientific evidence into nutrition policy and policy into action
 1. Assessment, establishing priorities, program planning, intervention, monitoring and evaluation
 2. Managing data and resources
 3. Mobilizing personnel and the public health team
- h. Envisioning the Future of Public Health Nutrition
 - i. Addressing future challenges in public health nutrition in rural, urban, national, and global settings

Rationale for Proposal (Required Questions from CBA)

<p>How is/are the instructor (s) qualified in the Distance Education delivery method as well as the discipline?</p>	<p>As a registered dietitian, nutrition educator, and researcher, Dr. Stephanie Taylor-Davis has both depth and breadth of understanding, and sensitivity to, the particular food and nutrition issues of individuals and diverse groups. She has the academic preparation and practical experiences (including principal investigator on two federally-funded research grants (USDA-FNS WIC program) and serving on the editorial board and journal committee for The Journal of Nutrition Education and Behavior) needed to facilitate student awareness, understanding, and application with respect to current issues and research advances in food and nutrition. She earned a Master of Science degree in Public Health Nutrition from Case Western Reserve University and worked as Public Health Nutritionist for the state of Delaware prior to earning her PhD in Nutrition from The Pennsylvania State University. In addition, she has conducted numerous community-based education and intervention projects, and has provided nutrition counseling in public health, clinical and out-patient settings, as well as private consulting.</p> <p>Dr. Taylor-Davis earned her Ph.D. in Nutrition from The Pennsylvania State University (PSU). While attending PSU, she served on a team of instructional designers and content experts to conceptualize and develop the first web-based nutrition course. She was among the first faculty at Colorado State University (1996-1998) to use WebCT. Shortly after her arrival to IUP in 1998, she provided training to other IUP faculty on WebCT and was among the first IUP faculty members to offer a WebCT-based course. Since Summer 1999, Dr. Taylor-Davis has taught online courses regularly at the undergraduate level (FDNT145: Introduction to Nutrition, FDNT212: Nutrition; FDNT213 Lifecycle Nutrition; FDNT470 Human Food Consumption Patterns; FDNT 481: Quantity Food Purchasing (1999-2001), LBST499: Screen Cuisine). Since fall 2010 she has taught online courses at the graduate level (FDNT564 Nutrition Research Methods; FDNT635 Food and Nutrition Intervention and Education Strategies; FDNT642 Contemporary Issues in Food and Nutrition; FDNT645 Protein, Fat, and Carbohydrates; FDNT661 Designing Effective Research Projects in Food and Nutrition; FDNT662 Applying Research Methods in Food and Nutrition; and FDNT771 Lifecycle Nutrition). Dr. Taylor-Davis has designed courses for both the Moodle and Desire2Learn Learning Management Systems (LMS). In addition to her teaching experience, Dr. Taylor-Davis currently serves as the Director of the IUP Center for Teaching Excellence. She has been actively engaged in professional development through research in the educational effectiveness of technology-based instruction, participation in workshops offered by IUP Technology Support, and meetings/workshops offered by the IUP Reflective Practice project. She has consulted with the university's instructional designers in the development other graduate-level online courses and will seek, as needed, continued development and production support from the IT Services staff.</p>
<p>For each outcome in the course, describe how the outcome will be achieved using Distance Education technologies.</p>	<p>Achievement of Learning Outcomes with Distance Education Technologies:</p> <p>Features in the Learning Management System will be used to facilitate student achievement of learning objectives. In addition to the text, instructor-developed materials include: learning objectives, selection of reading assignments and resource links, brief instructor perspectives (overviews of each module/unit), short audio or video lectures, and problem sets/worksheets to stimulate critical thinking. Throughout the course students will analyze current research articles from professional food and nutrition publications in order to better understand the role of food and nutrition in public health.</p> <p>FDNT 422:</p>

FDNT522 (all of the above PLUS):

1. Interpret statistical findings of nutrition-related primary research.

PowerPoint slides (some narrated), text readings, and journal articles will provide basic information to students on the statistical tools (e.g., odds ratios, relative risk, confidence intervals, regression) and how they are used to describe and interpret epidemiological data. Links to electronic journals and websites, links national nutrition databases, links to professional guidance documents, and links to videos will also provide resources to guide development of interpretation skills. Completing guidance worksheets (focusing on skill development in interpreting findings, and where available consideration of grading quality of evidence and strength of recommendations) and public health nutrition problem set assignments will support student learning. Graduate students will further demonstrate competence to review and interpret research findings when they write a research paper on a specific public health nutrition issue or concern.

2. Use sample data to engage in the process of program planning and evaluation including: assessment; setting priorities/goals /objectives; program implementation and monitoring; and evaluation.

A sample data set may be provided in order to students to run basic analyses and practice interpretation. Using publicly available data sets (e.g., National Health and Nutrition Examination Survey, What We Eat in America Survey) and comprehensive national /global reports and peer-reviewed literature as resources, graduate students will focus on a specific public health nutrition issue or concern to write a research paper. A component of this research paper is to make recommendations including further research in public health nutrition, drafting new or commenting on existing public health and nutrition recommendations or policy, as well as drafting a program/intervention and its evaluation.

3. Advocate for population-based policies to improve health and nutrition status.

Research papers will be posted for other students to review and use of synchronous web conferencing software (e.g., Blackboard Collaborate, Zoom) and/or discussion boards (asynchronous). During these discussions, it is expected that students will engage in conversation on how to translate public health nutrition science to policy and action. In addition, guidance worksheets and public health nutrition problem set assignments will aid critical thinking and understanding. These assignments may also provide opportunities for students to simulate participation in advocacy by becoming familiar with the Federal Register and developing evidence-based cases to support legislative action related to nutrition (e.g., the Older Americans Act, Treat and Reduce Obesity Act, the Farm Bill).

How will the instructor-student and student-student interaction take place? (if applicable)

Methods of communication and interaction may include LMS communication tools (e.g., discussion forums), videoconferencing (e.g., Skype, Zoom, Blackboard Collaborate), telephone, postal mail, IUP email, and/or online and traditional on-campus office hour appointments. IUP email will be used for private communications between instructor and student, as well as any private communications that students may desire among one another. Student-to-student interaction will also be fostered through group work such as when student are assigned to discussions, to facilitate discussion, and to collaborate on assignments online (using for example, Wiki, Google Docs).

Several features of the LMS provide a primary vehicle for communication among students and the instructor, and provide a mechanism to organize and coordinate delivery of course content. Features of the LMS to be used include: the calendar, news feature, discussion forums, the DropBox, chat, and conferencing.


- Calendar and/or Checklist = The instructor will provide specific assignment due dates and announce availability for office hours.; News = In addition to information posted to the calendar, the instructor will use the news feature to announce upcoming events of relevance to course topics (e.g., current events, recent journal articles, professional listserv discussion topics);
- Discussion Forums = The discussion forums will consist of areas for discussion of course topics, assignments, frequently asked questions (e.g., content, or related to logistics or technical aspects of the course), and an area for informal student discussion;
- DropBox = Students will submit many assignments using the Dropbox. The instructor will use this tool to grade student assignments and to provide individualized feedback;
- Web Conferencing = A platform (e.g, Blackboard Collaborate, Zoom) with a variety of options such as audio, video, interactive whiteboard, application sharing, and session recording will be used. Skype and FaceTime are also options to connect the instructor and one or more students;
- Chat = Instructor-mediated and general chat spaces will be provided for students to chat with the instructor or other students in the course. The instructor-mediated room will be used for instructor online office hours

How will student achievement be evaluated?

Evaluation:

- Quizzes (20%): For each major topic discussed in the course, a quiz will be administered to assess student knowledge. Quizzes will include multiple choice, matching, and short-answer questions that can be scored by computer, providing students with immediate feedback regarding basic concepts. Students can score between 0 to 10 points for each quiz. Approximately 8 quizzes will be given.
- Guided Reading Assignments/Worksheets (30% undergraduate students; 10% graduate students): For each major topic discussed in the course, current research articles will serve as application examples to foster understanding and critical thinking. The instructor will select these articles (or sections of the text), and students will individually be required to read articles assigned and submit their article analysis worksheets. Worksheets may also be focused on enhancing and focusing student learning on specific content areas and competencies rather than helping them to process and understand and apply information in journal articles. Students can earn between 0 to 25 points for each worksheet. Students will be evaluated on their ability to critically assess articles (or content areas) to demonstrate competency and to answer basic questions regarding assessment methods, strengths and limitations, instruments and measurement, implications and applications, etc.
- Public Health Nutrition Problem Sets and Discussion (50%): Narrated PowerPoint slides, links to journal articles, website links, and video links will provide students with the foundation necessary to work in small groups to engage in problem-solving exercises in the following public health nutrition areas: (a) Methodology; (b) Interpretation; (c) Systems Approach; (d) Translation of Nutrition Epidemiological Findings to Policy and Practice; (e) Engaging in Public Health Nutrition process; and (f) Practice Advocating for Public Health Nutrition. Student groups will engage using collaborative tools such as Google Docs or Wiki, as well as the LMS Discussion Board. The products of this group work for each nutrition area will be graded on a scale of 0 to 30 points using the problem sets rubric with components of assessment including quality/clarity and correctness of responses, evidence of critical thinking, ability to answer questions and post additional comments/questions to promote discussion, timeliness of responses, ability to make connection to the the readings and discussion comments by others. Participation will be assessed using the discussion rubric and students can earn 0 to 10 points.
- Graduate Students enrolled in FDNT522 only: Research Paper and Presentation (20%): Students will write an in-depth research paper on a public health nutrition issue of their choice, including consideration of its national/global rural/urban significance, and present a summary of findings. Research papers should be 12-15 pages in length. Students can earn 0-100 points based on the research paper rubric criteria which includes: concepts, principles, public health nutrition issue described, extent of literature review, interpretation of research findings, accuracy of information, depth of coverage, clarity of explanation, relevance of examples provided, application of research to practice in public health nutrition, citations provided. Presentations, including development of a PowerPoint presentation, will be given orally on 1 to 3 designated class times. Students can earn 0 to 50 points based on the presentation rubric which includes elements in categories of content, organization, mechanics of presentation, and used of media. Participation in student presentations using the discussion rubric, students can earn 0 to 15 points per presentation for contributing to discussions, comments, or suggestions regarding the oral presentation.

<p>Expected Undergraduate Student Learning Outcomes (EUSLOs)</p>	<p><i>Describe how each Student Learning Outcome in the course enables students to become Informed Learners, Empowered Learners and/or Responsible Learners</i></p> <p><i>See http://www.iup.edu/98/Learners and/or Responsible Learners</i></p>

	<p>For both new and revised courses, please attach (see the program education coordinator):</p> <ul style="list-style-type: none"> • The Overall Program Assessment Matrix • The Key Assessment Guidelines • The Key Assessment Rubric <p style="text-align: center;">File Modified</p> <hr/> <p>No files shared here yet.</p> <ul style="list-style-type: none"> • Drag and drop to upload or browse for files 
<p>Narrative Description of the Required Content</p>	<p><i>How the proposal relates to the Education Major</i></p>

For Deans Review
<p>Are Resources Available/Sufficient for this Course?</p>
<p>Is the Proposal Congruent with the College Mission?</p>
<p>Has the Proposer Attempted to Resolve Potential Conflicts with Other Academic Units?</p>
<p>Comments:</p>