

Course of Study for Biomechanics

PRE-MEDICAL SCHOOL

YEAR ONE			
Fall Semester	Hours	Spring Semester	Hours
MTH 132 Precalculus with Science Applications	5	HS 221 Personal Health I	3
ENG 101 English Composition (COMP-CORE II)	3	PSY 201 General Psychology (SOCIAL-CORE II & CT)	3
HS 200 Medical Terminology for the AT (CORE I - CT)	3	First-Year Seminar (Core I)	3
BSC 227 Human Anatomy	4	ENG 102 English Composition II (COMP-CORE II)	3
		BSC 228 Human Physiology (NAT SCI- Core II)	4
Total	15	Total	16
Summer			
		Hours	
		BSC 120 Principals of Biology (Med – pre-req)	4
		BSC 121 Principals of Biology (Med – pre-req)	4
YEAR TWO			
Fall Semester	Hours	Spring Semester	Hours
PHY 201 General Physics I	3	PHY 203 General Physics II	3
PHY 202 General Physics I Lab	1	PHY 204 General Physics II Lab	1
Fine Art elective (FINE ART – CORE II)	3	SFT 235 Intro to Safety (CT)	3
ESS 345 Physiology of Exercise	3	HS 215 Intro to Athletic Training	3
HS 365 Functional Biomechanics	3	Eng. Literature (HUN-(Core II)	3
PSY 311 Child Development	3		
Total	16	Total	13
Summer			
		Hours	
		CHM 211 Chemistry I (Med – pre-req)	3
		CHM 212 Chemistry I lab (Med – pre-req)	2
		CHM 212 Chemistry II (Med – pre-req)	3
		CHM 212 Chemistry II lab (Med – pre-req)	2
YEAR THREE			
Fall Semester	Hours	Spring Semester	Hours
HS 465 Biomechanical Analysis of Movement	3	HS 464 Pathomechanics	3
ESS 375 Fitness Assessment	3	HS 435 Biomech Instrument MATLAB	3
HS 478 Research Practicum	3	SFT 373 Principles in Ergonomics and Human Factors	3
STA 225 Statistics (MATH- Core II)	3	SFT 373 L Principles in Ergonomics Lab	1
SS 401 Ethics	3	ESS 220 Fitness Wellness	3
Total	15	Total	13

Summer			
		Hours	
HS 369 Motor Learning		3	
CHM 355 Organic Chemistry I (Med – pre-req)		3	
CHM 356 Organic Chemistry II (Med – pre-req)		3	
CHM 361 Intro Organic Chemistry lab (Med – pre-req)		3	
YEAR THREE – SUMMER I			
ESS 369 Motor Learning (online)	3		
YEAR FOUR			
Fall Semester	Hours	Spring Semester	Hours
HS 475 Trends in Biomechanical Analysis (capstone)	3	HS 495 Trend in Biomechanical Analysis 2 (capstone)	3
ESS 442 Strength and Conditioning	3	ESS 410 Administration and Organization	3
ESS 443 Principles of Strength and Conditioning Lab	1	PSY 312 Adult Development	3
ESS 401 Ethics in Sport	3	HS 222 First Aid	3
DTS 210 Nutrition	3	Elective	3
COMM (CORE II)	3		
Total	16	Total	15