Załacznik 1 do zarządzenia nr 37/2021 Rektora Uniwersytetu Szczecińskiego z dnia 23 lutego 2021 r.

WYDZIAŁ KULTURY FIZYCZNEJ I ZDROWIA								
	Poziom (I, II, JM)	**Kierunek**	**Nazwa przedmiotu**	**Język wykładowy**	**Kod przedmiotu**	**ECTS**	**semestr z toku studiów**	**sylabus**
A	**Przedmioty z programów studiów kierunków prowadzonych w języku obcym**							
B	**Przedmioty do wyboru prowadzone w języku obcym z pozostałych programów studiów**							
1	II	diagnostyka sportowa / sports diagnostics	genetic basis of health / epigenetics	j. angielski / English	KFZ113AIIJ3451_44S /KFZ113AIIJ3451_51S	3	1	zał.
C	**Przedmioty z programów studiów kierunków prowadzonych w języku polskim, które będą realizowane w języku obcym**							
1	I	sports diagnostics / diagnostyka sportowa	Exercise biochemistry with elements of bioenergetics / Biochemia wysiłku z elementami bioenergetyki	Polish / English j. polski / j. angielski	US113AIJ2980_33S	4	3	zał.
2	I	sports diagnostics / diagnostyka sportowa	The basics of physiotherapy in sport / Podstawy fizjoterapii w sporcie	Polish / English j. polski / j. angielski	US113AIJ2983_58S	3	6	zał.
3	I	sports diagnostics / diagnostyka sportowa	First aid / Pierwsza pomoc przedmedyczna	Polish / English j. polski / j. angielski	US113AIJ2979_26S	1	6	zał.

4	I	diagnostyka sportowa / sports diagnostics	Genetic diagnostics in sport / Diagnostyka genetyczna w sporcie	Polish / English j. polski / j. angielski	US113AIJ2451_36S	3	4	zał.
5	I	sports diagnostics / diagnostyka sportowa	Theory and methodology of the team sports / Teoria i metodyka sportów zespołowych	Polish / English j. polski / j. angielski	US113AIJ3451_3S	5,6	3, 4	zał.
1	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.
2	II	sports diagnostics / diagnostyka sportowa	Multimedia techniques in sport / Techniki multimedialne w sporcie	Polish / English j. polski / j. angielski	KFZ113AIIJ3451_37S	3	3	zał.
3	II	diagnostyka sportowa / sports diagnostics	Supplementation in selected sports / Suplementacja w wybranych dyscyplinach sportowych	Polish / English j. polski / j. angielski	KFZ113AIIJ3451_4S	5	3	zał.
4	II	sports diagnostics / diagnostyka sportowa	Nutrition and supplementation in cardiovascular disease / Żywienie i suplementacja w chorobach sercowo-naczyniowych	Polish / English j. polski / j. angielski	KFZ113AIIJ3451_8S	3	4	zał.

5	II	sports diagnostics / diagnostyka sportowa	Probiotics and food allergies in the athlete's practice / Probiotyki i alergie pokarmowe w praktyce sportowca	Polish / English j. polski / j. angielski	KFZ113AIIJ3451_9S	3	4	zał.

DZIEKAN
Wydziału Kultury Fizycznej i Zdrowia
Uniwersytetu Szczecińskiego
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COURSE SYLLABUS AND SPECIFICATION

Curriculum title: **USKFZ-DS-O-I-S-21/22Z**	
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
				w tym 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 DOROTA KOSTRZEWA-NOWAK**
Course / module objectives	**getting acquainted with the basic biochemical methods used in sports laboratory diagnostics to assess the athlete's health and identify selected disease states** **gaining readiness for teamwork** **gaining laboratory work skills**
Prerequisites	**basic knowledge of human biochemistry and physiology**

LEARNING OUTCOMES

Category	No.	Code	Description	Ref. to programme benchmarks
knowledge	1	EP1	**describes the most common metabolic disorders and post-exercise changes at the level of human biochemistry**	**K_W02** **K_W04**
	2	EP2	**discusses the bioenergetic aspects of selected changes in laboratory diagnostic markers under the influence of physical effort**	**K_W13**
skills	1	EP3	**demonstrates the ability to correctly identify metabolic disorders and post-exercise changes on the basis of the obtained test results**	**K_U10** **K_U14**
	2	EP4	**under the supervision of a research supervisor performs biochemical analyzes most often used in laboratory diagnostics**	**K_U02**
	3	EP5	**knows how to prepare a well-documented study of the results of experimental research**	**K_U05**
social competences	1	EP6	**is ready to cooperate and work in a group**	**K_K05**
	2	EP7	**updates own knowledge and is aware of its practical importance**	**K_K01**

CONTENT	Semester	No. of hours	
			w tym 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 circulation**	3	2	0
6. **The respiratory chain as a proper site for ATP synthesis**	3	2	0
7. **ATP synthase and its role in energy production**	3	4	0
Format of instruction: **laboratory**			
1. **Principles of safe work in the laboratory**	3	2	0
2. **Energy carriers and energy storage in the human body**	3	2	0
3. **Assessment of purine nucleotide levels by instrumental methods.**	3	10	0
4. **Creatine kinase as a biochemical marker in sports diagnostics.**	3	4	0
5. **How to equip the trainer's handheld laboratory?**	3	10	0
6. **Final summary of laboratory exercises.**	3	2	0

Modes of delivery	**audiovisual presentation (lectures)** **work in groups (exercises)** **performing laboratory experiments (exercises)**	
Assessment methods		No. of learning outcome from the syllabus
	KOLOKWIUM	**EP1,EP2,EP3**
	ZAJĘCIA PRAKTYCZNE (WERYFIKACJA POPRZEZ OBSERWACJĘ)	**EP4,EP5,EP6,EP7**
Grading criteria	**Written test covers the knowledge of the lectures (70% of the final grade).** **Passing the exercises on the basis of the presence and correctness of the experiments performed (30% of the final grade).**	
	Grade calculation principles	
	Written test covers the knowledge of the lectures (70% of the final grade). **Passing the exercises on the basis of the presence and correctness of the experiments performed (30% of the final grade).**	

	Sem.	Course	Type of credit	Grade calc. method	Weight for the average
Final grade calculation method	3	biochemia wysiłku fizycznego z elementami bioenergetyki		Ważona	
	3	biochemia wysiłku fizycznego z elementami bioenergetyki [laboratorium]	zaliczenie z oceną		0,30
	3	biochemia wysiłku fizycznego z elementami bioenergetyki [wykład]	zaliczenie z oceną		0,70

Basic reading	Autor David G. Nicholls, Stuart J. Ferguson (1995): Bioenergetyka 2, Wydawnictwo Naukowe PWN , Warszawa
	Banfi G., Colombini A., Lombardi G., Lubkowska A. (2012): Metabolic markers in sports medicine., Adv Clin Chem 56: 1–54,
	Hübner-Woźniak E., Lutosławska G. (2000): Podstawy biochemii wysiłku fizycznego., Biblioteka Trenera Warszawa, Warszawa
Supplementary reading	Chamera T., Spieszny M., Klocek T.Kostrzewa-Nowak D., Nowak R., Lachowicz M., Buryta R., Fice K., Moska W., Eider J., Cięszczyk P. (2015): Post-effort changes in activity of traditional diagnostic enzymatic markers in football players' blood, Journal of Medical Biochemistry 34, 179-190
	Koolman J., Röhm K.-H. 2005 (2005): Biochemia. Ilustrowany przewodnik. , PZWL , Warszawa
	Kostrzewa-Nowak D., Nowak R., Chamera T., Buryta R., Moska W., Cięszczyk P. (2015): Post- effort chances in C-reactive protein level among soccer players at the end of the training season. , Journal of Strength and Conditioning Research 2015; 29(5): 1399-1405

STUDENT WORKLOAD

	No. of hours	
		W tym e-learning
Contact hours	**45**	**0**
Participation in test / exam	**2**	**0**

Preparation for contact hours	**20**	**0**
Private reading and studying	**8**	**0**
Participation in tutorials	**10**	**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-I-S-21/22Z**	
Unit: **Moduł A: genetyka w sporcie**	
Course title: **Genetic diagnostics in sport (POZOSTAŁE PRZEDMIOTY / MODUŁY)**	Course code: **US113AIJ2451_36S**
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
				w tym e-learning		
2	4	laboratory	30	0	pg	3
Total			**30**			**3**

Course / module coordinator	**dr hab. MAREK SAWCZUK**
Course instructor	**dr n. med. ANNA NOWAKOWSKA**
Course / module objectives	**Acquainting with issues in the field of molecular and genetic diagnostics in sport**
Prerequisites	**Completion of the course "Selected issues in human biology"** **Completion of the course "Human genetics with elements of clinical genetics**

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	
			w tym e-learning
Subject title: **Genetic diagnostics in sport**			
Format of instruction: **laboratory**			
1. **RNA isolation from whole blood**	4	5	0
2. **Real-Time PCR reaction in the quantitative version**	4	5	0
3. **Determination of human sex with the use of PCR - analysis of the amelogenin gene**	4	5	0
4. **Polyacrylamide gel electrophoresis**	4	5	0
5. **Analysis of mini and microsatellite sequences - analysis of polymorphism in the LPR region of the HTT gene**	4	5	0
6. **Sequencing the selected region fragment**	4	5	0

Modes of delivery	**Laboratory exercises using the method of working in groups, Solving problems related to work in the laboratory (selection of the analysis method, development of research methodology, difficulties in interpreting the results), Experimental exercises combined with discussion**	
Assessment methods		No. of learning outcome from the syllabus
	KOLOKWIUM	**EP1,EP2,EP3,EP4,EP5,EP6,EP7,EP8**
Grading criteria	**Passing classes: based on the activity during the classes and the results of the test**	
	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	Cięszczyk P., Maciejewska A., Sawczuk M. (2008): Badania genetyczne w sporcie , Wydawnictwo Qprint , Szczecin
	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	
		W tym 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-II-S-22/23Z**	
Unit: **Przedmiot do wyboru w jęz. angielskim [moduł]**	
Course title: **epigenetics (POZOSTAŁE PRZEDMIOTY / MODUŁY)**	Course code: **KFZ113AIIJ3451_51S**
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: 1 - english language polish language**

Year	Semester	Form of instruction	No. of hours		Type of credit	ECTS
				w tym e-learning		
1	1	laboratory	15	0	pg	3
		lecture	5	0	pg	
Total			**20**			**3**

Course / module coordinator	**dr hab. MAREK SAWCZUK**
Course instructor	**dr hab. MAREK SAWCZUK**
Course / module objectives	**Presentation of the latest information on epigenetic issues** **Acquaintance with epigenetic regulation of gene expression** **Acquiring the ability to choose and apply research techniques used in epigenetic analyzes**
Prerequisites	**Podstawowa wiedza z zakresu genetyki i biologii komórki**

LEARNING OUTCOMES

Category	No.	Code	Description	Ref. to programme benchmarks
knowledge	**1**	**EP1**	**The student knows the epigenetic mechanisms and their meaning in the human body**	**K_W12** **K_W13**
	2	**EP2**	**The student knows the principles of epigenetic expression regulation genes**	**K_W12** **K_W13** **K_W16** **K_W17**
skills	**1**	**EP3**	**The student is able to propose an adequate research technique for epigenetic analyzes**	**K_U08** **K_U10** **K_U12**
social competences	**1**	**EP4**	**The student is willing to interact with other team members to solve diagnostic tasks**	**K_K03** **K_K05** **K_K07**

CONTENT	Semester	No. of hours	
			w tym e-learning
Subject title: **epigenetics**			
Format of instruction: **lecture**			
1. **Mechanizmy metylacji DNA**	1	2	0
2. **Modyfikacje epigenetyczne niekodującego RNA**	1	2	0
3. **Molekularne mechanizmy modyfikacji histonów**	1	1	0
Format of instruction: **laboratory**			
1. **Analizy metylacji DNA w obrębie genów**	1	3	0

2. **Analizy modyfikacji histonów w całym genomie**	1	3	0
3. **Imprinting genomowy**	1	3	0
4. **Wpływ diety na procesy epigenetyczne**	1	3	0
5. **Epigenetyka procesów pamięci oraz w chorobach neurologicznych**	1	3	0

Modes of delivery	**ćwiczenia laboratoryjne prowadzone metodą pracy w grupach, wykłady prowadzone w formie informacyjno-konwersatoryjnej z wykorzystaniem prezentacji multimedialnych**	
Assessment methods		No. of learning outcome from the syllabus
	KOLOKWIUM	**EP1**
	SPRAWDZIAN	**EP2,EP3**
	ZAJĘCIA PRAKTYCZNE (WERYFIKACJA POPRZEZ OBSERWACJĘ)	**EP4**
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.	

	Sem.	Course	Type of credit	Grade calc. method	Weight for the average
Final grade calculation method	1	epigenetics		Arytmetyczna	
	1	epigenetics [wykład]	zaliczenie z oceną		
	1	epigenetics [laboratorium]	zaliczenie z oceną		

Basic reading	Moore DS. (2017): Behavioral epigenetics, Jan;9(1), Wiley Interdiscip Rev Syst Biol Med. , Poznan
	Potaczek DP. et al. (2017): Epigenetics and allergy: from basic mechanisms to clinical applications, Apr;9(4):539-571, Epigenomics, Łódź
	Sapienza C., Issa JP. (2016): Diet, Nutrition, and Cancer Epigenetics, Jul 17;36: 665-81, Annu Rev Nutr.
Supplementary reading	Cieszczyk P i in. (2008): Badania genetyczne w sporcie, International Association of Ontokinesiologists

STUDENT WORKLOAD

	No. of hours	
		W tym e-learning
Contact hours	**20**	**0**
Participation in test / exam	**4**	**0**
Preparation for contact hours	**10**	**0**
Private reading and studying	**15**	**0**
Participation in tutorials	**10**	**0**
Preparation of project / essay / etc.	**0**	**0**
Preparation for test / exam	**16**	**0**
TOTAL workload	**75**	
ECTS credits	**3**	

COURSE SYLLABUS AND SPECIFICATION

Curriculum title: **USKFZ-DS-O-II-S-22/23Z**	
Unit: **Przedmiot do wyboru w jęz. angielskim [moduł]**	
Course title: **genetic basis of health (POZOSTAŁE PRZEDMIOTY / MODUŁY)**	Course code: **KFZ113AIIJ3451_44S**
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: 1 - english language polish language**

Year	Semester	Form of instruction	No. of hours		Type of credit	ECTS
				w tym e-learning		
1	1	discussion classes	15	0	pg	3
		lecture	5	0	pg	
Total			**20**			**3**

Course / module coordinator	**dr inż. JAKUB SKORUPSKI**
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	**Podstawowa wiedza z zakresu genetyki i biologii komórki.**

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	
			w tym e-learning
Subject title: **genetic basis of health**			
Format of instruction: **lecture**			

1. **Budowa DNA i RNA**	1	2	0
2. **Mechanisms of genetic expression**	1	3	0
Format of instruction: **discussion classes**			
1. **Introduction to human genetics with elements of clinical genetics**	1	3	0
2. **Scheme of autosomal and sex-linked inheritance in humans**	1	3	0
3. **Principles of multifactorial inheritance in humans**	1	3	0
4. **Genetic basis of carbohydrate and protein metabolism disorders**	1	3	0
5. **Genetic basis of lipid metabolism and metal absorption disorders**	1	3	0

Modes of delivery	**wykłady prowadzone w formie informacyjno-konwersatoryjnej z wykorzystaniem prezentacji multimedialnych, ćwiczenia audytoryjne prowadzone metoda pracy w grupach**	
Assessment methods		No. of learning outcome from the syllabus
	KOLOKWIUM	**EP3,EP8**
	SPRAWDZIAN	**EP4,EP5**
	ZAJĘCIA PRAKTYCZNE (WERYFIKACJA POPRZEZ OBSERWACJĘ)	**EP6,EP7**
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
	1	genetic basis of health		Arytmetyczna	
	1	genetic basis of health [wykład]	zaliczenie z oceną		
	1	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	
		W tym e-learning
Contact hours	**20**	**0**
Participation in test / exam	**4**	**0**
Preparation for contact hours	**10**	**0**
Private reading and studying	**15**	**0**
Participation in tutorials	**10**	**0**
Preparation of project / essay / etc.	**0**	**0**
Preparation for test / exam	**16**	**0**
TOTAL workload	**75**	
ECTS credits	**3**	

COURSE SYLLABUS AND SPECIFICATION

Curriculum title: **USKFZ-DS-O-I-S-20/21Z**	
Course title: **First aid (KIERUNKOWE)**	Course code: **US113AIJ2979_26S**
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: 6 - polish language**

Year	Semester	Form of instruction	No. of hours		Type of credit	ECTS
				w tym e-learning		
3	6	discussion classes	10	0	pg	1
Total			**10**			**1**

Course / module coordinator	**dr MACIEJ ZAWADZKI**
Course instructor	**dr ELŻBIETA SIEŃKO-AWIERIANÓW**
Course / module objectives	**To acquaint students with the theoretical and practical basics of providing first aid. Acquiring the ability to work in a team. Acquiring the ability 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 organism disorders.**	**K_W04**
	2	EP2	**the student knows the theoretical basics of pre-medical first aid**	**K_W09**
skills	1	EP3	**the student is able to identify problems of a person in a situation that threatens his health and life.**	**K_U04**
	2	EP4	**the student is able to take actions aimed at saving human health and life**	**K_U04**
social competences	1	EP5	**the student is aware of his / her own limitations and knows when to turn to experts.**	**K_K01**
	2	EP6	**the student provides help in a way that ensures the safety of himself and 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	
			w tym e-learning
Subject title: **First aid**			
Format of instruction: **discussion classes**			
1. **The importance of pre-medical aid for human health and life, a golden hour. Legal aspects of providing first aid.**	6	1	0
2. **Characteristics of basic activities saving the health and life of a child and an adult. Cardiopulmonary resuscitation.**	6	3	0
3. **Principles of providing first aid in special situations: heart attack, fainting and fainting, burns, hypothermia, heat stroke, stroke, electric shock, poisoning, traffic accidents.**	6	4	0
4. **Accidents in schools and educational institutions.**	6	2	0

Modes of delivery	**multimedia presentation, tutorials, demonstration with explanation, situational method, simulation method**

Assessment methods		No. of learning outcome from the syllabus
	KOLOKWIUM	**EP1,EP2,EP3,EP4**
	PROJEKT	**EP1,EP2,EP3,EP4,EP5,EP6,EP7**

Grading criteria	**Completing the course with a grade. Establishing a final grade on the basis of attendance at classes, grades from the colloquium as well as passing the individual practical exercises.**
	Grade calculation principles
	Completing the course with a grade. Establishing a final grade on the basis of attendance at classes, grades from the colloquium as well as passing the individual practical exercises.

Final grade calculation method	Sem.	Course	Type of credit	Grade calc. method	Weight for the average
	6	pierwsza pomoc przedmedyczna		Ważona	
	6	pierwsza pomoc przedmedyczna [ćwiczenia]	zaliczenie z oceną		1,00

Basic reading	Buchfelder M., Buchfelder A. : Podręcznik pierwszej pomocy, Wydawnictwo Lekarskie PZWL, 2003
	Goniewicz M. (2011): Pierwsza pomoc. Podręcznik dla studentów, Wydawnictwo Lekarskie PZWL
	Polska Rada Resuscytacji. (2016): Wytyczne resuscytacji 2015., Copyright for the Polish edition by Polska Rada., Kraków
Supplementary reading	Bass D., Baker R. (2006): Pierwsza pomoc i opieka domowa, Wydawnictwo RM
	Czapiewska B. (2010): Pierwsza pomoc, Wydawnictwo Literat

STUDENT WORKLOAD

	No. of hours	
		W tym e-learning
Contact hours	**10**	**0**
Participation in test / exam	**2**	
Preparation for contact hours	**2**	
Private reading and studying	**3**	
Participation in tutorials	**2**	
Preparation of project / essay / etc.	**4**	
Preparation for test / exam	**2**	
TOTAL workload	**25**	
ECTS credits	**1**	

COURSE SYLLABUS AND SPECIFICATION

Curriculum title: **USKFZ-DS-O-I-S-20/21Z**	
Unit: **Moduł A: medycyna sportowa [moduł]**	
Course title: **The basics of physiotherapy in sport (POZOSTAŁE PRZEDMIOTY / MODUŁY)**	Course code: **US113AIJ2983_58S**
Name of field of study: **diagnostyka sportowa**	

Mode and cycle of study:	Profile of study:	Specialty:
first-degree, full - time	**general academic**	

Course / module status	Language of instruction:
elective	**semester: 6 - polish language**

Year	Semester	Form of instruction	No. of hours		Type of credit	ECTS
				w tym e-learning		
3	6	discussion classes	15	0	pg	3
		lecture	15	0	pg	
Total			**30**			**3**

Course / module coordinator	**dr KRZYSZTOF WILK**
Course instructor	**dr KRZYSZTOF WILK**
Course / module objectives	**Acquainting with the specificity of sports injuries as well as diagnostics, prevention and therapy of the most common clinical problems. Developing the ability to conduct rehabilitation in athletes depending on the type of injury.**
Prerequisites	**Knowledge of the basics of human anatomy and physiology as well as biomechanics and ergonomics. Ability to use functional tests and conduct kinesiotherapy. Team work and interpersonal communication.**

LEARNING OUTCOMES

Category	No.	Code	Description	Ref. to programme benchmarks
knowledge	**1**	**EP1**	**has knowledge in the field of physicochemical and biological foundations of health sciences and physical culture sciences**	**K_W01**
skills	**1**	**EP5**	**can analyze the impact of the external environment on the occurrence of injuries in sport**	**K_U07**
social competences	**1**	**EP8**	**can define priorities and follow ethical rules in decisions and actions taken in relation to a competitor/athlete**	**K_K02**

CONTENT	Semester	No. of hours	
			w tym e-learning
Subject title: **The basics of physiotherapy in sport**			
Format of instruction: **lecture**			
1. **Place and role of physical therapy in medicine. Types of physical factors.**	6	2	0
2. **Mechanisms of human thermoregulation and their role during the interaction of thermal physical factors. Biological effects of the influence of thermal factors on the organism.**	6	2	0
3. **Biological effects of the interaction of mechanical and thermal factors in hydrotherapy.**	6	2	0
4. **Physical basics of using ultraviolet (UV), infrared (IR) and visible light in physical therapy. Biological effects of the influence of UV, IR and visible radiation on the human body.**	6	2	0
5. **Low and high energy laser therapy. Features of laser radiation and the physical basis of its generation. Biological effects of laser biostimulation. Photodynamic therapy.**	6	4	0
6. **The physical properties of the ultrasound wave and the biological effects of ultrasound on the human body.**	6	3	0
Format of instruction: **discussion classes**			

1. **The definition of wellness, inches and tasks.**	6	3	0
2. **Methods and means of biological regeneration. Principles of applying biological regeneration.**	6	3	0
3. **Common injuries in sport rules of conduct.**	6	3	0
4. **The use of physical stimuli in sport - dry sauna, cryotherapy, hydrotherapy in the training process.**	6	3	0
5. **Sports massage, purpose, tasks, mechanism of action. Prophylactic and therapeutic massage used in biological regeneration. Taping in the prevention and treatment of diseases and injuries of the musculoskeletal system in an athlete**	6	3	0

Modes of delivery	**Health aspects of physical activity; Health prophylaxis in sport; Fundamentals of physiotherapy in sport** **Lecture: Lecture with multimedia presentation** **Conversation exercises: multimedia presentation, preparation and conducting of classes, practical classes, problem solving, discussion.** **Student's own work: work with a book, analysis and thematic review of literature - preparation of classes on a selected topic.**	
Assessment methods		No. of learning outcome from the syllabus
	KOLOKWIUM	**EP1,EP5**
	ZAJĘCIA PRAKTYCZNE (WERYFIKACJA POPRZEZ OBSERWACJĘ)	**EP1,EP5,EP8**
Grading criteria	**The conditions for passing the course are: active participation in classes, obtaining positive grades from the test covering the content of the lectures and practical completion of the exercises.**	
	Grade calculation principles	
	The final grade for completing the course is the arithmetic mean of the grades for classes and lectures.	

	Sem.	Course	Type of credit	Grade calc. method	Weight for the average
Final grade calculation method	6	podstawy fizjoterapii w sporcie		Arytmetyczna	
	6	podstawy fizjoterapii w sporcie [wykład]	zaliczenie z oceną		
	6	podstawy fizjoterapii w sporcie [ćwiczenia]	zaliczenie z oceną		

Basic reading	Donatelli R.A. (2017): Rehabilitacja w sporcie, Edra Urban & Partner,, Wrocław
	Dziak A. 20002 (2002): Urazy i uszkodzenia w sporcie, Kasper, Kraków.
	Jegier A., Nazar K., Dziak A. (2013): Medycyna sportowa, PZWL, Warszawa Łódź
	Kasprzak W., Mańkowska A. (2008): Fizykoterapia medycyna uzdrowiskowa i SPA, PZWL Warszawa
	Magiera L., Walaszek R. (2003): Masaż sportowy z elementami odnowy biologicznej, BIOSPORT, Kraków.
	Mędraś M. (2004): Medycyna sportowa, Medsportpress, Warszawa.
	Woynarowska B. 2008 (2008): Edukacja zdrowotna, PWN Warszawa
Supplementary reading	Straburzyńska-Lupa A., Straburzyński G. (2008): Fizjoterapia z elementami klinicznymi, PZWL Warszawa.

STUDENT WORKLOAD

	No. of hours	
		W tym e-learning
Contact hours	**30**	**0**
Participation in test / exam	**2**	
Preparation for contact hours	**20**	
Private reading and studying	**8**	
Participation in tutorials	**5**	
Preparation of project / essay / etc.	**0**	
Preparation for test / exam	**10**	

TOTAL workload	**75**
ECTS credits	**3**

COURSE SYLLABUS AND SPECIFICATION

Curriculum title: **USKFZ-DS-O-II-S-21/22Z**	
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
				w tym e-learning		
2	4	discussion classes	30	0	pg	4
		lecture	10	0	e	
Total			**40**			**4**

Course / module coordinator	**dr KRZYSZTOF WILK**
Course instructor	**dr KRZYSZTOF WILK**
Course / module objectives	**Acquiring basic information on the methods and means of biological regeneration supporting the training process, teaching basic relaxation techniques and sports massage.**
Prerequisites	**Knowledge of the basics of anatomy and physiology**

LEARNING OUTCOMES

Category	No.	Code	Description	Ref. to programme benchmarks
knowledge	**1**	**EP1**	**He knows the goals and tasks of biological regeneration, characterizes the physical treatments used in biological regeneration.**	**K_W01**
skills	**1**	**EP2**	**He can choose the right means of biological regeneration in the training process and perform selected sports massage techniques.**	**K_U13**
social competences	**1**	**EP3**	**Understands the principles of ethics and safety in the performance of biological regeneration treatments.**	**K_K03 K_K08**

CONTENT	Semester	No. of hours	
			w tym e-learning
Subject title: **Fundamentals of biological regeneration in sport**			
Format of instruction: **lecture**			
1. **The definition of wellness. The beginnings of biological regeneration and its place in sport. Restitution and regeneration of the body, condition and sports form. Tasks for wellness in sport.**	4	2	0
2. **Massage - definition, types of massage, application in biological regeneration.**	4	2	0
3. **Means used in wellness clinics and in Spa facilities. Biological regeneration office.**	4	2	0
4. **Physical treatments used in wellness: electrotherapy, thermotherapy, laser therapy, magnetic field, ultrasound therapy.**	4	4	0
Format of instruction: **discussion classes**			
1. **Equipment and preparation of the massage parlor, massage aids, interview, preparation of the competitor for the treatment.**	4	2	0
2. **Classic massage of upper and lower limbs, shoulder girdle, pelvic girdle, back and neck using the techniques of stroking, rubbing, kneading, patting, vibration, shaking and rolling taking into account various sports disciplines.**	4	24	0
3. **Poisometric muscle relaxation - concept, goals and tasks, relaxation technique of selected muscle groups.**	4	4	0

Modes of delivery	**Multimedia presentation, show.**	
Assessment methods		No. of learning outcome from the syllabus
	EGZAMIN PISEMNY	**EP1,EP3**
	ZAJĘCIA PRAKTYCZNE (WERYFIKACJA POPRZEZ OBSERWACJĘ)	**EP2**
Grading criteria	**The conditions for passing the course are: attendance at the exercises, active participation, obtaining positive grades of the exam and of the exercises.**	
	Grade calculation principles	
	The final grade for the subject is the arithmetic mean of the exam and tutorial grades.	

	Sem.	Course	Type of credit	Grade calc. method	Weight for the average
Final grade calculation method	4	podstawy odnowy biologicznej w sporcie		Arytmetyczna	
	4	podstawy odnowy biologicznej w sporcie [wykład]	egzamin		
	4	podstawy odnowy biologicznej w sporcie [ćwiczenia]	zaliczenie z oceną		

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	
		W tym 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-21/22Z-DiPŻS**	
Course title: **Probiotics and food allergies in the athlete's practice (SPECJALNOŚCI / SPECJALIZACJE / MODUŁY SPECJALNOŚCIOWE)**	Course code: **KFZ113AIIJ3451_9S**
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: 4 - polish language**

Year	Semester	Form of instruction	No. of hours		Type of credit	ECTS
				w tym e-learning		
2	4	discussion classes	20	0	pg	3
		lecture	10	0	pg	
Total			**30**			**3**

Course / module coordinator	**dr inż. ANNA KRAJEWSKA-PĘDZIK**
Course instructor	**dr inż. ANNA KRAJEWSKA-PĘDZIK**
Course / module objectives	**The aim of the course is to familiarize students with allergies, their causes and the importance of probiotics in an athlete's life. The student's acquisition of the ability to classify allergies. Developing an attitude of readiness in students to take action to diagnose and minimize the effects of allergies.**
Prerequisites	**Basic knowledge of supplementation and nutrition.**

LEARNING OUTCOMES

Category	No.	Code	Description	Ref. to programme benchmarks
knowledge	**1**	**EP1**	**Has knowledge of nutrition and supplementation in sport.**	**K_W15 K_W18**
	2	**EP2**	**He knows what probiotics are and knows how they affect the sports level in various age categories. He knows and understands the phenomenon of food allergies.**	**K_W08 K_W09 K_W15 K_W18**
skills	**1**	**EP3**	**Can show the relationship between eating habits and food allergies. Can define the role and importance of probiotics in highly qualified and amateur sport.**	**K_U07 K_U08 K_U14**
	2	**EP4**	**Has the ability to transfer knowledge about the role of probiotics in our lives.**	**K_U07 K_U12**
social competences	**1**	**EP5**	**Is aware of the need to apply knowledge about food allergies and their impact on the level of physical activity and highly qualified sports.**	**K_K07**

CONTENT	Semester	No. of hours	
			w tym e-learning
Subject title: **Probiotics and food allergies in the athlete's practice**			
Format of instruction: **lecture**			
1. **Characteristics of probiotic strains and their role in sport.**	4	3	0

2. **Food allergies (IgA / IgG-dependent) and immediate (IgE-dependent).**	4	4	0
3. **Probiotic therapy in sport.**	4	3	0
Format of instruction: **discussion classes**			
1. **Review of delayed allergy tests, characteristics, advantages and disadvantages.**	4	5	0
2. **Probiotic therapy in the practice of an athlete.**	4	5	0
3. **Food allergies in the practice of an athlete.**	4	5	0
4. **Nutrition in food allergies at different stages of life.**	4	5	0

Modes of delivery	**lectures, multimedia presentations, discussions, independent classes;**	
Assessment methods		No. of learning outcome from the syllabus
	KOLOKWIUM	**EP1,EP2,EP3,EP4,EP5**
	PREZENTACJA	**EP2,EP3**
	ZAJĘCIA PRAKTYCZNE (WERYFIKACJA POPRZEZ OBSERWACJĘ)	**EP3**
Grading criteria	**he 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.**	
	Grade calculation principles	
	The final grade is the arithmetic mean of: **1. Presentation - 25% of the final grade.** **2. Colloquium of exercises - 25% of the final grade.** **3. Colloquium of lectures - 50% of the final grade.**	

	Sem.	Course	Type of credit	Grade calc. method	Weight for the average
Final grade calculation method	4	probiotyki i alergie pokarmowe w praktyce sportowca		Arytmetyczna	
	4	probiotyki i alergie pokarmowe w praktyce sportowca [wykład]	zaliczenie z oceną		
	4	probiotyki i alergie pokarmowe w praktyce sportowca [ćwiczenia]	zaliczenie z oceną		

Basic reading	G. Zydek, M. Michalczyk, A. Zając (2017): Nowe trendy w żywieniu i suplementacji osób aktywnych fizycznie , AWF Katowice, Katowice
	H. Ciborowska, A. Rudnicka (2014): Dietetyka żywienie zdrowego i chorego człowieka, PZWL, Warszawa
	J. Gawęcki, L. Hryniewiecki (1998): Żywienie człowieka. Podstawy nauki o żywieniu , PWN, Warszawa
	O. Lafay (2015): Skuteczne odżywianie w treningu i sporcie, FitActiwe, Łódź
Supplementary reading	

STUDENT WORKLOAD

	No. of hours	
		W tym e-learning
Contact hours	**30**	**0**
Participation in test / exam	**5**	**0**
Preparation for contact hours	**7**	**0**
Private reading and studying	**7**	**0**
Participation in tutorials	**14**	**0**
Preparation of project / essay / etc.	**6**	**0**
Preparation for test / exam	**6**	**0**

TOTAL workload	**75**
ECTS credits	**3**

COURSE SYLLABUS AND SPECIFICATION

Curriculum title: **USKFZ-DS-O-II-S-21/22Z-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:	Profile of study:	Specialty:
second degree, full - time	**general academic**	**diagnoza i planowanie żywienia sportowca**

Course / module status	Language of instruction:
obligatory	**semester: 3 - polish language**

Year	Semester	Form of instruction	No. of hours		Type of credit	ECTS
				w tym 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**	**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**	**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	
			w tym e-learning
Subject title: **Supplementation in selected sport**			
Format of instruction: **lecture**			
1. **Suplementacja w zarysie**	3	3	0
2. **Suplementacja pomocna w zwalczaniu zmęczenia treningowego**	3	3	0
3. **Suplementacja wspomagająca rozwój siły**	3	3	0
4. **Suplementacja wspomagająca rozwój wytrzymałości mięśniowej**	3	3	0

5. **Suplementacja wspomagająca redukcję tkanki tłuszczowej**	3	3	0
Format of instruction: **discussion classes**			
1. **indywidualizacja suplementacji w zależności od potrzeb dyscypliny**	3	5	0
2. **Suplementacja minimalizująca ryzyko kontuzji**	3	5	0
3. **Suplementacja wspomagająca odporność sportowca**	3	5	0
4. **Suplementacja w sportach zespołowych**	3	5	0
5. **Suplementacja w sportach szybkościowo-siłowych**	3	5	0
6. **Suplementacja w sportach wydolnościowych**	3	5	0

Modes of delivery	**lectures, multimedia presentations, discussion, practical classes**	
Assessment methods		No. of learning outcome from the syllabus
	EGZAMIN PISEMNY	**EP1,EP2,EP3,EP4**
	KOLOKWIUM	**EP2,EP3,EP4,EP5**
	PREZENTACJA	**EP1,EP2,EP3,EP4,EP5,EP6**
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**	

	Sem.	Course	Type of credit	Grade calc. method	Weight for the average
Final grade calculation method	3	suplementacja w wybranych dyscyplinach sportowych		Arytmetyczna	
	3	suplementacja w wybranych dyscyplinach sportowych [wykład]	egzamin		
	3	suplementacja w wybranych dyscyplinach sportowych [ćwiczenia]	zaliczenie z oceną		

Basic reading	A. Bean (2019): Żywienie w sporcie, ZYSK I S-KA, Poznań
	G. Zydek, M. Michalczyk, A. Zając (2017): Nowe trendy w żywieniu i suplementacji osób aktywnych fizycznie, AWF Katowice, Katowice
Supplementary reading	B. Frączek, J. Krzywański, H. Krysztofiak (2019): Dietetyka sportowa, PZWL, Warszawa
	A. Zając, S. Poprzęcki, M. Czuba, G. Zydek, A. Gołaś (2012): Dieta i suplementacja w sporcie i rekreacji , AWF Katowice, Katowice

STUDENT WORKLOAD

	No. of hours	
		W tym 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-II-S-21/22Z**	
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
				w tym e-learning		
2	3	discussion classes	30	0	pg	3
Total			**30**			**3**

Course / module coordinator	**dr KRZYSZTOF WILK**
Course instructor	**dr MIŁOSZ STĘPIŃSKI**
Course / module objectives	**Acquiring knowledge about editing computer programs for creating e-outlines. The student will have the ability to create e-outline, video editing and graphics. Will know the validity of using multimedia techniques in coaching work.**
Prerequisites	**basic knowledge of computer skills in the Windows and MS Office environment**

LEARNING OUTCOMES

Category	No.	Code	Description	Ref. to programme benchmarks
knowledge	**1**	**EP1**	**He knows the basic computer programs and other technical devices for the assessment and monitoring of physical activity and used in schools and sports clubs.**	**K_W04 K_W14**
skills	**1**	**EP2**	**Can select and use research methods and apparatus in the assessment of physical activity and assess and interpret the obtained results. Can use specialized computer and other equipment multimedia equipment in the area 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	
			w tym e-learning
Subject title: **Multimedia techniques in sport**			
Format of instruction: **discussion classes**			
1. **Learning how to use computer programs**	3	24	0
2. **E-drafts presentation**	3	6	0

Modes of delivery	**Theoretical and practical methods of operation Literature**	
Assessment methods		No. of learning outcome from the syllabus
	PREZENTACJA	**EP1,EP2,EP3**

Grading criteria	**253 / 5 000** **Wyniki tłumaczenia** **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-outline containing graphic and video materials from the hospitalized training sports**
	Grade calculation principles
	The final grade is the grade from the preparation and presentation of the e-outline (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	
		W tym e-learning
Contact hours	**30**	**0**
Participation in test / exam	**2**	**0**
Preparation for contact hours	**8**	**0**
Private reading and studying	**5**	**0**
Participation in tutorials	**15**	**0**
Preparation of project / essay / etc.	**12**	**0**
Preparation for test / exam	**3**	**0**
TOTAL workload	**75**	
ECTS credits	**3**	

COURSE SYLLABUS AND SPECIFICATION

Curriculum title: **USKFZ-DS-O-I-S-21/22Z**	
Course title: **Theory and methodology of the team sports (KIERUNKOWE)**	Course code: **KFZ113AIJ3451_3S**
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
				w tym e-learning		
2	3	discussion classes	40	0	pg	5
	4	discussion classes	40	0	pg	6
		lecture	10	0	e	
Total			**90**			**11**

Course / module coordinator	**dr WOJCIECH JEDZINIAK**
Course instructor	**dr hab. TERESA ZWIERKO , dr BEATA FLORKIEWICZ**
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 - diagnosis of special fitness as well as quantitative and qualitative components of the game in selected sports team. Acquire of competences to promote health-promoting behavior and care for one's own physical fitness.**
Prerequisites	**Lack**

LEARNING OUTCOMES

Category	No.	Code	Description	Ref. to programme benchmarks
knowledge	**1**	**EP1**	**Has elementary knowledge of game theory team as a form of sports activity and recreational. He knows the technique of performing skills specialist in sports games and knows and describes the methodology of shaping and diagnosis in the right way basic elements of movement technique.**	**K_W05**
	2	**EP2**	**Defines the basic systems and rules of the game, lists and explains the rules of sports games. distinguishes specialized terminology used in the process training in sport and recreation.**	**K_W05**

skills	**1**	**EP3**	**Demonstrates specialized motor skills with the scope of basic elements of game technique and tactics teamwork necessary to run the process training in sport and recreation.**	**K_U01**
	2	**EP4**	**Uses basic equipment necessary for implementation of sports and recreational activities in the field of team games in accordance with the safety rules your own and the participants of the classes.**	**K_U04**
	3	**EP5**	**Applies basic methods of assessing the level of fitness special with sports games and game ingredient analysis and is able to interpret the results of research in this area.**	**K_U12**
	4	**EP6**	**Constructs a program of sports and recreational activities with range of sports games for people of all ages with taking into account the appropriate exercise load.**	**K_U13**
social competences	**1**	**EP7**	**He is ready to cooperate in a team and has competences that enable people to engage in work group assuming various roles in it, including the initiator exercises, referee.**	**K_K04**
	2	**EP8**	**Is aware of the need to communicate clearly knowledge of sports games to participants training process in sport and recreation.**	**K_K06**
	3	**EP9**	**He is ready to take responsibility for health and safety of participants in activity programs sports and recreation in the field of sports games.**	**K_K08**
	4	**EP10**	**Performs a correct self-assessment of their own competencesand is aware of the need to maintain the appropriate level of physical fitness necessary for professional work.**	**K_K10**

CONTENT	Semester	No. of hours	
			w tym e-learning
Subject title: **Theory and methodology of the team sports**			
Format of instruction: **lecture**			
1. **Sports games as a form of physical activity for people of all ages**	4	1	0
2. **Rules of the game (basketball, handball, volleyball, soccer)**	4	4	0
3. **Stages of sports training in team games**	4	4	0
4. **Determinants of achievements in sports games: morphological, motor and psychological factors**	4	1	0
Format of instruction: **discussion classes**			
1. **Exercises to familiarize with the balls.**	3	2	0
2. **Games and activities in the teaching of sports games**	3	4	0
3. **Technique of performance and methodology of teaching the basic technical elements of games sports (handball, basketball)**	3	10	0
4. **Technical and tactical activities (handball, basketball), analysis of game components.**	3	6	0
5. **Organization and conducting sports and recreational activities in sports games**	3	6	0
6. **Special technical and motor tests**	3	12	0
7. **Exercises to familiarize with the balls.**	4	2	0
8. **Games and activities in the teaching of sports games**	4	4	0
9. **Technique of performance and methodology of teaching the basic technical elements of sports games (volleyball, football)**	4	10	0
10. **Technical and tactical activities (volleyball, football), analysis of the game components.**	4	6	0
11. **Organization and conducting sports and recreational activities in sports games**	4	6	0

12. **Special technical and motor tests**	4	12	0

Modes of delivery	**- multimedia lecture** **- theoretical and practical methods (recreational and creative)** **- group work** **- simulation games**

Assessment methods		No. of learning outcome from the syllabus
	EGZAMIN PISEMNY	**EP1,EP2**
	PROJEKT	**EP6,EP7,EP8,EP9**
	ZAJĘCIA PRAKTYCZNE (WERYFIKACJA POPRZEZ OBSERWACJĘ)	**EP10,EP3,EP4,EP5**

Grading criteria	**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 lecture** **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).** **All points from 2-5 the student must receive a minimum pass mark**
	Grade calculation principles
	The grade is the weighted average of the final grade from exercises 60% and lectures 40%

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		0,60
	4	teoria i metodyka sportów zespołowych [wykład]	egzamin		0,40

Basic reading	(red. M. Dorna) (2016): Narodowy Model Gry, PZPN, Warszawa
	Huciński T., Wilejto-Lekner I. (2008): Koszykówka. Podręcznik dla trenerów, nauczycieli i studentów, BK Wydawnictwo i Księgarnie, Wrocław
	Naglak Z. (2001): Teoria zespołowej gry sportowej. Kształcenie gracza, AWF , Wrocław
	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 Plewnia

Supplementary reading	Florkiewicz B., Fogtman S., Lesiakowski P., Zwierko T. (2015): Antropomotoryka. , Journal of Kinesiology and Exercise Sciences
	Oficjalne przepisy gry w koszykówkę, piłkę nożną, piłkę siatkową, pikę ręczną :
	Paluszek K., Stępiński M. (2009): Taktyka atakowania i bronienia 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
	Steciuk H., Zwierko T. (2015): Gaze behavior in basketball shooting: Preliminary investigations. TRENDS in Sport Sciences,, 2(22): 89-94
	Stępiński M, Dorna M. (2011): Gra 1x1 we współczesnej piłce nożnej., Trener 16-25, Czasopismo fachowe PZPN
	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.

STUDENT WORKLOAD

	No. of hours	
		W tym e-learning
Contact hours	**90**	**0**
Participation in test / exam	**4**	**0**
Preparation for contact hours	**60**	**0**
Private reading and studying	**40**	**0**
Participation in tutorials	**16**	**0**
Preparation of project / essay / etc.	**35**	**0**
Preparation for test / exam	**30**	**0**
TOTAL workload	**275**	
ECTS credits	**11**	

COURSE SYLLABUS AND SPECIFICATION

Curriculum title: **USKFZ-DS-O-II-S-21/22Z-DiPŻS**	
Course title: **Nutrition and supplementation in cardiovascular disease (SPECJALNOŚCI / SPECJALIZACJE / MODUŁY SPECJALNOŚCIOWE)**	Course code: **KFZ113AIIJ3451_8S**
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: 4 - polish language**

Year	Semester	Form of instruction	No. of hours		Type of credit	ECTS
				w tym e-learning		
2	4	discussion classes	20	0	pg	3
		lecture	10	0	pg	
Total			**30**			**3**

Course / module coordinator	**dr n. med. KATARZYNA KLAPCZYŃSKA**
Course instructor	**dr MACIEJ BURYTA**
Course / module objectives	**The aim of the course is to familiarize students with the causes of cardiovascular diseases. Acquiring by the student the ability to apply rational nutrition and supplementation in cardiovascular diseases. Developing students readiness to take action to minimize the risk of selected diseases.**
Prerequisites	**Basic knowledge of diet and supplementation**

LEARNING OUTCOMES

Category	No.	Code	Description	Ref. to programme benchmarks
knowledge	**1**	**EP1**	**He understands the essence of human physiological processes as well as the statistics of morbidity and deaths related to cardiovascular diseases, the genesis of S-N diseases and methods of prevention.**	**K_W15 K_W18**
skills	**1**	**EP2**	**Can show the relationship between diet, diet and nutrition, and cardiovascular diseases.**	**K_U14**
	2	**EP3**	**Can point out mistakes and neglect in nutrition, shows the ability to independently search for the necessary data from available sources informational.**	**K_U07 K_U08 K_U14**
social competences	**1**	**EP4**	**Has an awareness of applying knowledge of cardiovascular disease prevention.**	**K_K02**

CONTENT	Semester	No. of hours	
			w tym e-learning
Subject title: **Nutrition and supplementation in cardiovascular disease**			
Format of instruction: **lecture**			
1. **Discussion of cardiovascular death and mortality statistics**	4	1	0
2. **Causes of cardiovascular disease**	4	3	0
3. **Diagnosis of cardiovascular disease**	4	3	0
4. **Triglycerides as an independent risk factor for cardiovascular disease**	4	3	0
Format of instruction: **discussion classes**			
1. **OFTT - oral fat tolerance test**	4	2	0

2. **Indicators of atherogenicity**	4	2	0
3. **Positive and negative effects of drug therapy**	4	2	0
4. **Cholesterol facts and myths**	4	3	0
5. **Primary prevention of cardiovascular disease**	4	6	0
6. **Secondary prevention of cardiovascular disease**	4	2	0
7. **Recommended nutrition and supplementation in cardiovascular disease**	4	3	0

Modes of delivery	**lectures, multimedia presentations, discussion**	
Assessment methods		No. of learning outcome from the syllabus
	KOLOKWIUM	**EP1,EP2,EP3**
	PREZENTACJA	**EP1,EP2,EP3,EP4**
	ZAJĘCIA PRAKTYCZNE (WERYFIKACJA POPRZEZ OBSERWACJĘ)	**EP1,EP2,EP3,EP4**
Grading criteria	**Prerequisites for credit include:** **1. attendance and active participation in class** **2. positive mark from the presentation** **3. positive mark from the colloquium**	
	Grade calculation principles	
	The final grade consists of: **1. presentation and colloquium from exercises - 50% of the final grade** **Colloquium from lectures - 50% of the final mark**	

	Sem.	Course	Type of credit	Grade calc. method	Weight for the average
Final grade calculation method	4	żywienie i suplementacja w chorobach sercowo-naczyniowych		Arytmetyczna	
	4	żywienie i suplementacja w chorobach sercowo-naczyniowych [ćwiczenia]	zaliczenie z oceną		
	4	żywienie i suplementacja w chorobach sercowo-naczyniowych [wykład]	zaliczenie z oceną		

Basic reading	H. Ciborowa, A. Rudnicka (2014): Dietetyka, żywienie zdrowego i chorego człowieka, PZWL, Warszawa
	Paprocka-Borowicz M. i in. (2016): 5 minut dla serca, SBM, cop, Warszawa
	Waller S. (2018): Dr Heart dbaj o swoje serce: jak zapobiegać zawałowi sercaoraz lepiej i bardziej świadomie żyć, Edra Urban&Partner, copyright, Wrocław
Supplementary reading	

STUDENT WORKLOAD

	No. of hours	
		W tym e-learning
Contact hours	**30**	**0**
Participation in test / exam	**3**	**0**
Preparation for contact hours	**8**	**0**
Private reading and studying	**7**	**0**
Participation in tutorials	**14**	**0**
Preparation of project / essay / etc.	**6**	**0**
Preparation for test / exam	**7**	**0**
TOTAL workload	**75**	
ECTS credits	**3**	