

Please provide the following information (use additional pages as needed). Do not use acronyms without defining them.

1. Describe the proposed new degree program, including the following:
 - a. A brief description of the program. If this is currently being offered as a track, provide justification for a standalone program.

This proposal creates an online, non-thesis (coursework only) **Master's of Professional Practice in Dietetics** (MPPD). The primary audience for the program will be students completing the Dietetic Internship (DI) Graduate Certificate. Graduate credits awarded in the Graduate Certificate will be applied towards the master's degree. The Commission on Dietetics Registration the credentialing agency for the Academy of Nutrition and Dietetics announced a master's degree will be required to take the national registration exam to become a Registered Dietitian (RD) beginning in 2024. Initiating this program prior to the 2024 mandate, will positively position the ISU dietetics programs for an efficient and effective transition to the new Commission on Dietetics Registration requirements. The Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics will determine appropriate graduate level competencies and educational requirements that will be used by accredited educational programs when educating students to become RD and we will adapt our program according to these standards.

See Appendix A for proposed curriculum.

- b. A statement of academic objectives:
 - Demonstrate an in-depth and accurate knowledge and understanding of the field of nutrition/dietetics
 - Apply evidence-based guidelines, systematic reviews, and scientific literature in the nutrition care process and model other areas of dietetics practice
 - Evaluate emerging research for application in dietetics practice
 - Apply theoretical information to solve practical problems
 - Justify programs, products, services and care using appropriate evidence or data
 - Conduct projects using appropriate research methods, ethical procedures and data analysis
 - Prepare and communicate discipline-specific information in written and oral forms to scientific and lay audiences
 - Apply leadership skills to achieve desired outcomes
 - Use current informatics technology to develop, store, retrieve and disseminate information and data
- c. What the need for the program is and how the need for the program was determined;

Currently, Registered Dietitians (RD) or Registered Dietitian Nutritionists (RDN) are individuals who have:

- completed the minimum of a Baccalaureate degree granted by a U.S. regionally accredited college or university, or foreign equivalent;
- met current minimum academic requirements (Didactic Program in Dietetics) as approved by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics;
- completed a supervised practice program accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics;
- successfully completed the national Registration Examination for Dietitians administered by the Commission on Dietetics Registration (CDR) the credentialing agency of the Academy of Nutrition and Dietetics

Educational program accreditation is granted by ACEND. The ISU DI program currently awards a DI Graduate Certificate and is delivered as a distance education program in the online format which is fully accredited.

The Commission on Dietetics Registration has announced a master's degree will be required to take the national registration exam to become an RD beginning in 2024. Thus, students enrolled in the ISU DI program (n=180 annually) will need to complete a master's degree prior to becoming eligible for the national registration exam.

A survey of the current dietetic intern class (n=111; 74 responses, 67% response rate) suggests 90% of interns would be interested in pursuing a master's degree where credits earned in the internship were applied to the master's degree. Approximately two-thirds (64%) were planning to pursue a master's degree within 3 years.

- The relationship of the proposed new program to the institutional mission and how the program fits into the institution's and college's strategic plan;

ISU Mission: Create, share, and apply knowledge to make Iowa and the world a better place.

ISU prepares dietetic leaders for the nation and the world. In fact, it is home to the only didactic program in dietetics (DPD) in the state. The ISU DI program is the largest program in the nation (180 interns annually), and is the only DI program offering an international experience. The ISU DPD and DI programs are administered in the Department of Food Science and Human Nutrition (FSHN). The Department of FSHN is fully engaged in outcomes driven education, which focuses on student-centered education. Graduates of the program will play an integral role in producing and delivering safe and nutritious food, and protecting human health.

ISU and College of Human Sciences Strategic Plan:

- The proposed master's degree, in combination with the DI, will continue to attract outstanding students seeking education and training preparing them to impact human lives. The ISU DI currently receives approximately 300 applications to fill the 180 internship spots annually. Nationwide, the match rate for DI programs is 50%. Thus, there continues to be a demand for the DI, and ultimately the master's degree when it becomes a mandate in 2024. Graduates of the program will be equipped to solve complex, multi-dimensional problems relative to food systems and human health.
- The Department of FSHN is well-known for both dietetics and food science programs. The proposed program will attract outstanding new faculty to provide

instructional support to both online and on-campus programs.

- The Department of FSHN is uniquely positioned to address one of the most significant challenges of the 21st century – food safety, food security, and protection of human health. The proposed program will play a crucial role in the dissemination of transformational applied research and creativity to ensure a safe and secure food system and advance the understanding of nutrition in human health and disease.
- The proposed program will continue the current goal of the DI Graduate Certificate to prepare and make interns eligible for the national registration examination and become a RD. As the only Didactic Program in Dietetics program in the state, the largest DI in the nation, and the only DI offering an international component, the ISU Dietetic programs are a treasured resource for Iowa, the nation, and the world.

- The relationship of the proposed new program to other existing programs at the institution; describe how the proposed program will enhance other programs at the university. Will the proposed program duplicate existing programs at the university?

The proposed program will provide students/interns completing Didactic Program in Dietetics and DI Graduate Certificate, the opportunity to complete a master's degree. The online delivery of the program will accommodate those students/interns who elect to pursue employment and/or reside off-campus the opportunity to complete the master's degree prior to the 2024 Commission on Dietetics Registration mandate.

After the 2024 Commission on Dietetics Registration mandate, the online delivery of the program will accommodate the interns completing the DI to complete the master's degree in a timely manner. Timeliness is critical because the master's degree is required to be eligible for the national registration examination and become a RD.

The proposed program does not duplicate existing programs at the university. The proposed program is an online, coursework only master's degree.

- The relationship of the proposed new program to existing programs at other colleges and universities in Iowa, including how the proposed program is different or has a different emphasis than the existing programs.

The University of Iowa (UI) has an on-campus DI program that serves a maximum of 12 students annually. Students may elect to stay on-campus and complete a Masters of Public Health (MPH) program after completing the DI. Thus, the proposed program differs from the UI DI program in that:

- 180 vs 12 students are served annually
- A MPP degree is awarded vs a MPH
- Degree is earned in a distance education format, online delivery, vs an on-campus degree

- Special features or conditions that make the institution a desirable, unique, or appropriate place to initiate such a degree program.

ISU has the only DPD program in the state, the largest DI program nationally, the only DI with an international experience, and an online distance education delivery format already in place. The Department of FSHN already has a critical mass of faculty that hold both the PhD and RD credential that can contribute graduate coursework for the degree.

- Are the university's personnel, facilities, and equipment adequate to establish and maintain a high quality program?

The Department and Faculty of FSHN are renowned and recognized in the areas of dietetic

education as well as food science and nutrition research. On the FSHN faculty there are 13 tenure-track faculty with PhDs in nutrition-specific areas and 5 also are RDs. Additionally, there are 7 non-tenure eligible faculty in the Clinician or Senior Clinician rank with MS and RD degrees in the department. Thus, faculty are well-equipped to provide instruction at the master's level for this professional master's program. The College of Human Sciences provides support in distance education delivery through the Office of Distance Education and Educational Technology (ODEET).

- How does student demand for the proposed program justify its development?

According to the Commission on Dietetics Registration a master's degree will be required to sit for the national registration examination to become a RD starting in 2024. Therefore, all 180 interns served annually by the ISU DI will require a master's degree beginning 2024.

2. Describe the state and/or national workforce need and/or demand for graduates of the proposed program currently and in the foreseeable future (provide documentation about the current sources of data used to estimate need and demand).

According to Occupational Outlook Handbook, the job outlook for dietitians/nutritionists is anticipated to grow. Between 2014 and 2024, the number of positions will grow by 11,000 (16%, much faster than average). A search at Monster.com revealed 1000+ positions nationwide (2/1/16).

3. List all other public and private institutions of higher education in Iowa currently operating programs similar to the proposed new degree program. (For comparison purposes, use a broad definitional framework, e.g., such identification should not be limited to programs with the same title, the same degree designation, having the same curriculum emphasis, or purporting to meet exactly the same needs as the proposed program.)

If the same or similar program exists at another public or private institution of higher education in Iowa, respond to the following questions:

- a. Could the other institution reasonably accommodate the need for the new program through expansion? Describe collaboration efforts with other institutions.

The UI and University of Northern Iowa do not possess a department with faculty dedicated to instruction and research relative to food and human nutrition. Therefore, they are unable to provide the necessary coursework for an advanced practitioner degree (master's) in nutrition/dietetics.

- b. With what representatives of these programs has there been consultation in developing the program proposal? Provide a summary of the response of each institution consulted.

UI DI Director– Laurie Kroyman. Ms. Kroyman suggests UI currently offers interns the option to complete a master's degree by staying on campus one academic year beyond the DI to complete an MPH in the College of Public Health. Thus, the programs are quite unique and different. The ISU program will be advanced practice in general dietetics, a program without thesis or creative component with coursework only, and in a distance education format. The IU program will offer options in public health in an on-campus format.

- c. Has the possibility of an inter-institutional program or other cooperative effort been explored? What are the results of this study? (Consider not only the possibility of a formally established inter-institutional program, but also how special resources at other institutions might be used on a cooperative basis in implementing the proposed program

solely at the requesting institution.)

The goals and objectives of the programs at ISU and UI are significantly different in scope. The UI program is an on-campus Masters of Public Health program, whereas the ISU program is an online MPPD. As our online courses are developed UI students interested in graduate nutrition curricula would be encouraged and welcome to enroll in these courses.

d. Do other colleges in Iowa offer programs similar to the proposed program at comparable quality and cost?

no

e. Are letters of support included with the program proposal?

yes

4. Estimate the number of majors and non-majors students that are projected to be enrolled in the program during the first seven years of the program.

a. Undergraduate

Undergraduate	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
Majors							
Non-Majors							

b. Graduate

Graduate	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
Majors	5	15	30	50	75	125	180
Non-Majors							

c. What are the anticipated sources of these students?

These students will be coming from the DI Graduate Certificate program.

5. If there are plans to offer the program away from the campus, briefly describe these plans, including potential sites and possible methods of delivery instruction. Will off-campus delivery require additional HLC accreditation?

The ISU DI has offered its entire program off-campus via distance education delivery since 1996 across the state of Iowa. The program received approval from Accreditation Council for Education in Nutrition and Dietetics to offer the program fully off-campus nationwide in 2000. The ISU DI received Graduate Certificate status from ISU Graduate College in 2011.

6. Has the proposed program been reviewed and approved by the appropriate campus committees and authorities?

The proposed program will be reviewed and approved by all appropriate campus committees and authorities including:

- FSHN Department curriculum committee
- FSHN Department faculty
- College of Human Sciences curriculum committee
- College of Agriculture and Life Sciences curriculum committee
- College of Human Sciences faculty
- College of Agriculture and Life Sciences faculty
- Graduate Council

- Faculty Senate Curriculum Committee
- Faculty Senate Academic Affairs Council
- Faculty Senate
- Office of the Provost

7. List date the program proposal was submitted to the Iowa Coordinating Council for Post High School Education (ICCPHSE) and results of listserv review.
8. Will the proposed program apply for programmatic accreditation? When?

The program will apply for programmatic accreditation through ACEND as a pilot program during its 10 year accreditation visit in 2018. If not accepted into the pilot program, we will apply for a 'major change' after the accreditation visit, likely 2020-2022. Full accreditation will be pursued at the next accreditation visit in 2025

9. Will articulation agreements be developed for the proposed program? With whom?
no
10. Will there be opportunities for student internships?

This program encompasses the DI Graduate Certificate, which already includes an accredited, required internship component that prepares graduates for the national registration examination to become a RD.

11. Describe the faculty, facilities, and equipment that will be required for the proposed program.

Due to the online structure of the program, additional facilities and equipment beyond those required to support faculty for instructional purposes (office space, office furniture, computer, Ethernet) are not required. Distance education support services such as ODEET, the Brenton Center, Instructional Technology Center and Center for Excellence in Learning and Teaching will be utilized by the program faculty.

To provide administrative and instructional support for the anticipated 180 students annually, the following faculty and staff, in addition to current FSHN Department faculty, have been recommended:

Program Director (25% effort) – PhD/RD
 Administrative Assistant
 PhD Clinician instructors (2)
 Instructional technology support specialist

12. From where will the financial resources for the proposed program come (list all that apply, e.g., department reallocation, college reallocation, grants, new to the university)?

SOURCES	TOTAL AMOUNT
College of Human Sciences – Online Course Development Award Supports the development of Advanced Nutrition I, Advanced Nutrition II, Advanced Medical Nutrition Therapy, and Consumer Perceptions and Nutrition Communication	\$18,000

The Director role will be assigned to a current FSHN tenured faculty member	\$5,000 administrative stipend
Administrative assistant	\$0 Current staff will be reassigned
Clinical instructor	CHS has committed one line which will be filled in spring 2017 Second line will be requested as the program and tuition revenue increases
Instructional tech support specialist	Will be supported with fees recovered from current distance programs

13. Estimate the total costs/total new costs (incremental increases in expenditures) that will be necessary for the next seven years as a result of the new program. Be as specific as possible.

	TOTAL COSTS	TOTAL NEW COSTS
Year 1		\$5,000 stipend
Year 2		\$5,000 stipend
Year 3		\$5,000 + \$55,000 (clinician) + FB*
Year 4		\$60,000 + FB
Year 5		\$60,000 + FB
Year 6		\$60,000 + FB
Year 7		\$60,000 + FB

*FB = fringe benefits

14. Describe the marketing plan developed to communicate the new program and recruit students. Because of the CDR mandate, marketing and recruitment of students will not be necessary. Initially, the program will be made available to students receiving the DI Graduate Certificate. We anticipate high interest for this program given the response from current students. Hence the Department of FSHN will need to move quickly to develop the program to meet CDR mandate and the ACEND educational requirements. As the CDR mandate becomes more imminent, additional students are anticipated. When the CDR mandate for a master's degree to become eligible for the national registration examination and become a RD occurs in 2024, the master's degree will become a requirement of all students enrolled in the DI Graduate Certificate.
15. Describe the program evaluation plan to determine if the program is meeting the intended objectives, if the expected student enrollment has occurred, funding for the program, and any other components that affect the effective operation of the program.

The current DI program is currently accredited by ACEND through 2018 and has been accredited since 1988 with successful accreditation review every 10 years. The proposed program will have the opportunity to participate in a pilot-phase implementation of the new ACEND educational requirements. Long term, the program will be accredited by ACEND and as such, will be required to complete a 7 year Program Review Visit required to maintain accreditation status.

The program will participate in a systematic process of planning, implementation, and evaluation of all components of the program and its effectiveness on a regular and continuing basis. Advisement and input is sought from various stakeholders, both inside and outside the DPD and DI. Additionally, members of departmental faculty, outside of DI faculty, participate in program planning, implementation, and evaluation through faculty meetings and committee meetings (e.g. outcomes assessment and curriculum committees). The program will also participate in continual learning outcomes assessment as part of the Department of FSHN's outcomes driven education

outcome assessment programs. Graduates of the program will be surveyed annually and current students complete faculty and course evaluations at the conclusion of each course. Employers of graduates are surveyed also.

16. Include any additional information that justifies the development of this program.
We have noted an increase in the number of programs that are beginning to offer MS degrees for dietetic students in anticipation of the ACEND requirement change. ISU has been a leader in DI training for many decades and it is essential that we move our program forward at this time to maintain our national prominence.

Updated comments based on feedback from Graduate College Curriculum Committee:

- FSHN 555 will be changed from 4 credits to 5 credits with the next catalog revisions. It is already on the list of revisions with the Department Curriculum Committee.
- The FSHN departmental committee is aware that the list of non-core course offerings is limited at this time. As the program develops, we plan to offer more classes.

Appendix A

Dietetic Internship Graduate Certificate (14 credits) FSHN 554 Dietetic Internship I (5 credits) FSHN 555 Dietetic Internship II (4 credits) FSHN 556 Dietetic Internship III (5 credits)	14 credits
Additional Graduate Coursework (16 credits) <u>Required core coursework:</u> FSHN 517 Advanced Nutrition I (2 credits) FSHN 518 Advanced Nutrition II (2 credits) FSHN 583 Advanced Medical Nutrition Therapy (3 credits) DIET 595 Grant Writing for the Professional (3 credits) <u>Select 6 credits:</u> FSHN 508 Consumer Perceptions and Nutrition Communication (2 credits) FSHN 529 Foodborne Toxicants (2 credits) FSHN 566 Nutrition Counseling and Education Methods (3 credits) FSHN 597 Nutritional Aspects of Oncology (3 credits)	16 credits
TOTAL CREDITS	30 credits

New coursework descriptions:

FSHN 508 Consumer Perceptions and Nutrition Communication – 2 credits

Examination of current consumer food and nutrition trends using the socio-ecological model. Critical analysis of each level of influence (individual, social, physical, policy) on food and nutrition choices and behaviors. Use of the model to create effective nutrition messages.

FSHN 517 Advanced Nutrition I – 2 credits

Examination of current literature relative to molecular, cellular, and physiologic aspects of energy, macronutrient, and micronutrient metabolism. Integration of current evidence-base to inform advanced professional nutrition practice.

FSHN 518 Advanced Nutrition II – 2 credits

Principles of research design/methods and interpreting results/statistics in the current scientific literature. Critical evaluation of the evidence-base to inform advanced professional nutrition practice.

FSHN 583 Advanced Medical Nutrition Therapy – 3 credits

Nutritional biochemistry and physiology related to selected pathophysiology of disease with emphasis on treatment of complex medical problems. The nutrition care process will be utilized. Evidenced-based practice will be integrated into each disease state covered.

Academic Program Approval Voting Record

This document is to be appended as the last page of the proposal for any new or revised academic program to record the successive votes of approval as the proposal moves through its required review and approval steps. Consult Faculty Handbook Section 10.8 or the Faculty Senate Curriculum Committee website for information regarding Committee review and voting requirements for each action.

Curricular Action: (check appropriate boxes below)

1. New Program Name Change Discontinuation Concurrent Degree for:
2. Undergraduate Major Graduate Major Undergraduate Minor Graduate Minor
 Undergraduate Certificate Graduate Certificate Other: _____
3. Name of Proposed Change: Master's of Professional Practice
4. Name of Contact Person: Ruth Litchfield e-mail address: litch@iastate.edu
5. Primary College: College of Human Sciences Secondary College: College of Agriculture and Life Sciences
6. Involved Department(s): Food Science and Human Nutrition _____

Voting record for this curricular action:

Voting Body	Votes			Date of Vote
	For	Against	Abstain	
Dept. of FSHN curriculum committee	7			2-11-16
Food Science and Human Nutrition faculty	24	1	1	2-26-16
College Curriculum Committees				
College of Human Sciences	6	0	0	3-23-16
College of Agriculture and Life Sciences	10	0	0	3-21-16
College Approval Vote				
College of Human Sciences	91		17	4-12-16
College of Agriculture and Life Sciences	80	2	0	4-22-16
Graduate Council	8	0		1/25/17
Faculty Senate Curriculum Committee	7	0		2/14/17
Faculty Senate Academic Affairs Council				
Faculty Senate				