

(H) Number of Credits*	
Oreans	Class Hours:3
	Lab Hours:0
	Credits:3
(I) Prerequisite (s)	FDNT 145, 212 or Departmental Permission
(J) Co-requisite (s)	This means that another course must be taken in the same semester as the proposed course  None
(K) Additional	Check all that apply. Note: Additional documentation will be required
Information	* Teacher Education: Please complete the Teacher Education section of this form (below)
	*Liberal Studies: Please complete the Liberal Studies section of this form (below)
	* Distance Education: Please complete the Distance Education section of this form (below)
	distance-education
(L) Recommended Class Size	YES  Number (Enter Zero if No):30
	If YES: (Check one of the following reasons and provide a narrative explanation)
	Pedagogical  Evaloir (required):
	Explain (required):  The restriction is due to the interactive nature of the course. Discussion will be enhanced with a controlled number of students. The course requires students to perform an evidenced based analysis of a complementary, integrative and alternative nutrition topic which will include a presentation/poster. More than 30 students will decrease the quality of the presentations due to time limitations in a semester.
(M) Catalog Description*	Guidelines: Do not include pre/co-requisite information here. The registrar prefers a concise description of course content, beginning with an active verb.
	Explores the foundation of complementary, alternative, integrative and functional nutrition theories and practices. Differentiates among traditional, complementary, alternative, integrative, and functional nutrition models as related to food, supplements, herbs, and disease. Evaluates current research related to complementary, alternative, integrative and functional nutrition.

#### (N) Student Learning Outcomes\*

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

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

#### FDNT 471/FDNT 571

The student will be able to:

- 1. Utilize credible resources (published research, websites, etc.). to differentiate between evidence-based and unproven integrative, complementary, alternative, and functional nutrition practices.
- 2. Assess the (1) healing philosophy, (2) evidence of effectiveness, (3) mechanisms of action, (4) common clinical applications, (5) safety and cost, and (6) practice parameters for selected complementary alternative, integrative and functional nutrition therapies.
- 3. Interpret the safety and interactions of herbs, botanicals and supplements in nutrition care.
- 4. Discuss the use of complementary, alternative and functional nutrition in treatment and prevention of chronic diseases.
- 5. Evaluate how the nutrition/healthcare/exercise professional can integrate complementary, alternative, integrative and functional practice ethically.
- 6. Analyze the legal implications of utilizing complementary, alternative, integrative and functional nutrition therapies.

## FDNT 571 only

The student will be able to:

1. Evaluate the differences and similarities of integrative nutrition practitioners through in-depth evidence-based research and professional interview(s).

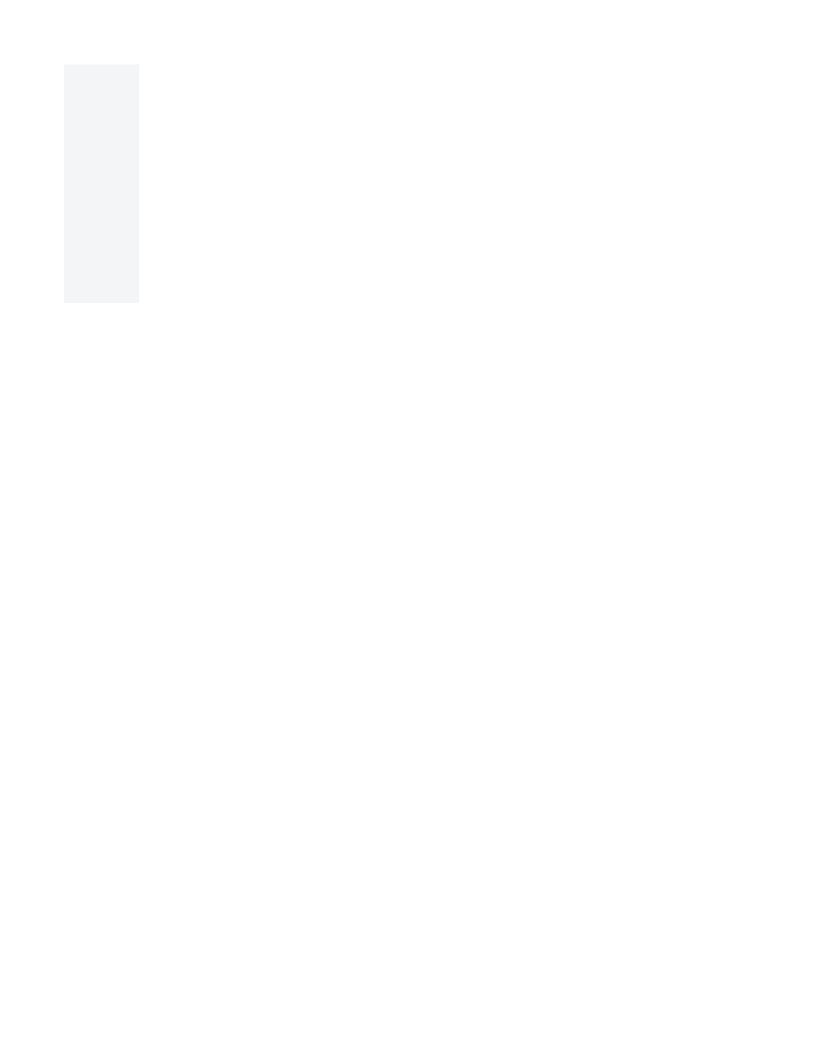
#### (O) Brief Course Outline\*

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.

- I. Overview of Complementary and Alternative Modalities
  - a. Complementary Nutrition
- b. Alternative Nutrition
- c. Integrative Nutrition
- d. Functional Nutrition
- II. Food as Medicine
  - a. Inflammation
  - b. Current alternative nutrition practices
  - c. Food Allergies
- III. Herbs, Botanicals, Supplements (common currently used herbs/botanicals)
  - a. Evidence Based Research
- i. Mechanism of Action
- ii. Disease Specific Use
- b. Cost vs Traditional Therapy
- c. Efficacy/Dosage
- d. Safety Concerns and Interactions
- IV. Mind-body practices
  - a. Mindful Eating
- V. Functional Foods



- 1. Prebiotics, Probiotics and Symbiotics
- 2. Select Micronutrients
- 3. Select Phytochemicals
- 4. Select Macronutrients
- 5. Others per current evidence

## Module 6 (Weeks 9, 10 and 11)

- Complementary, Alternative, Integrative and Functional Nutrition in Chronic Disease (Select topics which may include:)
- 1. Cardiovascular
- 2. Diabetes
- 3. Gastrointestinal
- 4. Cancer
- 5. Hepatic
- 6. Renal
- 7. Respiratory

## Module 8 (Week 12)

- Complementary and Alternative Nutrition in Sports
- 1. Research related to common supplements, herbs, botanicals
- 2. Dietary enhancing practices

#### Module 9 (week 13)

- Incorporation of Ethical Complementary and Alternative Nutrition in Practice
- 1. Legal implications
- 2. Profession specific, federal, state and local governing agencies

## Module 10 (Week 14)

- Other Traditional Medicine Systems with Nutrition Implications
- 1. Ayurvedic
- 2. Traditional Chinese Medicine
- 3. Homeopathy
- 4. Naturopathy

# **Culminating Activity**

Final Project

Rationale for Proposal (Required Questions from CBA)

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#### FDNT 471/571

- 1. Utilize credible resources (published research, websites, etc.). to differentiate between evidence-based and unproven complementary, alternative, and functional healthcare practices
  - Article discussion questions and webinars will address the need to critically evaluate resources and how to find evidence
    based information. Students will be required to use the LMS discussion forums to answer questions related to the module
    topics. The instructor will facilitate further evaluation of the weekly topics through the discussion forum. A rubric will be used
    to evaluate quality of the answers to the questions and discussion forum responses
  - If a webinar is used, students will either submit the certificate or take a short quiz based on the webinar. Discussions will
    also use the webinar linking it to the discussion question for the module. Links will be provided through the LMS to all
    webinars or library videos.
- 2. Assess the (1) healing philosophy, (2) evidence of effectiveness, (3) mechanisms of action, (4) common clinical applications, (5) safety and cost, and (6) practice parameters for selected complementary alternative, integrative and functional nutrition modalities.
  - Each module will provide an introduction to the healing philosophy, evidence of effectiveness, mechanism of action and
    common clinical applications using articles, webinars, and voiced over PowerPoints. Each student will post answers to
    specific questions about the module information in a discussion forum. The instructor will facilitate further discussion and
    clarify any misinterpreted information. A rubric will be used to assess the question responses.
  - Students will be required to assess the safety, cost and the practice parameters of selected complementary alternative, integrative and functional nutrition modality through the LMS discussion questions. A rubric will be used to assess appropriateness of responses to the questions and to other student postings.
  - Students will be required to take a quiz through the LMS after each module to assess knowledge and application of information presented.
- 3. Interpret the safety and interactions of herbs, botanicals and supplements in nutrition care
  - Students will be required to choose a herb, botanical or supplement and research the mechanism of action, efficacy, dosage, side effects and interactions and present a written paper. A discussion forum and/or chat will require peers to read and evaluate the information provided. A rubric will be used to assess the quality of the paper and the quality of the peer responses.
- 4. Discuss the use of complementary, alternative and functional nutrition in chronic diseases.
  - Select diseases will be presented through articles readings, webinars, videos, and voiced over PowerPoints in relation to the current evidence based research and use of complementary and alternative nutrition therapies.
  - Student groups will be required to research a integrative therapies use in a disease and provide a short summary of the
    nutrition modalities thought to be of benefit, the mechanism of these modalities actions, the safety, efficacy, dosage, side
    effects and interactions. Other student groups will read the posts and ask a questions, request clarification or make a
    comment. The instructor will facilitate the discussions and make sure evidence based research is being used. A rubric will be
    used to assess the summary post and the student group's comments, clarifications or questions.
- 5. Evaluate how the nutrition /healthcare professional can integrate complementary, alternative, integrative and functional practice morally and ethically
  - Students will be assigned a specific nutrition related complementary and alternative therapy and will discuss how they can use this therapy in their career. A discussion through the LMS will be used for the responses and peers will be asked to comments, ask a questions or ask for clarification. Students will be asked to consider certification programs and evaluate the quality of these programs. A rubric will be used to assess the postings.
  - Students who careers have a Code of Ethics will be asked to discuss how this code dictates the use of complementary and
    alternative therapies. If the students career field does not have a code of ethics they will be required to read the Academy of
    Nutrition and Dietetics Code of Ethics and discuss how this translates to the use of complementary and alternative therapies.
    A discussion forum in the LMS will be used and a rubric will assess the quality of work.
- 6. Analyze the legal implications of utilizing complementary, alternative, integrative and functional nutrition therapies
  - Students will read a case(s) of complementary and alternative providers who have been legally implicated. The students will
    discuss in the LMS discussion forum how they can avoid legal issues related to the use of complementary and alternative. A
    rubric will be used to assess the quality of the posting.

#### FDNT 571 only

- 7. Summarize and reflect on differences and similarities of integrative nutrition practitioners through in-depth evidence based research and interview(s).
  - In depth research investigation (15 to 20 pages typed 12 font, double spaced) of a complementary and alternative therapy and the type of certification needed for practice and the nutrition implications.
  - Interview a nutrition complementary and alternative practitioner, summarize the answers to 8 questions and 2 of your
    own design. Evaluate their practice, evidence based knowledge and ethical practices compared to evidence based
    research.

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# How will student achievement be evaluated?

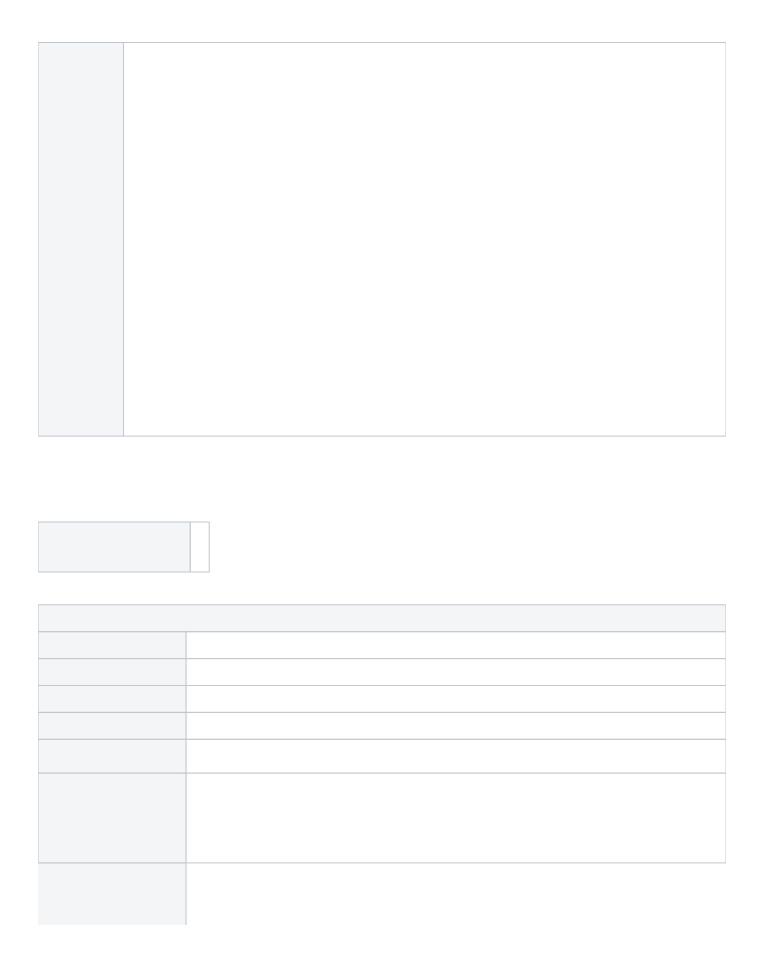
Students will be evaluated using a variety of methods, making a total of 100% of the course grade. The methods by which students will be evaluated are as follows;

- Journal Article Summary and Discussions Postings (35%) Current literature readings and critiques in the food and nutrition science literature will be used to assess student knowledge and critical thinking ability with respect to integrative nutrition and complementary and alternative healthcare. Students will be assigned to groups to facilitate discussion on a given article. The Facilitation Team grading scale is from 0 to 50 points. Facilitation Team members will be evaluated on their ability to summarize the article, pose questions that stimulate student critical thinking about nutrition and integrative, functional, complementary and functional topic presented, answer questions, and post additional questions to promote discussion, timeliness of responses, and the ability to make connection to the readings and among student discussion comments as described in the Facilitation Assignment Rubric. Each Team is required to read and respond to the other students group's articles summary with a question, a comment or additional information about the cases scenario based on their own practice or articles/webinars/ conferences they have attended. Students can earn a grade of 0 to 50 based on the response rubric.
- Quizzes (15%) For each major topic in the course, a quiz will be administered to assess student knowledge and application
  ability. Quizzes will include multiple-choice, matching, and short-answer questions that can be scored by computer, providing
  students with immediate feedback regarding basic concepts. Approximately 10 quizzes will be given.
- Case Study Responses and Discussions (10%)—Students will read a case regarding code of ethics and legal issues associated with using integrative, functional, complementary and alternative nutrition in practice. Students will be required

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

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