Weber State University Biennial Report on Assessment of Student Learning

Cover Page





Department/Program: Bachelor of Science in Nutrition Education

Academic Year of Report: 2020/21 (covering Summer 2019 through Spring 2021)

Date Submitted: 11/15/19

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We have updated the Institutional Effectiveness website, which includes an update for each program page. All Biennial Assessment and Program Review reports will now be available on a single page. Please review your page for completeness and accuracy, and indicate on the list below the changes that need to be made. Access your program page from the top-level <u>results</u> page. Select the appropriate college and then your program from the subsequent page.

A.	Mission Statement
	X_ Information is current; no changes required.
В.	Student Learning Outcomes (please note the addition of certificate and associate credential learning outcomes) _X_ Information is current; no changes required.
	Update if not current:
C.	Curriculum (please note, we are using Google Sheets for this section so that updates are easier to make)
	Information is current; no changes required.
	Update if not current (you may request access to the Google Sheet if that is easiest, or we can make the updates):

New Course NUTR 3070:

The Nutrition Education dual track major courses and learning outcomes have been aligned with the Society for Nutrition Education and Behavior (SNEB) Association competencies and designed to prepare students for graduate studies. An upper division food science course is now required by most Accreditation Council for Education in Nutrition and Dietetics (ACEND) accredited programs for students seeking to enter a graduate program to become a Registered Dietitian Nutritionist (RDN). The Sports Nutrition major is a pre-professional graduate program preparatory degree.

Add NUTR 3070 as a required course in the sports nutrition track:

Food Science is a major competency area of the SNEB. Our current curriculum offers one lower division food science course (NUTR SUS 1240). We added this upper division course as a requirement for sports nutrition majors and as an elective for integrative nutrition majors to strengthen the elective options for students wanting a food science related career.

Change credit hours of NUTR 3220:

Foundations in Diet Therapy (2) changed to (3) to include the following content that is in the required Nelms text and part of aligning the program to SNEB and ACEND a. Legal issues surrounding nutrition practice b. Practice Development c. Ethics - Standard of Care and Scope of Practice. NUTR 3220 remains a required course in the sports nutrition track.

Add NUTR 3220 as an elective in the integrated nutrition track:

Foundations in diet therapy is a key course for those nutrition education students in the integrative track that may want to pursue therapy related professions, graduate studies or further certification through the Society for Nutrition Education and Behavior (SNEB) Association.

Changing NUTR 4420 from a required core course to an elective:

The standard course content for program alignment and course articulation is NUTR 3020: Sports Nutrition. NUTR 3020 is currently an elective in integrative nutrition emphasis and a requirement in the sports nutrition emphasis. With the requirement to add a food science course to the curriculum, the 1 credit hour increase in NUTR 3220, and students only having 5 CH electives in the sports nutrition emphasis, the nutrition program moved NUTR 4420 to an elective.

Add NUTR 3020 a required core course for both nutrition education major tracks.

Add this note to integrative nutrition track:

The Sports Nutrition emphasis, not the Integrative Nutrition emphasis, is a preparatory program for many Graduate Registered Dietitian programs. Students wishing to take the Integrative Nutrition emphasis and prepare for Graduate Registered Dietitian programs should select elective courses carefully and consider these additional suggested courses needed for many Graduate Registered Dietitian programs (includes General Education)

						Lea	arning Outcomes			
				Co	ncepts			Comp	etencies	
				2				2		
			1	Integrate	3	4	1	Nutrient	3	4
Course	Course	Credit	Knowledg	d &	Respons-	High	Diet Analysis	Needs &	Nutr. Issues &	Structure &
Number	Title	Hours	e & Skills	Applied	ibility	Impact	& Design	Functions	Assessment	Function
Nutrition Educa	ation (NE) Required Cour	ses								
NUTR LS SUS	Science and	3	3	2	2	1	2	3	1	1
1020	Application of Human									
	Nutrition									
NUTR 2320	Food Values, Diet	3	3	3	3	0	3	3	2	2
	Design, and Health									
NUTR 2020	Nutrition in the Life	3	3	2	3	1	1	3	1	1
	Cycle									

						Lea	rning Outcomes			
					ncepts				etencies	
Course Number	Course Title	Credit Hours	1 Knowledg e & Skills	2 Integrate d & Applied	3 Respons- ibility	4 High Impact	1 Diet Analysis & Design	2 Nutrient Needs & Functions	3 Nutr. Issues & Assessment	4 Structure & Function
NUTR 3020	Sports Nutrition	3	3	3	2	1	3	3	3	3
NUTR 3420	Multicultural Health and Nutrition	3	3	3	2	1	2	2	1	1
NUTR 4320	Current Issues in Nutrition	2	3	3	3	2	0	1	3	3
NUTR 4990	Senior Seminar	1	3	3	3	3	0	1	3	1
Integrative Nutr	ition (IN) Emphasis Req	uired Cou	rses							
NUTR 1240 SUS (SN elective)	Nutrition and Sustainable Cooking	3	1	3	3	3	1	2	0	1
NUTR 4860 INT (SN elective)	Field Experience	2 (1-2 SN)	2	3	3	3	0	1	1	1
	(SN) Emphasis Require									
NUTR 3070 (IN elective)	Advanced Food Science	3	3	3	1	1	0	1	2	3
NUTR 3040 (IN elective)	Nutrition Assessment	3	3	2	2	2	2	2	3	1
NUTR 3220 (IN elective)	Foundations in Diet Therapy	3	3	2	1	0	0	3	3	2
NUTR 4440 (IN elective)	Advanced Human Nutrition	3	3	1	1	1	0	3	3	3
Elective Nutritio	n Courses									
NUTR 1120 (SN)	Nutrition for the Athlete	2	3	3	2	2	1	1	1	1
NUTR 3320	Health and Nutrition of the Older Adult	3	3	2	3	0	1	3	2	1
NUTR 4830	Directed Readings	1-2	3	3	2	3	0	3	3	2
NUTR 4520 (IN & SN)	Directed Undergraduate Research	1-4	3	3	3	3	1	1	3	3
NUTR 4420 (IN & SN)	Nutrition and Fitness	3	3	3	3	1	2	3	3	3

KEY: 0 = Not Addressed, 1 = Introduced, Minor Emphasis, 2 = Emphasized, Moderate Importance, 3 = Assessed Comprehensive, Major Emphasis

D. Program and Contact Information

___ Information is current; no changes required.

Update if not current:

Update academic advisor. Heidi Costello (801-626-6727, heidicostello@weber.edu)

Assessment Plan

We have traditionally asked programs to report on outcome achievement by students at the course level. We are encouraging programs to consider alternative assessment approaches and plans that are outcome-based as opposed to course-based, though course-based assessment can continue to be used. A complete assessment plan will include a timeline (which courses or which outcomes will be assessed each year), an overall assessment strategy (course-based, outcome-based, reviewed juries, ePortfolio, field tests, etc.), information about how you will collect and review data, and information about how the department/program faculty are engaged in the assessment review.

___ Information is current; no changes required.

Update if not current: Updated information is highlighted in red.

In summary:

- 1) Method 1 for human structure and function changed from "80% of students will score 70% or better on NUTR 2320 exams tied to this outcome" to "70% of students will score 70% or better on NUTR 1020 exams tied to this outcome." The previous method 1 listed is included as an additional method for a future report.
- 2) Threshold for all assessments methods tied to NUTR 1020 changed from 65% to 70%

Assessment plan:

<u>Collection and Analysis of Data:</u> Nutrition Program full-time faculty will be required to provide assessment data from courses taught and participate in the oversight and implementation of the program's assessment plan. Adjunct faculty are required to provide data for courses taught. Data for all program courses will be analyzed and reported by the faculty member in conjunction with the program director.

General Education Life Science (LS) courses: The Nutrition LS1020 Gen Ed course will be assessed each semester using categorized multiple choice questions delivered using Chi-Tester that address either the Natural Science or Life Science Gen Ed Learning Outcomes through course specific questions (direct measure 1) or the life science area committee learning outcome specific question options (direct measure 2).

<u>Required Courses:</u> Required Nutrition Education courses (see program grid in section D. curriculum) will be assessed using categorized multiple choice questions delivered using Chi-Tester and/or a course-specific assessment instrument, rubric, or assignment that directly measures program level learning outcomes for nutrition education majors.

<u>Elective Courses:</u> Elective Nutrition Education courses (see program grid in section D. curriculum) will be assessed using a course-specific assessment instrument, rubric, or assignment that directly measures targeted program level learning outcomes for nutrition education majors.

Assessment of Graduating Majors: Senior Seminar (NUTR 4990) serves as a capstone course for Nutrition Education majors and is typically taken in the last year of study. As a way to assess graduating majors, students enrolled in Senior Seminar will be required to take the Collegiate Learning Assessment. Nutrition Education program, concept and competency learning outcome questions will be included in the WSU exit survey administered to all WSU graduates in which approximately 60% of graduating seniors complete.

Concepts: Students completing the Nutrition Education program will have:

A. **Knowledge & Skills** to solve nutrition and health related problems.

Method 1: 80% of students will score 70% or better on NUTR 2320 exams.

Method 2: 80% of students will score 70% or better on the comprehensive NUTR 4440 final exam.

Additional assessment methods considered for future reports:

Method 3: 70% of students will score 70% or better on NUTR 1020 exams tied to this outcome.

Method 4: 80% of students will score 70% or better on the NUTR 2020 comprehensive final exam.

B. **Integrated & Applied Expertise** to educate and communicate for optimal health promotion and human performance.

Method 1: 80% of students will score 70% or better on the NUTR 3020 supplement facts sheet research presentation.

Method 2: 80% of students will score 70% or better on NUTR 4320 presentations.

Additional assessment methods considered for future reports:

Method 3: 80% of students will score 70% or better on the Nutrition LS1020 exam 4 Diet and Exercise Analysis assimilation and communication of results.

Method 4: 80% of students will score 70% or better on NUTR 4420 Laboratory exercises.

C. **Personal and Community Responsibility** to optimize healthful behaviors of individuals, families, and/or communities through the life cycle with networking, resources, and support.

Method 1: 80% of students will score 70% or better on the Nutrition LS1020 Signature Assignment essay.

Method 2: 80% of students will score 70% or better on the NUTR 3420 major project research paper.

Additional assessment methods considered for future reports:

Method 3: 80% of students will score 70% or better on NUTR 2320 exam questions tied to this outcome.

Method 4: 80% of students will score 70% or better on the NUTR 2220, 2420, and/or 2020 community observation assignments.

D. **High Impact Experiences** from assimilating or engaging in research, group projects, senior capstone work, and/or community-based fieldwork. Method 1: 90% of NUTR 1240 students will engage in hands on nutrition and sustainable cooking and earn a 70& or better score in their cooking demonstration assignment.

Method 2: 90% of NUTR 4520 directed research students will earn a course grade of 70% or better.

Additional assessment methods considered for future reports:

Method 3: 90% of NUTR 4830 directed readings students will earn a course grade of 70% or better.

Method 4: 80% of students will score 70% or better on the NUTR 2020 lifecycle community observation project.

Competencies: Students completing the Nutrition Education programs will master nutrition concepts in:

- 1. **Diet Analysis & Design** by performing accurate diet analysis and design according to dietary guidelines for Americans, for health, fitness, and/or sport performance and with comprehensive evaluation, interpretation, and application.
 - Method 1: 80% of students will score 70% or better on the NUTR 2320 diet design assignments 4 and 5.
 - Method 2: 80% of students wills core 70% or better on the NUTR 3020 evaluation of student athlete diet analysis and design projects.

Additional assessment methods considered for future reports:

- Method 3: 70% of students will score 70% or better on the Nutrition LS1020 exam 2 diet analysis reports.
- Method 4: 80% of students will score 70% or better on the NUTR 4420 self-fitness-oriented diet project.
- 2. **Nutrient Needs & Functions** by gender and activity level for various age groups and health conditions using healthy and sustainable food preparation methods.
 - Method 1: 70% of students will score 70% or better on NUTR 1020 exam questions tied to this outcome
 - Method 2: 80% of students will score 70% or better on NUTR 4420 exam 2.

Additional assessment methods considered for future reports:

- Method 3: 80% of students will score 70% or better on NUTR 2020 case studies tied to this outcome.
- Method 4: 80% of students will score 70% or better on NUTR 3040 exams 4, 5 and 6.
- 3. **Nutrition Issues & Assessment** across cultures and the lifespan, for fitness and sport performance, in culinary science, and for the prevention and treatment of various medical conditions.
 - Method 1: 80% of students will score 70% or better on the NUTR 1240 cooking demonstration project
 - Method 2: 80% of students will score 70% or better on NUTR 3420 exams.

Additional assessment methods considered for future reports:

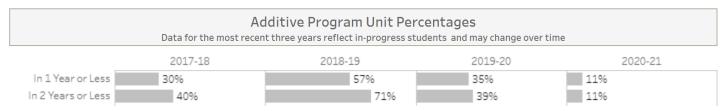
- Method 3: 80% of students will score 70% or better on NUTR 2020 case studies tied to this outcome.
- Method 4: 80% of students will score 70% or better on NUTR 3040 case studies tied to this outcome.
- Method 5: 80% of students will score 70% or better on NUTR 4420 exams 3 and 5.
- Method 6: 80% of students will score 70% or better on NUTR 3220 case studies tied to this outcome
- 4. **Human Structure and Function** by understanding how nutrition intersects with living and nonliving hierarchies within the human body.
 - Method 1: 70% of students will score 70% or better on NUTR 1020 exams tied to this outcome.
 - Method 2: 80% of students will score 70% or better on the comprehensive NUTR 4440 final exam.

Additional assessment methods considered for future reports:

- Method 3: 80% of students will score 70% or better on NUTR 4420 exams 1 and 4.
- Method 4: 80% of students will score 70% or better on NUTR 2320 exams tied to this outcome.

E. Student Achievement: Percent of students completing degrees after 90 credit hours within 2 years and a reflection on that metric (this information can be accessed on the Program Review Undergraduate dashboard – tab labeled, 'Time to Grad from 90CH – please reach out to <u>oie@weber.edu</u> if you need help with this metric). What department initiatives are in place to address this?

Nutrition Education:



From 2017-18 through 2018-19, this program averages a 55.5% completion within 2 years of 90CH. The first catalog year for the nutrition education program was 2017-2018.

Evidence of Learning

There are varieties of ways in which departments can choose to show evidence of learning.

- 1) Course-based assessment
 - a. This is the format we have traditionally suggested programs use for assessment. The familiar 'evidence of learning worksheets' are included in the template and can also be accessed from the IE website. The critical pieces to include are:
 - i. learning outcomes addressed in the course,
 - ii. method(s) of measurement used,
 - iii. threshold for 'acceptable that is, the target performance,
 - iv. actual results of the assessment,
 - v. interpretation/reflection on findings,
 - vi. the course of action to be taken based upon the interpretation,
 - vii. how that action will be evaluated.
- 2) Outcome-based assessment
 - a. Moving from course-based to outcome-based assessment has the potential for programs to gather and reflect upon data that are more meaningful, and to connect assessment findings from throughout the program. The approach may be much easier for associates and certificate programs where only select students in classes are earning the credential. For more information email (gniklason@weber.edu)
 - b. Reporting options include:
 - i. A traditional evidence-of-learning <u>worksheet</u> with an outcome (across multiple courses) as the focus (instead of a course with multiple outcomes).
 - ii. A report that is more <u>narrative-based</u>.
 - iii. Other tools such as an ePortfolio in which key or signature assignments have been identified by the faculty, and uploaded by the student with their reflection. The key or signature assignments are aligned to student learning outcomes. (ePortfolio is an excellent assessment tool for certificates and associate degrees.)
 - iv. There are other approaches such as juried reviews, physical portfolios, field tests, etc.
- 3) General Education course assessment needs to continue to be reported at the course level using either the <u>traditional template</u> or a more <u>narrative-based format</u>. See the <u>Checklist and Template</u> page for area-specific worksheets as well.

Note: if you cannot download templates directly from this document, please visit our template page for downloads.

A. Evidence of Learning: Courses within the Major: Concepts Data reported from Summer 2019/Fall 2019/Spring 2020/Summer 2020/Fall 2020/Spring 2021

		Co	oncepts Table		
Measurable Learning	Method of	Threshold for Evidence	Findings Linked to Learning	Interpretation of	Action Plan/Use of Results
Outcome: Students will	Measurement*	of Student Learning	Outcomes	Findings	
Learning Outcome CONCEPT A: Knowledge & Skills to solve nutrition and health related problems.	Measure 1: Correct exam responses	Measure 1: 80% of students will score 70% or better on NUTR 2320 exams.	Measure 1: 81/100/86/80/75/83 % of students scored 70% or more across all combined course exams from all sections.	Measure 1: Five out of six semesters, the threshold was met.	Measure 1: Exam questions will be evaluated and those with more than 50% of students answering incorrectly will be revised. Teaching methods and course content tied to this learning outcome will be evaluated and edited if necessary.
	Measure 2: Correct exam responses	Measure 2: 80% of students will score 70% or better on the comprehensive NUTR 4440 final exam.	Measure 2: na/na/84/100/83/na % of students scored 70% or more in the final exam across all sections.	Measure 2: Students successfully demonstrated Knowledge and skills to solve nutrition and health problems	Measure 2: No changes needed. Continue to collect data and monitor student performance
Learning Outcome CONCEPT B: Integrated & Applied Expertise to educate and communicate for optimal health promotion and human performance.	Measure 1: Research presentation and discussion Measure 2: Secondary research presentation and discussion	Measure 1: 80% of students will score 70% or better on the NUTR 3020 supplement facts sheet research presentation. Measure 2: 80% of students will score 70% or better on NUTR 4320 presentations.	Measure 1: na/94/96/na/96/93 % of students scored 70% or more on this assignment across all sections. Measure 1: na/93/99/90/94/93 % of students scored 80% or more on their presentation across all sections.	Measure 1: Four of four semesters, the threshold was met. Measure 2: Students successfully applied and integrated their expertise to	Measure 1: The instructions for the assignment will be evaluated and rewritten for clarity if needed. Sample work will be provided. Students will be asked to peerevaluate their work prior to submission. Teaching methods and course content tied to this learning outcome will be evaluated and edited if necessary. Measure 2: No changes needed. Continue to collect data and monitor student performance
Learning Outcome	Measure 1: Interpretation and	Measure 1: 80% of students will score 70% or better on the	Measure 1: 88/83/90/83/94/81 % of students scored 70% or more on	educate and communicate optimal health promotion Measure 1: Students successfully demonstrated	Measure 1: No changes needed. Continue to collect data and
CONCEPT C: Personal and Community Responsibility to optimize healthful behaviors of	discussion of results from self-food intake study	Nutrition LS1020 Signature Assignment essay	this assignment across all combined course sections.	personal and community responsibility to improve society.	monitor student performance
individuals, families, and/or communities through the life cycle with networking, resources, and support.	Measure 2: Completion of assignment tied to global nutrition issues, health and food practices	Measure 2: 80% of students will score 70% or better on the NUTR 3420 major project research paper	Measure 2: 97/na/97/80/na/91 % of students scored 70% or more on this assignment across all combined course sections	Measure 2: Students successfully demonstrated personal and community responsibility to improve society.	Measure 2: No changes needed. Continue to collect data and monitor student performance

Concepts Tal	DΙ	е
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Measurable Learning Outcome: Students will	Method of Measurement*	Threshold for Evidence of Student Learning	Findings Linked to Learning Outcomes	Interpretation of Findings	Action Plan/Use of Results
Learning Outcome CONCEPT D: High Impact Experiences from assimilating or engaging in research, group projects,	Measure 1: complete and record a cooking demo (sustainability, food science, nutrition adequacy and food safety).	Measure 1: 90% of NUTR 1240 students will engage in hands on nutrition and sus cooking and earn a 70% or better score in their cooking demonstration assignment.	Measure 1: 100/100/100/100/100 % of students scored 70% or more on this cooking demonstration across all combined course sections.	Measure 1: Students successfully engaged in high impact experiences	Measure 1: No changes needed. Continue to collect data and monitor student performance
senior capstone work, and/or community-based fieldwork.	Measure 2: completion of 1-4 credit hours of primary research	Measure 2: 90% of NUTR 4520 directed research students will earn a course grade of 70% or better.	Measure 2: na/100/100/100/na/100 % of students earned a course grade 70% or better	Measure 2: Students successfully engaged in high impact experiences	Measure 2: No changes needed. Continue to collect data and monitor student performance

Can be a mix of <u>direct</u> and <u>indirect</u> measures, but at least one measure must be direct

B.- Evidence of Learning: Courses within the Major: Competencies Data reported from Summer 2019/Fall 2019/Spring 2020/Summer 2020/Fall 2020/Spring 2021

Competencies Table

Measurable Learning Outcome: Students will	Method of Measurement*	Threshold for Evidence of Student Learning	Findings Linked to Learning Outcomes	Interpretation of Findings	Action Plan/Use of Results
Learning Outcome COMPENTECY 1: Diet Analysis & Design by performing accurate diet analysis and design according	Measure 1: Successful Completion of diet design assignment	Measure 1: 80% of students will score 70% or better on the NUTR 2320 diet design assignments 4 and 5.	Measure 1: 90/81/74/80/82/70 % of students scored 70% or more on this diet design assignment across all combined course sections	Measure 1: Five out of six semesters, the threshold was met. Students successfully demonstrated ability to analyze and design diets	Measure 1: No changes needed. Continue to collect data and monitor student performance
to dietary guidelines for Americans, for health, fitness, and/or sport performance and with comprehensive evaluation, interpretation, and application.	Measure 2: Successful completion of athlete diet design	Measure 2: 80% of students will score 70% or better on the NUTR 3020 evaluation of student athlete diet analysis and design projects.	Measure 2: na/84/85/na/88/86% % of students scored 70% or more on this diet design assignment across all combined course sections.	Measure 2: four of four semesters, the threshold was met.	Measure 2: The instructions for the project will be evaluated and rewritten for clarity if needed. Sample work will be provided. Students will be asked to peerevaluate their work prior to submission. Teaching methods and course content tied to this learning outcome will be evaluated and edited if necessary.

Learning Outcome COMPENTECY 2: Nutrient Needs & Functions by gender and activity level for various age groups and health conditions using healthy and sustainable food preparation methods.	Measure 1: Correct responses of exam questions tied to LO Measure 2: Correct exam responses	Measure 1: 70% of students will score 70% or better on NUTR 1020 exam questions tied to this outcome Measure 2: 80% of students will score 70% or better on NUTR 4420 exam 2.	Measure 1: 77/81/80/84/83/83 % of students scored 70% or more on exam questions aligned to similar Chi Tester nutrition minor and statewide articulation outcome across all combined course sections. Measure 2: This student % na/85.0/78.0/na/83.0/71.0 scored 70% or more in exam 2 across all sections.	Measure 1: Students successfully demonstrated understanding of human nutrient needs and functions Measure 2: Two of four semesters, the threshold was met.	Measure 1: No changes needed. Continue to collect data and monitor student performance Measure 2: Exam questions will be evaluated and those with more than 50% of students answering incorrectly will be revised. Teaching methods and course
Learning Outcome COMPENTECY 3: Nutrition Issues & Assessment across cultures and the lifespan, for fitness	Measure 1: Complete and record a cooking demo	Measure 1: 80% of students will score 70% or better on the NUTR 1240 cooking demonstration project	Measure 1: This student % 100/100/100/100/100/100.0/100.0 scored 70% or more on this project.	Measure 1: Students successfully demonstrated understanding of nutrition issues and assessment across multiple populations	content tied to this learning outcome will be evaluated and edited if necessary. Measure 1: No changes needed. Continue to collect data and monitor student performance
and sport performance, in culinary science, and for the prevention and treatment of various medical conditions	Measure 2: Correct exam responses	Measure 2: 80% of students will score 70% or better on NUTR 3420 exams.	Measure 2: This student % 99/na/100.0/100/na/100 scored 70% or more across all combined course exams from all sections.	Measure 2: Students successfully demonstrated understanding of nutrition issues and assessment across multiple populations	Measure 2: No changes needed. Continue to collect data and monitor student performance
Learning Outcome COMPENTECY 4: Human Structure and Function by understanding how nutrition intersects with living and nonliving hierarchies within the human body.	Measure 1: Correct responses of exam questions tied to LO	Measure 1: 70% of students will score 70% or better on NUTR 1020 exams tied to this outcome.	Measure 1: 66/76/75/75/79/80 % of students scored 70% or more on exam questions aligned to similar Chi Tester nutrition minor and statewide articulation outcome across all combined course sections.	Measure 1: x of y semesters, the threshold was met.	Measure 1: Exam questions will be evaluated and those with more than 50% of students answering incorrectly will be revised. Teaching methods and course content tied to this learning outcome will be evaluated and edited if necessary. Faculty teaching separate sections will discuss and compare exams and question alignment to learning outcomes for consistentcy.
	Measure 2: Correct exam responses	Measure 2: 80% of students will score 70% or better on the comprehensive NUTR 4440 final exam.	Measure 2: This student % na/na/84/100/83/scored scored 70% or more in the comprehensive final exam across all sections.	Measure 2: Students successfully demonstrated understanding of Human Structure and Function.	Measure 2: No changes needed. Continue to collect data and monitor student performance

Additional narrative (optional – use as much space as needed):

c. Evidence of Learning: General Education Courses

NUTR LS1020 is a general education course taught in the Exercise and Nutrition Sciences Department and Nutrition Education program.

Method of Measuring the Outcomes: There are two direct measures of assessment used in NUTR LS1020 to generate direct evidence of meeting the Life Science General Education learning outcomes. Chi Tester was used to administer all of the NUTR LS1020 exams and has provided a tool for the program to consistently collect and analyze the data. Because each section of the course taught is assessed each semester, hundreds to thousands of data points were generated per learning outcome.

- **Direct Measure #1 (DM 1):** The first direct measure of assessment includes aligning the eight Life Science General Education course learning outcomes to each Nutrition exam question. There were four 50-question exams and one 16 question exam analyzed for all sections of NUTR LS1020 each semester. Online, hybrid, and face-to-face classes were assessed for all of the learning outcomes. Additionally, there was one project-based exam where students collect, analyze, interpret, and report their own data. All exams were administered using Chi Tester. Every question is tied to the appropriate learning outcome(s). Each of the trimesters has a different set of the exam questions and exams are consistently used for assessment.
- **Direct Measure #2 (DM 2):** The second direct measure of assessment includes administering a closed-book exam consisting of 40 questions that include five competency-based questions from each of the eight Life Science General Education course learning outcomes that were developed and approved by the Life Science General Education Area Committee in the Spring of 2013.

Threshold: The Life Science General Education Area Committee set the threshold of 70% for life science courses. This threshold of 70% is used for NUTR LS1020 for both the first and second direct measures of assessment. The 70% threshold is above what is needed to receive credit for the course.

Findings: Students being capable of answering exam and competency-based questions correctly demonstrated that learning outcomes were met. All eight Life Science General Education course learning outcomes were met for DM 1 and DM 2 with the threshold of 70%. The Nutrition program evaluates the consistency of student performance over time due to the consistent process used to assess learning outcomes.

Action Plan: Continue to collect the evidence to ensure that learning outcomes continue to be met as determined by student performance. No changes are needed at this time.

Evidence of Learning: General Education, Life Science Courses

NUTR LS1020 (Science and Application of Human Nutrition)
Data reported from Summer 2019/Fall 2019/Spring 2020/Summer 2020/Fall 2020/Spring 2021

Nature of science learning outcomes tables

Gen Ed Learning Goal	Measurable Learning Outcome	Method of Measurement	Threshold	Findings Linked to Learning Outcomes	Interpretation of Findings	Action Plan/Use of
Students will demonstrate understanding of the Nature of Science: Scientific knowledge is based on evidence	NUTR LS1020 Students will demonstrate their understanding by applying and evaluating principles	Direct Measure (DM) 1: Correct responses of exam questions tied to LOs.	DM 1: Students will answer 70% of the aligned exam questions correctly across all combined course sections.	DM 1: Students answered 75/74/81/92/90/90% of the aligned exam questions correctly across all combined course sections.	Students demonstrated an understanding of the <i>Nature of Science</i> . The learning outcome was met.	Results No changes needed. Continue to collect data and monitor student performance.
that is repeatedly examined, and can change with new information. Scientific explanations differ fundamentally from those that are not scientific.	reflecting the <i>Nature</i> of <i>Science</i> .	Direct Measure (DM) 2: Correct responses to WSU LS Gen Ed standard Competency-based questions tied to LOs.	DM 2: Students will answer 70% of the standardized exam questions correctly across all combined course sections.	DM 2: Students answered 82/87/87/84/86/87% of the standardized exam questions correctly across all combined course sections.	Students demonstrated an understanding of the <i>Nature of Science</i> . The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance.

GE Learning Goal	Measurable Learning Outcome (LO)	Method of Measurement	Threshold	Findings	Interpretation	Action Plan/Use of Results
Students will demonstrate understanding of the Integration of Science: All natural phenomena are interrelated and	NUTR LS1020 Students will demonstrate their understanding by applying and evaluating principles reflecting the Integration of	Direct Measure (DM) 1: Correct responses of exam questions tied to LOs.	DM 1: Students will answer 70% of the aligned exam questions correctly across all combined course sections.	DM 1: Students answered 72/79/76/78/80/80% of the aligned exam questions correctly across all combined course sections.	Students demonstrated an understanding of the <i>Integration of Science</i> . The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance.
share basic organizational principles. Scientific explanations obtained from different disciplines should be cohesive and integrated.	Science.	Direct Measure (DM) 2: Correct responses to WSU LS Gen Ed standard Competency-based questions tied to LOs.	DM 2: Students will answer 70% of the standardized exam questions correctly across all combined course sections.	DM 2: Students answered 79/89/89/85/89/90% of the standardized exam questions correctly across all combined course sections.	Students demonstrated an understanding of the Integration of Science. The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance.

GE Learning Goal	Measurable Learning Outcome (LO)	Method of Measurement	Threshold	Findings	Interpretation	Action Plan/Use of Results
Students will demonstrate understanding of Science and Society: The study of science provides explanations that have significant impact on society,	NUTR LS1020 Students will demonstrate their understanding by applying and evaluating principles reflecting Science and Society.	Direct Measure (DM) 1: Correct responses of exam questions tied to LOs.	DM 1: Students will answer 70% of the aligned exam questions correctly across all combined course sections.	DM 1: Students answered 80/76/76/75/78/77% of the aligned exam questions correctly across all combined course sections.	Students demonstrated an understanding of Science and Society. The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance.
including technological advancements, improvement of human life, and better understanding of human and other influences on the Earth's environment.		Direct Measure (DM) 2: Correct responses to WSU LS Gen Ed standard Competency- based questions tied to LOs.	DM 2: Students will answer 70% of the standardized exam questions correctly across all combined course sections.	DM 2: Students answered 86/93/93/93/93/95% of the standardized exam questions correctly across all combined course sections.	Students demonstrated an understanding of Science and Society. The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance.

GE Learning Goal	Measurable	Method of	Threshold	Findings	Interpretation	Action Plan/Use of
	Learning Outcome	Measurement				Results
	(LO)					
Students will demonstrate	NUTR LS1020 Students will	Direct Measure (DM) 1: Correct	DM 1: Students will answer 70% of the	DM 1: Students answered 72/76/67/73/73/72% of the	Students demonstrated an understanding of	No changes needed. Continue to collect
understanding of	demonstrate their	responses of exam	aligned exam	aligned exam questions correctly	Problem Solving and	data and monitor
Problem Solving & Data Analysis: Science relies on	understanding by applying and evaluating principles	questions tied to LOs.	questions correctly across all combined course sections.	across all combined course sections.	Data Analysis. The learning outcome was met.	student performance.
empirical data, and such data must be analyzed, interpreted, and generalized in a rigorous manner.	reflecting Problem Solving and Data Analysis.	Direct Measure (DM) 2: Correct responses to WSU LS Gen Ed standard Competency-based questions tied to LOs.	DM 2: Students will answer 70% of the standardized exam questions correctly across all combined course sections.	DM 2: Students answered 85/87/88/88/88/88% of the standardized exam questions correctly across all combined course sections.	Students demonstrated an understanding of Problem Solving and Data Analysis. The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance.

Life science learning outcomes tables

GE Learning Goal	Measurable Learning Outcome (LO)	Method of Measurement	Threshold	Findings	Interpretation	Action Plan/Use of Results
Students will demonstrate understanding of the Levels of Organization: All life shares an organization that is based on molecules	NUTR LS1020 Students will demonstrate their understanding by applying and evaluating principles reflecting the Levels of Organization.	Direct Measure (DM) 1: Correct responses of exam questions tied to LOs.	DM 1: Students will answer 70% of the aligned exam questions correctly across all combined course sections.	DM 1: Students answered 71/83/85/81/82/83% of the aligned exam questions correctly across all combined course sections.	Students demonstrated an understanding of Levels of Organization. The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance.
and cells and extends to organisms and ecosystems.	oj Organizacion.	Direct Measure (DM) 2: Correct responses to WSU LS Gen Ed standard Competency-based questions tied to LOs.	DM 2: Students will answer 70% of the standardized exam questions correctly across all combined course sections.	DM 2: Students answered 85/92/96/96/96/96% of the standardized exam questions correctly across all combined course sections.	Students demonstrated an understanding of Levels of Organization. The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance

GE Learning Goal	Measurable Learning Outcome (LO)	Method of Measurement	Threshold	Findings	Interpretation	Action Plan/Use of Results
Students will demonstrate understanding of Metabolism and Homeostasis: Living things obtain and use energy, and maintain	NUTR LS1020 Students will demonstrate their understanding by applying and evaluating principles reflecting Metabolism	Direct Measure (DM) 1: Correct responses of exam questions tied to LOs.	DM 1: Students will answer 70% of the aligned exam questions correctly across all combined course sections.	DM 1: Students answered 79/79/75/77/79/78% of the aligned exam questions correctly across all combined course sections.	Students demonstrated an understanding of Metabolism and Homeostasis. The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance.
	and Homeostasis.	Direct Measure (DM) 2: Correct responses to WSU LS Gen Ed standard Competency-based questions tied to LOs.	DM 2: Students will answer 70% of the standardized exam questions correctly across all combined course sections.	DM 2: Students answered 81/90/94/93/95/95% of the standardized exam questions correctly across all combined course sections.	Students demonstrated an understanding of Metabolism and Homeostasis. The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance.

GE Learning Goal	Measurable	Method of	Threshold	Findings	Interpretation	Action Plan/Use of
	Learning Outcome	Measurement				Results
	(LO)					
Students will	NUTR LS1020	Direct Measure (DM)	DM 1: Students will	DM 1: Students answered	Students demonstrated	No changes needed.
demonstrate	Students will	1: Correct responses	answer 70% of the	79/75/72/74/76/74% of the	an understanding of	Continue to collect
understanding of	demonstrate their	of exam questions tied	aligned exam	aligned exam questions	Genetics and Evolution.	data and monitor
Genetics and	understanding by	to LOs.	questions correctly	correctly across all combined	The learning outcome	student
Evolution: Shared	applying and		across all combined	course sections.	was met.	performance.
genetic processes and	evaluating principles		course sections.			
evolution by natural	reflecting Genetics and					
selection are universal	Evolution.	Direct Measure (DM)	DM 2: Students will	DM 2: Students answered	Students demonstrated	No changes needed.
features of all life.		2: Correct responses	answer	69/75/85/85/86/88% of the	an understanding of	Continue to collect
		to WSU LS Gen Ed	70% of the	standardized exam questions	Genetics and Evolution.	data and monitor
		standard	standardized	correctly across all combined	The learning outcome	student
		Competency-based	exam questions	course sections.	was met.	performance.
		questions tied to LOs.	correctly across all	edurse sections.	Was mea	periormanee
		questions tied to bos.	combined course			
			sections.			
			5000101151			

GE Learning Goal	Measurable Learning Outcome	Method of Measurement	Threshold	Findings	Interpretation	Action Plan/Use of Results
	(LO)					
Students will demonstrate Students will demonstrate understanding of Ecological interactions: All organisms, NUTR LS1020 Students will demonstrate their understanding by applying and evaluating principle	Students will demonstrate their understanding by	1: Correct responses of exam questions tied to LOs.	DM 1: Students will answer 70% of the aligned exam questions correctly across all combined course sections.	DM 1: Students answered 75/75/78/76/82/72% of the aligned exam questions correctly across all combined course sections.	Students demonstrated an understanding of <i>Ecological Interactions</i> . The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance.
	0 0	Direct Measure (DM) 2: Correct responses to WSU LS Gen Ed standard Competency- based questions tied to LOs.	DM 2: Students will answer 70% of the standardized exam questions correctly across all combined course sections.	DM 2: Students answered 85/93/92/92/94/94% of the standardized exam questions correctly across all combined course sections.	Students demonstrated an understanding of <i>Ecological Interactions</i> . The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance.

Additional narrative (optional – use as much space as needed):

Appendix A

Most departments or programs receive a number of recommendations from their Five/Seven-Year Program Review processes. This page provides a means of updating progress towards the recommendations the department/program is enacting.

Date of Program Review: ####	Recommendation	Progress Description
Recommendation 1	Text of recommendation	#### +1 progress
		#### +2 progress
		#### +3 progress
		#### +4 progress
Recommendation 2	Text of recommendation	#### +1 progress
		#### +2 progress
		#### +3 progress
		#### +4 progress
Recommendation 3	Text of recommendation	#### +1 progress
		#### +2 progress
		#### +3 progress
		#### +4 progress
(add as needed)		

Additional narrative: This section is left blank because the nutrition education major was created in 2017-2018. We have not undergone a 5-year program review process yet.

Appendix B

Please provide the following information about the full-time *and adjunct faculty* contracted by your department during the last academic year (summer through spring). Gathering this information each year will help with the headcount reporting that must be done for the final Five Year Program Review document that is shared with the State Board of Regents.

Faculty Headcount	2018-19	2019-20	2020-21
With Doctoral Degrees (Including MFA and other terminal degrees, as specified by the institution)	7	9	9
Full-time Tenured	2	2	2
Full-time Non-Tenured (includes tenure-track)	4	5	5
Part-time and adjunct	1	2	2
With Master's Degrees	5	7	7
Full-time Tenured	0	0	0
Full-time Non-Tenured	0	0	0
Part-time and adjunct	5	7	7
With Bachelor's Degrees	3	2	3
Full-time Tenured	0	0	0
Full-time Non-tenured	0	0	0
Part-time and adjunct	3	2	3
Other	0	0	0
Full-time Tenured	0	0	0
Full-time Non-tenured	0	0	0
Part-time	0	0	0
Total Headcount Faculty	15	18	19
Full-time Tenured	2	2	2
Full-time Non-tenured	4	5	5
Part-time	9	11	13

Faculty Headcount (Nutrition Program Faculty only)	2018-19	2019-20	2020-21
With Doctoral Degrees (Including MFA and other terminal degrees, as specified by the institution)	5	6	6
Full-time Tenured	2	2	2
Full-time Non-Tenured (includes tenure-track)	2	2	2
Part-time and adjunct	1	2	2
Will Mark J. D.	_		
With Master's Degrees	5	6	6
Full-time Tenured	0	0	0
Full-time Non-Tenured	0	0	0
Part-time and adjunct	5	6	6
With Bachelor's Degrees	3	2	3
Full-time Tenured	0	0	0
Full-time Non-tenured	0	0	0
Part-time and adjunct	3	2	3
Other	0	0	0
Full-time Tenured	0	0	0
Full-time Non-tenured	0	0	0
Part-time	0	0	0
Total Headcount Faculty	13	14	15
Full-time Tenured	2	2	2
Full-time Non-tenured	2	2	2
Part-time	9	10	12

Please respond to the following questions.

1) Review and comment on the trend of minority students enrolling in your classes (particularly lower-division, GEN Ed) and in your programs. We currently do not have a plan to effectively assess this trend.

Our department conducts regular surveys of alumni that capture socio-economic and demographic data post-graduation. The yearly demography figures from our department's tableau data report an increasing percentage of Lantix and female students in most successive years.

2) What support (from enrollment services, advising, first-year transition office, access & diversity, etc.) do you need to help you recruit and retain students?

Continuity of programs implemented last year such the retention peer mentor students will be of great benefit to recruit and retain students. These positions were created with the emphasis on retaining self-identified Black, Indigenous, and Students of Color within the College of Education majors. They could act as the bridge between faculty and advisors in our department to disseminate, recommend and help navigate BIPOC students thru the different opportunities including HIEE, funding, graduation etc.

Peer mentors should utilize Starfish and other university tools to identify students in critical need of academic support. This notification process will allow academic advisors to provide the types of targeted assistance that improves retention.

The Exercise and Nutrition Science academic advising staff provide professional guidance for MCOE students interested in Nutrition Education, Exercise Science, and several pre-professional outcomes (primarily Physical Therapy, Occupational Therapy, and Dietetics). Time constraints and departmental obligations prevent the creation of scaffolding tools for PT, OT, and Dietetics pre-professional students, such as a formalized landing page on the department's website or a Canvas page (like the one employed for PA students). Support services could work with departmental advisors and provide solutions to help meet this need.

3) We have invited you to re-think your program assessment. What strategies are you considering? What support or help would you like?

Some of the recommendations implemented since last assessment were to strive for a higher threshold than 65% in all of our assessment methods. The minimum threshold for those courses that previously was set up at 65% it is now 70%. We are planning to rotate assessment methods used in order to include a larger variety of courses taught in our program.

In relationship with help and support, there has been some concern about how assessment will be reported once Testing moves from Chi Tester to Canvas. It will be of help to develop and make accessible a tutorial on the most efficient ways to collect assessment data tied to learning outcomes from Canvas.

4) Finally, we are supporting our Concurrent Enrollment accreditation process. Does your program offer concurrent enrollment classes? If so, have you been able to submit the information requested from the Concurrent Enrollment office? Staff from OIE will reach out to you in the next few months to assist in finalizing that data submission as well as gather information for concurrent Gen Ed assessment.

The nutrition program offers two concurrent enrollment courses NUTR 1020 LS SUS - Science and Application of Human Nutrition and NUTR 1240 SUS - Nutrition and Sustainable Cooking. No information has been submitted to the Concurrent Enrollment office regarding assessment. Changes to NUTR 1240 SUS have been implemented to comply and be able to assess the Utah State Board of Education Culinary Arts Pathway Strands and Standards related to this class.

Glossary

Student Learning Outcomes/Measurable Learning Outcomes

The terms 'learning outcome', 'learning objective', 'learning competency', and 'learning goal' are often used interchangeably. Broadly, these terms reference what we want students to be able to do AFTER they pass a course or graduate from a program. For this document, we will use the word 'outcomes'. Good learning outcomes are specific (but not too specific), are observable, and are clear. Good learning outcomes focus on skills: knowledge and understanding; transferrable skills; habits of mind; career skills; attitudes and values.

- Should be developed using action words (if you can see it, you can assess it).
- Use compound statements judiciously.
- Use complex statements judiciously.

Curriculum Grid

A chart identifying the key learning outcomes addressed in each of the curriculum's key elements or learning experiences (Suskie, 2019). A good curriculum:

- Gives students ample, diverse opportunities to achieve core learning outcomes.
- Has appropriate, progressive rigor.
- Concludes with an integrative, synthesizing capstone experience.
- Is focused and simple.
- Uses research-informed strategies to help students learn and succeed.
- Is consistent across venues and modalities.
- Is greater than the sum of its parts.

<u>Target Performance</u> (previously referred to as 'Threshold')

The level of performance at which students are doing well enough to succeed in later studies (e.g., next course in sequence or next level of course) or career.

Actual Performance

How students performed on the specific assessment. An average score is less meaningful than a distribution of scores (for example, 72% of students met or exceeded the target performance, 5% of students failed the assessment).

Closing the Loop

The process of following up on changes made to curriculum, pedagogy, materials, etc., to determine if the changes had the desired impact.

Continuous Improvement

An idea with roots in manufacturing, that promotes the ongoing effort to improve. Continuous improvement uses data and evidence to improve student learning and drive student success.

<u>Direct evidence</u>

Evidence based upon actual student work; performance on a test, a presentation, or a research paper, for example. Direct evidence is tangible, visible, and measurable.

Indirect evidence

Evidence that serves as a proxy for student learning. May include student opinion/perception of learning, course grades, measures of satisfaction, participation. Works well as a complement to direct evidence.

<u>HIEE - High Impact Educational Experiences</u>

Promote student learning through curricular and co-curricular activities that are intentionally designed to foster active and integrative student engagement by utilizing multiple impact strategies. Please see https://weber.edu/weberthrives/HIEE.html