

# MAJOR IN NUTRITION AND FOOD SCIENCE, PRE-HEALTH NUTRITION CONCENTRATION

The Pre-Health Nutrition concentration provides a strong background in natural and biomedical sciences and nutrition, making it an appropriate preparation for graduate study, medical school, or a career in nutritional research, biomedical research, or college teaching. This concentration is an excellent pre-health professions curriculum.

By addition of several elective courses, students can meet the Accreditation Council for Education in Nutrition and Dietetics (ACEND) (<https://www.eatrightpro.org/acend/>) didactic course requirements if they meet requirements for FSHN 392.

Please note: To become a registered dietitian, one must: 1) complete the required coursework and obtain the B.S. degree in Nutrition and Food Science (and the additional elective required by ACEND); 2)

complete an 8-12 month accredited dietetic internship AFTER finishing the B.S. degree; and 3) earn a master's degree (*effective January 2024*). Internships are facilitated separately from obtaining the B.S. degree, and all internships require a vigorous application process. Earning the B.S. degree in Nutrition and Food Science at CSU is one step toward becoming a registered dietitian, but it is insufficient without then completing the internship and earning a master's degree. After completion of an internship and master's degree, one is then eligible to take the registration exam, the final step toward becoming a registered dietitian. The registered dietitian credential is awarded after successfully passing the registration exam and is facilitated by the Commission on Dietetic Registration (CDR) of the Academy of Nutrition and Dietetics (AND).

Learn more about the Pre-Health Nutrition Concentration on the Department of Food Science and Human Nutrition website. (<https://www.chhs.colostate.edu/fshn/programs-and-degrees/b-s-in-nutrition-and-food-science/nutritional-sciences-concentration/>)

## Requirements

### Effective Fall 2023

#### Freshman

	AUCC	Credits
Select one group from the following:		5
Group A:		
CHEM 107 Fundamentals of Chemistry (GT-SC2)	3A	
CHEM 108 Fundamentals of Chemistry Laboratory (GT-SC1)	3A	
Group B:		
CHEM 111 General Chemistry I (GT-SC2)	3A	
CHEM 112 General Chemistry Lab I (GT-SC1)	3A	
CO 150 College Composition (GT-CO2)	1A	3
FSHN 150 Survey of Human Nutrition		3
LIFE 102 Attributes of Living Systems (GT-SC1)	3A	4
LIFE 103 Biology of Organisms-Animals and Plants (GT-SC1)	3A	4
MATH 117 College Algebra in Context I (GT-MA1)	1B	1
MATH 118 College Algebra in Context II (GT-MA1)	1B	1
MATH 124 Logarithmic and Exponential Functions (GT-MA1)	1B	1
MATH 125 Numerical Trigonometry (GT-MA1)	1B	1
PSY 100 General Psychology (GT-SS3)	3C	3
Diversity, Equity, and Inclusion ( <a href="http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#diversity-equity-inclusion">http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#diversity-equity-inclusion</a> )	1C	3
<b>Total Credits</b>		<b>29</b>

#### Sophomore

BMS 300 Principles of Human Physiology		4
CHEM 113 General Chemistry II		3
CHEM 114 General Chemistry Lab II		1
CHEM 341 Modern Organic Chemistry I		3
FSHN 340 Food as Preventive Medicine		3
MATH 155 Calculus for Biological Scientists I (GT-MA1)	1B	4
Arts and Humanities ( <a href="http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities">http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities</a> )	3B	6

Historical Perspectives ( <a href="http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives">http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives</a> )		3D	3
Social and Behavioral Sciences ( <a href="http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#social-behavioral-sciences">http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#social-behavioral-sciences</a> )		3C	3
<b>Total Credits</b>			<b>30</b>
<b>Junior</b>			
BC 351	Principles of Biochemistry		4
CHEM 343	Modern Organic Chemistry II		3
CHEM 344	Modern Organic Chemistry Laboratory		2
FSHN 350	Human Nutrition		3
FSHN 428	Nutrition Teaching and Counseling Techniques		3
PH 121	General Physics I (GT-SC1)	3A	5
STAT 301	Introduction to Applied Statistical Methods		3
Select one course from the following:			3
CO 300	Writing Arguments (GT-CO3)	2	
CO 301B	Writing in the Disciplines: Sciences (GT-CO3)	2	
CO 301C	Writing in the Disciplines: Social Sciences (GT-CO3)	2	
JTC 300	Strategic Writing and Communication (GT-CO3)	2	
Elective			3
<b>Total Credits</b>			<b>29</b>
<b>Senior</b>			
BZ 310 or LIFE 210	Cell Biology Introductory Eukaryotic Cell Biology		3-4
FSHN 450	Medical Nutrition Therapy	4B	5
FSHN 459	Nutrition in the Life Cycle	4A	3
FSHN 470	Integrative Nutrition and Metabolism		3
FSHN 492	Seminar in Dietetics and Nutrition	4C	2
MIP 300	General Microbiology		3
MIP 302	General Microbiology Laboratory		2
Electives <sup>1</sup>			10-11
<b>Total Credits</b>			<b>32</b>
<b>Program Total Credits:</b>			<b>120</b>

<sup>1</sup> Select enough elective credits to bring program total to a minimum of 120 credits, of which at least 42 must be upper-division (300- to 400-level).

## Major Completion Map

### Freshman

Semester 1		Critical	Recommended	AUCC	Credits
CO 150	College Composition (GT-CO2)	X		1A	3
FSHN 150	Survey of Human Nutrition	X			3
LIFE 102	Attributes of Living Systems (GT-SC1)	X		3A	4
MATH 117	College Algebra in Context I (GT-MA1)	X		1B	1
MATH 118	College Algebra in Context II (GT-MA1)	X		1B	1
PSY 100	General Psychology (GT-SS3)	X		3C	3
<b>Total Credits</b>					<b>15</b>
Semester 2		Critical	Recommended	AUCC	Credits
Select one group from the following:		X			5
Group A:					
CHEM 107	Fundamentals of Chemistry (GT-SC2)			3A	

CHEM 108	Fundamentals of Chemistry Laboratory (GT-SC1)			3A		
Group B:						
CHEM 111	General Chemistry I (GT-SC2)			3A		
CHEM 112	General Chemistry Lab I (GT-SC1)			3A		
LIFE 103	Biology of Organisms-Animals and Plants (GT-SC1)	X		3A	4	
MATH 124	Logarithmic and Exponential Functions (GT-MA1)	X		1B	1	
MATH 125	Numerical Trigonometry (GT-MA1)	X		1B	1	
Diversity, Equity, and Inclusion ( <a href="http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#diversity-equity-inclusion">http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#diversity-equity-inclusion</a> )				X	1C	3

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**Total Credits** **14**

**Sophomore**

<b>Semester 3</b>		<b>Critical</b>	<b>Recommended</b>	<b>AUCC</b>	<b>Credits</b>	
CHEM 113	General Chemistry II	X			3	
CHEM 114	General Chemistry Lab II	X			1	
MATH 155	Calculus for Biological Scientists I (GT-MA1)	X		1B	4	
Arts and Humanities ( <a href="http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities">http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities</a> )				3B	3	
Historical Perspectives ( <a href="http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives">http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives</a> )				X	3D	3

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**Total Credits** **14**

<b>Semester 4</b>		<b>Critical</b>	<b>Recommended</b>	<b>AUCC</b>	<b>Credits</b>	
BMS 300	Principles of Human Physiology	X			4	
CHEM 341	Modern Organic Chemistry I	X			3	
FSHN 340	Food as Preventive Medicine	X			3	
Arts and Humanities ( <a href="http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities">http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities</a> )				X	3B	3
Social and Behavioral Sciences ( <a href="http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#social-behavioral-sciences">http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#social-behavioral-sciences</a> )				X		3

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**Total Credits** **16**

**Junior**

<b>Semester 5</b>		<b>Critical</b>	<b>Recommended</b>	<b>AUCC</b>	<b>Credits</b>
CHEM 343	Modern Organic Chemistry II	X			3
CHEM 344	Modern Organic Chemistry Laboratory	X			2
FSHN 350	Human Nutrition	X			3
Select one course from the following:					
CO 300	Writing Arguments (GT-CO3)			2	
CO 301B	Writing in the Disciplines: Sciences (GT-CO3)			2	
CO 301C	Writing in the Disciplines: Social Sciences (GT-CO3)			2	
JTC 300	Strategic Writing and Communication (GT-CO3)			2	
Elective			X		3

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**Total Credits** **14**

<b>Semester 6</b>		<b>Critical</b>	<b>Recommended</b>	<b>AUCC</b>	<b>Credits</b>
BC 351	Principles of Biochemistry	X			4
FSHN 428	Nutrition Teaching and Counseling Techniques	X			3
PH 121	General Physics I (GT-SC1)	X		3A	5
STAT 301	Introduction to Applied Statistical Methods	X			3

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**Total Credits** **15**

**Senior**

<b>Semester 7</b>		<b>Critical</b>	<b>Recommended</b>	<b>AUCC</b>	<b>Credits</b>
BZ 310 or LIFE 210	Cell Biology Introductory Eukaryotic Cell Biology	X			3-4
FSHN 450	Medical Nutrition Therapy	X		4B	5
FSHN 459	Nutrition in the Life Cycle	X		4A	3

Electives			X		4-5
<b>Total Credits</b>					<b>16</b>
<b>Semester 8</b>		<b>Critical</b>	<b>Recommended</b>	<b>AUCC</b>	<b>Credits</b>
FSHN 470	Integrative Nutrition and Metabolism	X			3
FSHN 492 (Final semester only)	Seminar in Dietetics and Nutrition	X		4C	2
MIP 300	General Microbiology	X			3
MIP 302	General Microbiology Laboratory	X			2
Electives			X		6
The benchmark courses for the 8th semester are the remaining courses in the entire program of study.		X			
<b>Total Credits</b>					<b>16</b>
<b>Program Total Credits:</b>					<b>120</b>