Exercise Science and Rehabilitative Studies



About this Composite Major

A Exercise Science and Rehabilitative Studies major is designed to prepare students for professional healthcare programs in athletic training, physical therapy, occupational therapy, physician assistant, chiropractic, cardiac rehab, dietetics, and other rehabilitative healthcare professions.

The courses are **taught by certified healthcare providers** and are hands-on and interactive. Students gain experience with state-of-the-art rehabilitative equipment in the classroom and in practical experience settings with healthcare professionals. The experiences and course content in the Exercise Science and Rehabilitative Studies (ESRS) program prepare students for a smooth and successful transition to their professional graduate degree.

As part of the ESRS program, students earn a Strength and Conditioning certificate. The combination of required courses and the strength and conditioning certificate prepares students to sit for the Certified Strength and Conditioning Specialist (CSCS) exam. This is a highly sought credential for those interested in increasing marketability in their prospective professional setting. In addition, students have an opportunity to earn a Sport Nutrition Specialist credential, a High School Strength Coach Certified credential, and an Emergency Medical Responder certification.

Career Opportunities

Use your Exercise Science and Rehabilitative Studies education for future career opportunities as an:

- Athletic Trainer
- Physical Therapist
- Occupational Therapist
- Chiropractor
- Physician Assistant
- Cardiac Rehab
- Dietitian
- · Other rehabilitative healthcare professions

Meet a Student



During my time in the Exercise Science and Rehabilitative Studies program, I truly got an understanding and a feel for what I was wanting to do with my future. Through all of the hands-on practical experience in each of the classes and the professors who were always willing to go over things again, or meet and explain things further, it was easy to feel out what types of careers would be good for myself. Because of all of that, I finally found a profession that I can wholeheartedly say will make me happy. The professors in this program helped show what a day in your professional careers could look like, while still giving you so much knowledge and sharing their personal experiences to prepare you for it, and I think that is the biggest plus of this

program. – McKenna Taylor - current Physician Assistant student



Get Involved in the Major

The **Kinesiology and Human Performance Club** empowers students by providing invaluable opportunities such as attending professional conferences, crafting resume materials, preparing for exams like the GRE and PRAXIS, navigating the application processes for professional graduate programs, and studying for certifications and credentialing exams. The club is dedicated to cultivating students' growth and achievement within their discipline, fostering success in both academic and professional environments.

Contact Information Department Chair and Faculty Contact

Dr. Rachelle Hunt, rachelle.hunt@vcsu.edu, (701) 845-7260

Department Location

Gaukler Family Wellness & Physical Education Center, 149

Schedule your visit today!

http://visit.vcsu.edu/

(701) 845-7101 or (800) 532-8641

Plan of Study - Pre-Athletic Training, Pre-Chiropractic, Pre-Occupational Therapy

*Plans of study are adjusted to prerequisite courses reflecting specific professional school requirements.

First Year			
Fall	Credits	Credits	
BIOL 150 (Gen Ed)	4	ENGL 125 (Gen Ed)	
HPER 127	3	PSYC 111 (Gen Ed)	3
HPER 128	3	Math (Gen Ed)	3
Wellness (Gen Ed)	2	Lab Science (Gen Ed)	4
English Composition (Gen Ed)	3	Computer Science/Digital Literacy (Gen Ed)	3
UNIV 150	1		
	16		16
Second Year			
Fall	Credits	Spring	Credits
HPER 109 (Directed Elective)	3	HPER 259	3
HPER 207	2	PSYC 250	3
PHYS 211	4	Directed Elective	3
Speech Communication (Gen Ed)	3	Literacies (Gen Ed)	3
Directed Elective (PSYC 370 for OT)	3	Art or Music (Gen Ed)	3
	15		15
Third Year	15		15
Third Year Fall		s Spring	15 Credits
		s Spring BIOL 221	
Fall	Credits	· -	Credits
Fall BIOL 220	Credits	BIOL 221	Credits
Fall BIOL 220 HPER 260	Credits 4	BIOL 221 HPER 327	Credits 4 3
Fall BIOL 220 HPER 260 HPER 311 (Directed Elective)	Credits 4 3 3	BIOL 221 HPER 327 HPER 309 (Directed Elective)	Credits 4 3 3
Fall BIOL 220 HPER 260 HPER 311 (Directed Elective)	Credits 4 3 3	BIOL 221 HPER 327 HPER 309 (Directed Elective) HPER 384	Credits 4 3 3
Fall BIOL 220 HPER 260 HPER 311 (Directed Elective)	Credits 4 3 3 3	BIOL 221 HPER 327 HPER 309 (Directed Elective) HPER 384	Credits 4 3 3 3 3
Fall BIOL 220 HPER 260 HPER 311 (Directed Elective) HPER 321	Credits 4 3 3 3	BIOL 221 HPER 327 HPER 309 (Directed Elective) HPER 384	Credits 4 3 3 3 3
Fall BIOL 220 HPER 260 HPER 311 (Directed Elective) HPER 321 Fourth Year	Credits 4 3 3 3	BIOL 221 HPER 327 HPER 309 (Directed Elective) HPER 384 Social Science (Gen Ed)	Credits 4 3 3 3 16
Fall BIOL 220 HPER 260 HPER 311 (Directed Elective) HPER 321 Fourth Year Fall	Credits 4 3 3 3 Credits	BIOL 221 HPER 327 HPER 309 (Directed Elective) HPER 384 Social Science (Gen Ed)	Credits 4 3 3 3 16 Credits
Fall BIOL 220 HPER 260 HPER 311 (Directed Elective) HPER 321 Fourth Year Fall CHEM 121	Credits 4 3 3 3 3 Credits 5	BIOL 221 HPER 327 HPER 309 (Directed Elective) HPER 384 Social Science (Gen Ed) Spring HPER 326	Credits 4 3 3 3 16 Credits 3
Fall BIOL 220 HPER 260 HPER 311 (Directed Elective) HPER 321 Fourth Year Fall CHEM 121 HPER 328	Credits 4 3 3 3 Credits 5 3	BIOL 221 HPER 327 HPER 309 (Directed Elective) HPER 384 Social Science (Gen Ed) Spring HPER 326 HPER 454	Credits 4 3 3 3 16 Credits 3 3
Fall BIOL 220 HPER 260 HPER 311 (Directed Elective) HPER 321 Fourth Year Fall CHEM 121 HPER 328 HPER 444	Credits 4 3 3 3 Credits 5 3 3	BIOL 221 HPER 327 HPER 309 (Directed Elective) HPER 384 Social Science (Gen Ed) Spring HPER 326 HPER 454 MATH 321 or PSYC 330 Additional Humanities or	Credits 4 3 3 3 16 Credits 3 3 3

Total Credits 120

Please note: This plan is intended for general information only. Students are strongly encouraged to meet with their academic advisor each semester before registration.

Plan of Study - Pre-Physical Therapy

*Plans of study are adjusted to prerequisite courses reflecting specific professional school requirements.

First Year			
Fall	Credits	Credits	
HPER 127	3	BIOL 151 (Directed Elective)	4
HPER 128	3	CIS 170 (Gen Ed)	3
BIOL 150 (Gen Ed)	4	PSYC 111 (Gen Ed)	3
ENGL 110 (Gen Ed)	3	ENGL 125 (Gen Ed)	3
HPER 100 or 212 (Gen Ed)	2	Math (Gen Ed)	3
UNIV 150	1		
	16		16
Second Year			
Fall	Credits	Spring	Credits
HPER 109 (Directed Elective)	3	HPER 259	3
HPER 207	2	PHYS 212 (Directed Elective)	4
PHYS 211 (Gen Ed)	4	PSYC 250	3
COMM 110 (Gen Ed)	3	Literacies (Gen Ed)	3
Elective	2	Art or Music (Gen Ed)	3
	14		16
Third Year			
Fall	Credits	Spring	Credits
HPER 311 (Directed Elective)	3	HPER 327	3
HPER 321	3	HPER 384	3
HPER 260	3	BIOL 221	
			4
BIOL 220	4	Social Science (Gen Ed)	3
BIOL 220 PSYC 370 (Directed Elective)	4 3	Social Science (Gen Ed)	
	•	Social Science (Gen Ed)	
	3	Social Science (Gen Ed)	3
PSYC 370 (Directed Elective)	3 16	Social Science (Gen Ed)	3 13
PSYC 370 (Directed Elective) Fourth Year	3 16	` ,	3
PSYC 370 (Directed Elective) Fourth Year Fall	3 16 Credits	s Spring	13 Credits
PSYC 370 (Directed Elective) Fourth Year Fall HPER 328	3 16 Credits 3	s Spring HPER 326	3 13 Credits 3
PSYC 370 (Directed Elective) Fourth Year Fall HPER 328 HPER 444	3 16 Credits 3 3	S Spring HPER 326 HPER 387 (Directed Elective)	3 Credits 3 2 3
PSYC 370 (Directed Elective) Fourth Year Fall HPER 328 HPER 444 CHEM 121	3 16 Credits 3 3 5	SSpring HPER 326 HPER 387 (Directed Elective) HPER 454	3 Credits 3 2 3

Total Credits 120

Plan of Study - Pre-Physician Assistant

*Plan of study may change based on prerequisite requirements for different professional programs

First Year			
Fall	Credits	Credits	
HPER 127	3	CIS 170 (Gen Ed)	3
HPER 128	3	PSYC 111 (Gen Ed)	3
BIOL 150 (Gen Ed)	4	Math (Gen Ed)	3
UNIV 150	1	English Composition (Gen Ed)	3
English Composition (Gen Ed)	3	Directed Elective	4
Wellness (Gen Ed)	2		
	16		16
Second Year			
Fall	Credits	Spring	Credits
PHYS 211 (Gen Ed)	4	HPER 259	3
HPER 109 (Directed Elective)	3	PSYC 250	3
HPER 207	2	Literacies (Gen Ed)	3
Speech Communication (Gen Ed)	3	Directed Electives	6
Directed Elective	3		
	1 5		15
Third Year			
Fall	Credits	Spring	Credits
BIOL 220	4	HPER 327	3
HPER 260	3	HPER 384	3
HPER 321	3	BIOL 221	4
Art or Music (Gen Ed)	3	Social Science (Gen Ed)	3
Elective	3		
	16		13
Fourth Year			
Fall	Credits	Spring	Credits
HPER 328	3	HPER 326	3
HPER 387 (Directed Elective)	2	HPER 454	3
HPER 444	3	Additional Humanities or Social Science (Gen Ed)	2
CHEM 121	5	Electives	5
PSYC 330	3		
	16		13

Total Credits 120

Plan of Study - VCSU-NDSU Accelerated Master's in Athletic Training

master's in Atmetic Training					
First Year					
Fall	Credits	Spring	Credits		
HPER 127	3	HPER 128	3		
CIS 170 (Gen Ed)	3	HPER 207	2		
PSYC 111 (Gen Ed)	3	BIOL 150 (Gen Ed)	4		
UNIV 150	1	Math (Gen Ed)	3		
English Composition (Gen Ed)	3 1	English Composition (Gen Ed)	3		
Wellness (Gen Ed)	2	Directed Elective	3		
Directed Elective	3				
	18		18		
Second Yea	r				
Fall	Credits	Spring	Credits		
HPER 109	3	HPER 259	3		
HPER 311	3	HPER 384	3		
PHYS 211 (Gen Ed)	4	CHEM 121	5		
Additional Humanities or Social Science (Gen Ed)	2	PSYC 250	3		
Directed Elective	3	Speech Communica (Gen Ed)	3 tion		
Literacies (Gen Ed)	3	HPER 210	1		
	18		18		
Third Year					
Fall	Credits	Spring	Credits	Summer	Credits
HPER 260	3	BIOL 221	4	HNES 780 - NDSU VCSU Directed Elective	3
HPER 328	3	MATH 321 or PSYC 330 MATH 321 (spring only) PSYC 330 (fall only)	3	HNES 720 - NDSU	3
HPER 444	3	HPER 309 (Directed Elective)	3	Start on NDSU's Campus	
BIOL 220	4	Social Science (Gen Ed)	3		



Art or Music (Gen Ed)	3	Directed Elective	5	
Directed Elective	2			
Apply to NDSU Graduate AT Program				
	18		18	6
Fourth Year				
Fall	Credits	Spring	Credits	
HNES 770 - NDSU ^{VCSU} HPER 454	2	HPER 778 - NDSU	3	
HNES 781 - NDSU VCSU HPER 226	4	HNES 782 - NDSU ^{VCSU} HPER 227	5	
HNES 794 - NDSU ^{VCSU -} HPER 487	2	HNES 794 - NDSU	3	
		Graduate from VCSU with an ESRS undergraduategree	1	
	8		11	
Fifth Year				
Fall	Credits	Spring	Credits	
HNES 774 - NDSU	3	HNES 772 - NDUS	2	
HNES 775 - NDSU	3	HNES 773 - NDSU	2	
HNES 776 - NDSU	3	HNES 794 - NDSU	5	
HNES 794 - NDSU	2			
	11		9	

Total Credits 153

Learning Outcomes

- 1. Students will demonstrate and apply knowledge of human anatomy and physiology principles.
- 2. Students will assess, critique, and analyze the appropriate knowledge and educational foundation to interpret evidence-based research.
- 3. Students will accurately evaluate orthopedic and nonorthopedic injuries and illnesses. Develop and implement therapeutic strategies for rehabilitation.
- 4. Students will develop communication skills using verbal, written, and electronic documentation appropriate for health care professions.