Looking West: UNMC Rural Health Initiatives and Expansion of Nutrition Education

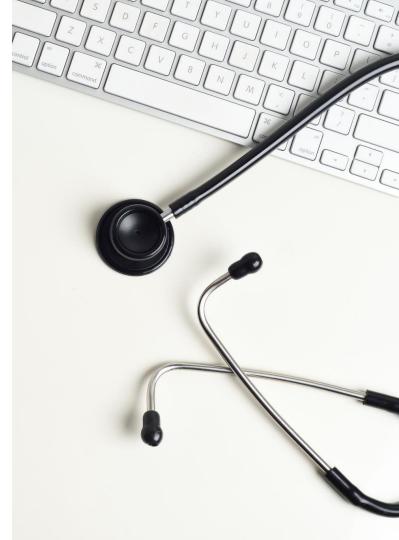
Megan Timmerman, MPA, RDN, LMNT Associate Program Director

Program Overview

- Discuss the Current
 State of Health Care in
 Nebraska
- Discuss Rural Pathways and Rural Health Opportunity Programs
- Review UNMC Medical Nutrition Expansion to Kearney Campus

At the End of the Presentation, the participant will:

- Understand the state of Nebraska's current and future health care needs and shortage of providers across all health care disciplines and solutions being created to maintain access to healthcare throughout Nebraska.
- Understand Rural Pathway and Rural Health Opportunity Programs in the state of Nebraska and the impact they have on rural communities in Nebraska.
- Discuss how UNMC Masters of Medical Nutrition seeks to address the Nutrition Therapist shortage in Central and Western Nebraska through our expansion to the University of Nebraska at Kearney Expansion Project.
- Describe changes in education methods to educate the next generation of Nutrition Therapists and advance the practice in a competency based learning environment.



Status of the Nebraska Healthcare Workforce: Update 2020

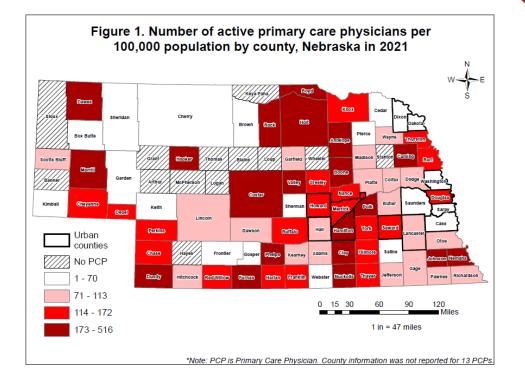
- Available online at:
- www.unmc.edu/ruralhealth/_documents/Workforce_2020.p
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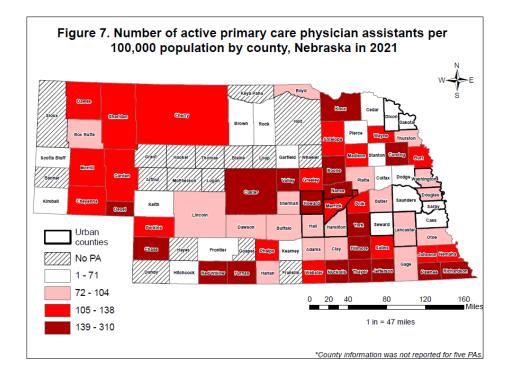
Primary Care Physicians

- 13 of the state's 93 counties do not have any active primary care physicians (family medicine, general practice, internal medicine, OB/GYN, pediatrics)
- The number of active physicians per 100,000 population decreased from 257.7 to 249.8 per 100,000 between 2019 and 2021.
- Since 2019, while the number of counties with any primary care physician increased by 1 to 80 out of 93, the number of primary care physicians per 100,000 population has continued its decline.
- Out of 93 counties, 49 counties had active OB/GYN physicians in 2021 compared to 39 counties in 2019; however, the number of physicians in this specialty has continued to decline.



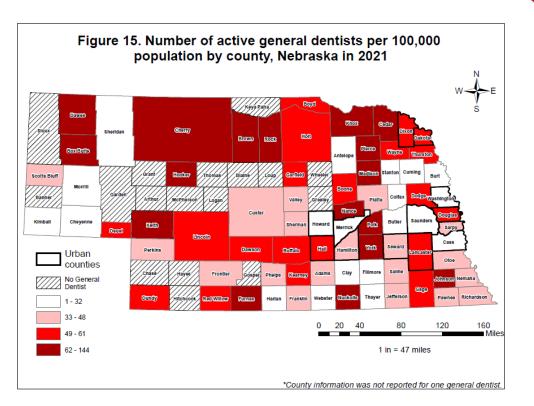
Physician Assistants

• There was an increase in active physician assistants (PA) from 908 PAs in 2017 to 1,013 PAs in 2019 to 1,087 PAs in 2021.



Dental Professionals

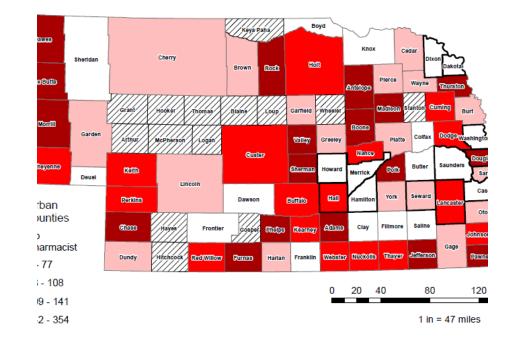
• The number of dental professionals decreased between 2019 and 2021. The number of dentists per 100,000 population fell from 56.2 to 53.6, while the number of dental hygienists decreased from 73.8 to 65.8 per 100,000 population.



Pharmacy Professionals

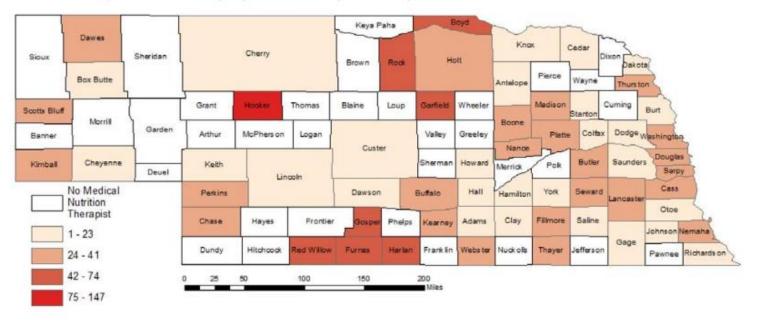
 Between 2019 and 2021, the number of practicing pharmacists increased from 2,048 to 2,051. However, pharmacists per 100,000 population decreased from 106.2 to 104.5, while pharmacy technicians experienced substantial growth from 3,511 to 5,044 during this two-year period.

Figure 18. Number of active pharmacists per 100,000 population by county, Nebraska in 2021



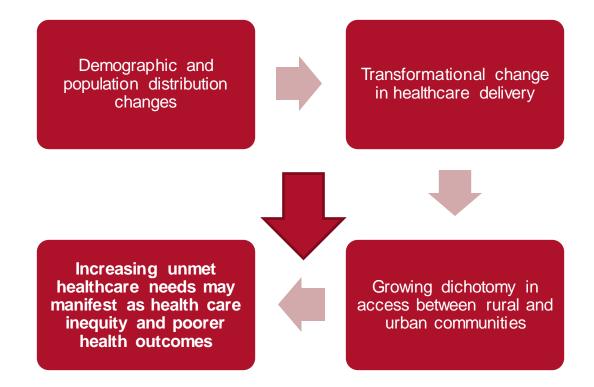
Medical Nutrition Therapists: 2020 Data

Figure 26. Number of licensed medical nutrition therapists per 100,000 population by county, Nebraska

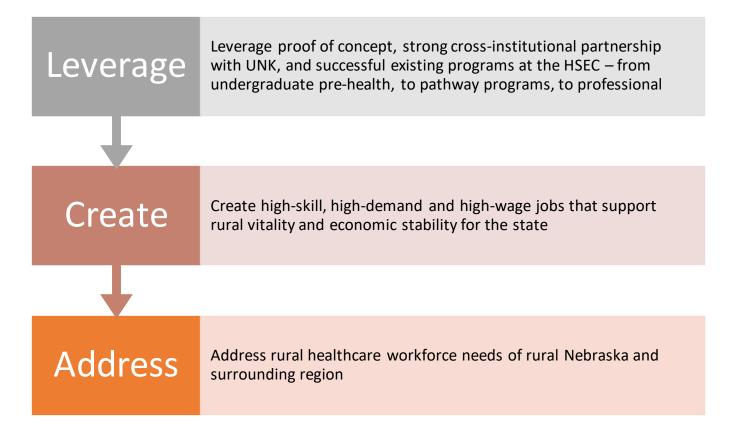




Nebraska's Health Care Workforce



Healthier Rural Nebraska



Key Components of Plan

Focus on interprofessional education and training

Enhanced rural community-based and clinical experiences for students

iEXCEL hub

Research

Expanded and enhanced programs to support degree advancement

Opportunities to support rural practitioners in the region (i.e., through CE)

Developing new certificate and degree options for health professions students that **meet** emerging needs in the clinical and community environment

Programmatic Overview

New or expanded training programs in the following colleges:

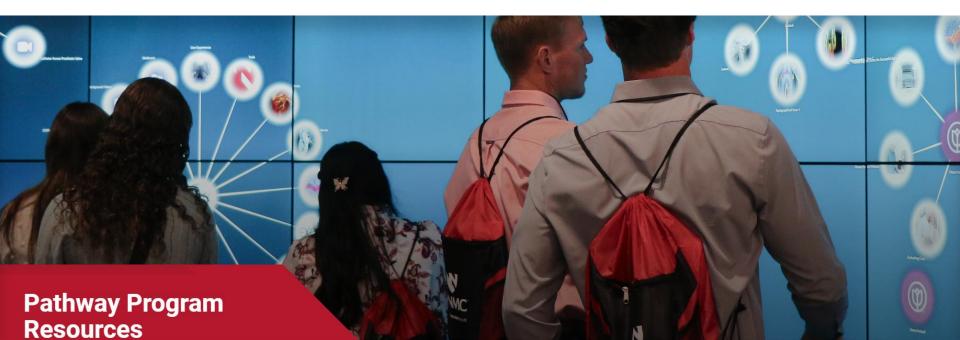
- College of Allied Health Professions
- College of Medicine
- College of Nursing
- College of Pharmacy
- College of Public Health
- Rural Health Initiatives
- Behavioral Health Education Center of Nebraska (BHECN)

Building existing undergraduate provisional admittance programs like KHOP and RHOP.

At full implementation, total enrollment at UNMC-Kearney would be nearly 800 learners. Over 600 on-campus and 200 off-campus

UNMC Pathway Programs

 Developing a diverse workforce that reflects the communities we serve is an important part of the steps needed to reduce health disparities and advance health equity. Through historical programing and new initiatives, our pathway programs inspire K-12 and college students to choose careers in medicine and research.





Nebraska Medicine/UNMC Job Shadow Program



Public Health Early Admissions Student Track (PHEAST)



Rural and Kearney Health Opportunities Programs



Summer Health Professions Education Program (SHPEP)



Summer Undergraduate Research Program (SURP)



Summer Undergraduate Research Program for the Study of Institutional and Structural Disparities in Healthcare and Academies of Higher Education



UNMC High School Alliance



Urban Health Opportunities Program (UHOP)



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YES! Youth Enjoy Science
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Rural Health Education Building the Future



September 5, 2023

Design & Construction



Concept Rendering



Design | Updates



First Floor Lobby



Design | Updates



Third Floor Classroom



Considerations



Funding for ongoing programmatic development and sustainability.



Expansion will require thorough and thoughtful planning to ensure students in every program receive an **equitable training experience** to that of those based at the main campus AND **sufficient clinical and experiential training** partnerships



Short-term housing and community capacity for students



Enhanced health career exploration and pathway programs, scholarships and student loan repayment programs

UNMC Preceptor & Experiential Learning Excellence







Develop and maintain an integrated information management system for UNMC Enhance preceptor and clinical training site recruitment, retention, training and support systems

Coordinate interprofessional experiential learning/training opportunities for UNMC students and partner communities

UNMC Masters of Medical Nutrition Pogram 1 Program, 2 Campuses

Medicine

00

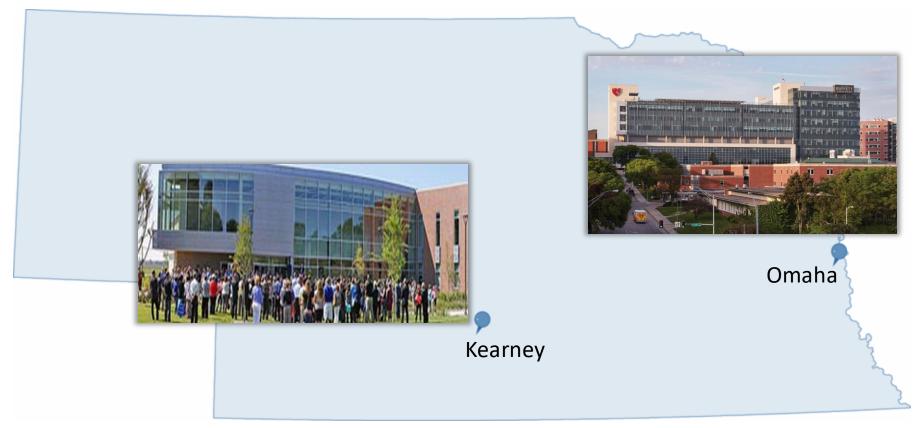


UNMC Program Overview



12 Students 8 Omaha | 4 Kearney Core Faculty 4 LMNT | 3 PhD Adjunct Faculty Inpatient | Outpatient | Pediatrics | Community | Food Service

One Program – Two Campuses





One Program 2 Campuses

Omaha Campus

Kearney Campus

8 students on campus

Future Target: 8-10 students

Overall Program Capacity: 20 students

Fall 2023: 2 Students on campus

Fall 2024: 5 students on campus

Overall Student target: 4/year

Evolution of our Program

- 2019 transitioned to Masters Required
- 2019 Futures Education Program
- October 2022: Full Accreditation under FEM
- Fall 2023: Expansion to Kearney Campus
- Fall 2024: Clinical Doctoral Program begins









Teaching the next generation with innovative approaches and varied learning settings

Clinical Simulation

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Omaha

- Sorrel Clinical Simulation Center
- Davis Global Center
- Kearney
 - HSEC





McGoogan Library of Medicine







Clinical Education: Competency Based Education

What is Competency Based **Education**?

- Framework for teaching and provides an assessment of learning
 - Allows for students to demonstrate what ey have learned through a variety of eriential learning activities
 - Focuses on outcomes and real-world learning experiences/performance
- Students demonstrate their learned knowledge and skill
- Each clinical course will have it's own set of defined competencies
- Students are given multiple times to become meaningful feedback from preceptors

competent and are given opportunities to receive



What is Experiential Learning?

- Hands on approach to learning
- Learning that moves beyond the classroom and allows for a learned experience
 - Simulation
 - Case Studies
 - Practice in actual clinical setting
- In this setting, we can teach all 12 students concepts at one time, with real time assessment
- This learning model allows for multiple assessments throughout the program and feedback to the student in real time

Source: foodandnutrition.org

Mastery of Concepts

<u>Knows</u>: Fact gathering phase; traditional style of learning and assessment of knowledge (ie exam)

<u>Shows</u>: Demonstration of learning in a hands on setting (ie simulation)

Does: Performance is integrated into clinical practice setting (ie direct 1:1 student with patient)

UNMC: Futures Education Model of Education



2018: Applied to be the first group of ACEND Futures Education Model Cohort

MEDICAL NUTRITION



Transitioned from Masters Optional Program to Masters Required



2019: Admitted first class15 month programof FEM Graduate students2023 was our 5th class of FEM students

UNMC Master of Medical Nutrition Curriculum

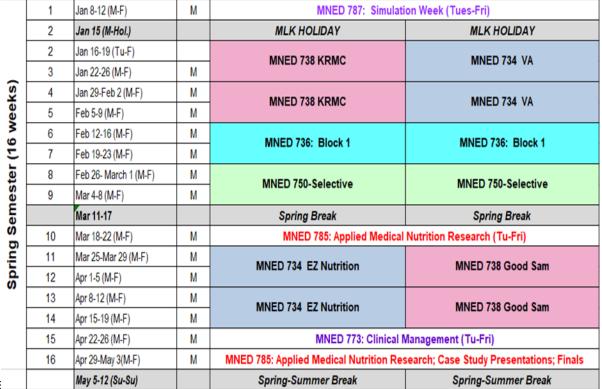
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| FALL 1 | | | | |
|--|---------------------|----------------------|---|-----------|
| COURSE | CR HRS ¹ | LEC HRS ² | SEL HRS³ (Prof/Alt⁴) | Instructo |
| MNED 720: Interprofessional Learning and Leadership I | 1 | 0 | 50 (0/50) | Timmerma |
| MNED 710: Nutrition Services Scope | 2 | 0 | 120 (120/0) | Timmermo |
| MNED 730: Pediatric Nutrition Care | 2 | 0 | 90 (60/30) | Timmerma |
| MNED 732: Nutrition Therapy-Adult & Geriatric Patient Care | 3 | 0 | 180 (120/60) | Timmermo |
| MNED 775: Research Methods in Medical Sciences | 3 | 45 | 0 | Hanson |
| MNED 777: Medical Nutrition and Diagnosis Related Care | 3 | 30 | 60 (0/60) | Ponce |
| Semester Total: | 14 | 75 | 500 (300/200) | |
| <u>SPRING 1</u> | | | | |
| COURSE | CR HRS ¹ | LEC HRS ² | SEL HRS ³ (Prof/Alt ⁴) | Instructo |
| MNED 734: Nutrition Therapy-Education & Counseling | 2 | 0 | 120 (120/0) | Timmerm |
| MNED 736: Nutrition Therapy-Complex Issues & Continuum of Care | 2 | 0 | 120 (120/0) | Timmerm |
| MNED 738: Nutrition Therapy-Critical Care & Nutrition Support | 2 | 0 | 120 (120/0) | Timmerm |
| MNED 750: Advanced Practice Selective | 2 | 0 | 60 (60/0) | Timmerm |
| BIOS 806: Biostatistics | 3 | 45 | 0 | СОРН |
| MNED 787: Medical Nutrition and the Nutrition Care Process | 3 | 45 | 30 (0/30) | Ponce |
| Semester Total: | 14 | 90 | 450 (420/30) | |
| SUMMER 1 | | | | |
| COURSE | CR HRS ¹ | LEC HRS ² | SEL HRS ³ (Prof/Alt ⁴) | Instructo |
| MNED 773: Clinical Nutrition Management | 2 | 0 | 100 (100/0) | Timmerm |
| MNED 779: Nutrition Therapy Practicum | 3 | 0 | 160 (160/0) | Timmerm |
| MNED 785: Applied Medical Nutrition Research | 3 | 45 | 0 | Hanson |
| MNED 790: Capstone | 2 | 0 | 0 (0/0) | Hanson |
| Semester Total: | 10 | 45 | 260 (260/0) | |



| | Week | MMN 2023-2024 | Class Day ¹ | 1 | 2 | | | |
|---------------------|------|--------------------|---------------------------|---|------------------------|--|--|--|
| | NCCK | 101011 2023-2024 | Day | | | | | |
| | | Aug 15-18 (T-F) | | Orientation | Orientation | | | |
| | 1 | Aug 21-25 (M-F) | М | MNED 710-PFS/TF/MGT | MNED 710-PFS/TF/MGT | | | |
| | 2 | Aug 28-Sep 1 (M_F) | М | Block 1 | Block 1 | | | |
| | | Monday-Holiday | | Holiday | Holiday | | | |
| | 3 | Sep 5-8(Tu-F) | | MNED 730/732: Simulation Week 1 (T-F) | | | | |
| | 4 | Sep 11-15 (M-F) | М | MNED 710-PFS/TF/MGT | MNED 710-PFS/TF/MGT | | | |
| _ | 5 | Sep 18-22 (M-F) | М | Block 2 | Block 2 | | | |
| sks | 6 | Sep 25-29 (M-F) | М | MNED 730/732: Simulation Week 2 (T-F) | | | | |
| vee | 7 | Oct 2-Oct 6 (M-F) | М | MNED 732 | MNED 732 | | | |
| 9 | 8 | Oct 9-Oct 13 (M-F) | М | Good Sam | KRMC | | | |
| 5 | 9 | Oct 16-17 (M-Tu) | | Fall Break | Fall Break | | | |
| Semester (16 weeks) | 9 | Oct 18-20(W-F) | М | MNED 732 | MNED 732 | | | |
| ne | 10 | Oct 23-27 (M-F) | М | Good Sam | KRMC | | | |
| Sel | 11 | Oct 30-Nov 3 (M-F) | | MNED 730/732: Simulation Week 3 (T-F) | | | | |
| all | 12 | Nov 6-10 (M-F) | М | | | | | |
| Ű. | 13 | Nov 13-17 (M-F) | М | MNED 730 PediatricsWIC | MNED 730 PediatricsWIC | | | |
| | 14 | Nov 20-21(M-Tu) | М | MNED 775 (Tues) | MNED 775 (Tues) | | | |
| | 14 | Nov 22-26 (W-Sun) | | HOLIDAY | HOLIDAY | | | |
| | 15 | Nov 27-Dec 1(M-F) | М | MNED 732EZ Nutrition | MNED 720 | | | |
| | 16 | Dec 4-8 (M-F) | М | MNED 720 | MNED 732EZ Nutrition | | | |
| | 17 | Dec 11-15(M-F) | М | MNED 775-Final; MNED 777-Case Study Presentations; MNED 777-Final E | | | | |





UNIVERSITY OF NEBRASKA MEDICAL CENTE **MEDICAL NUTRITION EDUCATION**

| May 13-17 (M-F) | M-773 | MNED 750-Selective | | | |
|----------------------|-------|-----------------------------|--|--|--|
| May 20-24 (M-F) | M-773 | MINED 750-Selective | | | |
| May 27 (M-Hol.) | | Holiday | | | |
| May 28-31(T-F) | | MNED 736: Block 2 | | | |
| Jun 3-7 (M-F) | M-773 | WINED 736. BIOCK 2 | | | |
| Jun 10-14 (M-F) | | | | | |
| Jun 17-21 (M-F) | | MNED 779 - Staff Experience | | | |
| Jun 24-28 (M-F) | | | | | |
| Jul 4 (Thurs-Hol) | | HOLIDAY | | | |
| Jul 1- 3, 5 (M-W, F) | | MNED 779 - Staff Experience | | | |
| Jul 8-12 (M-F) | | MNED 773: Clinical Mar | | | |
| Jul 15-19 (M-F) | M-773 | | | | |
| Jul 22-26 (M-F) | M-773 | MNED 785; 790 | | | |
| Jul 29-Aug 2 (M-F) | M-773 | | | | |
| Aug 5-9 (M-F) | | | | | |
| Aug10-18 (S-Su) | | Summer-Fall Break | | | |

UNIVERSITY OF NEBRASKA MEDICAL CENTER** MEDICAL NUTRITION EDUCATION

UNMC Master of Medical Nutrition Program

Student Competency Assessment Rubric (SCAR)

2023-2024

Student Name: _____

Rotation: MNED 734: Nutrition Therapy—Education & Counseling

Rotation Date(s):

| Performance Indicator | Not Addressed | Not Met | Progressing | Met | Date Notes from Preceptor |
|--|------------------|---------|-------------|-----|------------------------------|
| Analyzes the impact of food and nutrition on physiological processes. (1.2.1-S) | | | | | |
| Integrates knowledge of anatomy, physiology, and biochemistry to make decisions related to nutrition care. (1.2.2-S) | | | | | |
| Integrates nutritional biochemistry knowledge to make informed food and nutrition decisions for optimal health. (1.4.2- S) | | | | | |
| Bramines nutritional biochemical indicators specific to the disease process. (1.5.1-5) | | | | | |
| Interprets and analyzes the effects of disease, clinical condition and treatment on nutritional health status. (1.5.3-5) | | | | | |
| Formulates food and nutrition services considering psychological and social factors to meet the needs of individuals, <u>communities</u> and populations. (1.6.1-5) | | | | | |
| Analyzes the environmental factors affecting access to services and/or adequate nutrition. (1.6.4-S) | | | | | |
| Applies culturally sensitive approaches and communication skills. (1.7.5-D) | | | | | |
| Develops awareness of one's own personal beliefs, <u>values</u> and biases to better serve clients/patients of different cultures and backgrounds. (1.7.6-S) | | | | | |
| Demonstratesunderstanding of pharmacokinetics, absorption, clearance, drug metabolism, latencyperiod, drug and supplement metabolism, accumulation, half-life, and routesof administration. (1.8.2-5) | | | | | |
| Identifies indications, use and contraindications of complementary and integrative nutrition. (1.9.3-K) | | | | | |
| Interprets and communicates medical terminology to non-health professional audiences. (1.11.1-D) | | | | | |
| Uses acceptable medical abbreviations and appropriate medical terminology in all forms of communication. (1.11.2-D) | | | | | |
| Analyzes appropriate data in electronic format to make best decisions related to nutrition and diet. (1.13.1-5) | | | | | |
| Proficiently uses technology and informatics skills to aggregate data, enhance practice and patient care. (1.13.5-D) | | | | | |
| Identifies nutritional risk factors across the life cycle. (1.14.2-D) | | | | | |
| Teaches the benefits of physical activity across the life cycle to individuals, groups and populations. (1.14.3-D) | | | | | |
| Explains and takes into consideration how nutrients, nutritional supplements and hydration influence physical activity. (1.14.4-K) | | | | | |
| Selects and implements nutrition assessment tools for individuals, groups or populations. (2.3.1-D) | | | | | |
| Takes a food and nutrition related medical history. (2.3.4-D) | | | | | |
| Assesses physical activity and history of physical activity. (2.3.5-D) | | | | | |

MNED 734: Student Assessment



100% employment within six months of passing the exam

100% ultimate pass rate on the licensure exam (3 –yr avg)

100% of employers say they would hire another of our graduates



DURHAM RESEARCH CENTER

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BUFFETT CANCER CENTER

HDR © 2017 Dan Schwalm

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