

MAJOR IN NUTRITION SCIENCE, PRE-NURSING CONCENTRATION

Many students pursuing a degree in Nutrition Science within the department of Food Science and Human Nutrition (FSHN) plan to apply to nursing school, and this concentration is designed to prepare them for post-baccalaureate nursing programs, including accelerated Bachelor of Nursing programs. The coursework within this concentration covers common nursing school prerequisites (<https://hp.colostate.edu/>) and is tailored to equip students with skills relevant to nutrition, human health, and disease prevention. Students in this concentration are strongly encouraged to consult with their academic advisor and the Health Professions Advising Team (<https://hp.colostate.edu/>) to ensure they meet the specific prerequisites for their targeted nursing schools.

This concentration also serves as a pathway to CSU's 3+2 Master of Science in Nursing (MSN) program [hyperlink to 3+2 MSN Program Description], offered on the Fort Collins campus in collaboration with CSU Pueblo's School of Nursing. Students interested in the 3+2 MSN program must begin in the Pre-Nursing Concentration and apply to the MSN program during their third semester. If accepted, students will transition from this concentration to the Major in Nutrition Science, Nursing Concentration (<https://catalog.colostate.edu/general-catalog/colleges/>

health-human-sciences/food-science-human-nutrition/nutrition-science-major-nursing-concentration/). If not accepted, students will remain in the Pre-Nursing Concentration to complete the nursing prerequisite coursework and earn their Bachelor of Science degree in Nutrition Science (<https://catalog.colostate.edu/general-catalog/colleges/health-human-sciences/food-science-human-nutrition/nutrition-science-major/>), after which they can apply to accelerated Bachelor of Nursing programs.

Learning Objectives

Upon successful completion of this concentration, students will be able to:

1. Demonstrate advanced knowledge of scientific principles relating to physiology, chemistry, and nutrition science.
2. Integrate information from scientific sources, critically analyze critique scientific information, and develop appropriate conclusions.
3. Apply knowledge to issues relating to human health and disease.

Requirements Effective Fall 2026

If students would like to apply to the 3+2 Master's of Nursing and the corresponding Nutrition Science Nursing Concentration, students must earn a grade of C or better in all nursing prerequisite courses as well as any course substitutions fulfilling these requirements.

Freshman

		AUCC	Credits
CHEM 107	Fundamentals of Chemistry (GT-SC2)	3A	4
CHEM 108	Fundamentals of Chemistry Laboratory (GT-SC1)	3A	1
CO 150	College Composition (GT-CO2)	1A	3
FSHN 115	Health Equity	1C	3
FSHN 150	Introduction to Human Nutrition		3
FSHN 340	Food as Medicine		3
HDFS 101	Lifespan Development (GT-SS3)	3C	3
MATH 117	College Algebra in Context I (GT-MA1)	1B	1
MATH 118	College Algebra in Context II (GT-MA1)	1B	1
PSY 100	General Psychology (GT-SS3)	3C	3
Select one group from the following:			4
Group A:			
BZ 110	Principles of Animal Biology (GT-SC2)	3A	
BZ 111	Animal Biology Laboratory (GT-SC1)	3A	
Group B:			
LIFE 102	Attributes of Living Systems (GT-SC1)	3A	
Arts and Humanities (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)			3
Historical Perspectives (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives)			3
Total Credits			35

Sophomore

FSHN 292	Careers in Nutrition Science Seminar		1
FSHN 350	Human Nutrition		3
FSHN 428	Nutrition Teaching and Counseling Techniques		3

FSHN 453	Biology of Body Weight Regulation		3
LIFE 205	Microbial Biology		3
LIFE 206	Microbial Biology Laboratory		2
MATH 124	Logarithmic and Exponential Functions (GT-MA1)	1B	1
MATH 125	Numerical Trigonometry (GT-MA1)	1B	1
SPCM 200	Public Speaking		3
STAT 201	General Statistics (GT-MA1)	1B	3
Select one course from the following:			4
BMS 300	Principles of Human Physiology		
HES 300	Physiology for Clinical Health Professions		
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	
Arts and Humanities (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)			3B

Total Credits	33
----------------------	-----------

Junior

CHEM 245	Fundamentals of Organic Chemistry		4
CHEM 246	Fundamentals of Organic Chemistry Laboratory		1
FSHN 449	Pathophysiology of Nutrition-Related Diseases	4B	2
FSHN 450	Medical Nutrition Therapy	4B	3
FSHN 459	Nutrition in the Life Cycle	4A	3
Select one course from the following:			3
FSHN 220	Intro to Nutrition for Sports and Fitness		
FSHN 271	Integrative Wellness Coaching I		
FSHN 451	Community Nutrition		
Pre-Nursing Concentration Course (see list below)			3
Electives			7

Total Credits	26
----------------------	-----------

Senior

BC 351	Principles of Biochemistry		4
BMS 301	Human Gross Anatomy		5
FSHN 470	Advanced Human Nutrition and Metabolism		3
FSHN 492	Seminar in Dietetics and Nutrition	4C	2
HES 310	Human Pathophysiology		3
Select one course from the following:			2
FSHN 361	Global Nutrition		
FSHN 455	Food Systems–Impact on Health/Food Security		
Pre-Nursing Concentration Courses (see list below)			7

Total Credits	26
----------------------	-----------

Program Total Credits:	120
-------------------------------	------------

Pre-Nursing Concentration Courses²

Select a minimum of 10 credits from the following:

Code	Title	Credits	
AGED 372/HDFS 372	Inclusive Mentoring for Neurodiverse Peers	2-4	
BMS 302	Laboratory in Principles of Physiology	2	
FSHN 220	Intro to Nutrition for Sports and Fitness	3	
FSHN 271	Integrative Wellness Coaching I	3	
FSHN 272	Integrative Wellness Coaching II	3	
FSHN 342A	Study Abroad–Italy: Food as Medicine	3	
FSHN 360	Nutrition Assessment	2	
FSHN 361	Global Nutrition	2	
FSHN 435	Lactation Benefits and Promotion	2	
FSHN 445/HDFS 445	Early Childhood Health, Safety, and Nutrition	3	
FSHN 451	Community Nutrition	3	

FSHN 455	Food Systems–Impact on Health/Food Security	2
HDFS 315	Disability Across the Lifespan and Culture	3
HDFS 317	Disabilities in Early Childhood Education	3
HDFS 332	Death, Dying, and Grief	3
HDFS 404	Child Life Theory and Practice	3
HES 202	Introduction to Exercise Physiology	3
HES 207	Anatomical Kinesiology	4
HES 300	Physiology for Clinical Health Professions	4
HES 345	Population Health and Disease Prevention	3
HES 354	Theory of Health Behavior	3
HES 434	Physical Activity Throughout the Lifespan	3
PBHL 200	Introduction to Public Health (GT-SS3)	3
PSY 320	Psychopathology	3
SOC 344	Health, Medicine, and Society	3

² Nursing pathophysiology is a common prerequisite for BSN programs. A recommended external option is NSG 207 online from CSU Pueblo. Students should consult with their advisor for additional options.

Major Completion Map

Distinctive Requirements for Degree Program:

Students seeking admission to the Major in Nutrition Science Nursing Concentration must begin in the Nutrition Science Pre-Nursing Concentration and formally apply to the Master's of Nursing (MSN) after completing all coursework in Semesters 1 - 3 with a grade of C or better. Notification of acceptance occurs during Semester 4 and if admitted, students will change to the Nursing Concentration prior to Semester 5. Students must complete all remaining MSN prerequisites in Semesters 5 and 6 with a grade of C or better and will not be allowed to enroll in MSN nursing courses until all prerequisites are complete.

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

Freshman

Semester 1		Critical	Recommended	AUCC	Credits
FSHN 115	Health Equity	X		1C	3
FSHN 150	Introduction to Human Nutrition	X			3
HDFS 101	Lifespan Development (GT-SS3)	X		3C	3
MATH 117	College Algebra in Context I (GT-MA1)	X		1B	1
Select one group from the following:		X			4
Group A:					
BZ 110	Principles of Animal Biology (GT-SC2)			3A	
BZ 111	Animal Biology Laboratory (GT-SC1)			3A	
Group B:					
LIFE 102	Attributes of Living Systems (GT-SC1)			3A	
Arts and Humanities (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)			X	3B	3

Total Credits

17

Semester 2		Critical	Recommended	AUCC	Credits
CHEM 107	Fundamentals of Chemistry (GT-SC2)	X		3A	4
CHEM 108	Fundamentals of Chemistry Laboratory (GT-SC1)	X		3A	1
CO 150	College Composition (GT-CO2)	X		1A	3
FSHN 340	Food as Medicine	X			3
MATH 118	College Algebra in Context II (GT-MA1)	X		1B	1
PSY 100	General Psychology (GT-SS3)	X		3C	3
Historical Perspectives (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives)			X	3D	3

Total Credits

18

Sophomore

Semester 3		Critical	Recommended	AUCC	Credits
FSHN 292	Careers in Nutrition Science Seminar	X			1
FSHN 350	Human Nutrition	X			3
MATH 124	Logarithmic and Exponential Functions (GT-MA1)	X		1B	1
MATH 125	Numerical Trigonometry (GT-MA1)	X		1B	1
SPCM 200	Public Speaking	X			3
STAT 201	General Statistics (GT-MA1)	X		1B	3

Select one course from the following:					4
BMS 300	Principles of Human Physiology	X			
HES 300	Physiology for Clinical Health Professions	X			
Total Credits					16
Semester 4					
		Critical	Recommended	AUCC	Credits
FSHN 428	Nutrition Teaching and Counseling Techniques	X			3
FSHN 453	Biology of Body Weight Regulation	X			3
LIFE 205	Microbial Biology	X			3
LIFE 206	Microbial Biology Laboratory	X			2
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	
Arts and Humanities (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)			X	3B	3
Total Credits					17
Junior					
Semester 5					
		Critical	Recommended	AUCC	Credits
FSHN 449	Pathophysiology of Nutrition-Related Diseases	X		4B	2
FSHN 459	Nutrition in the Life Cycle	X		4A	3
Select one course from the following:					3
FSHN 220	Intro to Nutrition for Sports and Fitness				
FSHN 271	Integrative Wellness Coaching I				
FSHN 451	Community Nutrition				
Electives					4
Total Credits					12
Semester 6					
		Critical	Recommended	AUCC	Credits
CHEM 245	Fundamentals of Organic Chemistry	X			4
CHEM 246	Fundamentals of Organic Chemistry Laboratory	X			1
FSHN 450	Medical Nutrition Therapy	X		4B	3
Pre-Nursing Concentration Course (see list on Concentration Requirements tab)			X		3
Elective			X		3
Total Credits					14
Senior					
Semester 7					
		Critical	Recommended	AUCC	Credits
BC 351	Principles of Biochemistry	X			4
Select one course from the following:					2
FSHN 361	Global Nutrition				
FSHN 455	Food Systems--Impact on Health/Food Security				
Pre-Nursing Concentration Courses (see list on Concentration Requirements tab)			X		7
Total Credits					13
Semester 8					
		Critical	Recommended	AUCC	Credits
BMS 301	Human Gross Anatomy	X			5
FSHN 470	Advanced Human Nutrition and Metabolism	X			3
FSHN 492	Seminar in Dietetics and Nutrition	X		4C	2
HES 310	Human Pathophysiology	X			3
The benchmark courses for the 8th semester are the remaining courses in the entire program of study.					
Total Credits					13
Program Total Credits:					120