

HHNS 6410 Applied Functional Foods and Nutraceuticals

Department of Human Health and Nutritional Sciences

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Office Hours: anytime by appointment

Classes: Mondays 2:30-5:20 in Food Science 146. Research and development project groups should anticipate meeting a further 3 hours per week.

Course Description: This graduate level course explores the applied aspects of food and natural health products as medicine; products and services within the functional food and nutraceutical (FFN) domain must comply with the Canadian healthcare system standards of safety, efficacy and effectiveness in an evidence-based medicine context. The course prepares student-teams to research and develop an innovative product, service or education/KTT vehicle from conceptualization to market entry within the FFN/healthcare industry. Each research and development project will be critically analyzed, in terms of regulatory, developmental efficiency, safety, efficacy and market readiness issues, by each member of the class at each stage of the process. A final exposition of all the FFN projects will be held for select members of the University and the local community. An executive summary, along with photographs of the project materials, will be submitted upon completion of the final expositional display.

Course Objectives:

Upon completion of this course students should:

1. Have a comprehensive understanding of preventive and therapeutic evidence-based medicine and how an FFN product or service can fit into the Canadian healthcare system.
2. Understand the differences in regulatory philosophies and guidelines for Functional Foods (Food Directorate- Health Canada) and Natural Health Products (Natural Health Product Directorate – Health Canada).
3. Gain an appreciation of the role of KTA (knowledge-to-action)/KTT (knowledge translation and transfer) in the FFN/healthcare industry and in the science-based work environment.
4. Have a detailed understanding of the defining characteristics of at least one healthcare product/service/education-KTT vehicle relative to a clearly defined demographic/consumer group.
5. Have enhanced skills in group work and in real-world problem-solving in a cooperative-competitive environment.
6. Have improved oral and written communication skills; develop the ability to make a clear distinction between teaching, promoting and selling styles/traditions of communication.
7. Have enhanced professional networks, both personal and e-based.

Evaluation:

Evaluation will be based on a critical assessment (creativity, 'real-world' feasibility, evidence-based science/healthcare, and consumer appeal) of the completed prototype product, service or educational/KTT vehicle and the overall professionalism of the final exposition of the project. The research and development project will be evaluated four times/ways: professor (50% of final mark), expert outside evaluators (10% of final mark), guest student evaluators (10% of final mark) and self-evaluation, based on the achievement of group and individual learning outcomes (30% of the final mark).

