

załącznik do zarządzenia nr 37/2021 Rektora Uniwersytetu Szczecińskiego z dnia 23 lutego 2021 r.
attachment to the Ordinance no. 37/2021 of the Rector of the University of Szczecin of 23 February 2021

WYDZIAŁ KULTURY FIZYCZNEJ I ZDROWIA								
	Poziom (I, II, JM) Cycle (I, II, long)	Kierunek ANG Course of study	Nazwa przedmiotu ANG Name of a course	Język wykładowy Language of a course	Kod przedmiotu Course code	ECTS	semestr z toku studiów semester in the study cycle	sylabus
A	Przedmioty z programów studiów kierunków prowadzonych w języku obcym Subjects from the study programmes of courses of study carried out in a foreign language							
B	Przedmioty do wyboru prowadzone w języku obcym z pozostałych programów studiów Elective subjects taught in a foreign language from other study programmes							
1	II	diagnostyka sportowa / sports diagnostics	genetic basis of health	j. angielski / English	KFZ113AIJ3451_14S	3	2	zał.
C	Przedmioty z programów studiów kierunków prowadzonych w języku polskim, które będą realizowane w języku obcym Subjects from the study programmes of courses of study carried out in the Polish language, offered in a foreign language							
1	I	sports diagnostics / diagnostyka sportowa	Exercise biochemistry with elements of bioenergetics / Biochemia wysiłku fizycznego z elementami bioenergetyki	Polish / English j. polski / j. angielski	US113AIJ2980_33S	4	3	zał.

2	I	sports diagnostics / diagnostyka sportowa	First aid / Pierwsza pomoc	Polish / English j. polski / j. angielski	KFZ113AIJ3451_13S	1	4	zał.
3	I	diagnostyka sportowa / sports diagnostics	Genetic diagnostics in sport / Diagnostyka genetyczna w sporcie	Polish / English j. polski / j. angielski	KFZ113AIJ3451_1S	3	4	zał.
4	I	sports diagnostics / diagnostyka sportowa	Theory and methodology of the team sports / Teoria i metodyka sportów zespołowych	Polish / English j. polski / j. angielski	KFZ113AIJ3451_4S	5,6	3, 4	zał.
5	I	sports diagnostics / diagnostyka sportowa	Health aspects of physical activity/Zdrowotne aspekty aktywności fizycznej	Polish / English j. polski / j. angielski	US113AIJ2983_57S	2	6	zał.
1	II	sports diagnostics / diagnostyka sportowa	Multimedia techniques in sport / Techniki multimedialne w sporcie	Polish / English j. polski / j. angielski	KFZ113AIJ3451_37S	2	3	zał.
2	II	diagnostyka sportowa / sports diagnostics	Supplementation in selected sports / Suplementacja w wybranych dyscyplinach sportowych	Polish / English j. polski / j. angielski	KFZ113AIJ3451_4S	5	3	zał.
3	II	sports diagnostics / diagnostyka sportowa	Monitoring in Sports Science/ Monitoring w sporcie	Polish / English j. polski / j. angielski	KFZ113AIJ3451_4S	3	3	zał.

4	II	sports diagnostics / diagnostyka sportowa	Fundamentals of Biological Regeneration in Sport/Podstawy odnowy biologicznej w sporcie	Polish / English j. polski / j. angielski	KFZ113AIIJ3451_41S	4	4	zał.
5	II	sports diagnostics / diagnostyka sportowa	Injury Prevention in Sport/Profilaktyka urazów w sporcie	Polish / English j. polski / j. angielski	KFZ113AIIJ3451_16S	4	1	zał.

COURSE SYLLABUS AND SPECIFICATION

Curriculum title: USKFZ-DS-O-I-S-25/26Z							
Unit: Moduł B: diagnostyka laboratoryjna [moduł]							
Course title: Exercise biochemistry with elements of bioenergetics (POZOSTAŁE PRZEDMIOTY / MODUŁY)					Course code: US113AIJ2980_33S		
Name of field of study: diagnostyka sportowa							
Mode and cycle of study: first-degree, full - time			Profile of study: general academic		Specialty:		
Course / module status elective				Language of instruction: semester: 3 - polish language			
Year	Semester	Form of instruction	No. of hours		Type of credit	ECTS	
				including e-learning			
2	3	laboratory	30	0	pg	4	
		lecture	15	0	pg		
Total			45			4	
Course / module coordinator		dr hab. ROBERT NOWAK					
Course instructor		dr hab. ROBERT NOWAK					
Course / module objectives		To familiarize students with the basic biochemical methods used in sports laboratory diagnostics to assess the health of athletes and diagnose selected disease states. The student must acquire readiness for teamwork. The student is expected to acquire laboratory work skills.					
Prerequisites		Basic knowledge of human biochemistry and physiology					
LEARNING OUTCOMES							
Category	No.	Code	Description			Ref. to programme benchmarks	
knowledge	1	EP1	The student describes the most common metabolic disorders and post-exercise changes at the level of human biochemistry.			K_W02 K_W04	
	2	EP2	The student discusses the bioenergetic aspects of selected changes in laboratory diagnostic markers under constant physical exertion.			K_W13	
skills	1	EP3	The student correctly recognizes metabolic disorders and post-exercise changes based on the obtained test results.			K_U10 K_U14	
	2	EP4	Under the supervision of a scientific supervisor, the student performs biochemical analyses most frequently used in laboratory diagnostics.			K_U02	
	3	EP5	The student prepares a well-documented study of experimental research results.			K_U05	
social competences	1	EP6	The student is ready to cooperate and work in a group			K_K05	
	2	EP7	The student is ready to update their knowledge and is aware of its practical importance.			K_K01 K_K07	
CONTENT					Semester	No. of hours	
							including e-learning
Subject title: Exercise biochemistry with elements of bioenergetics							
Format of instruction: lecture							
1. Introduction. The most important sources of energy during exercise. Carbohydrate metabolism - glycolysis.					3	1	0

2. Integration of carbohydrate and lipid metabolism - Krebs cycle, beta-oxidation			3	2	0
3. Chemiosmotic energy conversion			3	2	0
4. Transport of molecules across membranes. Quantitative approach to bioenergetics			3	2	0
5. Chemiosmotic proton turnover			3	2	0
6. The respiratory chain as the proper site of ATP synthesis			3	2	0
7. ATP synthase and its role in energy production			3	4	0
Format of instruction: laboratory					
1. Principles for safe work in the laboratory			3	2	0
2. Energy carriers and energy stores in the human body			3	2	0
3. Assessment of purine nucleotide levels using instrumental methods			3	10	0
4. Creatine kinase as a biochemical marker in sports diagnostics			3	4	0
5. How to equip a trainer's portable laboratory?			3	10	0
6. Final summary of laboratory exercises			3	2	0
Modes of delivery	group work, performing laboratory experiments (exercises), audiovisual presentation (lectures)				
	The course teacher shall specify how artificial intelligence should be used as part of implementation of the course according to University of Szczecin best practices and standards. The course teacher shall inform students in their first class about the scope and possibilities of using AI and shall present a catalogue of tools and applications adjusted to relevant learning outcomes and teaching needs and possibilities within a given course.				
Assessment methods				No. of learning outcome from the syllabus	
	KOŁOKWIUM			EP1,EP2	
	ZAJĘCIA PRAKTYCZNE (WERYFIKACJA POPRZECZ OBSERWACJĘ)			EP3,EP4,EP5,EP6,EP7	
	Metody i formy weryfikacji efektów uczenia się mogą zostać zmienione dla studentów ze szczególnymi potrzebami na warunkach i zasadach określonych w Regulaminie Studiów Uniwersytetu Szczecińskiego.				
Grading criteria	Assessment of exercises based on the correct completion of tasks. The written exam covers the knowledge from the lectures. Exam grading structure (based on the percentage of points earned): 60-69% - satisfactory 70-74% - satisfactory + 75-84% - good 85-89% - good + 90-100% - very good Independent completion of both forms of study is required.				
	Grade calculation principles				
	The final grade is a weighted average of the exercise grade (25%) and the exam grade (75%).				
Final grade calculation method	Sem.	Course	Type of credit	Grade calc. method	Weight for the average
	3	biochemia wysiłku fizycznego z elementami bioenergetyki		Ważona	
	3	biochemia wysiłku fizycznego z elementami bioenergetyki [laboratorium]	zaliczenie z oceną		0,25
	3	biochemia wysiłku fizycznego z elementami bioenergetyki [wykład]	zaliczenie z oceną		0,75
Basic reading	Banfi G., Colombini A., Lombardi G., Lubkowska A. (2012): Metabolic markers in sports medicine, Advances in Clinical Chemistry, 56: 1-54				
	Hübner-Woźniak E., Lutosławska G. (2000): Podstawy biochemii wysiłku fizycznego, Biblioteka Trenera, Warszawa				
	Nicholls D.G., Ferguson S.J. (1995): Bioenergetyka 2, Wydawnictwo Naukowe PWN , Warszawa				

Supplementary reading	Chamera T., Spieszny M., Kłócek T.Kostrzewska-Nowak D., Nowak R., Lachowicz M., Buryta R., Fice K., Moska W., Eider J., Ciężczyk P. (2015): Post-effort changes in activity of traditional diagnostic enzymatic markers in football players' blood, Journal of Medical Biochemistry, 34(2): 179-190
	Koolman J., Röhm K.-H. (2005): Biochemia. Ilustrowany przewodnik, Wydawnictwo Lekarskie PZWL, Warszawa
	Kostrzewska-Nowak D., Nowak R., Chamera T., Buryta R., Moska W., Ciężczyk P. (2015): Post-effort changes in C-reactive protein level among soccer players at the end of the training season, Journal of Strength and Conditioning Research, 29(5): 1399-1405

STUDENT WORKLOAD

	No. of hours	
		including e-learning
Contact hours	45	0
Participation in test / exam	2	0
Preparation for contact hours	15	0
Private reading and studying	8	0
Participation in tutorials	10	0
Preparation of project / essay / etc.	0	0
Preparation for test / exam	20	0
TOTAL workload	100	
ECTS credits	4	

COURSE SYLLABUS AND SPECIFICATION

Curriculum title: USKFZ-DS-O-I-S-25/26Z						
Course title: pierwsza pomoc (KIERUNKOWE)					Course code: KFZ113AIJ3451_13S	
Name of field of study: diagnostyka sportowa						
Mode and cycle of study: first-degree, full - time		Profile of study: general academic			Specialty:	
Course / module status obligatory				Language of instruction: semester: 4 - polish language		
Year	Semester	Form of instruction	No. of hours		Type of credit	ECTS
				including e-learning		
2	4	discussion classes	10	0	pg	1
Total			10			1
Course / module coordinator		dr MACIEJ ZAWADZKI				
Course instructor		dr MACIEJ ZAWADZKI				
Course / module objectives		Familiarizing students with the theoretical and practical basics of pre-medical first aid. Acquisition of teamwork skills. Acquisition of skills to provide first aid to the injured.				
Prerequisites		none				
LEARNING OUTCOMES						
Category	No.	Code	Description			Ref. to programme benchmarks
knowledge	1	EP1	the student knows the symptoms of basic disorders of the body's functioning.			K_W04
	2	EP2	the student knows the theoretical basics of first aid			K_W09
skills	1	EP3	the student is able to identify the problems of a person in a situation threatening his health and life.			K_U04
	2	EP4	the student is able to take action to save human health and life			K_U04
social competences	1	EP5	the student is aware of his own limitations and knows when to turn to experts			K_K01
	2	EP6	the student provides assistance in a way that ensures their own safety and that of the environment.			K_K08
	3	EP7	The student is convinced of the need to help the injured in accordance with the applicable law.			K_K02
CONTENT					Semester	No. of hours
						including e-learning
Subject title: pierwsza pomoc						
Format of instruction: discussion classes						
1. The importance of first aid for human health and life. Legal aspects of first aid.					4	1 0
2. Characteristics of basic activities that save the health and life of a child and an adult. Cardiopulmonary resuscitation.					4	3 0
3. Principles of first aid in special situations: choking, fainting and fainting, burns, hypothermia, heat stroke, cerebral stroke, electric shock, poisoning, special accidents.					4	4 0
4. Accidents in schools and educational institutions.					4	2 0

Modes of delivery	multimedia presentation, seminars, demonstration with explanation, situational method, simulation method				
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Assessment methods				No. of learning outcome from the syllabus	
	KOŁOKWIUM			EP1,EP2,EP6,EP7	
	PROJEKT			EP1,EP2,EP3,EP4,EP5,EP6,EP7	
	Metody i formy weryfikacji efektów uczenia się mogą zostać zmienione dla studentów ze szczególnymi potrzebami na warunkach i zasadach określonych w Regulaminie Studiów Uniwersytetu Szczecińskiego.				
Grading criteria	Grading the course. Determining the final grade on the basis of attendance at the exercises, grades from individual practical exercises				
	Grade calculation principles				
	Grading the course. Determining the final grade on the basis of attendance at the exercises, grades from individual practical exercises				
Final grade calculation method	Sem.	Course	Type of credit	Grade calc. method	Weight for the average
	4	pierwsza pomoc		Ważona	
	4	pierwsza pomoc [ćwiczenia]	zaliczenie z oceną		1,00
Basic reading	Polska Rada Resuscytacji (2016): Wytyczne resuscytacji 2015, Copyright for the Polish edition by Polska Rada., Kraków				
Supplementary reading					
STUDENT WORKLOAD					
		No. of hours			
			including e-learning		
Contact hours		10	0		
Participation in test / exam		2	0		
Preparation for contact hours		4	0		
Private reading and studying		2	0		
Participation in tutorials		2	0		
Preparation of project / essay / etc.		2	0		
Preparation for test / exam		3	0		
TOTAL workload		25			
ECTS credits		1			

COURSE SYLLABUS AND SPECIFICATION

Curriculum title: USKFZ-DS-O-II-S-25/26Z							
Course title: Fundamentals of biological regeneration in sport (KIERUNKOWE)					Course code: KFZ113AIIJ3451_41S		
Name of field of study: diagnostyka sportowa							
Mode and cycle of study: second degree, full - time			Profile of study: general academic		Specialty:		
Course / module status obligatory				Language of instruction: semester: 4 - polish language			
Year	Semester	Form of instruction	No. of hours		Type of credit	ECTS	
				including e-learning			
2	4	discussion classes	30	0	pg	4	
		lecture	10	0	e		
Total			40			4	
Course / module coordinator		dr MONIKA NIEWIADOMSKA					
Course instructor		dr KRZYSZTOF WILK					
Course / module objectives		Gaining basic knowledge about methods and biological regeneration measures that support the training process, teaching basic relaxation and sports massage techniques, preparing to show empathy towards the patient and paying attention to the safety of the patient and therapist during treatments.					
Prerequisites		lack					
LEARNING OUTCOMES							
Category	No.	Code	Description			Ref. to programme benchmarks	
knowledge	1	EP1	Knows the goals and tasks of biological regeneration, characterizes the physical treatments used in biological regeneration.			K_W01	
skills	1	EP2	Able to select appropriate wellness measures in the training process and perform selected sports massage techniques			K_U13	
social competences	1	EP3	Understands the principles of ethics in contacts with patients and is ready to take care of the health and safety of the athlete when performing biological regeneration treatments.			K_K03 K_K08	
CONTENT					Semester	No. of hours	
						including e-learning	
Subject title: Fundamentals of biological regeneration in sport							
Format of instruction: lecture							
1. Definition of wellness. Goals and objectives for wellness in sports.					4	2	0
2. Massage - definition, types of massage, use in biological regeneration.					4	2	0
3. Products used in wellness salons and spa facilities. Wellness salon					4	2	0
4. Physical treatments used in biological regeneration: electrotherapy, thermotherapy, laser therapy, magnetic field, ultrasound therapy.					4	4	0
Format of instruction: discussion classes							
1. Preparation and preparation of the massage room, expansion action, regular, preparation for the procedure					4	2	0
2. Classic massage of the upper and lower limbs, shoulder girdle, pelvic girdle, back, and neck using techniques of stroking, rubbing, kneading, tapping, vibration, shaking, and rolling, taking into account various sports disciplines.					4	24	0

3. Post-isometric muscle relaxation - concept, goals and tasks, relaxation technique for selected muscle groups					4	4	0
Modes of delivery	Multimedia presentation, show.						
	The course teacher shall specify how artificial intelligence should be used as part of implementation of the course according to University of Szczecin best practices and standards. The course teacher shall inform students in their first class about the scope and possibilities of using AI and shall present a catalogue of tools and applications adjusted to relevant learning outcomes and teaching needs and possibilities within a given course.						
Assessment methods						No. of learning outcome from the syllabus	
	EGZAMIN PISEMNY					EP1,EP3	
	ZAJĘCIA PRAKTYCZNE (WERYFIKACJA POPRZECZ OBSERWACJĘ)					EP2	
Metody i formy weryfikacji efektów uczenia się mogą zostać zmienione dla studentów ze szczególnymi potrzebami na warunkach i zasadach określonych w Regulaminie Studiów Uniwersytetu Szczecińskiego.							
Grading criteria	Lectures: Assessment based on a passing grade on the exam (single-choice test). To receive a passing grade, the following percentage of correct answers must be achieved: 60-69% - satisfactory grade 70-74% - satisfactory grade 75-84% - good grade						
	Grade calculation principles						
	The final grade for the course is the arithmetic average of the grades from the exam and the tutorials.						
Final grade calculation method	Sem.	Course			Type of credit	Grade calc. method	Weight for the average
	4	podstawy odnowy biologicznej w sporcie				Arytmetyczna	
	4	podstawy odnowy biologicznej w sporcie [ćwiczenia]			zaliczenie z oceną		
	4	podstawy odnowy biologicznej w sporcie [wykład]			egzamin		
Basic reading	Gieremek K., Dec L. (2002): Zmęczenie i regeneracja sił. Odnowa biologiczna, HM , Katowice						
	Magiera L. Walaszek R. (2008): Masaż sportowy z elementami odnowy biologicznej, BIOSPORT, Kraków						
	Pawelec R., Szczuka E., Laber W. (2011): Metodyka masażu w odnowie biologicznej, AGIW, Wrocław						
Supplementary reading	Barszowski P. (2000): Wspomaganie procesu treningowego, Centralny Ośrodek Sportu, Warszawa						
	Mika T. (2008): Fizykoterapia, PZWL, Warszawa						
STUDENT WORKLOAD							
		No. of hours					
					including e-learning		
Contact hours		40			0		
Participation in test / exam		6			0		
Preparation for contact hours		14			0		
Private reading and studying		11			0		
Participation in tutorials		19			0		
Preparation of project / essay / etc.		0			0		
Preparation for test / exam		10			0		
TOTAL workload		100					
ECTS credits		4					

COURSE SYLLABUS AND SPECIFICATION

Curriculum title: USKFZ-DS-O-II-S-26/27Z						
Unit: Przedmiot do wyboru w jęz. angielskim [moduł]						
Course title: genetic basis of health (POZOSTAŁE PRZEDMIOTY / MODUŁY)					Course code: KFZ113AIIJ3451_14S	
Name of field of study: diagnostyka sportowa						
Mode and cycle of study: second degree, full - time		Profile of study: general academic			Specialty:	
Course / module status elective				Language of instruction: semester: 2 - english language		
Year	Semester	Form of instruction	No. of hours		Type of credit	ECTS
				including e-learning		
1	2	discussion classes	15	0	pg	3
		lecture	5	0	pg	
Total			20			3
Course / module coordinator		dr hab. MAREK SAWCZUK				
Course instructor		dr inż. JAKUB SKORUPSKI				
Course / module objectives		Presentation of the basic concepts, regularities and problems regarding the genetic basis of human health. Acquainting with substituted elements of clinical genetics related to metabolic disorders and risk factors for human injuries. Acquiring the ability to recognize the basic symptoms of human genetic disorders.				
Prerequisites		Basic knowledge of genetics and cell biology.				
LEARNING OUTCOMES						
Category	No.	Code	Description			Ref. to programme benchmarks
knowledge	1	EP3	The student understands the contribution of genetic factors in the metabolism of basic nutrients and maintenance of homeostasis and adaptation processes to environmental changes.			K_W08 K_W15
	2	EP8	The student has knowledge about the importance of genetic variants as genetic risk factors for injury in sports players.			K_W09 K_W17
skills	1	EP4	Student is able to recognize the basic symptoms of genetically determined metabolic blocks occurring in humans.			K_U08 K_U14
	2	EP5	The student has the ability to identify problems in the field of clinical genetics and knows the basic ways to solve them.			K_U08 K_U10
social competences	1	EP6	The student is eager to interact with other team members to solve genetic problems.			K_K03 K_K05 K_K07
	2	EP7	The student actively promotes and popularizes knowledge of clinical genetics in a sports environment.			K_K04
CONTENT					Semester	No. of hours
						including e-learning
Subject title: genetic basis of health						
Format of instruction: lecture						

1. Structure of DNA and RNA			2	2	0
2. Mechanisms of genetic expression			2	3	0
Format of instruction: discussion classes					
1. Introduction to human genetics with elements of clinical genetics			2	3	0
2. Scheme of autosomal and sex-linked inheritance in humans			2	3	0
3. Principles of multifactorial inheritance in humans			2	3	0
4. Genetic basis of carbohydrate and protein metabolism disorders			2	3	0
5. Genetic basis of lipid metabolism and metal absorption disorders			2	3	0
Modes of delivery	lectures conducted in an informative and conversational form using multimedia presentations, auditorium exercises conducted using the group work method				
	The course teacher shall specify how artificial intelligence should be used as part of implementation of the course according to University of Szczecin best practices and standards. The course teacher shall inform students in their first class about the scope and possibilities of using AI and shall present a catalogue of tools and applications adjusted to relevant learning outcomes and teaching needs and possibilities within a given course.				
Assessment methods					No. of learning outcome from the syllabus
	KOŁOKWIUM				EP3,EP8
	SPRAWDZIAN				EP4,EP5
	ZAJĘCIA PRAKTYCZNE (WERYFIKACJA POPRZEZ OBSERWACJĘ)				EP6,EP7
Metody i formy weryfikacji efektów uczenia się mogą zostać zmienione dla studentów ze szczególnymi potrzebami na warunkach i zasadach określonych w Regulaminie Studiów Uniwersytetu Szczecińskiego.					
Grading criteria	Completing lectures: final grade from lectures issued on the basis of colloquium grade. Completion of classes: final grade from exercises based on the test grade and activity in the classes.				
	Grade calculation principles				
	The final grade for the subject is calculated on the basis of the final grade of the exercises and the grade of the exam in a 1: 1 ratio.				
Final grade calculation method	Sem.	Course	Type of credit	Grade calc. method	Weight for the average
	2	genetic basis of health		Arytmetyczna	
	2	genetic basis of health [wykład]	zaliczenie z oceną		
	2	genetic basis of health [ćwiczenia]	zaliczenie z oceną		
Basic reading	Brown T.A. (Red.) (2015): Genomy, Wydawnictwo PWN				
	Connor M, Ferguson-Smith M. (1998): Podstawy genetyki klinicznej, Wydawnictwo PZWL				
	Jorde LB (Red.) (2000): Genetyka medyczna, Wydawnictwo Czelej				
Supplementary reading	Węgleński P. (Red.) (2012): Genetyka molekularna, Wydawnictwo PWN				
STUDENT WORKLOAD					
		No. of hours			
		including e-learning			
Contact hours		20	0		
Participation in test / exam		2	0		
Preparation for contact hours		15	0		
Private reading and studying		13	0		
Participation in tutorials		13	0		

Preparation of project / essay / etc.	0	0
Preparation for test / exam	12	0
TOTAL workload	75	
ECTS credits	3	

COURSE SYLLABUS AND SPECIFICATION

Curriculum title: USKFZ-DS-O-I-S-25/26Z						
Unit: Moduł A: genetyka w sporcie						
Course title: Genetic diagnostics in sport (POZOSTAŁE PRZEDMIOTY / MODUŁY)					Course code: KFZ113AIJ3451_1S	
Name of field of study: diagnostyka sportowa						
Mode and cycle of study: first-degree, full - time			Profile of study: general academic		Specialty:	
Course / module status elective				Language of instruction: semester: 4 - polish language		
Year	Semester	Form of instruction	No. of hours		Type of credit	ECTS
				including e-learning		
2	4	laboratory	30	0	pg	3
Total			30			3
Course / module coordinator	dr hab. MAREK SAWCZUK					
Course instructor	dr hab. MAREK SAWCZUK					
Course / module objectives	Acquainting with issues in the field of molecular and genetic diagnostics in sport					
Prerequisites	None.					
LEARNING OUTCOMES						
Category	No.	Code	Description			Ref. to programme benchmarks
knowledge	1	EP1	The student knows what lies at the basis of human genetic variability, knows the impact of molecular differences on the exercise and post-exercise variable adaptation of the human body.			K_W02
	2	EP2	The student knows the conditions for maintaining a dynamic balance of the environment of processes taking place in the body at the molecular level, taking into account the specificity of physical activity			K_W04
	3	EP3	The student has basic knowledge regarding the planning and use of techniques and methods in the field of genetic sports diagnostics			K_W13

skills	1	EP4	The student knows how to make basic measurements in the field of sport genetics and their evaluation and the use of techniques and methods of molecular sports diagnostics	K_U02
	2	EP5	The student is able to use the basic methods of numerical data analysis for the initial verification of the results generated during the experiment in the field of sport diagnostics	K_U06
	3	EP6	The student is able to supplement the safety data sheet of an athlete or amateur with the data generated in the genetic experiment and interpret the results obtained	K_U10
	4	EP7	The student knows how to apply the right research methodology in the field of sport genetics for the purpose of conducting a research experiment	K_U11
	5	EP8	The student is able to independently plan and perform laboratory analyses in the field of molecular genetics and is able to prepare appropriate documentation of the experiment	K_U12
social competences	1	EP9	The student is aware of the need to critically assess the level of his knowledge and professional competence	K_K01
	2	EP10	The student complies with the rules of honesty in science, while respecting the provisions of law relating to issues related to diagnostics and sport.	K_K02
	3	EP11	The student shows respect and understanding towards people with whom he cooperates during the implementation of research projects and tasks	K_K03
	4	EP12	The student is able to effectively provide information in the field of sports diagnostics	K_K06
	5	EP13	The student is oriented on self-improvement aimed at continuous improvement of knowledge	K_K07
CONTENT			Semester	No. of hours
				including e-learning
Subject title: Genetic diagnostics in sport				
Format of instruction: laboratory				
1. Isolation of nucleic acids from whole blood and buccal epithelial cells			4	7 0
2. PCR reaction and quantitative real-time PCR (qPCR)			4	8 0
3. Determination of human sex using PCR analysis			4	6 0
4. Genotyping of selected genetic sport markers			4	9 0
Modes of delivery	Laboratory exercises conducted using the group work method, Solving problems related to laboratory work (selection of analysis methods, development of research methodology, difficulties in interpreting results), Experimental exercises combined with discussion			
	The course teacher shall specify how artificial intelligence should be used as part of implementation of the course according to University of Szczecin best practices and standards. The course teacher shall inform students in their first class about the scope and possibilities of using AI and shall present a catalogue of tools and applications adjusted to relevant learning outcomes and teaching needs and possibilities within a given course.			
Assessment methods				No. of learning outcome from the syllabus
	KOŁOKWIUM			EP1,EP2,EP3,EP4,EP5,EP6,EP7,EP8
	ZAJĘCIA PRAKTYCZNE (WERYFIKACJA POPRZEZ OBSERWACJĘ)			EP10,EP11,EP12,EP13,EP4,EP5,EP7,EP8,EP9
	Metody i formy weryfikacji efektów uczenia się mogą zostać zmienione dla studentów ze szczególnymi potrzebami na warunkach i zasadach określonych w Regulaminie Studiów Uniwersytetu Szczecińskiego.			

Grading criteria	Passing classes: based on the activity during the classes and the results of the test. Percentage grade distribution: 60-69% - satisfactory (dst) 70-74% - satisfactory plus (dst+) 75-84% - good (db) 85-89% - good plus (db+) 90-100% - very good (bdb)				
	Grade calculation principles				
	The final grade of the subject is issued on the basis of the final grade of the test and evaluation of the activity during the classes				
Final grade calculation method	Sem.	Course	Type of credit	Grade calc. method	Weight for the average
	4	diagnostyka genetyczna w sporcie		Ważona	
	4	diagnostyka genetyczna w sporcie [laboratorium]	zaliczenie z oceną		1,00
Basic reading	Ciężczyk P., Maciejewska A., Sawczuk M. (2008): Badania genetyczne w sporcie , Wydawnictwo Qprint , Szczecin				
	Ciężczyk P., Red. (2021): Genetyka sportowa, PZWL, Warszawa				
	Słomski R. (2011): Analiza DNA. Teoria i praktyka , Wydawnictwo Uniwersytetu Przyrodniczego w Poznaniu , Poznań				
Supplementary reading	O'Connell K i wsp. (2013): Collagen gene sequence variants in exercise-related traits , Central European Journal of Sport Sciences and Medicine 1: 3–17				
	Posthumus M. Collins M. (2016): Genetics and Sports , Wydawnictwo Karger				
	Sawczuk M. i wsp. (2011): The role of genetic research in sport , Science & Sports 26: 251-258				
	Wang G. i wsp. (2013): Czy w sporcie miarodajne są testy genetyczne? , Sport Wyczynowy 3-4 (547-548): 68-83 2013				
STUDENT WORKLOAD					
		No. of hours			
		including e-learning			
Contact hours		30		0	
Participation in test / exam		2		0	
Preparation for contact hours		18		0	
Private reading and studying		5		0	
Participation in tutorials		10		0	
Preparation of project / essay / etc.		0		0	
Preparation for test / exam		10		0	
TOTAL workload		75			
ECTS credits		3			

COURSE SYLLABUS AND SPECIFICATION

Curriculum title: USKFZ-DS-O-I-S-24/25Z						
Unit: Moduł A: medycyna sportowa [moduł]						
Course title: zdrowotne aspekty aktywności fizycznej (POZOSTAŁE PRZEDMIOTY / MODUŁY)					Course code: US113AIJ2983_57S	
Name of field of study: diagnostyka sportowa						
Mode and cycle of study: first-degree, full - time			Profile of study: general academic		Specialty:	
Course / module status elective				Language of instruction: semester: 6 - polish language		
Year	Semester	Form of instruction	No. of hours		Type of credit	ECTS
				including e-learning		
3	6	discussion classes	15	0	pg	2
		lecture	15	0	pg	
Total			30			2
Course / module coordinator		dr MAŁGORZATA PACZYŃSKA-JĘDRYCKA				
Course instructor		dr hab. MARTA STĘPIEŃ-SŁODKOWSKA				
Course / module objectives		Familiarization with the specifics of sports injuries as well as the diagnosis, prevention, and treatment of the most common clinical problems. Development of skills in conducting rehabilitation for athletes depending on the type of injury. Nabycie gotowości do pracy z różnymi grupami społecznymi w myśl zasad i norm etycznych.				
Prerequisites		Knowledge of the basics of human anatomy and physiology as well as issues in biomechanics and ergonomics. Ability to use functional tests and conduct kinesiotherapy. Teamwork and interpersonal communication skills.				
LEARNING OUTCOMES						
Category	No.	Code	Description			Ref. to programme benchmarks
knowledge	1	EP2	Has knowledge in the field of hygiene and health education and their impact on proper preparation of the body for undertaking physical activity.			K_W03
	2	EP4	Has knowledge in the field of prevention of sports injuries and health education.			K_W07
skills	1	EP7	Adheres to the basic health education guidelines when working with individuals of different ages.			K_U13
social competences	1	EP9	Is prepared to promote and actively foster a healthy lifestyle and encourage healthy behaviors in educational activities and within the local community.			K_K06
CONTENT					Semester	No. of hours
Subject title: zdrowotne aspekty aktywności fizycznej						
Format of instruction: lecture						
1. Healthy lifestyle, physical activity ? a holistic approach to health.					6	5 0
2. Physical activity as a component of health prevention.					6	5 0

3. Preferred forms of physical activity for children and adults.				6	5	0
Format of instruction: discussion classes						
1. Lifestyle, health behaviors, health risk associated with low physical activity.				6	4	0
2. Principles of health training for adults.				6	4	0
3. Impact of physical activity on the human body.				6	7	0
Modes of delivery	Lecture with a multimedia presentation and discussion. Exercises with a multimedia presentation, student?s independent work: preparing and presenting a presentation, working with a textbook, analysis and thematic review of the literature.					
	The course teacher shall specify how artificial intelligence should be used as part of implementation of the course according to University of Szczecin best practices and standards. The course teacher shall inform students in their first class about the scope and possibilities of using AI and shall present a catalogue of tools and applications adjusted to relevant learning outcomes and teaching needs and possibilities within a given course.					
Assessment methods					No. of learning outcome from the syllabus	
	KOLOKWIUM				EP2,EP4	
	PREZENTACJA				EP2,EP4,EP7,EP9	
Metody i formy weryfikacji efektów uczenia się mogą zostać zmienione dla studentów ze szczególnymi potrzebami na warunkach i zasadach określonych w Regulaminie Studiów Uniwersytetu Szczecińskiego.						
Grading criteria	Exercise credit based on the completion of a presentation. Lecture credit based on a passing grade on a colloquium covering the theory presented in the lecture.					
	Grade calculation principles					
	The final grade for the course is the arithmetic average of the grades from the exercises and the lecture.					
Final grade calculation method	Sem.	Course		Type of credit	Grade calc. method	Weight for the average
	6	zdrowotne aspekty aktywności fizycznej			Arytmetyczna	
	6	zdrowotne aspekty aktywności fizycznej [ćwiczenia]		zaliczenie z oceną		
	6	zdrowotne aspekty aktywności fizycznej [wykład]		zaliczenie z oceną		
Basic reading	Jager A., Krawczyk J. (2012): Wybrane zagadnienia z medycyny sportowej, PZWL , Warszawa.					
	Karski J.B. (2011): Praktyka i teoria promocji zdrowia, CeDeWu.PL, Warszawa					
	Kasprzak W., Mańkowska A. (2008): Fizykoterapia medycyna uzdrowiskowa i SPA, PZWL Warszawa					
	Wojnarowska B. 2008 (2008): Edukacja zdrowotna, PWN Warszawa					
Supplementary reading	Donatelli R.A. (2010): Rehabilitacja w sporcie, Elsevier Urban&Partner, Warszawa.					
STUDENT WORKLOAD						
		No. of hours				
					including e-learning	
Contact hours		30			0	
Participation in test / exam		0			0	
Preparation for contact hours		5			0	
Private reading and studying		5			0	
Participation in tutorials		5			0	
Preparation of project / essay / etc.		5			0	
Preparation for test / exam		0			0	

TOTAL workload	50
ECTS credits	2

COURSE SYLLABUS AND SPECIFICATION

Curriculum title: USKFZ-DS-O-II-S-26/27Z							
Course title: profilaktyka urazów w sporcie (KIERUNKOWE)					Course code: KFZ113AIIJ3451_16S		
Name of field of study: diagnostyka sportowa							
Mode and cycle of study: second degree, full - time			Profile of study: general academic		Specialty:		
Course / module status obligatory				Language of instruction: semester: 1 - polish language			
Year	Semester	Form of instruction	No. of hours		Type of credit	ECTS	
				including e-learning			
1	1	conversation	5	0	e	4	
		discussion classes	30	0	pg		
Total			35			4	
Course / module coordinator		dr MONIKA NIEWIADOMSKA					
Course instructor		dr BEATA BURYTA					
Course / module objectives		The aim of the course is to provide students with knowledge of the basics of diagnosis, treatment and prevention of sports injuries, to teach them how to perform preventive exercises, and to prepare them to apply ethical principles in their actions towards athletes.					
Prerequisites		Fundamentals of functional anatomy, physiology and human biomechanics.					
LEARNING OUTCOMES							
Category	No.	Code	Description			Ref. to programme benchmarks	
knowledge	1	EP1	has knowledge of procedures, first aid, and prevention of sports injuries			K_W01 K_W06	
skills	1	EP2	is able to analyze health-threatening factors, perform exercises based on stretching elements, rolling selected muscle groups and use basic dynamic taping applications.			K_U04 K_U13	
social competences	1	EP3	is ready to comply with ethical principles in decisions and actions taken towards athletes			K_K02 K_K07	
CONTENT					Semester	No. of hours	
							including e-learning
Subject title: profilaktyka urazów w sporcie							
Format of instruction: discussion classes							
1. Functional training in the prevention and treatment of injuries and overload changes in sports.					1	5	0
2. Dynamic taping in sports					1	5	0
3. Selected elements of biological regeneration in the prevention of sports injuries.					1	20	0
Format of instruction: conversation							
1. Specification of musculoskeletal injuries in sports, musculoskeletal diagnostic methods. Standards of care for soft tissue injuries (RICE, PRICE).					1	2	0
2. Methods, stages of treatment and prevention of selected sports injuries.					1	3	0

Modes of delivery	lecture, discussion, talk, group work				
	The course teacher shall specify how artificial intelligence should be used as part of implementation of the course according to University of Szczecin best practices and standards. The course teacher shall inform students in their first class about the scope and possibilities of using AI and shall present a catalogue of tools and applications adjusted to relevant learning outcomes and teaching needs and possibilities within a given course.				
Assessment methods					No. of learning outcome from the syllabus
	KOŁOKWIUM				EP1,EP3
	ZAJĘCIA PRAKTYCZNE (WERYFIKACJA POPRZECZ OBSERWACJĘ)				EP1,EP2,EP3
	Metody i formy weryfikacji efektów uczenia się mogą zostać zmienione dla studentów ze szczególnymi potrzebami na warunkach i zasadach określonych w Regulaminie Studiów Uniwersytetu Szczecińskiego.				
Grading criteria	The condition for passing the course is obtaining passing grades in the colloquium (90% - very good, 75% - good, 60% - satisfactory) (exam) and in the exercises (practical assessment including the diagnosis of individual injuries and the preparation of a set of preventive exercises).				
	Grade calculation principles				
	The final grade for the course is the arithmetic average of the grades from the practical test and the exam.				
Final grade calculation method	Sem.	Course	Type of credit	Grade calc. method	Weight for the average
	1	profilaktyka urazów w sporcie		Arytmetyczna	
	1	profilaktyka urazów w sporcie [ćwiczenia]	zaliczenie z oceną		
	1	profilaktyka urazów w sporcie [konwersatorium]	egzamin		
Basic reading	Dziak A (2012): Urazy sportowe : specyfika uszkodzeń narządu ruchu w sporcie, Medicina Sportiva, Kraków				
	Gieremek K., Dec L (2000): Zmęczenie i regeneracja sił. Odnowa biologiczna, HAS-MED, Katowice				
	Sygit K., Deskur A (2017): Wypadki i urazy w sporcie : zapobieganie, leczenie, rehabilitacja, Wydawnictwo Naukowe Uniwersytetu Szczecińskiego, Szczecin				
Supplementary reading	Zajac A., Zydek G., Michalczyk M., Poprzecki S., Czuba M., Gołas A., Boruta-Gojny B. (2014): Żywnienie i suplementacja w sporcie, rekreacji i stanach chorobowych., Wydawnictwo Akademii Wychowania Fizycznego im. Jerzego Kukuczki, Katowice				
STUDENT WORKLOAD					
		No. of hours			
		including e-learning			
Contact hours		35		0	
Participation in test / exam		5		0	
Preparation for contact hours		20		0	
Private reading and studying		13		0	
Participation in tutorials		12		0	
Preparation of project / essay / etc.		0		0	
Preparation for test / exam		15		0	
TOTAL workload		100			
ECTS credits		4			

COURSE SYLLABUS AND SPECIFICATION

Curriculum title: USKFZ-DS-O-II-S-25/26Z-TPM						
Course title: monitoring w sporcie (SPECJALNOŚCI / SPECJALIZACJE / MODUŁY SPECJALNOŚCIOWE)					Course code: KFZ113AIIJ3451_4S	
Name of field of study: diagnostyka sportowa						
Mode and cycle of study: second degree, full - time		Profile of study: general academic			Specialty: trener przygotowania motorycznego	
Course / module status obligatory				Language of instruction: semester: 3 - polish language		
Year	Semester	Form of instruction	No. of hours		Type of credit	ECTS
				including e-learning		
2	3	discussion classes	15	0	pg	3
Total			15			3
Course / module coordinator	dr RAFAŁ BURYTA					
Course instructor	dr RAFAŁ BURYTA					
Course / module objectives	To familiarize students with the possibilities of monitoring the training process. The student will be able to document monitored training or tests taking into account physiological, biomechanical or biochemical parameters and assess the state of motor training and will be ready to take care of safety and health athlete.					
Prerequisites	The student has knowledge of human motor skills and the theory of sports training.					
LEARNING OUTCOMES						
Category	No.	Code	Description			Ref. to programme benchmarks
knowledge	1	EP1	Knows advanced monitoring terminology in sports training and understands concepts and models motor training			K_W02
	2	EP2	Knows the monitoring methods used during performance assessment motor skills in team games and sports individual.			K_W07
skills	1	EP3	The student is able to document and analyze parameters physiological, biomechanical and biochemical characteristics of the athlete, obtained during monitoring of training units.			K_U03
	2	EP4	The student is able to assess the level of preparation motor skills, including monitoring used during a training unit.			K_U04
social competences	1	EP5	Is ready to use the proper techniques communication and carrying out the tasks assigned to him in the field of monitoring athletes.			K_K05
CONTENT					Semester	No. of hours
						including e-learning
Subject title: monitoring w sporcie						
Format of instruction: discussion classes						
1. Measurement and characterization of external and internal measures of training load.					3	6 0
2. Characteristics of systems and methods of measuring training loads.					3	4 0
3. Technologies supporting monitoring.					3	3 0
4. Analysis of data resulting from monitoring.					3	2 0

Modes of delivery	-practical -lecture with multimedia presentation				
	The course teacher shall specify how artificial intelligence should be used as part of implementation of the course according to University of Szczecin best practices and standards. The course teacher shall inform students in their first class about the scope and possibilities of using AI and shall present a catalogue of tools and applications adjusted to relevant learning outcomes and teaching needs and possibilities within a given course.				
Assessment methods					No. of learning outcome from the syllabus
	KOLOKWIMUM				EP1,EP2,EP3,EP4,EP5
	Metody i formy weryfikacji efektów uczenia się mogą zostać zmienione dla studentów ze szczególnymi potrzebami na warunkach i zasadach określonych w Regulaminie Studiów Uniwersytetu Szczecińskiego.				
Grading criteria	Attendance at exercises and passing the colloquium.				
	Grade calculation principles				
	30% for attendance, 70% is the grade from the test.				
Final grade calculation method	Sem.	Course	Type of credit	Grade calc. method	Weight for the average
	3	monitoring w sporcie		Ważona	
	3	monitoring w sporcie [ćwiczenia]	zaliczenie z oceną		1,00
Basic reading	Kusy K., Zieliński J. (2017): Diagnostyka w sporcie, AWF Poznań, Poznań				
	Warchoł W. (2019): Gotowy do gry , Train With Brain, Kraków				
Supplementary reading	French D. i wsp. (2022): NSCA's Essentials of Sport Science, Human Kinetics, USA				
STUDENT WORKLOAD					
		No. of hours			
		including e-learning			
Contact hours		15	0		
Participation in test / exam		10	0		
Preparation for contact hours		14	0		
Private reading and studying		14	0		
Participation in tutorials		12	0		
Preparation of project / essay / etc.		0	0		
Preparation for test / exam		10	0		
TOTAL workload		75			
ECTS credits		3			

COURSE SYLLABUS AND SPECIFICATION

Curriculum title: USKFZ-DS-O-II-S-25/26Z						
Course title: Multimedia techniques in sport (KIERUNKOWE)					Course code: KFZ113AIIJ3451_37S	
Name of field of study: diagnostyka sportowa						
Mode and cycle of study: second degree, full - time		Profile of study: general academic			Specialty:	
Course / module status obligatory				Language of instruction: semester: 3 - polish language		
Year	Semester	Form of instruction	No. of hours		Type of credit	ECTS
				including e-learning		
2	3	discussion classes	15	0	pg	2
Total			15			2
Course / module coordinator	mgr ROBERT TERCZYŃSKI					
Course instructor	mgr ROBERT TERCZYŃSKI					
Course / module objectives	Acquisition of knowledge on editing computer programs intended for creating e-conspects. The student will have the ability to create e-contexts, edit videos and graphics. Will know the legitimacy of using multimedia techniques in the work of trainers.					
Prerequisites	basic knowledge of computer operation in the Windows and MS Office environment					
LEARNING OUTCOMES						
Category	No.	Code	Description			Ref. to programme benchmarks
knowledge	1	EP1	He is familiar with basic computer programs and other technical devices used to assess and monitor physical activity, and is applicable in schools and sports clubs.			K_W04 K_W14
skills	1	EP2	He is able to select and use research methods and equipment in the assessment of physical activity, as well as evaluate and interpret the results obtained. Able to use specialized computer and other equipment multimedia apparatus in the field of sports training.			K_U03
social competences	1	EP3	He is ready to critically evaluate his own and other people's multimedia projects.			K_K03
CONTENT					Semester	No. of hours
						including e-learning
Subject title: Multimedia techniques in sport						
Format of instruction: discussion classes						
1. Learning how to use available computer programs that take into account the possibilities of multi-directional observation of a selected sports discipline.					3	8 0
2. Presentation of e-synopsis.					3	7 0
Modes of delivery	Theoretical and practical methods of operation					
	The course teacher shall specify how artificial intelligence should be used as part of implementation of the course according to University of Szczecin best practices and standards. The course teacher shall inform students in their first class about the scope and possibilities of using AI and shall present a catalogue of tools and applications adjusted to relevant learning outcomes and teaching needs and possibilities within a given course.					

Assessment methods					No. of learning outcome from the syllabus
	PREZENTACJA				EP1,EP2,EP3
	Metody i formy weryfikacji efektów uczenia się mogą zostać zmienione dla studentów ze szczególnymi potrzebami na warunkach i zasadach określonych w Regulaminie Studiów Uniwersytetu Szczecińskiego.				
Grading criteria	1. Active participation in classes; 2. Completed partial projects in the field of Power Point editing, graphic programs and video editors. 3. Preparation and presentation of an e-content containing graphic and video materials from the supervised training sports				
	Grade calculation principles				
	The final grade is the grade for the preparation and presentation of the e-concept (100% of the final grade)				
Final grade calculation method	Sem.	Course	Type of credit	Grade calc. method	Weight for the average
	3	techniki multimedialne w sporcie		Ważona	
	3	techniki multimedialne w sporcie [ćwiczenia]	zaliczenie z oceną		1,00
Basic reading	Piotr Wróblewski (2018): ABC komputera, Helion, Warszawa				
	Rzędowska A. (2003): Mistrzowskie prezentacje : slajdowy poradnik mówcy doskonałego, Helion, Gliwice				
	Sedlak K. (1995): Aby osiągnąć cel, czyli Jak pisać listy, jak układać ogłoszenia i reklamy, jak prowadzić zebrania i prezentacje, jak przygotowywać raporty, jak rozmawiać przez telefon, Wydawnictwo Profesjonalnej Szkoły Biznesu, Kraków				
Supplementary reading	Kuciński K. (1999): Obsługa komputera : krok po kroku '99. Edition 2000, Kraków				
	Wróblewski P. (2018): ABC komputera, Helion, Gliwice				
STUDENT WORKLOAD					
		No. of hours			
		including e-learning			
Contact hours		15		0	
Participation in test / exam		2		0	
Preparation for contact hours		10		0	
Private reading and studying		10		0	
Participation in tutorials		2		0	
Preparation of project / essay / etc.		9		0	
Preparation for test / exam		2		0	
TOTAL workload		50			
ECTS credits		2			

COURSE SYLLABUS AND SPECIFICATION

Curriculum title: USKFZ-DS-O-II-S-25/26Z-DiPŻS							
Course title: Supplementation in selected sport (SPECJALNOŚCI / SPECJALIZACJE / MODUŁY SPECJALNOŚCIOWE)					Course code: KFZ113AIIJ3451_4S		
Name of field of study: diagnostyka sportowa							
Mode and cycle of study: second degree, full - time		Profile of study: general academic			Specialty: diagnoza i planowanie żywienia sportowca		
Course / module status obligatory				Language of instruction: semester: 3 - polish language			
Year	Semester	Form of instruction	No. of hours		Type of credit	ECTS	
				including e-learning			
2	3	discussion classes	30	0	pg	5	
		lecture	15	0	e		
Total			45			5	
Course / module coordinator		dr MAREK KOLBOWICZ					
Course instructor		dr MAREK KOLBOWICZ					
Course / module objectives		The aim of the course is to acquire knowledge and skills in the field of forecasting supplementation in selected motor abilities and to focus it on individual sports disciplines.					
Prerequisites		Basic knowledge about supplementation in professional and amateur sports.					
LEARNING OUTCOMES							
Category	No.	Code	Description			Ref. to programme benchmarks	
knowledge	1	EP1	He has knowledge in the field of nutrition and supplementation in sport.			K_W08	
	2	EP2	He knows what type of supplementation should be used in sports training in selected motor skills.			K_W06 K_W08	
skills	1	EP3	He is able to independently analyze, interpret and choose an appropriate diet for selected sports disciplines.			K_U07 K_U08	
	2	EP4	He has the ability to independently search for the necessary data in the literature related to the supplementation of an athlete.			K_U14	
social competences	1	EP5	He is aware of his role in shaping eating habits and the correct use of supplementation in selected sports.			K_K08	
	2	EP6	He understands the need for further self-education in the field of supplementation in sports.			K_K02 K_K06	
CONTENT					Semester	No. of hours	
							including e-learning
Subject title: Supplementation in selected sport							
Format of instruction: lecture							
1. Basics of supplementation in sport					3	3	0
2. Supplementation helpful in post-workout fatigue					3	3	0
3. Supplementation supporting the development of strength					3	3	0

4. Supplementation supporting the development of muscle endurance				3	3	0
5. Supplementation supporting the reduction of adipose tissue				3	3	0
Format of instruction: discussion classes						
1. individualization of supplementation depending on the needs of the discipline				3	5	0
2. Supplementation to minimize the risk of injury				3	5	0
3. Supplementation supporting the athlete's immunity				3	5	0
4. Supplementation in team sports				3	5	0
5. Supplementation in speed and strength sports				3	5	0
6. Supplementation in endurance sports				3	5	0
Modes of delivery	lectures, multimedia presentations, discussion, practical classes					
	The course teacher shall specify how artificial intelligence should be used as part of implementation of the course according to University of Szczecin best practices and standards. The course teacher shall inform students in their first class about the scope and possibilities of using AI and shall present a catalogue of tools and applications adjusted to relevant learning outcomes and teaching needs and possibilities within a given course.					
Assessment methods					No. of learning outcome from the syllabus	
	EGZAMIN PISEMNY				EP1,EP2,EP3,EP4	
	KOLOKWNIUM				EP2,EP3,EP4,EP5	
	PREZENTACJA				EP1,EP2,EP3,EP4,EP5,EP6	
Metody i formy weryfikacji efektów uczenia się mogą zostać zmienione dla studentów ze szczególnymi potrzebami na warunkach i zasadach określonych w Regulaminie Studiów Uniwersytetu Szczecińskiego.						
Grading criteria	The condition for obtaining a credit is: 1. Presence and active participation in classes 2. Positive evaluation of the presentation 3. Positive assessment of the test 4. Positive exam grade					
	Grade calculation principles					
	The final grade is the arithmetic mean of: 1. Presentation and test - 50% of the final grade 2. Exam - 50% of the final grade					
Final grade calculation method	Sem.	Course	Type of credit	Grade calc. method	Weight for the average	
	3	suplementacja w wybranych dyscyplinach sportowych		Arytmetyczna		
	3	suplementacja w wybranych dyscyplinach sportowych [ćwiczenia]	zaliczenie z oceną			
	3	suplementacja w wybranych dyscyplinach sportowych [wykład]	egzamin			
Basic reading	Bean A. (2019): Żywnienie w sporcie, ZYSK I S-KA, Poznań					
	Zydek G., Michalczyk M., Zając A. (2017): Nowe trendy w żywieniu i suplementacji osób aktywnych fizycznie, AWF, Katowice					
Supplementary reading	Frączek B., Krzywański J., Krysztofiak H. (2019): Dietetyka sportowa, PZWL, Warszawa					
	Zając A., Poprzęcki S., Czuba M., Zydek G.,Gołaś A. (2012): Dieta i suplementacja w sporcie i rekreacji , AWF Katowice, Katowice					
STUDENT WORKLOAD						
			No. of hours			
			including e-learning			
Contact hours			45		0	
Participation in test / exam			4		0	
Preparation for contact hours			14		0	

Private reading and studying	10	0
Participation in tutorials	20	0
Preparation of project / essay / etc.	16	0
Preparation for test / exam	16	0
TOTAL workload	125	
ECTS credits	5	

COURSE SYLLABUS AND SPECIFICATION

Curriculum title: USKFZ-DS-O-I-S-25/26Z						
Course title: Theory and methodology of the team sports (KIERUNKOWE)					Course code: KFZ113AIJ3451_4S	
Name of field of study: diagnostyka sportowa						
Mode and cycle of study: first-degree, full - time		Profile of study: general academic			Specialty:	
Course / module status obligatory			Language of instruction: semester: 3 - polish language, semester: 4 - polish language			
Year	Semester	Form of instruction	No. of hours		Type of credit	ECTS
				including e-learning		
2	3	discussion classes	40	0	pg	5
	4	conversation	10	0	e	6
		discussion classes	40	0	pg	
Total			90			11
Course / module coordinator		dr BEATA FLORKIEWICZ				
Course instructor		dr BEATA FLORKIEWICZ , prof. dr hab. TERESA ZWIERKO				
Course / module objectives		Acquire of competences by students in the field of: - performing and teaching the basics of technique and tactics of selected team sports - diagnosing of special fitness as well as quantitative and qualitative components of the game in selected sports team. Acquisition of competences necessary for teamwork in research.				
Prerequisites		Lack.				
LEARNING OUTCOMES						
Category	No.	Code	Description			Ref. to programme benchmarks
knowledge	1	EP1	The student has knowledge of team game theory as a form of sports activity. The student understands specialist techniques used in sports games and is familiar with the methodology for the proper development and assessment of fundamental elements of movement technique.			K_W05
	2	EP2	Defines the basic game systems, lists and explains the rules of selected sports games, and distinguishes specialised terminology used in the sports training process.			K_W05
skills	1	EP3	Demonstrates specialised motor skills in the performance of technical and tactical the basic elements of team sports and applies teamwork skills necessary to conduct the sports training process.			K_U01
	2	EP4	Uses basic measurement equipment to conduct sport-specific technical and motor tests in team games, in accordance with safety regulations for both themselves and class participants.			K_U04
	3	EP5	Applies basic methods for assessing the level of fitness special fitness in team sports and analysing game components, and is able to interpret the results of research in this area.			K_U12

social competences	1	EP7	Is prepared to cooperate effectively in a team and reliably carry out tasks assigned within a group project.	K_K04		
	2	EP8	Is aware of the need to communicate knowledge of sports games clearly and effectively to participants in the sports training process.	K_K06		
CONTENT				Semester	No. of hours	
						including e-learning
Subject title: Theory and methodology of the team sports						
Format of instruction: discussion classes						
1. Technique of performance and methodology of teaching the basic technical elements of games sports (handball, basketball).				3	16	0
2. Technical and tactical activities (handball, basketball), observation sheets, of game components.				3	8	0
3. Special technical and motor tests -(handball, basketball) organization, conducting test measurement, collecting results, safety.				3	8	0
4. Analysis of the results of specialist tests (handball, basketball).				3	8	0
5. Technique of performance and methodology of teaching the basic technical elements of sports games (volleyball, football).				4	16	0
6. Technical and tactical activities (volleyball, football), observation sheets- of the game components.				4	8	0
7. Special technical and motor tests -(volleyball, football) organization, conducting test measurement, collecting results, safety.				4	8	0
8. Analysis of the results of specialist tests (volleyball, football).				4	8	0
Format of instruction: conversation						
1. Sports games as a form of physical activity for people of all ages.				4	2	0
2. Rules of the game (basketball, handball, volleyball, soccer) . New forms of team games.				4	4	0
3. Stages of sports training in team games .				4	2	0
4. Determinants of achievements in sports games: morphological, motor and psychological factors .				4	2	0
Modes of delivery	Seminar: conversational lecture, case study, discussion panel. Exercises: exercise-practical, based on observation and measurement, group work, discussion					
	The course teacher shall specify how artificial intelligence should be used as part of implementation of the course according to University of Szczecin best practices and standards. The course teacher shall inform students in their first class about the scope and possibilities of using AI and shall present a catalogue of tools and applications adjusted to relevant learning outcomes and teaching needs and possibilities within a given course.					
Assessment methods					No. of learning outcome from the syllabus	
	EGZAMIN PISEMNY				EP1,EP2	
	PROJEKT				EP4,EP5,EP7,EP8	
	ZAJĘCIA PRAKTYCZNE (WERYFIKACJA POPRZECZ OBSERWACJĘ)				EP3	
Grading criteria	Metody i formy weryfikacji efektów uczenia się mogą zostać zmienione dla studentów ze szczególnymi potrzebami na warunkach i zasadach określonych w Regulaminie Studiów Uniwersytetu Szczecińskiego.					
	Completion of exercises: 1. Presence and active participation in all exercises. 2. Practical credit for the basic elements of technique in sports games. 3. Completion of the group project in the scope of conducting a special proficiency test or quantitative analysis i qualitative components of the game in a selected team game (subject to evaluation: the accuracy of the method selected, organization measurement tests, report on the development of test results). 4. Completion of the group project: organizing and running a recreational and sports activity program from games sports (the evaluation covers the presentation, substantive preparation, safety and organization of classes for selected age group, the attitude of the lecturer). Credit for the konwersatorium. 5. Written exam covering theoretical knowledge (questions requiring a longer written statement containing terminology and nomenclature in the field of technique and methodology, teaching the basic elements of the game, knowledge of the subject diagnosis of special fitness).					
	Grade calculation principles					

Final grade: Semester 3 1. The mark for passing handball is -50% of the final mark 2. The grade for passing basketball constitutes -50% of the final grade Semester 4 1. Passing with a grade from the 4th semester (volleyball, football) constitutes -50% of the final grade. 2. The written exam constitutes -50% of the final grade.

Final grade calculation method	Sem.	Course	Type of credit	Grade calc. method	Weight for the average
	3	teoria i metodyka sportów zespołowych		Ważona	
	3	teoria i metodyka sportów zespołowych [ćwiczenia]	zaliczenie z oceną		1,00
	4	teoria i metodyka sportów zespołowych		Ważona	
	4	teoria i metodyka sportów zespołowych [ćwiczenia]	zaliczenie z oceną		0,50
	4	teoria i metodyka sportów zespołowych [konwersatorium]	egzamin		0,50
Basic reading	(red. M. Dorna) (2016): Narodowy Model Gry, PZPN, Warszawa				
	Czerwinski J., Cieslikowski J., Eliasz J., Norkowski H., Nowinski W., Wrzesniewski S. (2018): Nazewnictwo i zbiór testów, ZPRP, Warszawa				
	Huciński T., Wilejto-Lekner I. (2008): Koszykówka. Podręcznik dla trenerów, nauczycieli i studentów, BK Wydawnictwo i Księgarnie, Wrocław				
	Kasza W., Krzyzanowski Z. (2011): Piłka siatkowa dla najmłodszych, PZPS, ASP, Warszawa				
	Kłoczek T., Szczepaniak M (2003): Siatkówka na lekcji wychowania fizycznego. Podrecznik dla nauczycieli i instruktorów, COS, Warszawa				
	Naglak Z. (2001): Teoria zespołowej gry sportowej. Kształcenie gracza, AWF , Wrocław				
	Nowiński. W (2018): Umiejętności indywidualne i współdziałanie w piłce ręcznej, ZPR w Polsce, Warszawa				
	Spieszny M. (2011): Analiza rozwoju cech somatycznych, motoryczności i umiejętności techniczno-taktycznych młodych sportowców uprawiających grę w piłkę ręczną , AWF, Kraków				
	Stępiński M., Paluszek K. (2011): Trening pozycyjny w piłce nożnej, Wydawnictwo MWW, Wrocław				
	Zatyracz Z., Piasecki L. (2001): Piłka siatkowa, ZWPiW Pleszewia				
	(2022): Program szkolenia PZPN u 6-U13,, PZPN, Warszawa				
Supplementary reading	Kasza W., Swiderek A., Krzyzanowski Z., Felczak K., Kielak D., Grzadzziel G., Bałuszynski R (2012): Program szkolenia siatkarza- młodzik-kadet-junior, ASP, PZPS, Warszawa				
	Kasza W., Zdebska H (2007): Piłka siatkowa. Obrona pola w ujęciu taktycznym. Biblioteka trenera, COS, Warszawa				
	Oficjalne przepisy gry w koszykówkę, piłkę nożną, piłkę siatkową, pikę ręczną :				
	Paluszek K., Stępiński M. (2009): Taktyka atakowania i bronięcia w systemie 1-4-4-2., "Fundacja Widzew Łódź – „Akademia Futbolu", Łódź				
	Piasecki L. Florkiewicz B., Krzepota J., Steciuk H., Zwierko T. (2015): System FitLight TrainerTM — nowoczesna technologia w kontroli procesu treningu sportowego w piłce siatkowej. W: Sport, turystyka i rekreacja wobec wyzwań współczesności., 11, 41-48				
	red. Teresa Zwierko (2016): Percepcja wzrokowa w grach sportowych: podstawy teoretyczne i implikacje praktyczne, Wydawnictwo Naukowe Uniwersytet Szczeciński, Szczecin				
	Stępiński M, Dorna M. (2011): Gra 1x1 we współczesnej piłce nożnej., Trener 16-25, Czasopismo fachowe PZPN				
	Włodarczyk J. (2014): ABC lekkoatletycznych cwiczen motorycznych dla zespołów gier sportowych: koszykówka, S.I.				
	Zwierko T., Florkiewicz B., Fogtman S., Kszak-Krzyżanowska A. (2014): The ability to maintain attention during visuomotor task performance in handball players and non-athletes, Centr Eur J Sport Sci Med, 7 (3): 99–106.				
	(2020): Podrecznik trenera piłki nożnej dzieci,, PZPN, Warszawa				
STUDENT WORKLOAD					
		No. of hours			
				including e-learning	
Contact hours		90		0	
Participation in test / exam		2		0	

Preparation for contact hours	40	0
Private reading and studying	40	0
Participation in tutorials	28	0
Preparation of project / essay / etc.	60	0
Preparation for test / exam	15	0
TOTAL workload	275	
ECTS credits	11	