# 2023 Master of Public Health (MPH) Nutrition Graduate Program Assessment

Our 100% online Master of Public Health Nutrition (MPH) degree includes interdisciplinary training in nutrition-related sciences and prepares students with skills and competencies essential for leadership and administrative positions in public health nutrition. Students learn about designing, implementing, and evaluating nutrition-related programs and policies to improve the health and well-being of local, national, and global populations. The land grant setting of Utah State University provides unique opportunities for the study of the relationship between human nutritional status and health with strong academic and research programs in nutritional epidemiology, federal and community nutrition programs, USU Extension nutrition outreach programs, food science, food safety, agricultural practices, animal health, climate change, environmental sciences and much more. The program is 100% online so students can complete the program from anywhere around the world. The program can also be pursued part-time or full-time.

The MPH Nutrition program is considered a professional program (Plan C). Students must complete an Applied Practice Experience (APE) and write a capstone paper (Integrative Learning Experience (ILE)). Students contact their advisor early in their program to plan and get approval to complete a high-quality APE and ILE, ensure they meet all degree requirements, and that all appropriate paperwork has been sent to the School of Graduate Studies (SGS).

In the 2022-2023 academic year, the program updated its guiding statements, assessments, and program evaluations as part of the self-study process.

#### Vision

Our vision is a future where people and animals live in an environment that supports overall health.

#### Mission

Our mission is to prepare highly competent public health professionals to lead, innovate, advocate, and educate in order to improve the health of humans, animals, and the environment

## Goals

The goals of our program are to:

Provide access to high-quality graduation education in public health.

Facilitate application-based experiences that align with the diverse career interests of students.

Engage in service that benefits students, alumni, public health professionals, the USU community, and the broader field of public health.

Collaborate with public health professionals to conduct research and community outreach to advance public health knowledge and practice.

#### **Values**

Our values are learning, discovery, and engagement.

## **Program Learning Objectives**

The learning objectives of our program are that students will:

Demonstrate knowledge of nutritional epidemiology, social determinants of health, One Health, public health policy, leadership, and program planning/evaluation.

Demonstrate their ability to write grants and communicate effectively through writing and oral presentation.

Demonstrate essential public health skill development through applied practice experiences in governmental, non-governmental, non-profit, industrial, and for-profit settings or appropriate university-affiliated settings.

Be prepared for leadership positions within local, state, and federal health agencies, the private industry, and non-profit organizations.

#### **Program Outcomes**

We track program outcomes by collecting data on the following (refer to Table 1 for data on each outcome):

Graduate students who are ready and able to enter the public health workforce or advanced study.

80% of graduates will be employed in the field of public health within 1 year of graduation.

80% of graduates will complete program requirements in 3 years or less.

15% of graduates will be enrolled in advanced degree programs within 5 years of graduation.

Graduate students who are independent, capable, and prepared to function in leadership positions in public health.

80% of students will be rated as 'above average' on employer surveys.

80% of graduates will report being 'well prepared' for public health leadership positions in alumni surveys.<sup>1</sup>

Graduate students who have public health experience outside the classroom that aligns with their career goals.

80% of students will have engaged in professional or community service in the field during their time in the program.

# **Table 1** *MPH Nutrition Program Outcome Data*

## Academic Year Started Program # of incoming students

# of graduates (as of fall 2023)Graduate students who are ready and able to enter the public health work force or advanced study.Graduate students who are independent, capable, and prepared to function in leadership positions in public health.Graduate students who have received public health experience outside the classroom that aligns with their career goals.80% of graduates who seek employment will be employed in the field within 1 year of graduation.80% of graduates will complete program requirements in 3 years 15% of graduates will be enrolled in advanced degree programs within 5 years of graduation.80% of students will be rated as 'above average' on employer surveys†80% of graduates will report being 'well prepared' for public health leadership positions in alumni surveys†80% of students will have engaged in professional or community service in the field during their time in the program2017-2018\*33100%100%33%TBDTBDN/

A2018-201911100%100%0%TBDTBDN/A2019-20201411100%57%TBDTBDTBDN/A2020-20211111100%91%TBDTBDTBDN/A2021-2022211192%TBDTBDTBDTBDN/A2022-2023200TBDTBDTBDTBDTBDN/A2023-2024210TBDTBDTBDTBDTBDTBD90% *Note.* N/A = Not applicable, TBD = To be determined

- \* The 2017-2018 academic year was the first year of the MPH Nutrition program.
- † Data will begin to be collected in spring 2024.

# **Applied Practice Experience Outcomes**

The Applied Practice Experience (APE) is an integral component of the MPH curriculum that allows students to apply what they have learned in their courses in a public health setting. The experience is typically completed in a student's second-to-last semester to ensure they have the foundational knowledge and skills necessary for application-based experience. Students work closely with the program to find an experience and then with a public health professional in the field who serves as a preceptor throughout the student's experience.

Data collected from students and preceptors at the conclusion of the APE (see Tables 2 and 3) support the program outcome data discussed in the previous section that suggests our students are 1) ready and able to enter the public health workforce or advanced study; 2) independent, capable, and prepared to function in leadership positions in public health; and 3) have received public health experiences, in addition to required coursework, that aligns with their career goals.

**Table 2**Students 'Evaluation of their APE (for APEs completed in 2020-2023, n=11)

Statement	% of Students that 'Strongly Agree' or 'Agree'
My APE experience allowed me to apply my public health knowledge and skills.	100%
My APE experiences will be useful in the area in which I plan to seek employment.	100%
My MPH courses adequately prepared me for my APE.	100%

**Table 3** *Preceptors' Evaluation of Student Skills (for APEs Completed in 2022-2023, n=7)* 

Skill	% of APE Preceptors that Rated their Student as 'Excellent' or 'Good'
Written communication	100%
Oral communication	100%
Ability to interact with diverse individuals	100%
Ability to take initiative	100%
Project management skills	100%
Ability to meet goals and objectives	100%
Ability to organize tasks	100%
Ability to set goals and objectives	100%
Ability to think creatively	100%
Ability to work as part of a team	71%

Analytical ability	100%
Dependability	100%
Leadership potential	100%
Problem solving skills	100%
Professional attitude and behavior	100%
Overall performance	100%

## **MPH Nutrition Competencies**

The MPH Nutrition degree utilizes a competency-based curriculum to ensure that students receive a high-quality education and are successful in the field of public health. Our accrediting body, the Council for Education in Public Health (CEPH), has defined 22 Foundational Competencies that all MPH students must have knowledge and skills in. The MPH Nutrition program has also identified five concentration competencies that students are expected to demonstrate mastery of. The program documents the specific course(s) (Tables 2 and 3) and assessment measures (i.e., paper, presentation, quiz) for each foundational and concentration competency to validate a student's ability to perform the competency.

Our graduates have demonstrated outstanding readiness for their future roles as public health professionals through our competency-based course assessment measures and other data sources. For example, in our 2022-2023 exit survey, an average of 91% felt 'extremely prepared' or 'adequately prepared' in each foundational competency, while 97% expressed the same confidence in nutrition concentration competencies.

**Table 4** *MPH Nutrition Curriculum CEPH Foundational Competency Mapping* 

<b>CEPH Foundational Competency</b>	Course number(s) and name(s)
Evidence-based Approaches to Public Health	
1. Apply epidemiological methods to	NDFS 6540 Introduction to Epidemiology
settings and situations in public health	and Biostatistics
practice	
2. Select quantitative and qualitative data	NDFS 6540 Introduction to Epidemiology
collection methods appropriate for a given public health context	and Biostatistics (Quantitative)
public health context	AND
	NDFS 6240 Program Planning and
	Evaluation in Public Health (Qualitative)

<ul> <li>3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming, and software, as appropriate</li> <li>4. Interpret results of data analysis for public health research, policy or practice</li> </ul>	NDFS 6540 Introduction to Epidemiology and Biostatistics (Quantitative)  AND  NDFS 6240 Program Planning and Evaluation in Public Health (Qualitative)  NDFS 6540 Introduction to Epidemiology and Biostatistics
public health research, policy of practice	Epidemiology and Diostatistics
<b>Public Health &amp; Health Care Systems</b>	
5. Compare the organization, structure, and function of health care, public health, and regulatory systems across national and international settings	NDFS 6550 Public Health Policy and Advocacy
6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and systemic levels	NDFS 6810 Social Determinants of Health
Planning & Management to Promote Hea	alth
7. Assess population needs, assets, and	NDFS 6240 Program Planning and
capacities that affect communities' health	Evaluation in Public Health
8. Apply awareness of cultural values and practices to the design, implementation, or critique of public health policies or programs	NDFS 6810 Social Determinants of Health
9. Design a population-based policy, program, project, or intervention	NDFS 6010 Hunger Issues and Solutions
10. Explain basic principles and tools of budget and resource management	NDFS 6280 Public Health Administration and Leadership
11. Select methods to evaluate public health programs	NDFS 6240 Program Planning and Evaluation in Public Health
Policy in Public Health	Diametrical in Fuorice fronting
12. Discuss the policy-making process,	NDFS 6550 Public Health Policy and
including the roles of ethics and evidence	Advocacy
13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes	NDFS 6280 Public Health Administration and Leadership
14. Advocate for political, social, or economic policies and programs that will improve health in diverse populations	NDFS 6550 Public Health Policy and Advocacy

15. Evaluate policies for their impact on	NDFS 6550 Public Health Policy and
public health and health equity	Advocacy
Leadership	
16. Apply leadership and/or management	NDFS 6280 Public Health Administration
principles to address a relevant issue	and Leadership
17. Apply negotiation and mediation skills	NDFS 6280 Public Health Administration
to address organizational or community	and Leadership
challenges	
Communication	
18. Select communication strategies for	NDFS 6230 Communicating Current
different audiences and sectors	Topics in Nutrition
19. Communicate audience-appropriate	NDFS 6230 Communicating Current
(i.e., non-academic, non-peer audience)	Topics in Nutrition
public health content, both in writing and	
through oral presentation	
20. Describe the importance of cultural	NDFS 6230 Communicating Current
competence in communicating public	Topics in Nutrition
health content	
<b>Interprofessional Practice</b>	
21. Integrate perspectives from other	ADVS 5000 One Health: People,
sectors and/or professions to promote and	Animals, & the Environment
advance population health	
Systems Thinking	
22. Apply a systems thinking tool to	NDFS 6810 Social Determinants of
visually represent a public health issue in	Health
a format other than standard narrative	

**Table 5** *MPH Nutrition Curriculum Concentration Competency Mapping* 

MPH Nutrition Concentration Competencies	Course number(s) and name(s)
1. Analyze and critically evaluate peer- reviewed research in a specific area of public health nutrition	NDFS 6210 Advanced Public Health Nutrition
2. Discuss the role agriculture or nutrition plays in prevention and treatment of significant chronic diseases or food security.	NDFS 6010 Hunger Issues and Solutions
3. Assess multiple perspectives of a topic in public health nutrition using peer reviewed research to substantiate claims.	NDFS 6210 Advanced Public Health Nutrition

4. Build and utilize a tool to facilitate critical reading, note taking, and synthesis of scientific articles	NDFS 6200 Nutritional Epidemiology
5. Develop a resource to disseminate the findings of an original research article to a general audience	NDFS 6600 Current Topics in Obesity

#### **Assessment Planning and Feedback**

As of August 1, 2022, the MPH program is considered an applicant for accreditation by the Council on Education for Public Health (CEPH). The program's deadline for submitting a self-study to CEPH as part of the accreditation process is July 26, 2024.

MPH Nutrition assessments and general MPH program evaluations follow CEPH requirements and are held to CEPH standards. MPH faculty review/edit the assessments before they are administered each year. The program also collects data on specific assessments that fulfill the foundational public health competencies set forth by CEPH. CEPH has and will continue to provide us with detailed feedback on our assessment efforts throughout our accreditation process.

Select MPH program faculty and staff meet weekly to discuss accreditation, program curriculum, program improvements, professional development opportunities for students/faculty/staff, and other program/student concerns. All program faculty, staff, and department heads are engaged in monthly MPH program meetings.

#### **Assessment Implementation**

The program conducts a variety of assessments to collect data from students, recent graduates, and stakeholders through the following: Exit Interviews, Exit Survey, 1 Year Alumni Survey, Alumni In-depth Interviews, Preceptor Evaluation, Applied Practice Experience (APE) Progress and Completion Reports, Stakeholder Survey, Climate Survey, and Employer Survey. Publicly available links to summaries of the data collected through these assessments can be found below:

HYPERLINK "https://usu.box.com/s/wbbzkxemdm1arhyses99x291cekk7hj5"<a href="mailto:Exit">Exit</a> Interview Summary (Spring 2022)

HYPERLINK "https://usu.box.com/s/vnbhfq39ioa1gjx8iappefljk8lkz136"<a href="Exit Interview-Summary"><u>Exit Interview Summary (2022-2023 Academic Year)</u></a>

HYPERLINK "https://usu.box.com/s/xjaxcey7he8m1c3uu5o3ijicvl5uaqse"<a href="Exit Survey Summary">Exit Survey Summary</a> (Spring 2022)

HYPERLINK "https://usu.box.com/s/d0efcufpax112vkpad4y8fsixwx9zzc9"<u>Exit Survey Summary (2022-2023 Academic Year)</u>

HYPERLINK "https://usu.box.com/s/ayjain8ni635wpktstolqb54gowd5c3w"<u>Alumni Survey Summary (2019-2022)</u>

HYPERLINK "https://usu.box.com/s/cz6cd3szfdle3ntj6xsw8ttgca9cxd1b"<u>Alumni In-Depth Interview Summary (2023)</u>

HYPERLINK "https://usu.box.com/s/vr74irudmetbgxe3j1rvajhto40z4wy6"<a href="https://usu.box.com/s/vr74irudmetbgxe3j1rvajhto40z4wy6"</a> <a href="https://usu.box.com/s/vr74irudmetbgxe3j

Report Summary (2020-2023)

HYPERLINK "https://usu.box.com/s/a91uzlc8t8bfzk0xltlivt3p8tpv9o26"<u>APE Completion Report Summary (2020-2023)</u>

HYPERLINK "https://usu.box.com/s/ei98vn8zr0g7ggaybygloj2r1b41x858"<u>APE Preceptor Evaluation Summary (2020-2023)</u>

HYPERLINK "https://usu.box.com/s/g1tinhl95yb8whokjt7gjex9d6779z2s"<a href="Stakeholder">Stakeholder</a> Summary (2023)

HYPERLINK "https://usu.box.com/s/tlqmqpvm0w06vn2vt3c6yptzhynkdnqi"<u>Climate Survey (2023)</u>

Program assessment data is also collected from our Student Advisory Board and Advisory Board. Additional data is maintained via an MPH student database and updated as needed.

#### **Assessment Utilization**

The data collected from assessments are compiled and discussed by MPH faculty in monthly meetings to help guide program improvement efforts. Any changes or modifications are decided on as a group and are made before the next academic year. Program/course changes and modifications are documented accordingly.

## **Data-driven Changes**

In 2023, the MPH program made various changes to the curriculum, APE resources, advising and orientation resources and processes, professional development resources, and diversity, equity, and inclusion efforts based on the data collected from our assessments. A summary of key changes made in each of these five areas is provided below.

#### Curriculum

The MPH program curriculum underwent several key changes to enhance student experiences and better prepare them for the field. A new course, NDFS 6550 (Public Health Policy and Advocacy) was introduced in the spring of 2023, and in the fall of 2024, all students will be required to take NDFS 6540 (Introduction to Epidemiology and Biostatistics). Several MPH courses, including NDFS 6140 (Introduction to Public Health), NDFS 6600 (Current Topics in Obesity), and NDFS 6280 (Public Health Administration and Leadership) have also incorporated new modules or adjusted course assignments to better prepare students to enter the public health workforce.

## **APE Resources Changes**

The program has improved the resources available to students as they prepare for and complete their APE. Program faculty revised APE course pages and materials to offer more specific instructions on the APE process and expectations. The program director revised the APE Handbook to clarify the roles and responsibilities of preceptors and

students and created an APE instructional video to reach students with different learning styles. An APE preceptor/organization spreadsheet that shares information about past students' APEs and a Q&A document were also developed to help students identify APE opportunities and find quick answers to common questions. These enhancements provide students with streamlined support and clearer guidance on APE processes and expectations.

## Advising and Orientation

The program implemented various improvements related to academic advising and new student orientation. The program streamlined its acceptance notification/acceptance communication process to ensure that new students receive a welcome email and are enrolled in the MPH Canvas course shortly after acceptance and that advisors are aware of their incoming students. We also began listing students' advisors on their "student profile page" in Banner and regularly sharing advisor/advisee information on the MPH Canvas announcements

The program also added depth to our new student orientation presentation to ensure that incoming students have all the information they need to be successful in the program and are aware of the different resources available to them. Our orientation also began allocating more time for students to introduce themselves to help foster a sense of community.

## **Professional Development**

The MPH program worked to improve the professional development resources and opportunities it offers to students. In spring 2023, the program co-hosted a networking night with the Utah Public Health Association (UPHA) Academic Coalition and began sending weekly announcements on the Canvas page that share information about job opportunities, internships, scholarships, and career development resources. Fall 2023 included an information session on the Certificate of Public Health (CPH) exam for current students and alumni and the addition of a professional/community service requirement in NDFS 6140 (Introduction to Public Health). The program has also made plans to hold mock interviews for students, collaborate with USU's Career Design Center to offer two professional development training events to students, and publish more robust career development resources in the MPH Canvas course in spring 2024.

#### Diversity, Equity, and Inclusion

The program has undertaken several initiatives to strengthen its commitment to diversity, equity, and inclusion. In a fall 2023 MPH faculty/staff meeting, the program discussed strategies for creating a safe and comfortable online space for students. All faculty, staff, and students were encouraged to attend virtual *Allies on Campus* trainings offered by USU's Division of Diversity, Equity, and Inclusion. The program also collaborated with the Division of Diversity, Equity, and Inclusion to hold an inclusive online learning training for all faculty, staff, and students. Our fall 2023 General Advisory Board meeting

discussed ways to recruit and better support diverse and underrepresented students.

Data will begin to be collected in spring 2024.

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