|  |  |
| --- | --- |
| For Academic Affairs and Research Use Only | |
| Proposal Number |  |
| CIP Code: |  |
| Degree Code: |  |

**NEW OR MODIFIED COURSE PROPOSAL FORM**

**[ ] Undergraduate Curriculum Council**

**[X] Graduate Council**

|  |
| --- |
| **[X]New Course, [ ]Experimental Course (1-time offering), or [ ]Modified Course (Check one box)** |

Signed paper copies of proposals submitted for consideration are no longer required. Please type approver name and enter date of approval.

|  |  |
| --- | --- |
| JoAnna Cupp 1/8/2021 **Department Curriculum Committee Chair** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **COPE Chair (if applicable)** |
| JoAnna Cupp 1/8/2021 **Department Chair** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **Head of Unit (if applicable)** |
| Shanon Brantley 02/02/2021  **College Curriculum Committee Chair** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **Undergraduate Curriculum Council Chair** |
| Mary Elizabeth Spence 1/14/2021 **Office of Assessment (new courses only)** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **Graduate Curriculum Committee Chair** |
| \_Susan Hanrahan 2/1/21\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date… **College Dean** | \_\_\_\_Alan Utter\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2/26/21  **Vice Chancellor for Academic Affairs** |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **General Education Committee Chair (if applicable)** |  |

1. **Contact Person (Name, Email Address, Phone Number)**

JoAnna Cupp, jcupp@astate.edu, 870-680-8295

1. **Proposed starting term and Bulletin year for new course or modification to take effect**

Fall 2023; bulletin year fall 2022

**Instructions:**

*Please complete all sections unless otherwise noted. For course modifications, sections with a “Modification requested?” prompt need not be completed if the answer is “No.”*

|  |  |  |
| --- | --- | --- |
|  | **Current (Course Modifications Only)** | **Proposed (New or Modified)**  *(Indicate “N/A” if no modification)* |
| **Prefix** |  | **NS** |
| **Number\*** |  | **6223** |
| **Title** |  | **Advanced Nutrition** |
| **Description\*\*** |  | **Provides an in-depth look at the human body and the importance of nutrients from biochemical and physiological perspectives. Macro- and micro-nutrients and nutrition for health and fitness are additional topics during the semester.** |

***\**** (Confirm with the Registrar’s Office that number chosen has not been used before and is available for use. For variable credit courses, indicate variable range. *Proposed number for experimental course is 9*. )

\*\*Forty words or fewer as it should appear in the Bulletin.

1. **Proposed prerequisites and major restrictions** **[Modification requested? Yes/No]**

(Indicate all prerequisites. If this course is restricted to a specific major, which major. If a student does not have the prerequisites or does not have the appropriate major, the student will not be allowed to register).

1. **Yes** Are there any prerequisites?
   1. If yes, which ones?

Admission to the Graduate School

NS 2203 Basic Human Nutrition

* 1. Why or why not?

The tMSND program can be done on a part-time or full-time basis and is a non-accredited degree. Students outside the Nutrition and Dietetics major may enroll in the course.

1. **No** Is this course restricted to a specific major?
   1. If yes, which major?
2. **Proposed course frequency [Modification requested? Yes/No]**

(e.g. Fall, Spring, Summer; if irregularly offered, please indicate, “irregular.”) *Not applicable to Graduate courses.L*

N/A

1. **Proposed course type [Modification requested? Yes/No]**

Will this course be lecture only, lab only, lecture and lab, activity (e.g., physical education), dissertation/thesis, capstone, independent study, internship/practicum, seminar, special topics, or studio? Please choose one.

Lecture only

1. **Proposed grade type [Modification requested? Yes/No]**

What is the grade type (i.e. standard letter, credit/no credit, pass/fail, no grade, developmental, or other [please elaborate])

Standard letter

1. **No** Is this course dual-listed (undergraduate/graduate)?
2. **No** Is this course cross-listed?

*(If it is, all course entries must be identical including course descriptions. Submit appropriate documentation for requested changes. It is important to check the course description of an existing course when adding a new cross-listed course.)*

**a.** – If yes, please list the prefix and course number of the cross-listed course.

Enter text...

**b.** – **Yes / No** Can the cross-listed course be used to satisfy the prerequisite or degree requirements this course satisfies?

Enter text...

1. **Yes** Is this course in support of a new program?

a. If yes, what program?

transitional Master of Science in Nutrition and Dietetics program

1. **No** Will this course be a one-to-one equivalent to a deleted course or previous version of this course (please check with the Registrar if unsure)?

a. If yes, which course?

Enter text...

**Course Details**

1. **Proposed outline** **[Modification requested? Yes/No]**

(The course outline should be topical by weeks and should be sufficient in detail to allow for judgment of the content of the course.)

I. Nutrition for the body

Week 1 Foundational concepts

Elements and molecules

Cellular structure and organelles

The nucleus and genetics

Protein synthesis

Nutrition and epigenetics

Electron transport chain and oxidative phosphorylation

Cellular protein functions

Tissue

Organ systems

Week 2 Digestion and absorption

Gastrointestinal (GI) tract overview

Gastroesophageal reflux disease (GERD)

Mediators of appetite

Process of digestion and absorption

Lymphatic system

II. Macronutrients

Week 3 Carbohydrates

Types and characteristics

Intake, food sources and recommendations

Digestion and absorption

Carbohydrate circulation and cellular uptake

Major hormones in carbohydrate metabolism

Major metabolic pathways for carbohydrate

Week 4 Dietary fiber for health and digestion

Dietary fiber/functional fibers and soluble/insoluble fiber

Dietary fiber types and characteristics (cellulose, pectins, etc.)

Health benefits of fiber and structural carbohydrates

Daily intake and recommendations

Week 5 Lipids

Properties and nomenclature of lipids

Molecular control mechanisms of fat metabolism

Dietary lipid food sources, requirements and digestion

Lipid metabolism

Health implications of plasma cholesterol levels

Alcohol (not a lipid, but normally discussed here)

Week 6 Proteins and amino acids

Amino acids and protein structures

Dietary protein and protein digestion

Dietary protein quality

Roles of amino acids and proteins in metabolism

Metabolism of amino acids

Protein and amino acid requirements

Amino acid inborn errors of metabolism

Phenylketonuria

Maple syrup urine disease

Protein excess and deficiency

Week 7 Water

Properties and distribution of water in the body

Water balance

Hydration status

Edema

Dehydration

III. Micronutrients

Week 8 Fat-soluble vitamins

Vitamins A, D, E, and K

Week 9 Water-soluble vitamins (select)

Vitamin C

Thiamin, Riboflavin and Niacin

Week 10 Vitamins B6 and B12

Folic Acid

Biotin

Week 11 Major minerals

Calcium

Phosphorus

Magnesium

Sodium and Chloride

Potassium

Week 12 Minor minerals (select)

Iron

Zinc

Copper

Selenium

IV. Nutrition for health and fitness

Week 13 Energy balance and body weight

Total energy expenditure and components

Energy metabolism

Body weight and composition

Assessment of body composition

Regulation of energy intake, storage and expenditure

Focus: obesity

Epidemiology

Obesity and related diseases

Week 14 Nutrition, exercise and athletic performance

Muscle and exercise basics

Energy, supportive nutrients and exercise

General protein recommendations

Water and exercise

Dehydration and performance

Water recommendations for performance

Week 15 Nutraceuticals and functional foods

Important definitions

Organizational systems

Food sources

Mechanism of action

Health claims

1. **Proposed special features** **[Modification requested? Yes/No]**

None

1. **Department staffing and classroom/lab resources**

Department staffing is adequate to cover this course. NS 6223 is an online class; no classroom or lab space is required.

1. Will this require additional faculty, supplies, etc.?

See note on faculty above.

1. **No** Does this course require course fees?

*If yes: please attach the New Program Tuition and Fees form, which is available from the UCC website.*

**Justification**

**Modification Justification (Course Modifications Only)**

1. Justification for Modification(s)

Enter text...

**New Course Justification (New Courses Only)**

1. Justification for course. Must include:

a. Academic rationale and goals for the course (skills or level of knowledge students can be expected to attain)

Since most of these students have been in the health care workforce prior to enrolling for the master’s degree, they bring a different perspective to the topic of nutrition. They have real life experiences which foster engagement and interest in learning on a more mature level than most students have in their undergraduate coursework. Including an advanced class on a graduate level is a sequential and logical progression to build on previous knowledge from a basic nutrition background. It also adds depth and breadth to a program. Course goals – upon completion of this course, students are able to: review and comprehend foundational and complex concepts of body processes and functions related to nutrition; analyze the roles of macro- and micro-nutrients in maintaining optimal nutritional status; broaden awareness and appreciation of nutrition for health and fitness in the areas of energy balance, exercise/athletic performance and use of nutraceuticals and functional foods.

b. How does the course fit with the mission of the department? If course is mandated by an accrediting or certifying agency, include the directive.

The course fits with the department mission to provide quality education and experiences for students in the field of nutrition and dietetics. Students have a background of basic nutrition from their undergraduate curriculum. This nutrition course supports and advances their knowledge and training on the topic, adding to the quality of their education and experiences in graduate school and increasing their opportunities for successful employment with an advanced degree.

c. Student population served.

NS 6223 serves students who may already be RDNs or working in health care and are now pursuing a graduate degree.

d. Rationale for the level of the course (lower, upper, or graduate).

The graduate level of the course is appropriate as students must have a baccalaureate degree in order to enroll in the transitional Nutrition and Dietetics program as they seek an advanced educational experience.

**Assessment**

**Assessment Plan Modifications (Course Modifications Only)**

1. Do the proposed modifications result in a change to the assessment plan?

*If yes, please complete the Assessment section of the proposal*

**Relationship with Current Program-Level Assessment Process (Course modifications skip this section unless the answer to #18 is “Yes”)**

1. What is/are the intended program-level learning outcome/s for students enrolled in this course? Where will this course fit into an already existing program assessment process?

Program-Level Learning Outcomes

Domain 1 – Scientific and Evidence Base of Practice: Integrate scientific information and translation of research into practice, specifically KRDN\* 1.1, CRDN\* 1.6

Domain 2 - Professional Practice Expectations: Exhibit beliefs, values, attitudes and behaviors for the professional dietitian nutritionist level of practice, specifically KRDN\* 2.1

Domain 3 – Clinical and Customer Services: Develop and deliver information, products and services to individuals, groups and populations, specifically CRDN\* 3.4

Domain 4 – Practice Management and Use of Resources: Strategically apply principles of management and systems in the provision of services to individuals and organizations, specifically CRDN\* 4.4

(\*KRDN Knowledge for the Registered Dietitian Nutritionist; \*CRDN Competency for the Registered Dietitian Nutritionist)

There is a new curriculum map applicable to the transitional Master of Science in Nutrition and Dietetics degree (tMSND) as it is a non-accredited degree and is not tied to the undergraduate Dietetics Program leading to the MSND. The assessment plan is modeled after the existing program assessment process for the Bachelor of Science in Dietetics and the Master of Science in Nutrition and Dietetics degrees.

1. Considering the indicated program-level learning outcome/s (from question #19), please fill out the following table to show how and where this course fits into the program’s continuous improvement assessment process.

*For further assistance, please see the ‘Expanded Instructions’ document available on the UCC - Forms website for guidance, or contact the Office of Assessment at 870-972-2989.*

|  |  |
| --- | --- |
| **Program-Level Outcome 1 (from question #19)** | Domain 1 – Scientific and Evidence Base of Practice: Integrate scientific information and translation of research into practice |
| Assessment Measure | Outcome CRDN 1.5 Conduct projects using appropriate research methods, ethical procedures and data analysis Direct measure: NS 6303 Research manuscript - 80% of students will receive a grade of B or better, based on the rubric for this course project Indirect measure: NS 6313 Student survey - 100% of students will complete the self-assessment survey pertaining to the research poster and participation in Create@State event |
| Assessment  Timetable | Fall semester, every 3 years, 2023-2024, 2026-2027, 2029-2030 |
| Who is responsible for assessing and reporting on the results? | tMSND faculty |

*(Repeat if this new course will support additional program-level outcomes)*

|  |  |
| --- | --- |
| **Program-Level Outcome 2 (from question #19)** | Domain 2 - Professional Practice Expectations: Exhibit beliefs, values, attitudes and behaviors for the professional dietitian nutritionist level of practice |
| Assessment Measure | Outcome CRDN 2.2 Demonstrate professional writing skills in preparing professional communications Direct measure: NS 6013 LinkedIn profile – 80% of students will receive a letter grade of B or better, based on the rubric for this assignment Indirect measure: Exit survey – 100% of students will complete and submit exit survey regarding degree experience, including feedback on development of professionalism during program enrollment |
| Assessment  Timetable | Spring, every 3 years, 2023-2024, 2026-2027,2029-2030 |
| Who is responsible for assessing and reporting on the results? | tMSND faculty |

|  |  |
| --- | --- |
| **Program-Level Outcome 3 (from question #19)** | Domain 3 – Clinical and Customer Services: Develop and deliver information, products and services to individuals, groups and populations |
| Assessment Measure | Outcome KRDN 3.1 Use the Nutrition Care Process to make decisions, identify nutrition-related problems and determine and evaluate nutrition interventions Direct measure: Exit exam – 80% of students will score at least 80% on cumulative exit exam at end of program, indicating among other competencies, an ability to apply knowledge of the Nutrition Care Process Indirect measure: Time to degree/program length – 100% of students will complete degree requirements within 150% of planned program length (1.5 years) as a measure of time to achieve required competencies in the program |
| Assessment  Timetable | Spring, every 3 years, 2024-2025, 2027-2028, 2030-2031 |
| Who is responsible for assessing and reporting on the results? | tMSND faculty |

|  |  |
| --- | --- |
| **Program-Level Outcome 4 (from question #19)** | Domain 4 – Practice Management and Use of Resources: Strategically apply principles of management and systems in the provision of services to individuals and organizations |
| Assessment Measure | Outcome CRDN 4.2 Perform management functions related to safety, security and sanitation that affect employees, customers, patients, facilities and food Direct measure: During the last month of degree enrollment, 100% of students will make a presentation to tMSND faculty on an assigned topic related to management and leadership, scoring at least 80% or higher, based on the assignment guidelines and rubric for the required project. Indirect measure: Alumni survey – 80% of students will respond to alumni survey one-year post graduation to provide qualitative data on Domain 4 competencies met during program experience |
| Assessment  Timetable | Spring, every 3 years, 2024-2025, 2027-2028, 2030-2031 |
| Who is responsible for assessing and reporting on the results? | tMSND faculty |

**Course-Level Outcomes**

1. What are the course-level outcomes for students enrolled in this course and the associated assessment measures?

|  |  |
| --- | --- |
| **Outcome 1** | KRDN 1.1 Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence-based practice decisions  CRDN 1.6 Incorporate critical-thinking skills in overall practice  CRDN 4.4 Apply current nutrition informatics to develop, store, retrieve and disseminate information and data |
| Which learning activities are responsible for this outcome? | Choose a dietary supplement from selected topics to research and survey products available for consumer purchase and use. Resources should include the Office of Dietary Supplement (ODS) and other sources as appropriate. Prepare and submit written report. |
| Assessment Measure | 80% of students will receive a letter grade of B or higher, on the dietary supplement project, based on the assignment guidelines and rubric, to meet this outcome. |

*(Repeat if needed for additional outcomes)*

|  |  |
| --- | --- |
| **Outcome 2** | KRDN 2.1 Demonstrate effective and professional oral and written communication and documentation  CRDN 3.4 Design, implement and evaluate presentations to a target audience |
| Which learning activities are responsible for this outcome? | Design and present video program with slides and handout on a plant-based diet or gut health/microbiome. Develop tool to use for self-assessment on the program, including presentation skills, content, slides and handout. |
| Assessment Measure | 80% of students will receive a letter grade of B or higher, on the video program, based on the assignment guidelines and rubric, to meet this outcome. |

**Bulletin Changes**

|  |
| --- |
| **Instructions** |
| **Please visit** [**http://www.astate.edu/a/registrar/students/bulletins/index.dot**](http://www.astate.edu/a/registrar/students/bulletins/index.dot) **and select the most recent version of the bulletin. Copy and paste all bulletin pages this proposal affects below. Please include a before (with changed areas highlighted) and after of all affected sections.**  **\*Please note: Courses are often listed in multiple sections of the bulletin. To ensure that all affected sections have been located, please search the bulletin (ctrl+F) for the appropriate courses before submission of this form.** |

Insert after Nursing and before Occupational Therapy on page 382-383

***NS 6223. Advanced Nutrition Provides an in-depth look at the human body and the importance of nutrients from biochemical and physiological perspectives. Macro- and micro-nutrients and nutrition for health and fitness are additional topics during the semester.*** ***Prerequisite, NS 2203 Basic Human Nutrition.***