

Program Assessment Report
Food, Nutrition, and Health
Human Environmental Sciences
University of Arkansas
2021-2022

Program: Food, Nutrition, and Health

Contact Information:

Name: Nancy Harris Buckley

Phone: 479-575-4689

Email: nhb@uark.edu

A. Program Goals

The Food, Nutrition, and Health (FNAH) degree is designed for students who have a strong interest in nutrition, but do not want to become registered dietitians. The goal is to equip students with a strong foundation of evidence-based nutrition knowledge of how to locate, interpret, and use evidence-based information to deliver effective and professional oral and written communication in the nutrition related profession of their choice.

B. Expected Learning Outcomes

We expect all graduates to have the following skills and competencies:

Student Learning Outcome 1. Demonstrate the location, interpretation and usage of professional literature to deliver ethical, evidenced based nutrition information.

Student Learning Outcome 2. Demonstrate effective, professional oral and written communication regarding nutrition for a target population.

Student Learning Outcome 3. Demonstrate the principles of healthy meal planning incorporating consideration of special needs, culture and ethnic parameters through the development and implementation of a meal that reflects flavor profiles, food trends, sustainable food practices, and identifies nutrients, phytochemicals and functional foods while incorporating special needs, culture and ethnic parameters as assigned.

C. Program Assessment

Assessment Measure 1.

Direct Measure: NUTR 4001 (Nutrition Seminar) is a capstone course for FNAH students which requires the development and implementation of a professional presentation.

Assessment: Collection of data is the responsibility of the course instructor

Rubrics utilized: See attached rubric for NUTR 4001 (see attachments)

Acceptable and Ideal Targets

1. Acceptable: 85% or more of all FNAH students will earn 80% or higher on their final presentations.

2. Ideal: 100% of all FNAH students will score a 90% or higher on their final presentations.

Assessment Measure 2.

Direct Measure: NUTR 4303 (Cultural Perspectives on Foods) is a capstone course for FNAH students which requires the development and implementation of a professional presentation and ability to lead a meaningful group discussion on a selected topic.

Assessment: Collection of data is the responsibility of the course instructor.

Rubrics utilized: AACU Oral Communication Value Rubric (see attachments)

Acceptable and Ideal Targets

1. Acceptable: 85% or more of all FNAH students will earn a 90 out of 100 possible points using the rubric for the presentation in NUTR 4303.
2. Ideal: 100% of all FNAH students will earn a 90 out of 100 possible points using the rubric for the presentation in NUTR 4303.

Assessment Measure 3.

Indirect Measure: NUTR 3103 (Culinary Nutrition) includes a capstone experience which requires the completion of a service learning project in partnership with the University of Arkansas for Medical Sciences, that included the development of a social media campaign targeted towards students in grades 7-12 and their parents, and the creation of a training video for nutrition staff in public schools.

Assessment: Completed by external reviewer (UAMS representative) Collection of data is the responsibility of the course instructor

Acceptable and Ideal Targets

1. Acceptable: 85% or more of all FNAH students will earn 220 out of 275 (~80%) possible points on the service learning project.
2. Ideal: 100% of all FNAH students will earn 250 out of 275 (~90%) possible points on the service learning project.

D. Analysis of Results

Assessment Measure 1.

This measure was first assessed in the spring of 2019 when the course was taught for the first time. In the spring of 2020, ten (10) students completed the course and 100% met the target. In the spring of 2021, eight (8) FNAH students were enrolled in the course and 100% met the target. In the spring of 2022, fifteen (15) students were enrolled in the course and all but one student scored an 85% or better on the presentation. All students scored a 90% or better on the written summary of their presentation/journal article.

Assessment Measure 2.

This measure was first assessed in the spring semester of 2019 when NUTR 4403 (Recipe Modification) the course was taught for the first time. Seven (7) students enrolled in the FNAH degree completed the course. Three (3) of the students scored an 85% or better on the presentation. Therefore 50% of the students met the target. During the spring of 2021, sixteen (16) students enrolled in the FNAH degree completed the course. Fifteen (15) of the students scored an 80% or better on the presentation; therefore, 94% of the

students met the target. This year, the measure is being assessed in NUTR 4303 (Cultural Perspectives on Foods). Twenty (20) students enrolled in the course during the fall of 2021, and all twenty scored a 90 or above on the final presentation, therefore 100% of the students met the ideal target.

Assessment Measure 3.

This measure was first assessed by direct measure, in the fall semester of 2018 when the course was taught for the first time. Four (4) students enrolled in the FNAH degree completed the course. Four (4) of the students scored an 85% or better on the presentation. Therefore 100% of the students met the target. In the fall of 2019, thirteen (13), students enrolled in FNAH degree completed this course, all students scored an 80% or better on the presentation. Therefore, 100% of the students met the acceptable target. The fall of 2020, was the first year to incorporate service learning and an honors section into NUTR 3103/3101L. During the fall of 2021, the students were divided into three groups to complete the project. They were required to complete three social media posts, create two education materials, make a directional video, and write a reflection paper describing the process and what they have learned. The project was worth 300 points. An external reviewer (UAMS representative) evaluated the work. The groups were given feedback and the opportunity to make corrections. All groups were given a 300/300 on the service learning project, which meets the ideal target.

E. Changes to Degree Program

The 2021-2022 academic year marked the fourth year for the Food, Nutrition and Health degree. All three of the student learning outcomes were evaluated within this academic year. All measures met the acceptable targets. The Food, Nutrition, and Health program had its first program review in November of 2021. Listed below are the findings from the review. As with any new degree plans, there is a period of learning for both instructors and students. Issues brought forth during the program review, were noted and respective instructors for courses are taking corrective measures. Plans to modify focus areas are underway, along with development for additional courses designed specifically to the FNAH students, and aiming towards establishing rigor in content and curriculum.

Our findings are organized in accordance with the seven topic areas provided in the academic program review template provided to us and conclude with a summary and our recommendations for moving forward. Generally, we found the program not only sound, but creatively constructed demonstrating the commitment and values of the faculty involved.

Review of Program Goals, Objectives and Activities *(Are the program goals appropriate and assessed? To what degree are the students meeting the program's goals and student learning outcomes? How is the program meeting market/industry demands and/or preparing students for advanced study? Is there sufficient student demand for the program? Are the graduation/completion rates appropriate for the program?)*

Program goals are appropriate, well-articulated and assessed. There are seven learning goals including 1) demonstrating an understanding of and competencies in the i) scientific basis for the USDA's MyPlate guide, diet planning and how nutrients affect energy, wellness and disease and ii) the cultural and social aspects of food by exhibiting the relationship between culture and food choices, including customs, preparation methods, and religious observations; 2) demonstrating an understanding of effective communication skills in order to address nutrition related questions, promote nutrition and health, and

explain nutrition misconceptions; 3) demonstrate evidence-based skills by understanding nutrition concepts, analytical and problem-solving skills to promote health and assist in food related disease prevention, and 4) acknowledge that a career in this field may require you to meet certain licensing, training, and other requirements that can vary by vocation and state. No apparent gaps or problems in program learning goals were noted.

The program has three overarching student learning outcomes against which the learning goals are assessed: i) demonstrate the location, interpretation and usage of professional literature to deliver ethical, evidenced based nutrition information; ii) demonstrate effective, professional oral and written communication regarding nutrition for a target population; and iii) demonstrate the principles of healthy meal planning incorporating consideration of special needs, culture and ethnic parameters through the development and implementation of a meal that reflects flavor profiles, food trends, sustainable food practices, and identifies nutrients, phytochemicals and functional foods while incorporating special needs, culture and ethnic parameters as assigned.

FNAH program faculty spent summer 2020 revamping their program's assessment process and assessment measures are well spelt out. For example, in Recipe Modification [NUTR 4403], a capstone course for FNAH students are required to develop and implement a professional presentation and lead a meaningful group discussion on a selected nutrition topic. The acceptable target for this course is that 85% or more of all FNAH students will earn 90% or better using the rubric for the presentation. For spring semester 2021, 16 students enrolled in the FNAH degree completed the course and 15 scored an 85% or better on the presentation; therefore, 94% of the students met the target. In another course, Culinary Nutrition [NUTR 3103], which also includes a capstone experience, students complete a service-learning project in partnership with the University of Arkansas for Medical Sciences. The project usually includes the development of a social media campaign target at high school learners and their parents and the creation of a training video for nutrition staff in public schools. Acceptable targets are that 85% or more of all FNAH students will earn (~80%) possible points on the service-learning project. Student work is assessed by an external evaluator. For fall semester 2020, students worked on the project in two groups and one group scored 252/275 (91%) while the other scored 262/275 (95%) on the project, both of which met the acceptable target.

One of the impressive strengths of this program is the identification of a critical gap for students who are passionate about food and nutrition yet desire a career path alternative to becoming a registered dietician. Growth in the number of students declared in FNAH program from 6 in 2018, 27 in 2019 to 47 in 2020 is evidence that sufficient student demand is there. As a new program, only in its 3rd/4th year, graduation/completion rates are comparable with other programs with a placement rate (career outcome rate) of 70% for 2019-2020.

Review of Program Curriculum *(Is the program curriculum appropriate to meet current and future market/industry needs and/or to prepare students for advanced study? Are students introduced to experiences within the workplace and introduced to professionals in the field? Does the program promote and support interdisciplinary initiatives? How does the program address diversity with the curriculum, faculty, staff, and students?)*

The program curriculum is solid and congruent with its several complementary goals as discussed above. It requires the successful completion of 120 credit hours: 45 credit hours of general education courses, 33 credit hours of food, nutrition and health core courses, and 42 credit hours of focused and general elective courses. The sequencing from general education courses to core and elective courses, incrementally prepares students for community development practice. The core courses in the major offer a combination of theory, understanding cultural perspectives on foods, research, and experiential learning. The suite of core and elective courses is thoughtfully designed and offer opportunity to put learning into practice (through the service-learning courses) and practice into learning (through reflection on the field courses with the instructors and community partners.).

The most impressive strength of the program is the faculty creativity, commitment, proactiveness and spirit of togetherness that has enabled them to create internships opportunities for students thereby involving industry partners in the program. During the academic year 2020-2021, when FNAH major was

in its third year, faculty conducted an evaluation of the program and developed a list of changes that should be implemented to strengthen student learning, including i) developing goals that challenge students more, and ii) faculty should rethink course design to mirror student learning outcomes and course goals should be applied to Food, Nutrition, and Health specific courses. FNAH faculty members have built strong relationships with other key stakeholders including Jana Gardner from Avioc. These relationships in conjunction with the strong curriculum, facilitate more enriching service-learning opportunities for students and can enable a greater number to graduate with a FNAH degree, prepare for graduate study and position them well for professional degree programs in health and public service as well as academic programs of their interest. In the short term, with the guidance of faculty and community partners, the projects will infuse innovative ideas and practices into the communities, e.g., public schools. In the longer term, graduates of the FNAH major will become leaders in helping to increase the capacity of residents to improve their health through better understanding of food, nutrition and health. The impact of the graduates will be felt both in the communities in which they intern as well in other communities throughout the US and world, as graduates use their knowledge and credentials and move forward in their professional careers.

We did note that the program is aware of the need for continued revision of course offerings to ensure that student needs are met. For example, one of the students we visited with expressed her wish for more courses in related disciplines such as food science, and the faculty also spoke about this same idea.

Review of Academic Support (*Does the program provide appropriate quality and quantity of academic advising and mentoring of students? Does the program provide for retention of qualified students from term to term and support student progress toward and achievement of graduation?*)

Overall, the FNAH program has an effective mentoring and advising program for their student body. The faculty and staff team are quite coordinated in: (1) recruiting students into the program; (2) facilitating the career transition of students who didn't land an internship in dietetics into the FNAH program; and (3) openly communicating with each other the individual advising needs of the students. The faculty commented about how all lines of communication were wide open, as they easily find each other when students' needs arise. They said they were thankful for the support and community that they've created in quick time. Their student advising practices entailed an open-door policy that enabled students to feel free to visit and ask questions or share concerns and successes. Students who participated in the review commented, for example, that the faculty, "...are very supportive and present..." and "I like how close-knit it [the program] is." The support staff (Jody) mentioned that students often visit her office and it is a very collegial environment.

The FNAH program's faculty and staff actively collaborate to recruit and retain their students. We didn't specifically talk about this topic in our meetings, however, the faculty communicated on page 31 in the self-study that they engage in eight different activities to recruit and retain students, e.g. nominate students for awards, promote extracurricular activities, social media posts.

One concern that was brought up in our conversations was an institution-wide situation in which students aren't paired with the degree program level advisors until they've taken 60 credit hours at the university. Both the faculty and students communicated that they'd prefer to meet each other when the students are earlier into their academic careers.

It appeared there was an opportunity to build more of a community within the FNAH student body. For example, one student said, "... would like to somehow get connected with all the students in the [FNAH] program." Whereas other degree programs have established clubs, such as the dietetics club and the food science club, there was not a club for FNAH students.

Review of Program Faculty (*Do program faculty have appropriate academic credentials and/or professional licensure/certification? Are the faculty orientation and faculty evaluation processes appropriate? Is the faculty workload in keeping with best practices?*)

The four FNAH faculty include Ms. Nancy Buckley, Ms. Mechelle Bailey, and Drs. Way, Trudo and Hawley. Dr. Hawley and Trudo are specialists in food sciences and nutritional sciences respectively. Ms. Nancy is an expert in human environmental sciences with emphasis on dietetics. Ms. Bailey is a

nutritionist. While together they may seem enough to run the program effectively a few concerns were raised during our virtual discussion with them.

i i) Faculty felt that current and projected numbers of students to be enrolled in the program justify the need for more resources. Because some faculty have substantial service, lab responsibilities and joint appointments, it would be challenging for them to meet the needs of an increased body of students, without additional faculty and support.

i ii) Discussions held revealed lack of an institutional structure with regards to NTT and tenure track appointments/promotion. The interdisciplinary nature of FNAH invites cross-campus collaboration and sharing of faculty with other programs. While collaborative efforts are the future of teaching and research, the gray areas around time commitments and allocation of resources in these partnerships can be complicated. Therefore, joint appointments and collaborative efforts between programs or colleges must be well spelled out. Promotion guidelines must also be clear to faculty with a clear structure or outline of the research, teaching/lab and service components of the position should be established prior to hiring new faculty. This will help attract and retain qualified professionals for the program.

Review of Program Resources (*Is there an appropriate level of institutional support for program operation? Are faculty, library, professional development and other program resources sufficient?*)

It appears that the program had adequate institutional support. However, as it continues to grow (e.g. it is currently the fastest growing program in the college), this may need to be visited.

One topic that came up during our review was that the FNAH program didn't seem to have a designated/official administrator/champion, and that this is something that could help. Fortunately, the small teaching team is tight-knit, so they work things out, but as the program grows, having a leader to coordinate budgets, enrollment, scheduling, advising, etc. could be helpful. Or perhaps they could divvy these responsibilities up and/or coordinate/collaborate them within the School. Either way, in one of our conversations someone said resource-related issues are simply a communication issue, i.e. if the FNAH program could somehow be coordinated in their ask for more teaching support/resources, they will likely receive them. Since the program will likely compete for resources within the school, it would be wise to identify someone whose interests align with the program's success and who would be able to effectively advocate for the program.

Review of Instruction by Distance Technology (if program courses offered by distance)

Are the program distance technology courses offered/delivered in accordance with best practices? Does the institution have appropriate procedures in place to assure the security of personal information? Are technology support services appropriate for students enrolled in and faculty teaching courses/programs utilizing technology? Are policies for student/faculty ratio, and faculty course load in accordance with best practices? Are policies on intellectual property in accordance with best practices?

This section was not applicable to our review.

Review of Program Research and Service (*Are the intended research and creative outcomes for each program appropriate, assessed and results utilized? Are the intended outreach/service/entrepreneurial outcomes for each program's initiatives appropriate, assessed and results utilized?*)

Based on the number of faculty engaged in the FNAH program, the extent to which research has been conducted seemed reasonable. The primary creative outputs were in the form of the Scholarship of Teaching and Learning (SoTL) and teaching activities such as service-learning projects with nearby community partners. However, if/when the program continues to grow, and as more faculty support the program, perhaps that would be the time to brainstorm what sort of a hire would bring the research prowess necessary to successfully chase grants/industry partnerships. Given the proximity of the program to the university's medical school, several global headquarters within the food industries, and other resources, there seemed to be great potential for significant research outputs and/or entrepreneurial and extension activities.

Report Summary (*Indicate program strengths, areas of concern that need to be addressed by the program, other observations from the review team*). Overall, the FNAH program's strengths include its enthusiastic and tight-knit teaching team, which consists of experienced instructors with diverse

backgrounds and skillsets. The major is positioned quite nicely to attract students who are interested in (A) food and nutrition careers but not necessarily established programs such as dietetics or food science; and/or (B) pursuing pre-medical careers. The faculty facilitate experiential learning and support for their students that appeared to result in collegial relationships with each other and their students, as well as student success. The faculty clearly documented ideas for improvement in the self-study. The program also demonstrated an ability to maintain high student retention rates. As the program continues to grow, we are concerned about how the program will manage this growth. It appeared that the college/program may need to consider the need for more instructors/faculty members if the program continues/decides to grow, as well as how to manage “smart growth,” i.e. a strategic approach that is feasible and sustainable long-term. For example, as more students engage in the FNAH program, will it be practical to transition from teaching a course once per year to twice per year probably, and who will teach these sections? The college may want to consider the leadership within the unit, e.g. is there a designated champion(s) and what is their relationship with the other nutrition-related programs within the College as well as the department leadership etc. This could help with regard to needs, for example, budget-related concerns, course planning, etc. It was evident that the FNAH program has an upward trajectory and it is somewhat of a unicorn, as it is very new and the faculty have invested a lot of their enthusiasm and effective professional skills and teaching skill into it. As the program prepares for long term success, it will be worthwhile to discuss and identify roles and responsibilities for administrating the program such that the program can sustain through whatever challenges may arise in the future. Thank

F. Changes to Student Learning Outcomes

Additional clear and assessable learning outcomes should be incorporated during the restructuring of the focus areas to reflect the students’ educational goals, and assessed when applicable.

G. Changes to Assessment Process

Rethinking course design to mirror student learning outcomes and course goals should be applied to Food, Nutrition, and Health specific courses. Rubrics should be created for capstone experiences and designed to assess the learning outcomes.

Attachments:NUTR 4101 Grading Rubric for Oral Presentation and Final Project

	Sophisticated (15 points)	Competent (12 points)	Not Yet Competent (10 points)	Unacceptable (5 points)
Organization	Student presents information in clear, logical, & interesting sequence which audience can easily follow	Student presents information in clear & logical sequence which audience can follow	Student presents information in an illogical/disinteresting sequence; audience has difficulty following	No sequence to presentation. Audience cannot follow or understand information
Subject Knowledge (including background information as needed)	Student demonstrates full knowledge (more than required) by answering all questions with explanations and elaboration	Student is at ease with expected answers to all questions, but fails to elaborate.	Student is uncomfortable with information and is able to answer only rudimentary questions	Student does not have grasp of information; student cannot answer questions about his/her subject
Graphics/Key Figures Used in Power Point	Graphics explain and reinforce screen text and presentation	Graphics relate to text and presentation	Graphics minimally used and/or rarely support text and presentation	Graphics not used or are not appropriate to text and presentation
Text Used in Power Point	Presentation has no misspellings or grammatical errors	Presentation has no more than 2 misspellings &/or grammatical errors	Presentation has 3 misspellings and/or grammatical errors	Presentation has 4 or more spelling or grammatical errors
Eye Contact	Student maintains eye contact with audience	Student maintains eye contact most of the time but frequently returns to notes	Student occasionally makes eye contact with audience members but reads most of presentation	Student reads all of report with no eye contact
Oral Delivery	Student uses a clear voice and correct, precise pronunciation of terms so that all audience members can hear presentation	Student uses a clear voice and pronounces most words correctly. Most audience members can hear presentation	Student uses a voice that is low and difficult to hear. Student incorrectly pronounces terms frequently	Student mumbles and incorrectly pronounces terms continually. Audience members cannot hear.
Presentation Length	12-15 minutes (5 points)		10-12 minutes (3 points)	<10 minutes (0 points)
Printed PPT submitted on time	Yes = 5 points No = 0 points			

Date of Presentation:

Title of Presentation:

Article Submitted for Posting to Blackboard (one week before):

Copy of PowerPoint (5 points):

Written Summary (worth 75 points): _____

ORAL COMMUNICATION VALUE RUBRIC
for more information, please contact value@aacu.org

Definition: Oral communication is a prepared, purposeful presentation designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors.

100 point presentation assignment

	Mastery 20-16 points	Exceeds Expectations 15-11 points	Achieves Expectations 10-6 points	Needs Improvement 5-1 points
Organization	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable and is skillful and makes the content of the presentation cohesive.	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable within the presentation.	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is intermittently observable within the presentation.	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is not observable within the presentation.
Language	Language choices are imaginative, memorable, and compelling, and enhance the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are thoughtful and generally support the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are mundane and commonplace and partially support the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are unclear and minimally support the effectiveness of the presentation. Language in presentation is not appropriate to audience.
Delivery	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation compelling, and speaker appears polished and confident.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation interesting, and speaker appears comfortable.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation understandable, and speaker appears tentative.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) detract from the understandability of the presentation, and speaker appears uncomfortable.
Supporting Material	A variety of types of supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that significantly supports the presentation or establishes the presenter's credibility/authority on the topic.	Supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that generally supports the presentation or establishes the presenter's credibility/authority on the topic.	Supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that partially supports the presentation or establishes the presenter's credibility/authority on the topic.	Insufficient supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make reference to information or analysis that minimally supports the presentation or establishes the presenter's credibility/authority on the topic.
Central Message	Central message is compelling (precisely stated, appropriately repeated, memorable, and strongly supported.)	Central message is clear and consistent with the supporting material.	Central message is basically understandable but is not often repeated and is not memorable.	Central message can be deduced, but is not explicitly stated in the presentation.