Beyond Entry Level: New Advanced Practice Doctoral Standards for the RDN

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Conflict of Interest Statement

I have no conflicts of interest to disclose

University of Nebraska
Medical Center℠

Learning Objectives: **Upon completion of this presentation, the learner will be able to:**

Understand the rationale for the development of accredited Advance Practice Doctorate in Nutrition and Dietetics.

Describe competency-based education and the competencies associated with the advance practice professional doctorate.

Describe how RDNs who complete a practice doctorate will advance nutrition through integrating established and evolving science into practice.

The What: ACEND Advance Practice Doctorate

The Accreditation Council for Education in Nutrition and Dietetics (ACEND) has developed a new degree option for practicing Registered Dietitian Nutritionists (RDNs).

This Advanced Practice Doctorate degree is designed to provide RDNs with additional knowledge and competencies to fill leadership roles through an advanced practice course of study.

The Why:

Background and Rationale for an Advanced Practice Doctoral level degree

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ACEND Executive Summary

The Advanced Practice Doctorate is intended to prepare registered dietitian nutritionists (RDNs) as advanced clinicians, educators, clinical or community researchers, administrators and other advanced professional roles and emerging leaders in specialized roles.

The advanced practice degree is distinct from the entry-level master's degree in nutrition and dietetics as well as the research PhD.

Students entering a post-credential advanced practice doctoral program are expected to hold the RDN credential and to have earned a bachelor's degree with a minimum of four years full-time post-credentialing work experience or a master's degree with a minimum of two years full-time post-credentialing work experience

Based on ACEND's 2015-2018:

- Environmental scan
- Practitioner interviews
- Employer interviews
- Focus groups
- Survey data

One of the recommendations was to explore doctoral level standards

Accreditation Council for Education in Nutrition and Dietetics
the accrediting agency for the Academy of Nutrition and Dietetics

Rationale for Future Education Preparation of Nutrition and Dietetics Practitioners

February, 2015
Updated: July, 2015
Updated: August, 2015
Updated: January, 2017

Updated: March, 2017
Updated: November, 2017
Updated: August, 2018

Focus: Executive Summary

- Introduction, Purpose and Updates to Rationale Document
- Environmental Scan and Stakeholder Input
- Recommendations for Future Education and Stakeholder Input
- Additional Information on Nutrition Health Associate
- Assessment of *2012 ACEND Accreditation Standards*
- Development of Competencies and Performance Indicators
- Public Comments on Draft and Revisions to *Future Education Model Standards*
- Development of Practice Illustrations, Infographic and Position Descriptions
- Demonstration Program Project
- Research Logic Model

Shortage of RDNs with Terminal Degree

Academy of Nutrition and Dietetics data show that only 3.0% of RDNs hold a Doctoral degree
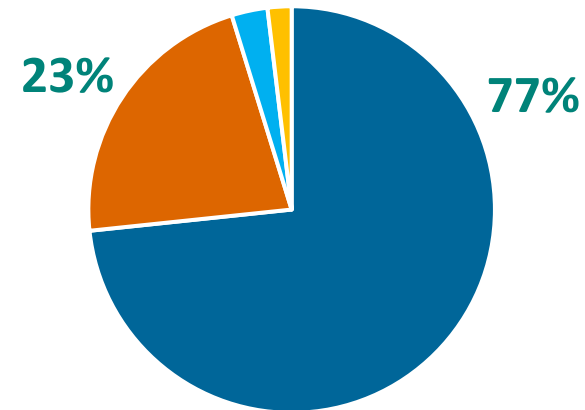
RDNs with Terminal Degrees

3%
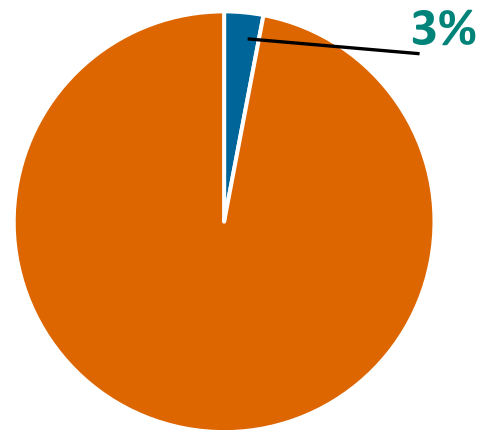
- Terminal Degree (All)
- RDNs & NDTRs without Terminal Degree

Type of Terminal Degree

23%   77%

- PhD (any)
- Professional Nutrition Doctorate

Source: Academy of Nutrition and Dietetics. Member and Non-Member RDN and NDTR Data. June 2022.

Shortage of Terminally Prepared Practitioners for:

Practice-based research

Competence to conduct outcome studies, including quality assurance

Expansion of the foundation of dietetics to further elevate practice

Current Nutrition-Related Professional Doctorate Programs in the US:

Lack of standardization

Lack of definition of the professional graduate

Confusion with current <u>entry-level doctoral</u> programs intended to prepare graduate to sit for the RDN exam
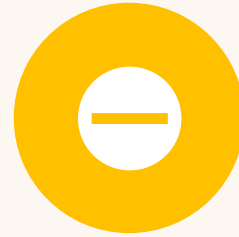
Doctorate Level Standards

OPTIONAL STANDARDS AND DEGREE

FOR THE RDN WITH MINIMUM 2 YEARS OF PROFESSIONAL EXPERIENCE

NOT ENTRY-LEVEL

PROFESSIONAL DOCTORATE AND **NOT PHD**

ACCESSED ON ACEND WEBSITE AT WWW.EATRIGHTPRO.ORG/ACEND

The Advanced Practice Doctorate has the potential to:

Increase recognition of RDNs' expertise

Attract and retain expert practitioners in clinical, leadership, and academic settings

Enhance graduates' career trajectory

Contribute to the advancement of the discipline through scholarly activity

The How:

Current Doctorate in Clinical Nutrition (DCN) Programs and Other Professional Doctorate Programs in Nutrition

7 professional doctorate programs in the US

4 programs are entry-level

- Program 1: for RDN with 3 years of experience, MS preferred
- Program 2: for RDN with 5 years of Experience, MS required
- Program 3: for RDN, employed, with MS, and license if required
- Program 4: for RDN
- Program 5: for RDN
- Program 6: Must have an RDN if BS or Master's in any field
- Program 7: Masters or equivalent in Human Nutrition

Program Information

Requires 48 Credit Hours

Full Time or Part Time Students Accepted

100% Online and Fully Asynchronous

Program will accept RDNs with 4 years of work experience or 2 years work experience + Masters degree

Program will consist of didactic courses, a scholarly project and residency

Open for applicants beginning Fall 2024

Program competency domains

Core Competencies:
The DND curriculum is based on five ACEND-defined competency domains.

Each domain contains specific competency statements and performance indicators

Advanced Nutrition and Related Science: RDNs who complete a practice doctorate discover and integrate established and evolving science into practice.

Leadership: RDNs who complete a practice doctorate demonstrate emotional intelligence, creativity, and innovation to lead groups and programs.

Advocacy: RDNs who complete a practice doctorate advocate for change and address issues related to the wider social, cultural, and political environment.

Critical Inquiry, Research and Scholarship: RDNs who complete a practice doctorate lead and engage in research and scholarly initiatives and activities.

Education: RDNs who complete a practice doctorate lead education initiatives or programs.

Example of Competency-Based Education

Unit 1: Advanced Nutrition and Related Science

RDNs who complete a practice doctorate discover and integrate established and evolving science into practice.

1.1 Analyze and synthesize evidence-based information and evolving science to inform and transform advanced nutrition and dietetics practice.

    a) Synthesize a body of evidence, information, and concepts related to emerging nutrition-sciences such as nutrigenomics, epigenetics, or microbiome to optimize the health and quality of life of individuals and populations.

    b) Acquire scientific knowledge by analyzing and evaluating a range of phenomena, scientific, pseudoscientific research.

    c) Integrate advanced knowledge in physiology, pathophysiology, and pharmacology to inform advanced nutrition practice in complex situations.

    d) Analyze multiple, synergistic levels of influence and interrelationships of dietary habits, evolving biomedical, clinical, epidemiological, or social-behavioral sciences, including scientific inquiry, in the care of clients or patients.

1.2 Conduct an advanced assessment of individuals, groups or populations to inform discovery, decision-making, and new applications.

    a) Collect data from multiple sources and determine the accuracy and validity of the data.

    b) Critically analyze the assessment findings to rule out potential alternative approaches and to identify potential gaps in the data.

    c) Formulate a recommendation, an opinion, or a diagnosis integrating critical inquiry and complex information.

    d) Articulate an evidence-based rationale for decisions, recommendations, or diagnoses.

1.3 Recommend, develop, or implement evidence-based practices, processes, resources, or instruments based on established and evolving science.

    a) Create or evaluate evidence-based assessment tools, algorithms, guidelines, or pathways to inform a targeted intervention or practice change.

    b) Integrate knowledge of biomarkers, biochemistry, body composition, and physiology to guide

UNMC DND Curriculum: Courses

Domain 1: Advanced Nutrition and Related Science	Integrative Nutrition and Emerging Concepts in Advance Nutrition Practice
	Applied Advanced Nutrition Science
Domain 2: Leadership	Management in Healthcare
	Design of Quality Improvement Initiatives
	Leadership in Health Care Professions Education

UNMC DND Curriculum: Courses

Domain 3: Advocacy	Advocacy in Global Health and the Advanced Practice of Nutrition
	Communication and Culture in Healthcare
Domain 4: Critical Inquiry, Research, and Scholarship	Research Methods for Advanced Nutrition Practice
	Biostatistics
	Capstone

UNMC DND Curriculum: Courses

Domain 5: Education	Foundations of Health Professions Education
	Instructional Design for Health Professions Education
	Evaluation and Assessment of Teaching and Learning in Health Profession Education
Domain: Determined by student	Residency I
	Residency II

What does this mean for me?

Am I going to make more money?

Exhibit 3.06
RDN Compensation by Highest Nutrition/Dietetics Degree

	# answering	HOURLY WAGE					# answering	TOTAL CASH COMPENSATION (those employed full time, 1+ years)				
		10th	25th	50th	75th	90th		10th	25th	50th	75th	90th
All RDNs	4754	$24.48	$28.00	$33.65	$40.87	$51.44	3420	$52,000	$60,300	$72,000	$87,700	$114,300
Highest Nutrition/Dietetics Degree												
doctoral degree	139	$31.72	$41.67	$49.52	$66.49	$78.94	94	$73,100	$91,700	$111,500	$145,000	$186,000
master's degree	2183	$24.35	$28.00	$33.56	$41.13	$50.49	1556	$52,000	$60,100	$71,400	$88,900	$112,500
bachelor's degree	2423	$24.23	$28.00	$33.65	$40.00	$50.00	1765	$52,000	$60,000	$70,700	$85,000	$107,600

Note: Results not shown if fewer than 15 valid values; 10th and 90th percentiles not shown if fewer than 30 valid values.

What does this mean for me?

What's the difference between the DND and a PhD?

EXISTING NUTRITION PHD PROGRAMS SUCH AS THOSE OFFERED UNL FOCUS ON ADVANCING THE FIELD THROUGH THEORETICAL RESEARCH AND THE CONSTRUCTION OF NEW KNOWLEDGE OR THEORIES.

THE DND DEGREE WILL FOCUS ON ADVANCING THE FIELD OF NUTRITION PRACTICE THROUGH APPLYING EXISTING KNOWLEDGE TO CLINICAL PRACTICE AND SOLVING PRACTICAL PROBLEMS IN THE FIELD.

What does this mean for me?
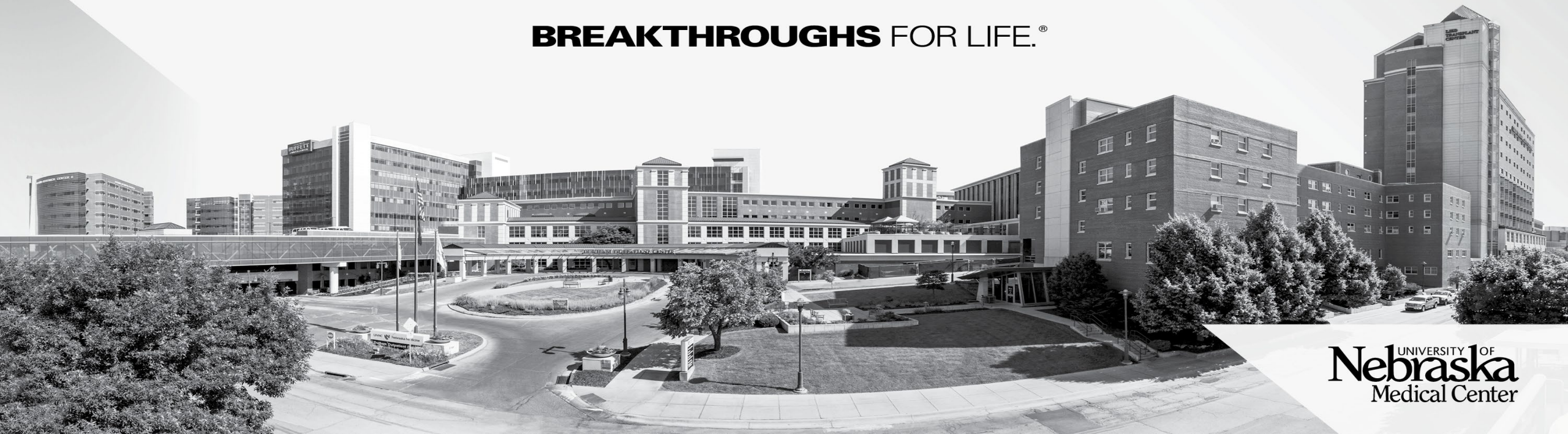
How much does it cost?

Market Comparison of Institutions with Advance Practice Nutrition Doctorate Programs					
Institution	**Credit Hours**	**Degree Awarded**	**Focus Area**	**Accreditation Status**	**Cost per Credit Hour (2022 estimates)**
Rutgers University	50	Doctor of Clinical Nutrition	Clinical Nutrition	Not accredited	$807
University of North Florida	54	Doctor of Clinical Nutrition	Clinical Nutrition	Not accredited	$852
University of Kansas	48	Doctor of Clinical Nutrition	Clinical Nutrition	Not accredited	$621
Maryland University of Integrated Health	48	Doctor of Clinical Nutrition	Clinical Nutrition	Not accredited	$1039
UNMC	**48**	**Doctor of Nutrition and Dietetics (DND)**	**Core competencies encompassed in 5 domains: Advanced Nutrition Science; Leadership; Advocacy; Education; Critical Inquiry, Research and Scholarship; and Education.**	**Accreditation will be applied for July 2024**	**$625**

Plan of study

DNDP Curriculum			
Course Number & Title	Course Description	Credit hours	Competency domain
NTSC 760	**Integrative Nutrition and Emerging Concepts in Advanced Nutrition Practice** This course will provide the student with opportunities for critical discussion and directed study of current literature and concepts in how integrative nutrition, genetics and other advancing technologies and concepts relate to the advanced practice of nutrition.	3	Advanced Nutrition and Related Science
NTSC 763	**Applied Advanced Nutrition Sciences** This course focuses on developing expertise in advance nutrition and dietetic sciences centered around the nutrition care process by integrating knowledge from established and evolving nutrition sciences, pharmacology, and social-behavioral sciences. The course aims to layer knowledge, skills and experience onto the existing RDN foundation to foster advanced practice in nutrition and dietetics	3	Advanced Nutrition and Related Science
NTSC 766	**Advocacy and Global Health in the Advanced Practice of Nutrition** This course focuses on developing expertise in advance nutrition and dietetic sciences centered by creating practitioners who advocate for change and address issues related to the wider social, cultural, and political environment.	3	Advocacy
HPTT 801	**Foundations of Health Professions Education** This course presents the basic concepts and processes of curriculum and instruction, including learning theories, curriculum planning, teaching modalities, and curriculum evaluation. Topics are selected to give students a basic understanding of pedagogy. Evaluation is based on weekly discussion posts and papers.	3	Education
HPTT 802	**Instructional Design for Health Professions Education** This course focuses on the fundamentals of instructional design for developing highly effective instruction. Topics include the science of how people learn, learning situations and characteristics, task and needs analysis, development of goals and objectives, principles of design process, assessment strategies (formative and summative), and concepts of design for a variety of environments and instructional modalities.	3	Education
HPTT 805	**Evaluation and Assessment of Teaching and Learning in Health Profession Education** This course explores the nature, objective, and basic procedures of assessment and program evaluation as applied to the various aspects of health professions education settings. The course will examine technical characteristics of various assessment methods, including both traditional and alternative methods. In addition, the course will analyze and discuss various topics in assessment such as authentic assessment, large-scale assessment, formative assessment, and assessment for program evaluation. Additional topics will include accreditation, program review, benchmarking, and evaluation of teaching in health professions programs.	3	Education

Plan of Study

Course	Description	Credits	Theme
HDS 831	**Management in Health Care This asynchronous course introduces allied health students and practitioners to the concepts of organizational theory and behavior as they apply to health care settings. The topics to be covered include personality types in the workplace, leadership and management, the principles of employee motivation, team performance and development, organizational culture, planning and implementing organizational change, human resource management practices, continuous quality improvement, financial management, and risk management.**	**3**	**Leadership**
HDS 852	**Design of Quality Improvement Initiatives** Learners will explore and apply strategies and tools from the science of improvement to define, measure, and analyze quality problems in healthcare settings. Topics covered include methods to identity improvement needs and set improvement aims, strategies to evaluate the strength of evidence, selection of the data collection and analysis tools and strategies, selection of appropriate measures and metrics for evaluation and comparison, prioritization of improvement activities, assembly of improvement teams, and justification of improvement goals and efforts	3	Leadership
HPTT 823	**Leadership in Health Professions Education** This course is an in-depth exploration the knowledge, skills, attitudes, and competencies required for leadership in the context of complex health care and health professions education organizations. Leadership theory will be used as a framework for enhancing organizational behavior focusing on both individual and team performance.	3	Leadership
HDS 815	**Communication and Culture in Healthcare** Communication and Cultural in Healthcare is an upper-level course for allied health professions students and other interested students that facilitates an understanding of the role of culture and diversity in the healthcare arena and explores the ethical and legal implications of these situations. The course enables students to explore the value of diversity in our society through self-examination of their own beliefs, values and biases. Students will evaluate the dynamics involved when cultures interact and apply this to the healthcare setting. The course will include an in-depth assessment of the Culturally and Linguistically Appropriate Services [CLAS] standards and the cultural competency responsibilities of healthcare organizations.	3	Advocacy
BIOS 806	**Biostatistics** This course is designed to prepare the graduate student to understand and apply biostatistical methods needed in the design and analysis of biomedical and public health investigations. The major topics to be covered include types of data, descriptive statistics and plots, theoretical distributions, probability, estimation, hypothesis testing, and one-way analysis of variance. A brief introduction to correlation and univariate linear regression will also be given. The course is intended for graduate students and health professionals interested in the design and analysis of biomedical or public health studies.	3	Critical Inquiry, Research and Scholarship

Plan of Study

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Example
Full Time Schedule

Plan of Study – Proposed Schedule (FT)		
Year One		
Fall Semester	Spring Semester	Summer
NTSC 760	HPTT 802	HDS 815
NTSC 766	HDS 831	NTSC 785
HPTT 801		
Year Two		
Fall Semester	Spring Semester	Summer
HPTT 805	NTSC 763	HDS 852
BIOS 806	HPTT 823	
Year Three		
Fall Semester	Spring Semester	Summer Semester
NTSC 790	NTSC 790	
NTSC 770	NTSC 773	

Example Part Time Schedule

Plan of Study – Proposed Schedule (PT)		
Year One		
Fall Semester	Spring Semester	Summer
NTSC 760	HPTT 802	HDS 815
Year Two		
Fall Semester	Spring Semester	Summer
NTSC 766	NTSC 763	HDS 852
Year Three		
Fall Semester	Spring Semester	Summer Semester
BIOS 806	HDS 831	NTSC 785
Year Four		
HPTT 801	NTSC 763	
NTSC 770	NTSC 790	
Year Five		
HPTT 805	HPTT 823	
NTSC 773		