

HEALTH SCIENCE (HS)

HS 505 Sport Psychology	3 Credit hours	
An examination of theory, research, and application of psychological principles related to sport and exercise.		
Grade Mode: Normal Grading Mode		
HS 512 Found Clinical Skills in AT	3 Credit hours	
Taping, bracing, spine boarding, airway and oxygen administration, and other advanced emergency and practical care techniques used in athletic training. (PR: program admissions; CR: HS 522)		
Grade Mode: Normal Grading Mode		
HS 515 Ath Trng Clinical Exp I	1-3 Credit hours	
To develop evaluation and treatment skills of the student under the direction of a BOC-certified Athletic Trainer. Requires completion of clinical hours and assigned competencies.		
Grade Mode: Normal Grading Mode		
HS 523 Ortho Assess Upper Extremity	4 Credit hours	
Orthopedic evaluation techniques of the neck and upper extremity for the athletic trainer.		
Grade Mode: Normal Grading Mode		
HS 524 Ortho Assess Lower Extremity	4 Credit hours	
Orthopedic evaluation techniques of the lower extremity for the athletic trainer.		
Grade Mode: Normal Grading Mode		
HS 525 Ath Trng Clinical Exp II	3 Credit hours	
To continue developing athletic training evaluation and treatment skills under the direction of a BOC-certified Athletic trainer. (PR: grade of B or higher in HS 515 and 75 clinical hours)		
Pre-req: HS 515.		
Grade Mode: Normal Grading Mode		
HS 535 Biomech Instrument MatLab	3 Credit hours	
This course teaches students the skills to use biomechanical sensors as instruments for research, and the use of MatLab programming language to process the data they collect from their instruments.		
Grade Mode: Normal Grading Mode		
HS 548 Therapeutic Interventions I	4 Credit hours	
Students in this course will be instructed in therapeutic modalities used in the initial stages of injury, and therapeutic exercise rehabilitation of the lower extremity and lumbar spine. Special emphasis is given to the decision making processes involved with modality and exercise selection and parameter adjustment based upon patient pathologic responses and desired patient outcomes.		
Grade Mode: Normal Grading Mode		
HS 549 Therapeutic Interventions II	4 Credit hours	
Students in this course will be instructed in electrical stimulation modalities and therapeutic exercise rehabilitation of the upper extremity and cervical spine. Post surgical rehabilitation for both upper and lower extremities and the spine will be incorporated. Special emphasis is given to the decision making processes involved with modality and exercise selection and parameter adjustment based upon patient pathologic responses and desired patient outcomes.		
Grade Mode: Normal Grading Mode		
HS 560 Professional Development		1-4 Credit hours
Courses and activities designed to meet the specific inservice needs of public school personnel. Credit in these courses may be used for certificate renewal and salary upgrading if approved but not for degrees.		
Grade Mode: Normal Grading Mode		
HS 561 Professional Development		1-4 Credit hours
Courses and activities designed to meet the specific inservice needs of public school personnel. Credit in these courses may be used for certificate renewal and salary upgrading if approved but not for degrees.		
Grade Mode: Normal Grading Mode		
HS 562 Professional Development		1-4 Credit hours
Courses and activities designed to meet the specific inservice needs of public school personnel. Credit in these courses may be used for certificate renewal and salary upgrading if approved but not for degrees.		
Grade Mode: Normal Grading Mode		
HS 563 Professional Development		1-4 Credit hours
Courses and activities designed to meet the specific inservice needs of public school personnel. Credit in these courses may be used for certificate renewal and salary upgrading if approved but not for degrees.		
Grade Mode: Normal Grading Mode		
HS 564 Professional Development		1-4 Credit hours
Courses and activities designed to meet the specific inservice needs of public school personnel. Credit in these courses may be used for certificate renewal and salary upgrading if approved but not for degrees.		
Grade Mode: Normal Grading Mode		
HS 565 Pathomechanics		3 Credit hours
An investigation into normal and abnormal human movement patterns in sport, the workplace, and in activities of daily living.		
Grade Mode: Normal Grading Mode		
HS 566 Biomechanical Analysis		3 Credit hours
The purpose of the course is to provide an advanced study of biomechanical concepts and their application to human movement and sport skills.		
Grade Mode: Normal Grading Mode		
HS 578 Biomech Research Pract		1-6 Credit hours
This course offers "hands-on" work within the biomechanics lab. The student will assist with current research. This experience that allows students to gain practical experience within a lab setting.		
Grade Mode: Normal Grading Mode		
HS 580 Special Topics		1-4 Credit hours
Attributes: No Textbook Required		
Grade Mode: Normal Grading Mode		
HS 581 Special Topics		1-4 Credit hours
Grade Mode: Normal Grading Mode		
HS 582 Special Topics		1-4 Credit hours
Grade Mode: Normal Grading Mode		
HS 583 Special Topics		1-4 Credit hours
Grade Mode: Normal Grading Mode		
HS 584 Special Topics in Health		1-4 Credit hours
Grade Mode: Normal Grading Mode		
HS 585 Independent Study		1-4 Credit hours
Grade Mode: Normal Grading Mode		

HS 586 Independent Study	1-4 Credit hours	HS 635 Kinetics in Biomech	3 Credit hours
Grade Mode: Normal Grading Mode		Students will gain knowledge regarding biomechanics technologies to measure kinetics, acquire the skills to investigate forces and the human body, and learn how to process, analyze, and interpret kinetic data.	
HS 587 Independent Study	1-4 Credit hours	Grade Mode: Normal Grading Mode	
Grade Mode: Normal Grading Mode		HS 639 Exam of Gen Med Conditions	3 Credit hours
HS 588 Independent Study	1-4 Credit hours	A study of common general medical conditions and illnesses of physically active individuals and the proper methods of evaluating these complaints.	
Grade Mode: Normal Grading Mode		Grade Mode: Normal Grading Mode	
HS 589 Independent Study	3 Credit hours	HS 640 Health Eval for the Ath Trn	3 Credit hours
Grade Mode: Normal Grading Mode		An indepth study of common problems and complaints of athletes and the proper method of evaluating those complaints.	
HS 591 Workshop in Phys Ed	1-3 Credit hours	Grade Mode: Normal Grading Mode	
Grade Mode: Normal Grading Mode		HS 645 Ath Trng Clinical Exp III	3 Credit hours
HS 592 Workshop in Phys Ed	1-3 Credit hours	To continue developing athletic training evaluation and treatment skills under the direction of a BOC-certified athletic trainer and/or other qualified allied health professionals. (PR: grade of B or higher in HS 525 and 225 clinical hours)	
Grade Mode: Normal Grading Mode		Pre-req: HS 525.	
HS 595 Trends in Biomechanics 2	3 Credit hours	Grade Mode: Normal Grading Mode	
The purpose of this course is to expose the student to the research process as it pertains to the field of biomechanics. This course is intended to continue the process started in HS 575.		HS 646 Athletic Training I	3 Credit hours
Pre-req: HS 575.		Training in the diagnosis of injuries in athletics. The student will be expected to participate in diagnosis techniques under the supervision of a trainer.	
Grade Mode: Normal Grading Mode		Grade Mode: Normal Grading Mode	
HS 609 Org & Admin Athletic Training	3 Credit hours	HS 647 Athletic Training II	3 Credit hours
This course will investigate current trends in administration and organization in the field of athletic training. Focus will be placed on current state/federal practice laws and the financial management of running an athletic training clinic.		Professional aspects of trainer-doctor and doctor-athlete relations will be taught and exploration of how to professionally handle injuries and cooperate with physicians.	
Grade Mode: Normal Grading Mode		Grade Mode: Normal Grading Mode	
HS 610 Adv Biomechanics	3 Credit hours	HS 650 Human Gait	3 Credit hours
An advance investigation into Newtonian mechanics and their application in their uses human movement analysis.		An investigation into normal and abnormal human gait patterns in activities of daily living.	
Pre-req: HS 566.		Pre-req: ESS 564 or HS 564.	
Grade Mode: Normal Grading Mode		Grade Mode: Normal Grading Mode	
HS 615 Kinematic Analysis App Biomech	3 Credit hours	HS 655 Ath Trng Clinical Exp IV	3 Credit hours
This course entails a study of kinematics as it relates to the analysis of human movement involving the mechanical and anatomical characteristics of physical skills through the utilization of research equipment.		Capstone clinical experience supervised by an MD, PT, PA, or ATC at an approved site. Requires 150 clinical hours. (PR: grade of B or higher in HS 645 and 225 clinical hours)	
Grade Mode: Normal Grading Mode		Pre-req: HS 645.	
HS 620 Subst Abuse & the Athlete	3 Credit hours	Grade Mode: Normal Grading Mode	
Grade Mode: Normal Grading Mode		HS 657 Adv Trn/Certs	1-3 Credit hours
HS 623 Adv Medical Aspect Sports	3 Credit hours	This course allows the student to participate in advanced training and certification courses such as the Functional Movement Screening, Performance Enhancement Specialist, and others that may be offered each year.	
Emphasis on the development of skills in recognition of symptoms of illness, injuries and proper procedures of medical care.		Grade Mode: Normal Grading Mode	
Grade Mode: Normal Grading Mode		HS 660 Internship	3-6 Credit hours
HS 625 Evidnce Base Prac Ther Elec Agt	3 Credit hours	Practical experince in a clinical setting.	
An in-depth understanding of therapeutic modalities with an emphasis on evidence based literature.		Grade Mode: Normal Grading Mode	
Grade Mode: Normal Grading Mode		HS 679 Trends in Athletic Training	3 Credit hours
HS 630 Seminar Athl Training	3 Credit hours	To investigate current trends with regard to evidence based practice, current practice position statements, and current research methods being utilized in athletic training.	
A course designed to use scientific literature to enhance students preparation and knowledge of athletic training.		Grade Mode: Normal Grading Mode	
Grade Mode: Normal Grading Mode			
HS 634 Ath Trng Externship	3 Credit hours		
Approved externship supervised by a clinical preceptor. Requires 225 clinical hours that includes an immersion experience. (PR: HS 645, program permission)			
Pre-req: HS 645.			
Grade Mode: Normal Grading Mode			

HS 680 Graduate Project in AT **3 Credit hours**

This course involves supervised development of a one-semester scholarly, entrepreneurial or administrative project that synthesizes the student's educational and clinical experiences obtained while matriculating through the PMSAT program.

Pre-req: HS 655.

Co-req: HS 630, HS 634

Grade Mode: Normal Grading Mode

HS 681 Thesis **1-6 Credit hours**

Grade Mode: Normal Grading Mode