MAJOR IN HEALTH AND EXERCISE SCIENCE, EXERCISE SCIENCE CONCENTRATION

Requirements

Effective Fall 2024

Freshman

		AUCC	Credits
CO 150	College Composition (GT-CO2)	1A	3
FSHN 150	Survey of Human Nutrition		3
HES 145	Health and Wellness for Everyone (GT-SS3)	1C	3
HES 202	Introduction to Exercise Physiology		3
MATH 118[1]	College Algebra in Context II (GT-MA1)	1B	1
MATH 124[1]	Logarithmic and Exponential Functions (GT-MA1)	1B	1
MATH 125[1]	Numerical Trigonometry (GT-MA1)	1B	1
Biology - Select one group from the following:			4
Group A			
LIFE 102	Attributes of Living Systems (GT-SC1)	3A	
Group B			
BZ 110	Principles of Animal Biology (GT-SC2)	3A	
BZ 111	Animal Biology Laboratory (GT-SC1)	3A	
Chemistry - Select one group from the following:[2]			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	
Arts and Humanities (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)		3B	3
Electives			3
	Total Credits		**30**

Sophomore

BMS 300	Principles of Human Physiology		4
BMS 302	Laboratory in Principles of Physiology		2
CHEM 113	General Chemistry II		3
CHEM 114	General Chemistry Lab II		1
HES 207	Anatomical Kinesiology		4
PSY 100	General Psychology (GT-SS3)	3C	3
SPCM 200	Public Speaking		3
Arts and Humanities (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)		3B	3
Historical Perspectives (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives)		3D	3
Electives			6
	Total Credits		**32**

Junior

CHEM 245[3]	Fundamentals of Organic Chemistry		4
CHEM 246[3]	Fundamentals of Organic Chemistry Laboratory		1
CO 301B	Writing in the Disciplines: Sciences (GT-CO3)	2	3
HES 319	Neuromuscular Aspects of Human Movement		4
HES 340	Exercise Prescription		3
HES 403	Physiology of Exercise	4B	3
HES 404	Physiology of Exercise Laboratory	4B	1
PH 121	General Physics I (GT-SC1)	3A	5
Statistics - Select one course from the following:			3
STAT 201	General Statistics (GT-MA1)	1B	
STAT 301	Introduction to Applied Statistical Methods		
STAT 307	Introduction to Biostatistics		
Electives			3
	Total Credits		**30**

Senior

BMS 301	Human Gross Anatomy		5
HES 307	Biomechanical Principles of Human Movement		3
HES 345	Population Health and Disease Prevention		3
Exercise Science Capstone - select one course from the following:[4]			3
HES 478A	Exercise Science Capstone: Seminar	4A,4C	
HES 478B	Exercise Science Capstone: Research	4A,4C	
HES 478C	Exercise Science Capstone: Teaching	4A,4C	
HES 478D	Exercise Science Capstone: Service Learning	4A,4C	
Exercise Science Guided Electives - Select 10 credits from the list below:			10
Electives[5]			4
	Total Credits		**28**
	Program Total Credits:		**120**

Exercise Science Guided Electives List:

Code	Title	AUCC	Credits
Select a minimum of 10 credits from the list.			
BC 351	Principles of Biochemistry		4
BMS *** Upper-Division course(s) not required elsewhere			3-5
BZ 310	Cell Biology		4
BZ 350	Molecular and General Genetics		4
FSHN*** Upper-Division course(s)			3-6
HDFS*** Upper-Division course(s)			3-6
HES *** Upper-Division course(s) not required elsewhere			1-10
LIFE *** 3-5 credits from Life Sciences (not including LIFE 102)			3-5
MATH 155	Calculus for Biological Scientists I (GT-MA1)	1B	4
or MATH 160	Calculus for Physical Scientists I (GT-MA1)		
MATH 161	Calculus for Physical Scientists II (GT-MA1)	1B	4
MIP 300	General Microbiology		3
MIP 302	General Microbiology Laboratory		2
MIP 315	Pathology of Human and Animal Disease		3
OT 215	Medical Terminology		1

PH 122	General Physics II (GT-SC1)	3A	5
or PH 142	Physics for Scientists and Engineers II (GT-SC1)		
PSY 252	Mind, Brain, and Behavior		3
PSY 260	Child Psychology		3
or PSY *** Upper-Division course			
SOCR 330	Principles of Genetics		3
SOCR 331	Genetics Laboratory		1

1 MATH 155 or MATH 160 may be substituted for MATH 118, MATH 124 and MATH 125. Students may not count MATH 155 or MATH 160 for a Guided Elective if they have substituted one of these courses for MATH 118, MATH 124, or MATH 125.

2 CHEM 111/CHEM 112 can be substituted for CHEM 107/CHEM 108 and should be seriously considered by students who want to go on to graduate studies. Students should select CHEM 111/CHEM 112 as it better prepares students for CHEM 113/CHEM 114.

3 CHEM 341/CHEM 343/CHEM 344 may be substituted for CHEM 245/CHEM 246 provided that all three courses are completed.

4 Students taking the capstone will initially enroll in HES 478A, but have the option of applying for HES 478B/HES 478C/HES 478D, those selected will be re-enrolled in the appropriate course and section.

5 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).