ACEND-accredited Graduate Program in Nutrition and Dietetics (GP)

General training for faculty and preceptors

August 2024



DEPARTMENT OF NUTRITION



Welcome and come on in!



Benefits of precepting

- Pay it forward!
- Provide input into program design and operations
- Have the opportunity to participate in student selection
- Earn Continuing Professional Education Units (CPEUs)
 - This orientation pending
 - Precepting up to 3 CPEUs/year for a max of 15 per 5-year cycle
- Sponsored access to UT Libraries resources
- Vet potential future employees





The presenter has no conflicts of interest to disclose.

Meet the core on-campus team in Clinical Nutrition and Dietetics



Melissa Hansen-Petrik, PhD, RDN, LDN Clinical Professor GP Director



Stephanie Antonelli, MS, RDN, LDN Clinical Instructor



Jenna Martin, MS, RDN, LDN Lecturer



Additional key team members on campus



Marsha Spence PhD, MS-MPH, RDN, LDN Professor of Practice Director, Public Health Nutrition



Kimberly Johnson PhD, RDN, LDN Adjunct Lecturer



Objectives of this training

- Provide an overview of Graduate Programs in Nutrition and Dietetics (GPs)
- Introduce the mission, goals, objectives, and overall structure of the GP at the University of Tennessee, Knoxville
- Familiarize preceptors and faculty with training and experience students have prior to coming to the practice setting
- Provide background for additional focused training designed to ...
 - Familiarize preceptors and faculty with expectations of students while in the practice setting
 - Assure preceptors and faculty are prepared to fulfill the expectations of their role through training, identification of resources, and ongoing support



Salient features of the GP model

- Didactic coursework and supervised experiential learning (SEL) are *integrated* throughout the curriculum
- It employs competency-based education
- Programs must culminate in a graduate degree
- Minimum 1,000 hours SEL (now required to be at the graduate level)



How the move to Graduate Programs in Nutrition and Dietetics (GPs) is changing the world of dietetics education ...



• In 2024:

- Now over 100 GPs accredited or in process in the U.S.
- Prerequisites vary widely
 - Some require a DPD
 - Most require specific sciences and some lower level nutrition courses – students can come from a variety of backgrounds
 - All result in a graduate degree with varying areas of emphasis
- Less students are applying to dietetic internships

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How the move to Graduate Programs in Nutrition and Dietetics (GPs) is changing the world of dietetics education ...



• In Tennessee: 3 GPs at UTK, UTC, and Tennessee Tech

- UTK accepts a max of 20 students per cohort for this 2-year program that builds on the first 3 years of undergraduate study and leads to a M.S. in Nutrition, concentration in Clinical Nutrition & Dietetics
- UTC has a 2-year in-person program leading to the MPH degree
- Tennessee Tech has a 22-month program leading to an online M.S. in Community Health and Nutrition including 12 months in-person supervised practice



A little about us!

- First accredited in 2020, replacing the long-standing MS-Dietetic Internship program
- Designed primarily within an accelerated combined bachelor's/master's degree model that allows students to complete both degrees in 5 years – the accredited program comprises the last 2 years
- Will be able to accept external applicants to the master's program (2 years) for fall 2025 if they have met program prerequisites
- The final degree is a Master of Science in Nutrition with a concentration in Clinical Nutrition & Dietetics
- Graduates are eligible to take the RDN credentialing exam
- Graduated our first cohort in 2022



Mission, Goals, and Objectives

The University of Tennessee, Knoxville, Graduate Program in Nutrition and Dietetics (GP)



Our Mission

The mission of the Graduate Program in Nutrition and Dietetics (GP) is to effectively integrate didactic and experiential learning in a program that culminates in a graduate degree that effectively prepares graduates for evidence-based nutrition and dietetics practice, practice-based research, and professional mentorship and leadership as RDNs in an interprofessional healthcare environment to optimize the nutritional health of individuals, families and communities.



Our goals in support of the mission statement

• Program Goal #1: Graduates will be prepared for effective evidence-based clinical nutrition and dietetics practice as credentialed Registered Dietitian Nutritionists.

• Program Goal #2: Graduates will be prepared to be effective members of an interprofessional healthcare team.

• Program Goal #3: Graduates will be prepared for mentoring and leadership roles in nutrition and dietetics.



Program Goal #1: Graduates will be prepared for effective evidence-based clinical nutrition and dietetics practice as credentialed Registered Dietitian Nutritionists.

Objective	Outcome
Objective 1: At least 80% of program graduates complete program/degree requirements within 3 years (150% of planned program length).	36/37 (97%)
Objective 2: Of graduates who seek employment, at least 85% are employed in nutrition and dietetics or related fields within 12 months of graduation.	22/22 (100%)
Objective 3: At least 85% of employers who respond to the employer survey agree that program graduates were ready and functioned independently in their jobs faster compared to other employees hired to the same position.	11/13 (84.6%)
Objective 4: At least 90% of program graduates take the CDR credentialing exam for dietitian nutritionists within 12 months of program completion.	22/23 (96%)
Objective 5: The program's one-year pass rate (graduates who pass the registration exam within one year of first attempt) on the CDR credentialing exam for dietitian nutritionists is at least 80%.	22/22 (100%)
at least 80%.	



What are our graduates doing? 2022 and 2023 cohorts

- 9 are in general acute care practice and one has been promoted to clinical nutrition manager while another has attained the CNSC credential
- o 3 are neonatal intensive care unit RDNs, with one credentialed as a CNSC
- o 3 are long-term care RDNs
- o 1 is a critical care/metabolic support RDN and is credentialed as a CNSC
- o 1 is a transplant RDN
- o 1 is a dialysis RDN
- 1 is an oncology RDN
- o 1 is a rehabilitation hospital RDN
- 1 is a traveling RDN
- 1 is practicing in weight management counseling
- 1 is practicing in community nutrition





Program Goal #2: Graduates will be prepared to be effective *members of an interprofessional healthcare team.*

Objective	Outcome
Objective 1: By the time of program completion, at least 85% of program graduates will report moderate-level or greater interprofessional beliefs, behavior, and attitudes as measured by the Interprofessional Socialization and Valuing Scale (2016).	6/6 (100%)

*Measure implemented through anonymous survey of 2024 cohort

9 questions on a 7-point Likert scale – some examples:

- I feel comfortable in speaking out within the team when others are not keeping the best interests of the client in mind
- I believe that the best decisions are made when members openly share their views and ideas
- I feel comfortable in describing my professional role to another team member
- I have gained an appreciation for the importance of having the client and family as members of a team



Program Goal #3: Graduates will be prepared for mentoring and leadership roles in nutrition and dietetics.

Objective	Outcome
Objective 1: At least 85% of program graduates will agree or strongly agree that the program prepared them well for mentoring and precepting others in the practice setting.*	6/6 (100%)
Objective 2: At least 75% of graduates will occupy mentoring and/or leadership roles in nutrition and dietetics within 3 years of program completion.	Data pending (begins 2025)

*Measure implemented through anonymous survey of 2024 cohort



Competency-based learning

The University of Tennessee, Knoxville, Graduate Program in Nutrition and Dietetics (GP)

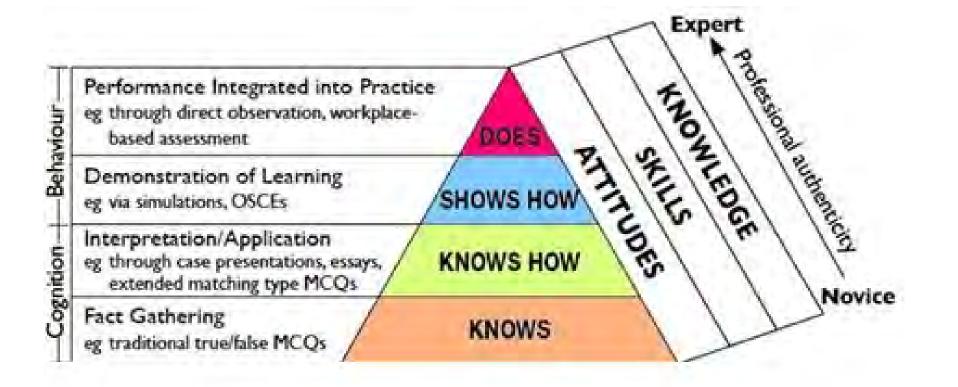


The Graduate Program in Nutrition and Dietetics (GP) Model employs competency-based learning What is "competency"?

Having the knowledge, skill, and judgment required for entry-level practice



The ACEND approach: Miller's Pyramid – Competency-based learning





Graduate Programs in Nutrition and Dietetics (GP) accreditation standards

Based on revised 2022 GP standards – updated every 5 years

- Seven unit areas:
 - Unit 1: Foundational Knowledge
 - Unit 2: Client/Patient Services
 - Unit 3: Food Systems Management
 - Unit 4: Community and Population Health Nutrition
 - Unit 5: Leadership, Business, Management and Organization
 - Unit 6: Critical Thinking, Research and Evidence-Informed Practice
 - Unit 7: Core Professional Behaviors
- Each unit is further subdivided into 37 required competencies and competencies include 221 performance indicators (PIs) that must be covered within the program and are assessable to demonstrate meeting of competencies. These competencies must be met at the "KNOWS" "SHOWS" or "DOES" level as specified.

https://www.eatrightpro.org/acend/accreditation-standards-fees-and-policies/future-education-model-standards-and-templates



Unit 2: Client/Patient Services

Applies and integrates client/patient-centered principles and competent nutrition and dietetics practice to ensure positive outcomes.

Competencies

- 2.1 Applies a framework to assess, develop, implement and evaluate products, programs and services (PIs: 4)
- 2.2 Selects, develops and/or implements nutritional screening tools for individuals, groups or populations (PIs: 4)
- 2.3 Utilizes the nutrition care process with individuals, groups or populations in a variety of practice settings (PIs: 27)
- 2.4 Implements or coordinates nutritional interventions for individuals, groups or populations (PIs: 19)
- 2.5 Prescribes, recommends and administers nutrition-related pharmacotherapy (PIs: 10)



Unit 2: Client/Patient Services

Applies and integrates client/patient-centered principles and competent nutrition and dietetics practice to ensure positive outcomes.

Competencies	Performance Indicators									
2.5* Prescribes, recommends and	2.5.1	Applies knowledge of foundational sciences and disease when determining the appropriateness of the therapy. (S)								
administers nutrition- related	2.5.2	Demonstrates awareness of food and drug interactions. (S)								
pharmacotherapy. (S)	2.5.3	Assesses client/patient factors to determine the client/patient's indication for the nutrition-related pharmacotherapy (S)								
	2.5.4	Considers client/patient factors, nutritional impact, indications, side effects, contraindications, benefits, risks, alternatives and foundational sciences when prescribing, recommending and administering nutrition related drug therapy. (S)								
	2.5.5	Critically analyzes the potential negative effects of the nutrition therapy or supplement and determines the required knowledge, skill and judgment required to manage negative outcomes. (S)								

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Unit 6: Critical Thinking, Research and Evidence-Informed Practice

Integrates evidence-informed practice, research principles, and critical thinking into practice.

- Competencies
 - 6.1 Incorporates critical thinking skills in practice. (PIs: 3)
 - 6.2 Applies scientific methods utilizing ethical research practices when reviewing, evaluating and conducting research. (PIs: 7)
 - 6.3 Applies current research and evidence-informed practice to services. (Pls: 4)



Unit 6: Critical Thinking, Research and Evidence-Informed Practice

Integrates evidence-informed practice, research principles, and critical thinking into practice.

Competencies	Performance Indicators									
6.2* Applies scientific	6.2.1 Identifies, explains and applies the steps of the scientific method and processes. (D)									
methods utilizing ethical research	6.2.2 Articulates a clear research question or problem and formulates a hypothesis. (D)									
practices when reviewing, evaluating	6.2.3 Identifies and demonstrates appropriate research methods. (D)									
and conducting research. (D)	6.2.4 Interprets and applies research ethics and responsible conduct in research. (D)									
	6.2.5 Collects and retrieves data using a variety of methods (qualitative, quantitative) and technologies. (D)									
	6.2.6 Analyzes research data using appropriate data analysis techniques (qualitative, quantitative, mixed). (D)									
	6.2.7 Translates and communicates research findings and conclusions through a variety of media. (D)									

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Curriculum mapping competencies & Pls

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Meet the class of 2025!

- Home states: Tennessee (10), Kentucky (1), Massachusetts (1), Michigan (1), New Jersey (1), New York (1), Ohio (2), Pennsylvania (1)
- Four earned Associate of Science degrees at Pellissippi State before transferring to UT
- Two are earning second bachelor's degrees with first degrees in sociology and public health/Spanish





Meet the class of 2026!

- Home states: Tennessee (13), Arkansas (1), Virginia (1)
- Four earned Associate of Science degrees at Pellissippi State, Roane State, or Walters State before transferring to UT
- *Minors represented include child and family studies, culinary arts, psychology, public health*





Big Picture – where they begin

- Three ways to begin:
 - Bachelor's degree program Nutrition major: Dietetics concentration right here at UTK
 - Begin coursework at a community college possibly complete the associate's degree with a Nutrition major at Pellissippi State and transfer to UTK
 - Transfer from another university or come to UTK after completing a bachelor's degree elsewhere – in anything
- What's common to all paths during the first 2-3 years?
 - Completion of general education requirements
 - Completion of science prerequisites including general chemistry I and II, organic chemistry, biochemistry, human physiology, and microbiology
 - Completion of introductory nutrition, life span nutrition, nutrient metabolism, nutrition assessment, food science/culinary, a physical activity-focused course, medical terminology, introduction to public health, research methods
- Beginning with fall 2025 entry, there is an option for external applicants with a DPD or prerequisites to apply directly to the graduate program



The two-year curriculum

Term 1

- HTM 210: Foodservice Operations Management (3)
- NUTR 410: Professional Issues in Nutrition and Dietetics (1)
- NUTR 412: Food and Nutrition in the Community (3)
- NUTR 415: Clinical Nutrition I (3)
- NUTR 422: Nutrition Education and Counseling (3)
- NUTR 425: Clinical Nutrition I Practicum (1)
- NUTR 430: Foodservice Management Practicum (1)

Term 2

- HTM 445: Restaurant and Catering Management and Execution (3)
- NUTR 403: Nutrition and Dietetics Management (3)
- NUTR 416: Clinical Nutrition II (3)
- NUTR 420: Nutrition Research Design & Methods II (2)
- NUTR 506: Clinical Nutrition II Practicum (2)

Term 3

- NUTR 513: Community Nutrition Practicum (3)
- NUTR 516: Clinical Practice Experience (4)

Term 4

- AGNR 480: How to Feed the World (3)
- NUTR 503: Community Nutrition Assessment (2)
- NUTR 514: Advanced Community Nutrition Practicum (1)
- NUTR 525: Clinical Nutrition III (2)
- NUTR 526: Clinical Nutrition III Practicum (3)

Term 5

- NUTR 504: Community Nutrition Intervention and Evaluation (2)
- NUTR 514: Advanced Community Nutrition Practicum (1)
- NUTR 520: Data Analysis and Interpretation of Nutrition Outcomes (3)
- NUTR 527: Advanced Clinical Practice and Mentorship (3)
- NUTR 530: Healthcare Foodservice Management (3)

https://catalog.utk.edu/index.php.



Focus on clinical dietetics practice

From simulation to clinic to general acute care to electives



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Clinical knowledge/skills/practice progression

Chronic disease MNT

 Pathophysiology, prevention intervention obesity, diabetes, CVD, cancer (NUTR 415)
 Nutrition educ/couns

Didactic

Simulation

• MI focus (NUTR 422)

Simulation - MI

 Hands on experience reviewing EHR, interviewing, educating, counseling SPs with chronic disease conditions, charting in ADIME format, IPE sim with nursing (NUTR 425)

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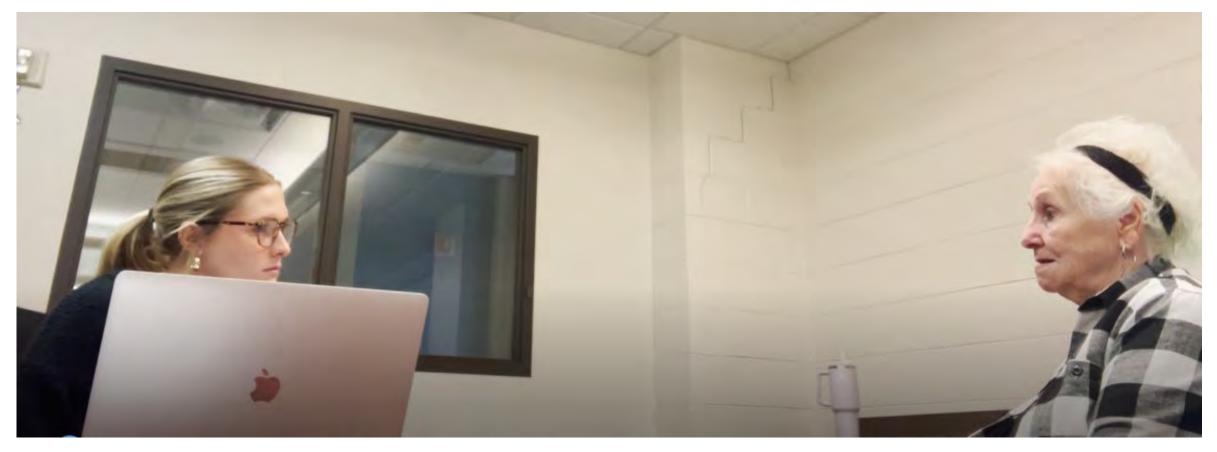
What is a standardized patient (SP)?



- A trained actor who can memorize a profile and play the part of a patient to give students a realistic training experience
- What do we use them for in our nutrition training?
 - Anthropometric assessment
 - NFPEs
 - Nutrition interviews
 - Nutrition education and counseling with focus on evidence-based MNT for chronic conditions



Students have realistic education and counseling experiences with standardized patients





Interprofessional simulation day with UT nursing students







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Clinical knowledge/skills/practice progression Term 2 Term 1

Didactic

Chronic disease MNT

- Pathophysiology, prevention intervention obesity, diabetes, CVD, cancer (NUTR 415) **Nutrition educ/couns**
- MI focus (NUTR 422)

Intermediate MNT

• Diseases of GI, liver, pancreas, kidneys, pulmonary system, introductory nutrition support (NUTR 416)

Simulation - MI

• Hands on experience reviewing EHR, counseling SPs with chronic disease conditions, charting in ADIME format, IPE sim with nursing (NUTR 425)

Simulation – acute care

• Primary care and acute care boot camps in NUTR 506: hands-on activities and case studies in preparation for primary care (start of term) and acute care (end of term)

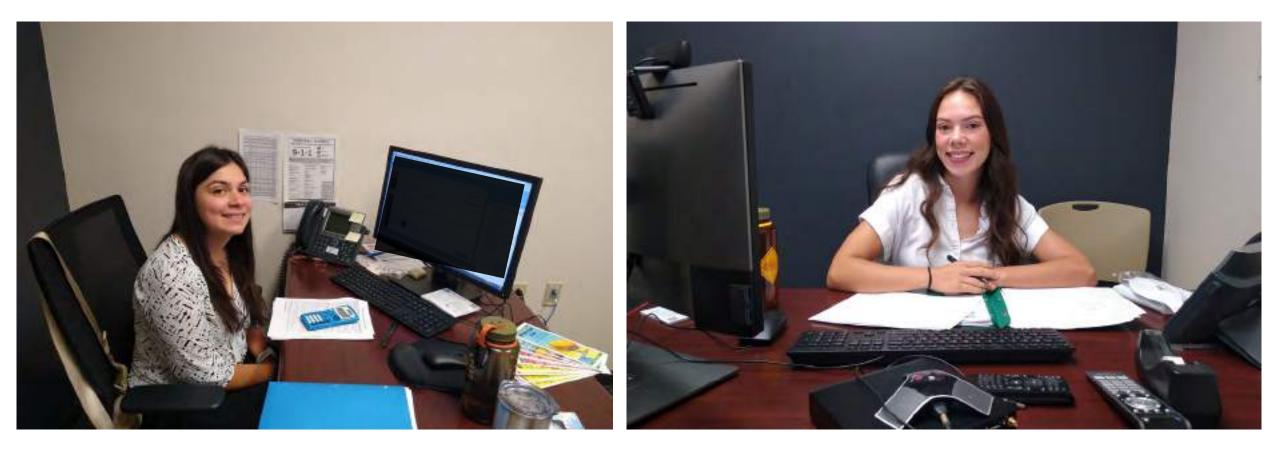
Simulation

CHS clinic

Novice (6 days)

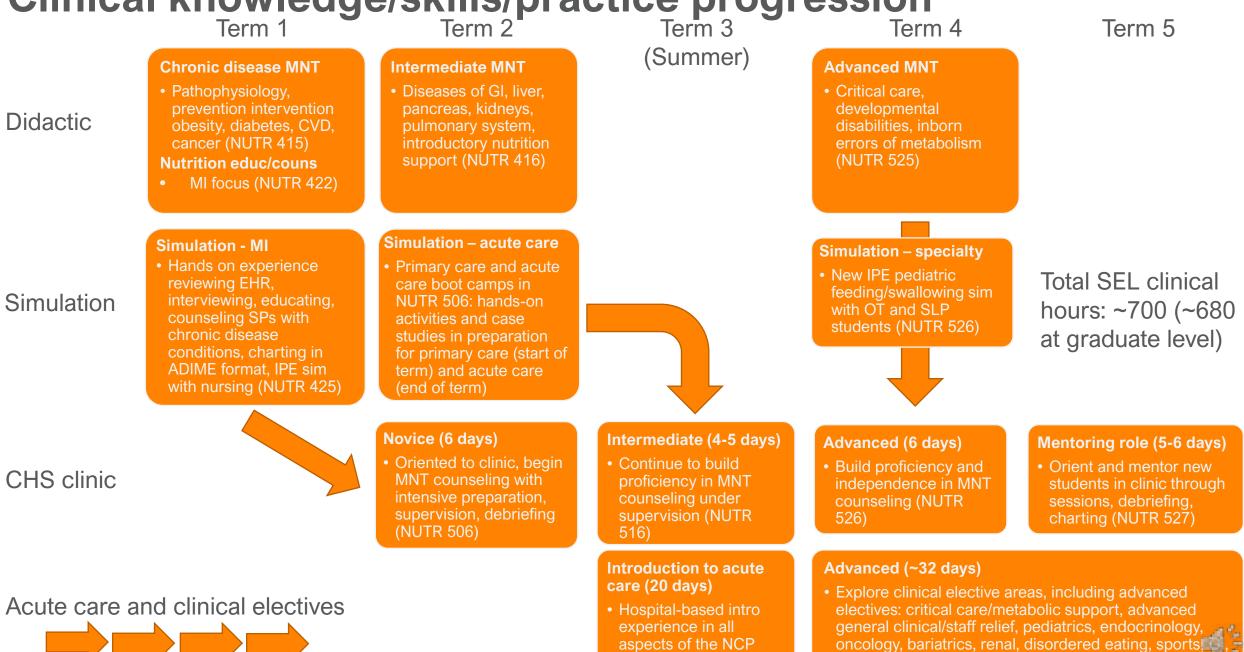
 Oriented to clinic, begin MNT counseling with intensive preparation, supervision, debriefing (NUTR 506)

In the CHS clinic – a mix of in person and telehealth appointments





Clinical knowledge/skills/practice progression



(NUTR 516)

NICU, CF, etc. (NUTR 526 and 527)

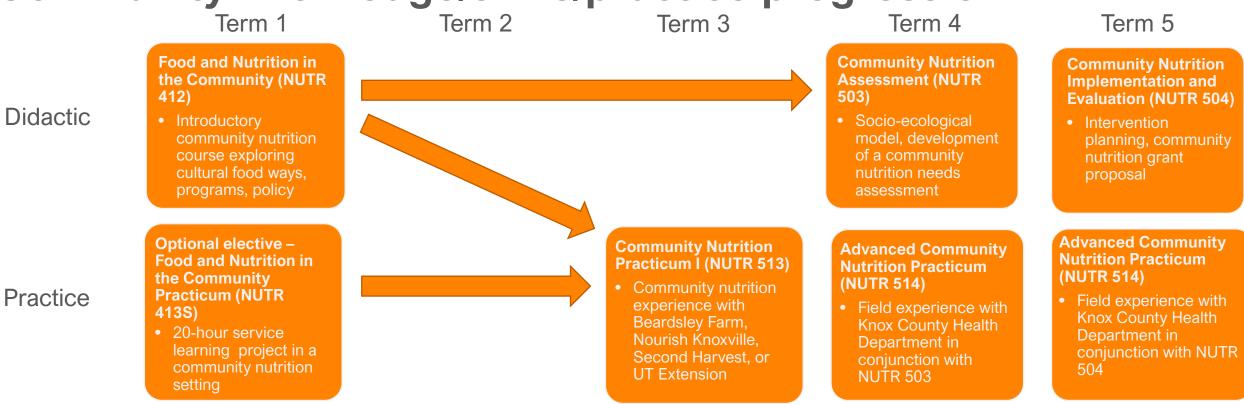
The clinical experience breakdown Supervised experiential learning (SEL) hours

- Role play, case studies, simulation: 100 SEL hours
- Cherokee Health Systems clinic (over 4 semesters): 180 SEL hours

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- General acute care: 150-160 SEL hours
- Clinical electives: ~260 SEL hours
- Total clinical hours: ~700 SEL hours

Community knowledge/skills/practice progression



Total SEL community hours (graduate level): ~220



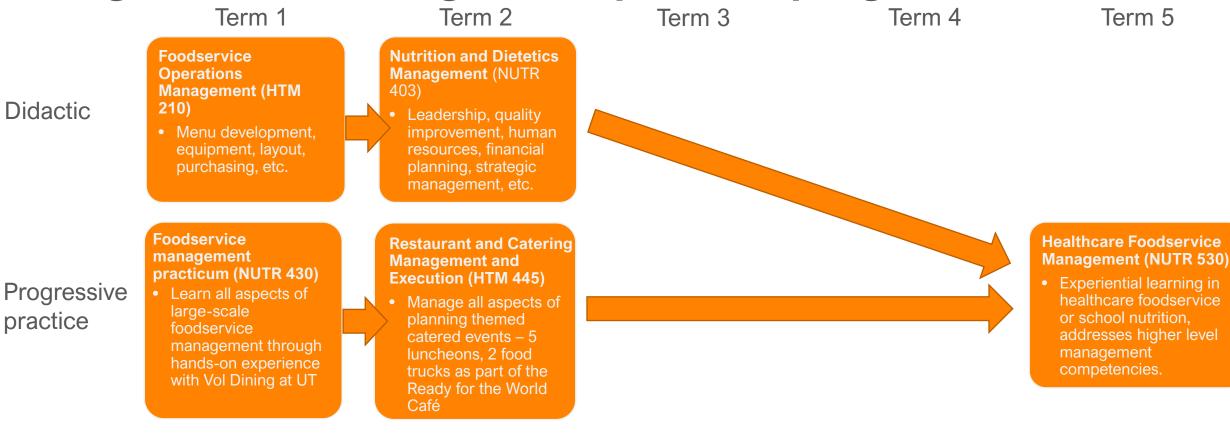


Nutrition 513: Community Nutrition Practicum

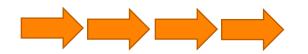




Management knowledge/skills/practice progression



Total SEL management hours: ~230 (~175 at the graduate level)





Ready for the World Café Food4Vols Food Truck





Current partners in preparing future RDNs

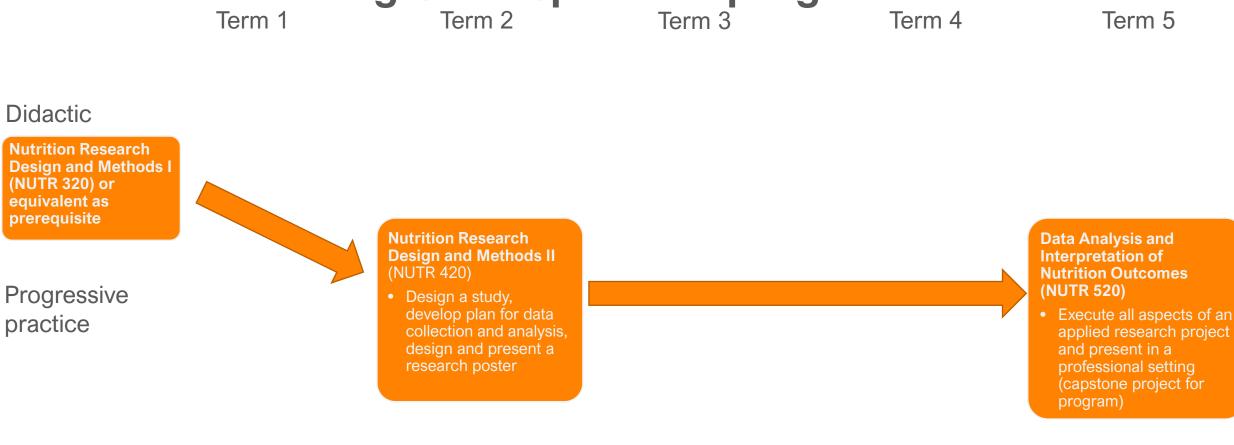
- Cherokee Health Systems
- Hospitals:
 - Covenant Health
 - Fort Sanders Regional Medical Center
 - Methodist Medical Center of Oak Ridge
 - Parkwest Medical Center
 - East Tennessee Children's Hospital
 - Tennova North Medical Center
 - UT Medical Center
- National HealthCare Corporation (NHC)

- Beardsley Community Farm
- Endocrinology Consultants of East Tennessee
- Focus Treatment Centers
- Food City
- Fresenius Kidney Care
- GI for Kids
- Knox County Health Department
- Knox County Schools
- Moon Nutrition Therapy
- Nourish Knoxville
- Second Harvest Food Bank
- Thompson Cancer Survival Center

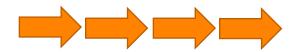
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- Thompson Proton Center
- University Bariatric Center
- UT Athletics
- UT Culinary Institute
- UT Extension
- Vol Dining

Research knowledge/skills/practice progression

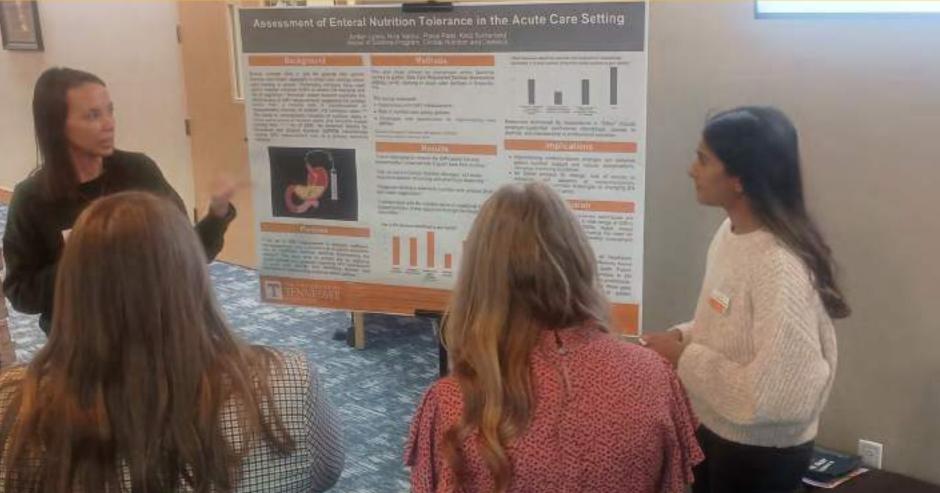


Total SEL research hours (graduate level): ~40





Presenting research at the Tennessee Academy of Nutrition and Dietetics conference



Big Picture

- The GP at UT, Knoxville, is a two-year program.
 - Students primarily begin in the bachelor's degree program as Nutrition-Dietetics majors
 - Students progressively grow through the knows, shows, and does levels of Miller's Pyramid as they build competency.
 - Students apply end of junior year to the GP (maximum 20 students) to earn B.S. and M.S. both in 5 years.
 Some graduate coursework begins senior year the first year included in the accredited GP.
 - Students are classified as Graduate Students in Clinical Nutrition & Dietetics and the Master of Science in Nutrition degree is a concentration in Clinical Nutrition & Dietetics
- Faculty:
 - Melissa Hansen-Petrik directs the program and teaches dietetics coursework.
 - Stephanie Antonelli and Jenna Martin provide direct supervision in Cherokee Health Systems clinics and teach applied coursework on campus.
 - Marsha Spence teaches graduate-level community nutrition coursework.
 - Kim Johnson teaches foodservice and management-related coursework within the department.
 - We look forward to filling two vacant clinical faculty positions within the coming year.





https://cehhs.utk.edu/nutrition/

@utkclinicalnutr



Next steps

1.For preceptors: complete site specific training – coming soon:

- For Clinical practice sites (NUTR 516, 526, 527)
 - Complete online training specific to clinical practice
- For Community practice sites (NUTR 513, 514)
 - Complete online training specific to community practice
- For Healthcare Foodservice Management sites (NUTR 530)
 - Complete online training specific to this course
- 2.For faculty and preceptors: Access training and resources on recognizing bias in self and others to reduce microaggression and discrimination (optional available on the department's preceptor page)
- 3.For faculty and preceptors: Complete the online training survey. Preceptors must upload resume or CV. The CPEU certificate will be available upon survey completion (CDR approval pending)



Thank you!

