#### **Honors Innovation Thesis**

With a University and School of Nursing commitment to innovation, this proposal is presented to offer undergraduate honors students a pathway to pursue a nursing innovation idea for their Honors Thesis requirements. The proposal offers details on how to effectively guide the student through a rigorous, evidence-based process based in innovation theory, concepts, methodologies and applications for an unmet need affecting a large population of people in need of a new solution for improved quality care.

### **Nursing Innovation Honors Project & Thesis:**

To prepare Honors students for a rigorous Innovation Project and Thesis, the composition includes five sequential parts (Part I – Part V) to complete the project and Thesis. Each component of the project is described below as to what the expectation of the student would be to opt into this track. To be eligible, students would need to first submit a one-page executive summary of the nursing problem and desired solution to explore and develop for evaluation by the Honors Thesis Advisor and/or innovation faculty. Honors nursing students must opt in by the start of the Spring semester of their sophomore year. This pathway will be open to nursing honors students to start in order to monitor progress and evaluate impact and interest over time.

# Part 0: Nursing Innovation Honors Innovation Proposal Submission from Student

To be considered for this opportunity, nursing students would need to prepare a one-page executive summary of the nursing problem the student sees in need of a solution that the student is eager to work to solve for as part of the project. Per university guidelines, undergraduate students have rights to the intellectual property that they invent, create and/or develop, including work created for a class. This pathway would allow for the student led innovation to be pursued post-graduation if so desired. At this time, students would be required to disclose their innovation through the School of Nursing's Innovation Disclosure Form for our records within the School of Nursing.

Excerpt from the University Intellectual Property Policy: <a href="https://policy.uconn.edu/2015/10/08/intellectual-property-and-commercialization-policy/">https://policy.uconn.edu/2015/10/08/intellectual-property-and-commercialization-policy/</a>

<u>C. Student Intellectual Property.</u> Students will own the intellectual property that they invent, create and develop, including work created for a class, unless the student is (1) working on a University research grant or other sponsored research, (2) working for the

University as an employee, or (3) working under a contract that stipulates otherwise. In these cases, the University will own the intellectual property.

## Part I: Nursing Innovation Problem Identification

**A:** Once the proposal is accepted, the student will be expected to enroll in NURS 5111: Healthcare Innovation Theory and Application (3 credits). During this course, students complete a concept analysis of healthcare innovation and analyze prominent innovation theories for core components of an innovation. Students will prepare a 10-minute presentation at the end of the course introducing their healthcare innovation idea (based on the premise of the Honors submitted proposal). The course work will meet a 3-credit requirement and support the knowledge development for the Nursing Innovation Honors Thesis.

- **B.** For the Honors Thesis (not the course work of NURS 5111), students will complete a synthesized literature review of the identified nursing problem in association with an identified target population of users (e.g., patients, families, communities, nurses, healthcare professionals, etc.). The literature review will provide the evidence of an unmet need for that population of users and begin to propose the need for a new solution (e.g., innovation) in the context of an identified quality metric (e.g., safety, efficiency, effectiveness, equitable, timely and/or patient-centered).
- **C.** Scheduled mentoring sessions with Honors Thesis Advisor to support the literature review development.
- **D.** Introduction to the University of Connecticut Library Services and how to use Databases to find empirical data.

#### Part II: Nursing Innovation Solution Description & Prototype Development

- **A.** For the Honors Thesis, students will describe a selected innovation theory from NURS 5111 to explain the nursing innovation solution. and use the Design Thinking Methodology to develop the proposed nursing innovation as introduced and taught in NURS 5112: Healthcare Opportunities for System Level Solutions (3 credits). By the end of NURS 5112, students will have developed the first version of a prototype with initial feedback from target users. In this section of the thesis, students will be expected to describe each aspect of Design Thinking Methodology and how they applied that methodology to the development of their prototype.
- B. Scheduled mentoring sessions with Honors Thesis Advisor to support Nursing Innovation Development

- **C.** Introduction to University of Connecticut Innovation Resources (e.g., Maker Space Lab, Werth Institute, Intellectual Property Clinic, etc.)
- **D.** Apply for a UCONN IDEA Grant and/or SURF grant to develop the innovation beyond the initial prototype and experience practice in grant applications.

#### Part III: Nursing Innovation Prototype Market Test

- A. Continuing onward from Part II and the initial prototype development, students will need to
  - 1. conduct market research with their target market users on the prototype for feedback and revisions
  - 2. identify needs for development and/or distribution
  - 3. explore if there is intellectual property to be filed (e.g., patent, trademarks, copyrights)
- B. Scheduled mentoring sessions with the Honors Thesis Advisor to support Nursing Innovation Development
- C. Introduction to Appropriate UConn and/or Industry Leaders as needed depending on the nursing innovation and current need.
- **D.** Optional: Apply for Innovation Quest during next cycle, Accelerate UConn or other Innovation competitions depending on interest level and appropriateness of the innovation.
- **E.** NURS 5113: Developing and Leading a Sustainable Culture of Healthcare Innovation (optional) (3 credits). While encouraged, students are not required to take this course if credits become a challenge with the program of studies.

# Part IV: Nursing Innovation Development Plan

- **A.** Enroll in NURS 5114: Healthcare Innovation Development and/or equivalent course (3 credits). The purpose of this course is to serve as a capstone in developing one's healthcare innovation. Students will formulate an innovation development plan for their next steps in bringing the nursing innovation forward to the marketplace. Students will be encouraged to apply for funding and/or subsequent programs but will not be required to do.
- **B.** Describe the optimal pathway the student sees as an opportunity to bring the nursing innovation to the marketplace to impact those who are in need of it. This may be an intrapreneurial or entrepreneurial pathway and will depend on the nursing innovation and vision of the student in collaboration with the faculty mentor and/or other involved mentors.
- C. Scheduled mentoring sessions with the Honors Thesis Advisor to support Nursing Innovation Development

- **D.** Introduction to Appropriate UConn and/or Industry Leaders as needed depending on the nursing innovation and current need.
- **E.** Optional: Apply for Innovation Quest during next cycle, Accelerate UConn or other Innovation competitions depending on interest level and appropriateness of the innovation.

#### Part V: References and Appendices

For any nursing innovation, students will need to have evidence of the unmet need which may come from the literature and/or current trends in the environments where affected (e.g., market research). Additionally, students will need to identify an appropriate innovation theory to explain their framework and approach as well as the design thinking methodology. Beyond the theory, concepts, and methodology additional references and appendices will be likely and reviewed for need by the faculty advisor.

OF NOTE: Students who complete all 4 courses would graduate from the BS program with a Healthcare Innovation Graduate Certificate.