



STUDY PROGRAM

Διατμηματικό Ξενόγλωσσο Προπτυχιακό Πρόγραμμα Σπουδών 2026-27

DEPARTMENT

Sport and Exercise Sciences for Health and Performance

A9
Course Outlines

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1st Semester

FUNCTIONAL ANATOMY

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM01	SEMESTER	1st Semester
COURSE TITLE	FUNCTIONAL ANATOMY		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE Background, General Knowledge, Scientific Area, Skill Development	General Background		
PREREQUISITES	PREREQUISITES None General prerequisites ---		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Upon successful completion of the course, students will be able to:			
Knowledge <ul style="list-style-type: none"> Theoretical principles and practical applications of human anatomy Structural and functional relationships of the musculoskeletal and organ systems 			

- Human movement, posture, and physiological function
- Human anatomical terminology and body organization
- Static and dynamic anatomical structures and their functional implications
- Foundational concepts supporting advanced studies in sports science and related fields

Skills

- Analyzing structural and functional relationships within the human body
- Applying anatomical knowledge to explain movement and posture
- Identifying and describing anatomical structures in practical and academic contexts
- Using educational tools and methods such as observation, anatomical models, and imaging
- Conducting anatomical assessment and interpreting anatomical data
- Applying anatomical concepts in real-world and academic settings

Abilities

- Integrating theoretical knowledge with practical application
- Critical thinking in the analysis of anatomical structure and function
- Spatial reasoning related to human anatomy and movement
- Learning, evaluating, and applying anatomical concepts effectively
- Communicating anatomical concepts clearly and accurately

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use
Decision making
Autonomous work
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Equity and Inclusion
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

1. Introduction in Functional Anatomy
2. Cell - Tissues - Organic Systems - Organs
3. Osteology - Ligaments
4. Skeletal system (head - spine - trunk)

5. Skeletal systems (limbs)
6. Myology
7. Muscular system (head - trunk)
8. Muscular system (limbs)
9. Myology - Sport movements
10. Architecture of the body - joints and movements
11. Neural system
12. Cardiovascular system - Respiratory system
13. Gastrointestinal system - Genitourinary system - Endocrine glands - Sensor organs - Skin

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD Face to face, Distance learning, etc.	Face to face										
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students	USE OF ICT <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Communication with students • Use of ICT in Evaluation of students Description eLearning platform for educational material, assignments, communication Email communication with students Use of electronic presentations (slides, videos) Use of ICT in student evaluation and final exams grading assisted by electronic means Use of ICT in communication with students										
TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc. The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="background-color: #e6f2ff;">Activity</th> <th style="background-color: #e6f2ff;">Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>writingProject</td> <td>41</td> </tr> <tr> <td>BibliographyAnalysis</td> <td>70</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	writingProject	41	BibliographyAnalysis	70	Total	150
Activity	Workload/semester										
Lectures	39										
writingProject	41										
BibliographyAnalysis	70										
Total	150										
STUDENT EVALUATION Description of the evaluation process Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others Please indicate all relevant information about the course	Description Evaluation process includes a combination of final examination and project. Assessment Language: English Assessment Methods: • Project (Written Assignment), 20% (Formative/Summative) • Final Examination (Multiple choice), 80% (Summative) All assessment criteria are included in the course description. A detailed rubric for the written assignment is also available through the e-learning platform. Student Evaluation Languages English										

assessment and how students are informed

Student evaluation methods

- MultipleChoice (Summative)
- WrittenAssignment (Formative)

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

- Anatomy, An Essential Textbook (3rd edition). Anne M. Gilroy. Thieme Medical Publishers Inc., 2021, New York.

Additional bibliography for study

- Human Anatomy (8th edition). E. Marieb, P.B. Wilhelm, J. Mallatt. Pearson Education Inc., 2017, San Francisco.

TEACHING SPORT SKILLS

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM02	SEMESTER	1st Semester
COURSE TITLE	TEACHING SPORT SKILLS		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE	Specific Background		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES - General prerequisites Basic computer skills for the use of standard software and online learning platforms		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Upon successful completion of the course, students will be able to:			
Knowledge			
<ul style="list-style-type: none"> • Understand the basic principles of motor learning and skill acquisition in sports. • Describe different methods and approaches to teaching sport skills. • Recognize common errors in skill execution and methods of correction. 			
Skills			

- Design and implement simple teaching sessions for sport skills.
- Apply appropriate teaching methods according to the level and needs of learners.
- Use feedback effectively to improve student performance.

Abilities

- Organize and manage teaching sessions in physical education and sport settings.
- Adapt teaching strategies to different age groups and skill levels.
- Evaluate learners' performance.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Decision making
Autonomous work
Critical thinking
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

- (1) Introduction to sport skill teaching and learning
- (2) Fundamental principles of effective teaching in physical education and sport.
- (3) Instructional planning and organization of sport sessions
- (4) Teacher/coach personality.
- (5) Behavior management and discipline in sport contexts: behavioral approaches.
- (6) Self-regulation approaches to behavior management in sport contexts.
- (7) Teaching methods and styles in physical education and sport
- (8) Teaching Games for Understanding approach (TGfU).
- (9) Basic principles of educational psychology in sport teaching
- (10) Teachers body language and non-verbal communication
- (11) Assessment as learning: Formative evaluation of motor skill progress in developing learners.
- (12) Oral presentations of a written assignment.
- (13) Course review and synthesis

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face</p>
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<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description eLearning platform for educational material, assignments, communication Email communication with students Use of electronic presentations (slides, videos) Use of ICT in student evaluation and final exams grading assisted by electronic means Use of ICT in communication with students</p>										
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1" data-bbox="858 674 1437 981"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>BibliographyAnalysis</td> <td>50</td> </tr> <tr> <td>writingProject</td> <td>61</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	BibliographyAnalysis	50	writingProject	61	Total	150
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Lectures	39										
BibliographyAnalysis	50										
writingProject	61										
Total	150										
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description Evaluation process includes a combination of oral presentation, short answer questions during the semester and written examination. Assessment Language: English Assessment Methods: • Oral presentation 20% (Formative/Concluding). • Quizzes (multiple choice, short answer questions during the semester), 20% (formative/Summative). • Written examination 60% (summative).</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p> <ul style="list-style-type: none"> • Presentation (Formative, Summative) • ComputerExamination (Summative) • EssayDevelopmentQuestions (Summative) 										

5. SUGGESTED BIBLIOGRAPHY

<p>EUDOXUS</p>
<p>-</p>
<p>Additional bibliography for study</p>
<p>Donnelly, F. C., Mueller, S. S., & Gallahue, D. L. (2016). Developmental physical education for all children: Theory into practice. Human Kinetics. Lavay, B. W., French, R. W., & Henderson, H. (2016). Positive behavior management in physical activity settings. Human Kinetics.</p>

Magill, R., & Anderson, D. I. (2017). Motor learning and control. McGraw-Hill Education.
Rink, J. E. (2019). Teaching physical education for learning. McGraw-Hill Education.

SPORT AND SOCIAL SCIENCES

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM03	SEMESTER	1st Semester
COURSE TITLE	SPORT AND SOCIAL SCIENCES		
TEACHING ACTIVITIES If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	6.0	
COURSE TYPE Background, General Knowledge, Scientific Area, Skill Development	General Background		
PREREQUISITES	PREREQUISITES - General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	NO		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Upon successful completion of the course, students will be able to: <ul style="list-style-type: none"> • Understand the role of Sociology of Sports • Perceive the correlation between sports in society • Perceive the involvement in sport and sport participation • Perceive Deviance in Sports • Understand Violence in Sports and who Suffers the Consequences • Understand Gender and Sports and if Equity is Possible • Understand Race and Ethnicity and if they are Important in Sports 			

- Understand the Barriers to Participation and Inclusion
- Perceive the correlation between sports and economy
- Perceive the correlation between sports and media
- Perceive the correlation between sports and politics
- Perceive the correlation between sports and religion

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Practical application of knowledge
Search, analysis and synthesis of data and information, ICT Use
Decision making
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Project design and management
Equity and Inclusion
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking

3. COURSE CONTENT

- (1) Sports And Socialization
- (2) Organized Youth Sports
- (3) Deviance in Sports
- (4) Violence in Sports
- (5) Gender and Sports
- (6) Race and Ethnicity
- (7) Age and Ability: Barriers to
- (8) Participation and Inclusion
- (9) Sports and the Economy
- (10) Sports and the Media
- (11) Sports and Politics
- (12) Sports and Religions
- (13) Sports in the Future: What Do We Want Them to Be

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face</p>						
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description eLearning platform for educational material, assignments, communication Email communication with students Use of electronic presentations (slides, videos) Use of ICT in student assessment and final exams grading assisted by electronic means Use of ICT in communication with students</p>						
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1" data-bbox="858 840 1437 1041"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Examinations</td> <td>150</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Examinations	150	Total	150
Activity	Workload/semester						
Examinations	150						
Total	150						
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description Evaluation process includes a combination of final examination, and project.</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p>						

5. SUGGESTED BIBLIOGRAPHY

<p>EUDOXUS</p>
<p>-Sports in Society: Issues and Controversies By Jay Coakley / Mc Graw Hill / 2020 https://www.mheducation.com/highered/product/sports-society-issues-controversies-coakley/M9781260240665.html</p>
<p>Additional bibliography for study</p>
<p>1. Routledge Handbook of the Sociology of sports / Taylor & Francis / 2017 https://www.taylorfrancis.com/books/edit/10.4324/9780203404065/routledge-handbook-sociology-sport-richard-giulianotti?</p>

context=ubx&refId=f0a21a52-917f-4812-b1d2-87cce9b6814f

2. Sociology of sports, 12th edition / Oxford / 2022

<https://global.oup.com/academic/product/sociology-of-sport-9780197622711?q=9780197622711&cc=gr&lang=en#>

3. Physical Education, Sport and Schooling: Studies in the sociology of physical education, 1st ed / Routledge / 2017 [https://www.taylorfrancis.com/books/edit/10.4324/9781315410890/physical-education-sport-schooling-john-evans?](https://www.taylorfrancis.com/books/edit/10.4324/9781315410890/physical-education-sport-schooling-john-evans?context=ubx&refId=ce203582-897f-427e-9c8c-915c48b71ed9)

context=ubx&refId=ce203582-897f-427e-9c8c-915c48b71ed9

4. Sport Sociology: 10 questions / 2018 / Kendal-Hunt

<https://he.kendallhunt.com/product/sport-sociology-10-questions>

5. The sociology of sports: An introduction / McFarland and co / 2021

<https://mcfarlandbooks.com/product/the-sociology-of-sports-3/>

6. Sociology in sports. A global subdiscipline in Review / Emerald Group / 2016

<https://books.emeraldinsight.com/book/detail/sociology-of-sport/?k=9781786350503>

CRITICAL PEDAGOGIES

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM04	SEMESTER	1st Semester
COURSE TITLE	CRITICAL PEDAGOGIES		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSE TYPE	General Background		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES - General prerequisites Basic computer skills for the use of standard software and online learning platforms		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	NO		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Upon successful completion of the course, students will be able to: Knowledge <ul style="list-style-type: none"> • Explain the fundamental principles of critical pedagogy, including Freirean concepts such as problem-posing education, conscientization, and dialogical method. • Describe how power dynamics and socio-cultural factors shape teaching, coaching, and learning processes in sport, exercise, and physical activity contexts. • Identify systemic inequities related to race, gender, class, disability, and other forms of social difference, and explain how these inequities influence participation and performance in sport. 			

- Demonstrate understanding of ethical frameworks relevant to coaching, high-performance sport, fair play, sportsmanship, and moral development.
- Recognize the role of digital media, technologies, and environmental issues as critical sites of pedagogy within sport and physical activity.

Skills

- Critically analyze coaching practices, educational settings, and sport environments, assessing how they reproduce or challenge power relations and social inequalities.
- Apply principles of critical pedagogy to design inclusive and empowering coaching or teaching strategies for diverse populations, including individuals with disabilities.
- Evaluate ethical dilemmas and moral issues in sport, using critical thinking to propose responsible and equitable solutions.
- Assess the pedagogical impact of media, technology, and performance culture, identifying risks, biases, and opportunities for athlete empowerment.
- Engage in reflective practice, integrating theory and experience to enhance ethical and socially just decision-making in sport contexts.

Abilities

- Design, implement, and justify a critical pedagogical intervention (e.g., coaching session, instructional plan, health-promotion activity) grounded in principles of empowerment, inclusivity, and ethical practice.
- Communicate complex socio-pedagogical issues clearly and professionally, both orally and in written form, within academic and applied sport settings.
- Collaborate effectively in groups, providing constructive peer feedback and integrating the perspectives of others into shared pedagogical projects.
- Demonstrate a heightened awareness of their own assumptions, biases, and power as future professionals in sport and exercise science.
- Integrate critical pedagogical thinking into professional practice, contributing to more equitable, reflective, and socially responsible sport environments.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use
Decision making
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Equity and Inclusion
Demonstration of social, professional and moral responsibility and sensitivity to gender issues

Critical thinking
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

- (1) Introduction: What Is (Critical) Pedagogy?
- (2) Foundations: Freirean Theory in Sport and Exercise Contexts
- (3) (Critical) Pedagogies in Coaching
- (4) Social Inequities in Sport and Health
- (5) Disability and Sport/Physical Activity from a Pedagogical Perspective
- (6) Critical Pedagogies of High Performance
- (7) “Fair Play” and “Sportspersonship” as Key Concepts in Sport
- (8) Morality, Olympic Moral Values, and Principles in Physical Activity and Sport
- (9) Prosocial vs. Aggressive Behavior in Sport Settings
- (10) Technology, Media, and Critical Digital Pedagogy
- (11) Environmental and Ecopedagogies in Sport
- (12) Designing Critical Pedagogical Interventions
- (13) Final Presentations and Course Synthesis

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face</p>												
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description</p> <p>eLearning platform for educational material, assignments, communication.</p> <p>Email communication with students.</p> <p>Use of electronic presentations (slides, videos).</p> <p>Use of ICT in student evaluation and final exams grading assisted by electronic means.</p> <p>Use of ICT in communication with students.</p>												
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>40</td> </tr> <tr> <td>Other</td> <td>20</td> </tr> <tr> <td>StudyCreation</td> <td>28</td> </tr> <tr> <td>BibliographyAnalysis</td> <td>62</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	40	Other	20	StudyCreation	28	BibliographyAnalysis	62	Total	150
Activity	Workload/semester												
Lectures	40												
Other	20												
StudyCreation	28												
BibliographyAnalysis	62												
Total	150												

STUDENT EVALUATION

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

Description

Evaluation process includes a combination of quizzes, written assignment, interactive teaching, and final examination. Assessment Language: English Assessment Methods: • Quizzes (Multiple choice, short answer, problem solving), 20% (Formative/Summative) • Project (written assignment and interactive teaching- presentation in audience), 30% (Formative, Summative) • Final Examination (Multiple choice, short answer, problem solving), 50% (Summative)

Student Evaluation Languages

English

Student evaluation methods

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

- Giroux, H. A. (2020). On Critical Pedagogy (2nd edn). Bloomsbury Publishing
- Stirrup, J. & Hooper O. (Eds.) (2022). Critical Pedagogy in Physical Education, Physical Education and Health. London & New York: Routledge

Additional bibliography for study

- Jarvie, G. (2013). Sport, Culture and Society: An Introduction. Oxfordshire, UK: Routledge
- Shields, D.L. & Bredemeier, B. (2014). Promoting morality and character development. In: A. Papaioannou & D. Hackfort (Eds.). Companion to Sport and Exercise Psychology (pp. 636-649). London & New York: Routledge.

SPORT BUSINESS

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM05	SEMESTER	1st Semester
COURSE TITLE	SPORT BUSINESS		
TEACHING ACTIVITIES If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	TEACHING HOURS PER WEEK		ECTS CREDITS
	3		6.0
COURSE TYPE Background, General Knowledge, Scientific Area, Skill Development	General Background		
PREREQUISITES	PREREQUISITES none General prerequisites none		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Knowledge: Understand the international sport industry Evaluate the trends in the sport industry Understand the characteristics of the sport market Analyze the sport business environment Synthesize the elements of business management Conduct strategic analysis			

Skills:

Critical skills: evaluate sport management cases
 Cooperation skills: contact group assignments
 Creativity skills: propose business strategies
 Leadership skills: take responsible decisions

Abilities

Handling criticism
 Synthesize
 Research
 Event planning
 Market research
 Problem solving
 Teamwork

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
 ICT Use, Adaptation to new situations,
 Decision making,
 Autonomous work,
 Teamwork,
 Working in an international environment,
 Working in an interdisciplinary environment, Production of
 new research ideas

Project design and management
 Equity and Inclusion
 Respect for the natural environment
 Sustainability
 Demonstration of social, professional and moral responsibility
 and sensitivity to gender issues
 Critical thinking
 Promoting free, creative and inductive reasoning

Practical application of knowledge
 Search, analysis and synthesis of data and information, ICT Use
 Adaptation to new situations
 Decision making
 Autonomous work
 Teamwork
 Working in an international environment
 Working in an interdisciplinary environment
 Production of new research ideas
 Project design and management
 Equity and Inclusion
 Respect for the natural environment
 Demonstration of social, professional and moral responsibility and sensitivity to gender issues
 Critical thinking
 Promoting free, creative and inductive reasoning

3. COURSE CONTENT

1. Intro to the sport business market
2. The unique characteristics of the sport business
3. The Sport Product
4. The external business environment

5. Strategic Analysis (PESTEL)
6. Porter's five Forces
7. SWOT analysis
8. The internal business environment
9. Managing Sport Service Quality
10. Financing Sport
11. Trends in the Sport Business Environment
12. Presentations

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face</p>														
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description Basic computer skills for the use of standard software and online learning platforms</p>														
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1" data-bbox="858 1025 1437 1442"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>BibliographyAnalysis</td> <td>30</td> </tr> <tr> <td>Seminars</td> <td>11</td> </tr> <tr> <td>writingProject</td> <td>50</td> </tr> <tr> <td>StudyCreation</td> <td>20</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	BibliographyAnalysis	30	Seminars	11	writingProject	50	StudyCreation	20	Total	150
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Total	150														
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description Evaluation process includes a combination of Final exams: 40% (Essay Development) All assessment criteria are included in the course description. Feedback on correct answers is provided for every quiz question. A detailed rubric for the written assignment is also available through the e-learning platform. Group Assignment: 40% Quiz: 20% (multiple choices) Assessment Language: English</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p> <ul style="list-style-type: none"> • MultipleChoice (Formative, Summative) 														

STUDENT EVALUATION

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

- WrittenAssignment (Formative, Summative)
- EssayReport (Formative, Summative)

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

-

Additional bibliography for study

-Russell Hoye, Katie Misener, Michael L. Naraine, Catherine Ordway (2022) Sport Management: Principles and Applications. Routledge

-Lussier, R. N., & Kimball, D. C. (2023). Applied sport management skills. Human Kinetics. • Sport Management Review
<http://www.journals.elsevier.com/sport-management-review/>

- European Sport Management Quarterly
<http://www.tandfonline.com>
- Journal of Sport Management
<http://journals.humankinetics.com/jsm>
- International Journal of Sport Marketing and Sponsorship
<http://www.imrpublications.com/journal-landing.aspx?volno=L&no=L>
- Sport Business and Management: An international journal
<http://www.emeraldinsight.com/journal/sbm>

Professional journal
 Sport Business Journal
 • <http://www.sportsbusinessdaily.com/Journal.aspx>

- Academic Associations
- Sport Marketing Association, <http://www.sportmarketingassociation.com/>
 - European Association for Sport Management <http://www.easm.net/>
 - North American Society for Sport Management <https://www.nassm.com/>

2nd Semester

HUMAN PHYSIOLOGY

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM06	SEMESTER	2nd Semester
COURSE TITLE	HUMAN PHYSIOLOGY		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE Background, General Knowledge, Scientific Area, Skill Development	General Background		
PREREQUISITES	PREREQUISITES None General prerequisites ---		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Upon successful completion of the course, students will be able to:			
Knowledge <ul style="list-style-type: none"> Theoretical principles and practical applications of human physiology Physiological processes and interactions within and between body systems 			

- Mechanisms of homeostasis, adaptation, and responses to internal and external stimuli
- Functions of major organ systems in health and disease
- Foundational physiological concepts supporting advanced studies in sports science and related fields

Skills

- Analyzing physiological processes and system interactions
- Observing, measuring, and interpreting physiological data using practical and experimental tools
- Applying educational and experimental methods in physiological study
- Conducting physiological assessments and interpreting results
- Evaluating and explaining physiological mechanisms in health and disease contexts

Abilities

- Integrating theoretical knowledge with practical and experimental applications
- Critical thinking in the analysis of physiological function
- Problem-solving related to physiological mechanisms and responses
- Effective communication of physiological concepts in oral and written forms

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use
Decision making
Autonomous work
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Equity and Inclusion
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

1. Introduction in Human Physiology - Basic Principles of Physiology - Cell and Cellular Functions
2. Muscular System
3. Cardiovascular System
4. Respiratory System
5. Cardiorespiratory Function
6. Central and Peripheral Nervous System

7. Autonomic Nervous System
8. Endocrine System
9. Hematopoietic System
10. Metabolism
11. Thermoregulation
12. Laboratory Physiology
13. Conclusions

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD Face to face, Distance learning, etc.	Face to face										
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description</p> <p>eLearning platform for educational material, assignments, communication</p> <p>Email communication with students</p> <p>Use of electronic presentations (slides, videos)</p> <p>Use of ICT in student evaluation and final exams grading assisted by electronic means</p> <p>Use of ICT in communication with students</p>										
TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc. The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr style="background-color: #e1f5fe;"> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>writingProject</td> <td>41</td> </tr> <tr> <td>BibliographyAnalysis</td> <td>70</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	writingProject	41	BibliographyAnalysis	70	Total	150
Activity	Workload/semester										
Lectures	39										
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STUDENT EVALUATION Description of the evaluation process Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others Please indicate all relevant information about the course assessment and how students are informed	<p>Description</p> <p>Evaluation process includes a combination of final examination and project. Assessment Language: English Assessment Methods: • Project (Written Assignment), 20% (Formative/Summative) • Final Examination (Multiple choice), 80% (Summative) All assessment criteria are included in the course description. A detailed rubric for the written assignment is also available through the e-learning platform.</p> <p>Student Evaluation Languages</p> <p>English</p> <p>Student evaluation methods</p>										

STUDENT EVALUATION

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

- MultipleChoice (Summative)
- WrittenAssignment (Formative)

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

- Human Physiology. Fundamentals. Carrie E. Mahoney, Edi. Ermes, 2023, Milan.

Additional bibliography for study

- Physiology. 7th Edition. Linda Costanzo. Elsevier, 2022, Philadelphia.

BIOMECHANICS

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM07	SEMESTER	2nd Semester
COURSE TITLE	BIOMECHANICS		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE	General Background		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES		
	- General prerequisites		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes	Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.		
<p>Upon successful completion of the course, students will be able to:</p> <ul style="list-style-type: none"> • Understand and analyze biomechanics as it relates to sport movement • Conduct biomechanical analysis of sport techniques and movements • Apply biomechanical principles to improve sport performance and reduce the risk of injury • Evaluate complex sport movements from a biomechanical perspective 			

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Decision making
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Equity and Inclusion
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

LECTURES

- (1) Introduction to Biomechanics
- (2) Linear Kinematics
- (3) Angular Kinematics
- (4) Newton's Laws
- (5) Work, Energy, Power
- (6) Linear Kinetics
- (7) Angular Kinetics and Moments/Torques
- (8) Projectile motion
- (9) Biomechanics of Running
- (10) Biomechanics of Jumping
- (11) Biomechanics of throwing
- (12) Biomechanics of aquatic Movements
- (13) Review and Student Biomechanical Analysis Projects

LABORATORIES

- (1) Week 1 & 2 (Lab 1): Anthropometry, 2D Video Analysis, and Linear Kinematics
- (2) Week 3 & 4 (Lab 2): Force Plates: Linear Kinetics and Impulse
- (3) Week 5 & 6 (Lab 3): Force Moments, Torques, and Balance
- (4) Week 7 & 8 (Lab 4): Projectile motion & Throwing Mechanics
- (5) Week 9 & 10 (Lab 5): Biomechanics of Running: Spatiotemporal and IMU analysis
- (6) Week 11 & 12 (Lab 6): Aquatic Biomechanics: Kinematic data analysis
- (7) Week 13 (Lab 7): Biomechanical Analysis Project

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face</p>												
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description e-Learning platform for educational material, assignments, communication Email communication with students Use of electronic presentations (slides, videos) Use of ICT in student assessment and final exams grading assisted by electronic means Use of ICT in communication with students</p>												
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5. SUGGESTED BIBLIOGRAPHY

<p>EUDOXUS</p> <p>Nick Stergiou (2020) Biomechanics and Gait Analysis (Elsevier) McGinnis, P. (2020) Biomechanics of Sport and Exercise. (Human Kinetics). Bartlett, R. (2007). Introduction to Sports Biomechanics: Analysing Human Movement Patterns (Routledge). Hay, J. G. (1993). The Biomechanics of Sports Techniques (Prentice Hall).</p>
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Additional bibliography for study

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EXERCISE BIOCHEMISTRY

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM08	SEMESTER	2nd Semester
COURSE TITLE	EXERCISE BIOCHEMISTRY		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE	Specific Background		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES - General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Upon successful completion of the course, students will be able to: Knowledge <ul style="list-style-type: none"> • Describe basic concepts of chemistry and biochemistry. • List the main biological substances in the human body. • Describe the biochemical processes in the nervous system that lead to muscle contraction. • Describe the biochemical processes in the muscular system that lead to muscle contraction. • Describe the biochemical processes of energy production from available sources during exercise. • Distinguish the roles of different energy sources in exercise metabolism. 			

- List biomarkers used in the biochemical assessment of exercisers.

Skills

- Explain how biochemical changes during exercise influence human metabolism.
- Justify the choice of energy sources based on the specific demands of different types of exercise.
- Choose appropriate biomarkers for the biochemical assessment of exercisers.

Abilities

- Apply theoretical concepts of biochemistry and metabolism to interpret exercise responses.
- Evaluate the principles of exercise metabolism in various training and performance contexts.
- Defend evidence-based scientific knowledge against misconceptions in exercise metabolism

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use
Decision making
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Equity and Inclusion
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

- (1) Chemistry and biochemistry basics
- (2) Principles of metabolism
- (3) Classes of biological substances and their role
- (4) Biochemical processes of neural control of movement
- (5) Biochemical processes of muscle activity
- (6) Principles of exercise metabolism
- (7) Compounds of high phosphoryl-transfer potential
- (8) Carbohydrate metabolism in exercise
- (9) Lipid metabolism in exercise
- (10) Protein metabolism in exercise
- (11) Exercise and gene expression
- (12) Integration of exercise metabolism
- (13) Basics of biochemical assessment of exercisers

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face</p>														
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description eLearning platform for educational material and assignments Communication with students via Email and the forum of the eLearning platform Use of electronic presentations (slides, videos) Use of ICT in student assessment and final exams grading assisted by electronic means</p>														
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<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description Evaluation process includes a combination of final examination, quizzes, and project. Assessment Language: English Assessment Methods: • Quizzes (Multiple choice, short answer, problem solving), 20% (Formative/Summative) • Project (Written Assignment), 30% (Formative/Summative) • Final Examination (Multiple choice, short answer, problem solving), 50% (Summative) All assessment criteria are included in the course description. Feedback on correct answers is provided for every quiz question. A detailed rubric for the written assignment is also available through the eLearning platform.</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p> <ul style="list-style-type: none"> • MultipleChoice (Formative, Summative) • WrittenAssignment (Formative, Summative) • ComputerExamination (Summative) 														

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

- Exercise Biochemistry, 2nd ed., 2020, Vassilis Mougios, Human Kinetics
- Biochemistry for Sport and Exercise Metabolism, 2nd ed., 2024, Donald MacLaren, James Morton, Wiley

Additional bibliography for study

Recent positions, as reflected in position statements and in reviews by scientific societies.

MOTOR CONTROL AND MOTOR LEARNING

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM09	SEMESTER	2nd Semester
COURSE TITLE	MOTOR CONTROL AND MOTOR LEARNING		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE	Specific Background		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES - General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes	Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.		
	-		

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Practical application of knowledge
Search, analysis and synthesis of data and information, ICT Use
Adaptation to new situations
Decision making
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Project design and management
Equity and Inclusion
Respect for the natural environment
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

-

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD

Face to face, Distance learning, etc.

Face to face

USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT)

Use of ICT in Teaching, in Laboratory Education, in
Communication with students

USE OF ICT

- Use of ICT in Teaching
- Use of ICT in Laboratory Education
- Use of ICT in Communication with students
- Use of ICT in Evaluation of students

Description

-

<p>TEACHING ORGANIZATION</p> <p>The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1"> <thead> <tr> <th style="background-color: #e0f2f1;">Activity</th> <th style="background-color: #e0f2f1;">Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>150</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	150	Total	150
Activity	Workload/semester						
Lectures	150						
Total	150						
<p>STUDENT EVALUATION</p> <p>Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description</p> <p>-</p> <p>Student Evaluation Languages</p> <p>English</p> <p>Student evaluation methods</p> <ul style="list-style-type: none"> • ShortAnswerQuestions (Formative) • WrittenAssignment (Formative) • MultipleChoice (Formative) 						

5. SUGGESTED BIBLIOGRAPHY
EUDOXUS
-
Additional bibliography for study
-

RESEARCH METHODS AND STATISTICS

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM10	SEMESTER	2nd Semester
COURSE TITLE	RESEARCH METHODS AND STATISTICS		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSE TYPE	Specific Background		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES None General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	NO		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Upon successful completion of the course, students will be able to:			
Knowledge <ul style="list-style-type: none"> • Deepen the knowledge of organizing and conducting scientific research in the field of Sport Science and Physical Education • Learn to plan a project • Learn to review literature • Understand the distinction between qualitative and quantitative studies • Know the issues of sampling 			

- Know the issues of the statistical procedures that will be applied

Skills

- Critically evaluate the literature
- Formulate the purpose and research questions
- Write a scientific paper
- Write a dissertation

Abilities

- Conduct short-term research on the topics of the course
- Evaluate data
- Write a short report

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Equity and Inclusion
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

- (1) Introduction to research methods. Identification of research problem
- (2) Literature review – Databases and bibliography search websites
- (3) The importance of method design. Sampling – Representativeness
- (4) Distinguishing variables - Scales - Questionnaires. Examples of research from physical education and sport science
- (5) Relationships between variables. Examples of research designs
- (6) Differences between groups. Examples of research
- (7) Regression analysis. Examples of research
- (8) Multivariate techniques I (factor analysis, multiple analysis of variance). Examples of research
- (9) Multivariate techniques II (repeated measures, factor analysis, etc.) Examples of research
- (10) Non-parametric techniques. Examples of research

- (11) Qualitative research. Research Examples
- (12) Writing a Research Proposal and Dissertation
- (13) Review-Presentation of Papers

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	Face to face												
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description eLearning platform for educational material, assignments, communication Email communication with students Use of electronic presentations (slides, videos) Use of ICT in student evaluation and final exams grading assisted by electronic means Use of ICT in communication with students</p>												
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1" data-bbox="858 965 1437 1328"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>BibliographyAnalysis</td> <td>30</td> </tr> <tr> <td>writingProject</td> <td>30</td> </tr> <tr> <td>StudyCreation</td> <td>51</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	BibliographyAnalysis	30	writingProject	30	StudyCreation	51	Total	150
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STUDENT EVALUATION

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

- PublicPresentation (Formative, Summative)

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

- Jones, I. (2022). Research Methods for Sports Studies (4th ed.). Routledge. <https://doi.org/10.4324/9781003195467>
- Creswell, J.W. (2002). Educational research; planning, conducting, and evaluating quantitative and qualitative research. New Jersey: Pearson Education Inc.
- Thomas, J. R., Martin, P., Etnier, J. L., & Silverman, S. J. (2023). Research methods in physical activity. Human kinetics.

Additional bibliography for study

-

3rd Semester

SPORT TRAINING PRINCIPLES & METHODOLOGY OF TRAINING

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM11	SEMESTER	3rd Semester
COURSE TITLE	SPORT TRAINING PRINCIPLES & METHODOLOGY OF TRAINING		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.			
	3	6.0	
COURSE TYPE	General Background		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES		
	- General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		

2. LEARNING OUTCOMES

Learning Outcomes
Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.

- Upon successful completion of the course, students will be able to:
- Knowledge
- Understand and describe the fundamental biological, physiological, and pedagogical principles of sport training.
 - Explain the mechanisms of training load, adaptation, fatigue, and recovery in the training process.
 - Identify contemporary methodological models of sport training, including periodization and block training approaches.

- Recognize the performance determinants and demands of different sports disciplines.
- Skills**
- Design structured training plans at the microcycle, mesocycle, and macrocycle levels.
 - Apply the principles of specificity, overload, progression, variation, and individualization in training program development.
 - Select and implement appropriate training methods for strength, endurance, speed, flexibility, and motor abilities.
 - Use monitoring tools and strategies to manage training load and assess athlete readiness.
 - Translate sport-specific performance demands into measurable training objectives.
- Abilities**
- Critically evaluate scientific literature related to coaching and sport training methodology.
 - Integrate theoretical knowledge with practical coaching applications.
 - Make evidence-based decisions in training design and modification.
 - Adapt training programs to individual athlete characteristics and contextual demands.

General Skills

Name the desirable general skills upon successful completion of the module

<p>Search, analysis and synthesis of data and information, ICT Use, Adaptation to new situations, Decision making, Autonomous work, Teamwork, Working in an international environment, Working in an interdisciplinary environment, Production of new research ideas</p>	<p>Project design and management Equity and Inclusion Respect for the natural environment Sustainability Demonstration of social, professional and moral responsibility and sensitivity to gender issues Critical thinking Promoting free, creative and inductive reasoning</p>
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- Search, analysis and synthesis of data and information, ICT Use
- Adaptation to new situations
- Decision making
- Autonomous work
- Teamwork
- Working in an international environment
- Working in an interdisciplinary environment
- Production of new research ideas
- Project design and management
- Equity and Inclusion
- Demonstration of social, professional and moral responsibility and sensitivity to gender issues
- Critical thinking
- Promoting free, creative and inductive reasoning

3. COURSE CONTENT

1. Introduction to Sport Training: Definitions, historical development, scientific foundations of training.
2. Biological Principles of Training: Adaptation, homeostasis, supercompensation, fatigue mechanisms.
3. Training Load & Adaptation: Internal and external load, load components, acute and chronic load.
4. Fundamental Principles of Training: Specificity, overload, progression, individualization, variation, reversibility.
5. Motor Abilities & Performance Factors: Strength, power, endurance, speed, agility, flexibility, coordination.
6. Methods of Strength Training: Maximal strength, hypertrophy, strength endurance, explosive strength methods.
7. Methods of Endurance Training: Continuous training, interval training, HIIT, race-pace training.
8. Methods of Speed & Agility Training: Technique development, neuromuscular methods, sprint training.

9. Flexibility Training Methods: Static, dynamic, PNF.
10. Periodization & Long-Term Planning: Linear, undulating, block models, annual and multi-year plans.
11. Microcycles & Mesocycles: Weekly training structure, session design, sequencing.
12. Monitoring Training Load & Athlete Readiness: Wellness monitoring, HRV, RPE, training logs, performance indicators.
13. Applied Training Plan Development: Case studies, athlete profiling, presentation of annual plans.

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD Face to face, Distance learning, etc.	Face to face																
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students	USE OF ICT <ul style="list-style-type: none"> Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students Use of ICT in Evaluation of students Description eLearning platform for educational material, assignments, communication Email communication with students Use of electronic presentations (slides, videos) Use of ICT in student evaluation and final exams grading assisted by electronic means Use of ICT in communication with students																
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STUDENT EVALUATION

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

- ComputerExamination (Formative)
- WrittenAssignment (Formative)
- Proodos (Formative)
- ContinuousEvaluation (Formative)

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

Bompa, T., & Buzzichelli, C. (2022). Periodization training for sports. Champaign, IL: Human Kinetics
 Faigenbaum, A., Lloyd, R., Oliver, J. (2020). Essentials of Young Fitness. Champaign, IL: Human Kinetics
 Haff, G. & Triplett, T. (2016). Essentials of Strength Training and Conditioning. Champaign, IL: Human Kinetics
 Haff, G. (2025). Scientific Foundations and Practical Applications of Periodization. Champaign IL: Human Kinetics
 Joyce, D. & Lewindon, D. (2022). High-performance training for sports. Champaign, IL: Human Kinetics
 Schoenfeld, B. & Snarr, R. (2022). NSCA's Essentials of Personal Training. Champaign, IL: Human Kinetics

Additional bibliography for study

-

STRENGTH AND CONDITIONING

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM12	SEMESTER	3rd Semester
COURSE TITLE	STRENGTH AND CONDITIONING		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE	Specific Background		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES - General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Upon successful completion of the course, students will be able to:			
Knowledge <ul style="list-style-type: none"> Describe the physiological and biomechanical principles underlying strength and power development. Explain the effects of key training variables (intensity, volume, frequency, and rest intervals) on neuromuscular adaptations. Identify different periodization models, including linear, undulating, and block approaches. Understand the principles of training load, fatigue, and recovery in strength and conditioning contexts. 			
Skills <ul style="list-style-type: none"> Perform and coach fundamental resistance training exercises (e.g., squat, deadlift, bench press, Olympic lifting progressions) 			

according to established technical standards.

- Design safe and effective strength and conditioning programs for beginners, athletes, and special populations.
- Conduct and interpret performance assessments of strength, power, speed, agility, and muscular endurance.
- Manipulate training variables to achieve specific performance adaptations.
- Apply periodization principles in program planning.

Abilities

- Monitor and evaluate internal and external training load, fatigue, and recovery indicators.
- Critically evaluate scientific literature related to strength and conditioning practice.
- Integrate scientific evidence with practical coaching decision-making.
- Adapt training programs to individual athlete needs and contextual demands.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use
Adaptation to new situations
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Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Project design and management
Equity and Inclusion
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

1. Introduction to Strength & Conditioning: Definitions, professional role, evidence-based practice.
2. Muscle Physiology & Neuromuscular Adaptations: Motor units, force production, hypertrophy mechanisms.
3. Biomechanics of Resistance Training: Movement patterns (squat, hinge, press, pull, lunge), kinetic and kinematic concepts.
4. Training Variables: Intensity, volume, frequency, tempo, rest intervals, exercise selection.
5. Maximal Strength Training: Assessment (1RM, isometric testing), advanced methods, velocity-based training.
6. Power Training & Olympic Lifting Progressions: Power clean and snatch progressions, plyometrics, stretch-shortening cycle.
7. Plyometrics & Explosive Strength Development: Jump profiling, depth jumps, force-velocity relationships.
8. Core Stability & Trunk Training: Anti-movement patterns and transfer to sport.
9. Assessment of Strength and Power: CMJ, IMTP, sprint testing, agility testing.

10. Muscular Endurance & Conditioning Methods: Interval training, HIIT, metabolic conditioning, repeated sprint ability.
11. Periodization Models: Linear, undulating, block, microdosing, contemporary approaches.
12. Training for Special Populations: Youth, female athletes, older adults, injury considerations.
13. Student Project Presentations & Course Review

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face</p>																
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description eLearning platform for educational material, assignments, communication Email communication with students Use of electronic presentations (slides, videos) Use of ICT in student evaluation and final exams grading assisted by electronic means Use of ICT in communication with students</p>																
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STUDENT EVALUATION

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

Student evaluation methods

- ComputerExamination (Formative, Summative)
- WrittenAssignment (Formative, Summative)
- ContinuousEvaluation (Formative, Summative)

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

Bompa, T., & Buzzichelli, C. (2022). Periodization training for sports. Champaign, IL: Human Kinetics
 Haff, G. & Triplett, T. (2016). Essentials of Strength Training and Conditioning. Champaign, IL: Human Kinetics
 Schoenfeld, B. & Snarr, R. (2022). NSCA's Essentials of Personal Training. Champaign, IL: Human Kinetics
 Schoenfeld, B. (2021). Science and development of muscle hypertrophy. Champaign, IL: Human Kinetics

Additional bibliography for study

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EXERCISE PHYSIOLOGY

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM13	SEMESTER	3rd Semester
COURSE TITLE	EXERCISE PHYSIOLOGY		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE	Specific Background		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES		
	- General prerequisites		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes	Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.		
	-		

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Practical application of knowledge
Search, analysis and synthesis of data and information, ICT Use
Autonomous work
Working in an interdisciplinary environment
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

-

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face</p>												
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description -</p>												
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1" data-bbox="858 1473 1437 1832"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>Bibliography Analysis</td> <td>61</td> </tr> <tr> <td>Laboratory</td> <td>20</td> </tr> <tr> <td>Other</td> <td>30</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	Bibliography Analysis	61	Laboratory	20	Other	30	Total	150
Activity	Workload/semester												
Lectures	39												
Bibliography Analysis	61												
Laboratory	20												
Other	30												
Total	150												

<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description</p> <p>-</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p>
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5. SUGGESTED BIBLIOGRAPHY

<p>EUDOXUS</p> <p>-</p>
<p>Additional bibliography for study</p> <p>-</p>

SPORT MARKETING

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM14	SEMESTER	3rd Semester
COURSE TITLE	SPORT MARKETING		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSE TYPE	Specific Background		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES		
	- General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	NO		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes	Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.		
	-		

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Practical application of knowledge
Search, analysis and synthesis of data and information, ICT Use
Decision making
Teamwork
Equity and Inclusion
Critical thinking

3. COURSE CONTENT

-

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	Face to face													
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description -</p>													
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1" data-bbox="858 1503 1437 1863"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>Bibliography Analysis</td> <td>52</td> </tr> <tr> <td>Study Creation</td> <td>44</td> </tr> <tr> <td>writing Project</td> <td>15</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>		Activity	Workload/semester	Lectures	39	Bibliography Analysis	52	Study Creation	44	writing Project	15	Total	150
Activity	Workload/semester													
Lectures	39													
Bibliography Analysis	52													
Study Creation	44													
writing Project	15													
Total	150													

<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description</p> <p>-</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p>
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5. SUGGESTED BIBLIOGRAPHY

<p>EUDOXUS</p>
<p>-</p>
<p>Additional bibliography for study</p>
<p>-</p>

1. GENERAL

FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM15	SEMESTER	3rd Semester
COURSE TITLE	FIRST AID IN SPORT AND EXERCISE		
TEACHING ACTIVITIES If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	TEACHING HOURS PER WEEK		ECTS CREDITS
	3		6.0
COURSE TYPE Background, General Knowledge, Scientific Area, Skill Development	Specific Background		
PREREQUISITES	PREREQUISITES None General prerequisites None		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	NO		
COURSE URL	-		

2. LEARNING OUTCOMES

Learning Outcomes

Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.

Upon successful completion of the course, students will be able to:

Knowledge

- Understand the pathophysiological mechanisms underlying acute medical conditions occurring during physical exercise.
- Recognize common exercise-related medical emergencies, including cardiovascular, respiratory, metabolic, neurological, and thermoregulatory conditions.
- Understand the acute effects of exercise on the cardiovascular, respiratory, and metabolic systems in healthy individuals and those with underlying disease.

- Identify signs and symptoms of exercise-induced or exercise-exacerbated conditions such as syncope, arrhythmias, asthma, hypoglycemia, heat illness, and sudden cardiac events.
- Understand risk stratification, contraindications to exercise, and warning signs requiring exercise termination.
- Understand legal, ethical, and professional responsibilities in managing medical emergencies during sport and exercise, including scope of practice and referral pathways.
- Understand current evidence-based guidelines for emergency response, including basic life support (BLS) and AED use in exercise settings.

Skills

- Conduct rapid on-site assessment of individuals experiencing medical symptoms during exercise using structured primary and secondary assessment approaches.
- Monitor and interpret basic clinical signs during exercise (e.g., heart rate, breathing patterns, level of consciousness, perceived exertion).
- Provide immediate first aid management for acute medical conditions such as cardiovascular collapse, respiratory distress, hypoglycemia, heat-related illness, and exercise-induced syncope.
- Perform basic life support procedures, including CPR and AED use, according to current international guidelines.
- Safely modify, interrupt, or terminate exercise in response to emerging pathological signs or symptoms.
- Communicate effectively with the affected individual, bystanders, emergency medical services, and healthcare professionals.

Abilities

- Identify early warning signs of pathological responses to exercise and intervene promptly to prevent deterioration.
- Make informed decisions under pressure regarding continuation or cessation of exercise based on clinical presentation.
- Apply first aid principles appropriately to individuals with known chronic conditions (e.g., cardiovascular disease, diabetes, respiratory disorders).
- Operate effectively within multidisciplinary sport, fitness, and clinical exercise environments.
- Promote safe participation in exercise through medical awareness, preparedness, and emergency action planning.
- Demonstrate professional judgment, ethical conduct, and adherence to safety and emergency protocols in exercise-related medical situations.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use
Adaptation to new situations
Decision making
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment

Production of new research ideas
 Equity and Inclusion
 Respect for the natural environment
 Demonstration of social, professional and moral responsibility and sensitivity to gender issues
 Critical thinking
 Promoting free, creative and inductive reasoning

3. COURSE CONTENT

1. Introduction to First Aid in Sport: Scope, responsibilities, legal & ethical issues
2. Common disorders during exercise and symptoms: estimation and handling
3. Basic Life Support (BLS), CPR & AED use in sport environments
4. Respiratory emergencies: asthma, choking, airway management
5. Circulatory emergencies: shock, hypertension/hypotension, cardiac events in athletes
6. Bleeding control, wound care & soft-tissue trauma first aid
7. Fractures, dislocations & spinal injuries: immobilization and safe handling
8. Head injuries & concussion recognition: sideline assessment
9. Heat illness, hypothermia, dehydration & environmental stress
10. Exercise & metabolic emergencies (diabetes mellitus, hypoglycemia, hyponatremia)
11. Field-side management of collapse, seizures, sudden illness
12. Emergency equipment & first aid kits: preparation for training/competition
13. Scenario-based simulations, case studies & skill assessment

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD Face to face, Distance learning, etc.	Face to face								
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students	USE OF ICT <ul style="list-style-type: none"> Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students Use of ICT in Evaluation of students Description eLearning platform for educational material, assignments, communication Email communication with students Use of electronic presentations (slides, videos) Use of ICT in student evaluation and final exams grading assisted by electronic means Use of ICT in communication with students								
TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr style="background-color: #e0f0ff;"> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>60</td> </tr> <tr> <td>FieldExercise</td> <td>30</td> </tr> <tr> <td>BibliographyAnalysis</td> <td>20</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	60	FieldExercise	30	BibliographyAnalysis	20
Activity	Workload/semester								
Lectures	60								
FieldExercise	30								
BibliographyAnalysis	20								

<p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Internship</td> <td>20</td> </tr> <tr> <td>Clinical Exercise</td> <td>20</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Internship	20	Clinical Exercise	20	Total	150
Activity	Workload/semester								
Internship	20								
Clinical Exercise	20								
Total	150								
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description</p> <ul style="list-style-type: none"> Quizzes (Multiple choice, short answer, problem solving), 20% (Formative/Summative) Project (Written Assignment), 30% (Formative/Summative) Final Examination (Multiple choice, short answer, problem solving), 50% (Summative) <p>All assessment criteria are included in the course description. Feedback on correct answers is provided for every quiz question. A detailed rubric for the written assignment is also available through the e-learning platform.</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p>								

5. SUGGESTED BIBLIOGRAPHY

<p>EUDOXUS</p>
<ol style="list-style-type: none"> SPORT FIRST AID, BY ROBB S. REHBERG, Human Kinetics, 2025, 9781718216761 SPORT FIRST AID, Flegel Melinda, Human Kinetics, 2014 ebook, 5th ed., 9781492578970 Komzsik, L. (2015). Musculoskeletal and Sports Medicine For The Primary Care Practitioner (R.B. Birrer, F.G. O'Connor, & S.F. Kane, Eds.) (4th ed.). Taylor and Francis, CRC Press. https://doi.org/10.1201/b19144Human Kinetics
<p>Additional bibliography for study</p>
<p>-</p>

4th Semester

EXERCISE AND SPORT NUTRITION

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM16	SEMESTER	4th Semester
COURSE TITLE	EXERCISE AND SPORT NUTRITION		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE Background, General Knowledge, Scientific Area, Skill Development	Specific Background		
PREREQUISITES	PREREQUISITES - General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		

2. LEARNING OUTCOMES

Learning Outcomes
Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.

- Upon successful completion of the course, students will be able to:
- Knowledge
- List the nutrients in the human diet (macronutrients and micronutrients).
 - Describe the processes of nutrient digestion, absorption, and metabolism.
 - Explain how different macronutrients contribute to energy production during exercise of varying types.

- Discuss the principles of a balanced diet and the health consequences of poor nutrition.
- Explain the scientific basis of nutritional strategies for performance enhancement.
- Recognize evidence-based ergogenic aids and their mechanisms of action in sport and exercise.
- Describe common methods of dietary analysis.

Skills

- Analyze dietary intake using appropriate tools and methods.
- Evaluate the nutritional adequacy of a diet based on established dietary guidelines.
- Differentiate between effective and ineffective (or unsafe) nutritional ergogenic aids using the scientific literature.
- Apply principles of nutrient timing to support training and competition.

Abilities

- Recommend evidence-based dietary strategies for weight management and body composition optimization.
- Critically evaluate the scientific validity of information related to nutrition and sport nutrition.
- Defend evidence-based scientific knowledge against misconceptions in sport nutrition.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Practical application of knowledge
Search, analysis and synthesis of data and information, ICT Use
Decision making
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Equity and Inclusion
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

- (1) Basic concepts of nutrition science
- (2) Classification of nutrients and their roles
- (3) Introduction to macronutrients
- (4) Introduction to micronutrients
- (5) Metabolism of nutrients
- (6) Use of macronutrients in energy metabolism during exercise
- (7) Principles of a balanced and health-promoting diet
- (8) Consequences of poor nutrition

- (9) Body weight management through diet and exercise
- (10) Nutritional strategies for enhancing performance
- (11) Nutritional ergogenic aids for endurance exercise
- (12) Nutritional ergogenic aids for maximal exercise
- (13) Dietary analysis

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face</p>														
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description eLearning platform for educational material and assignments Communication with students via Email and the forum of the e-learning platform Use of electronic presentations (slides, videos) Use of online tools for diet analyses Use of ICT in student assessment and final exams grading assisted by electronic means</p>														
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1" data-bbox="858 1061 1437 1473"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>Laboratory</td> <td>16</td> </tr> <tr> <td>BibliographyAnalysis</td> <td>60</td> </tr> <tr> <td>writingProject</td> <td>30</td> </tr> <tr> <td>Examinations</td> <td>5</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	Laboratory	16	BibliographyAnalysis	60	writingProject	30	Examinations	5	Total	150
Activity	Workload/semester														
Lectures	39														
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<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description Evaluation process includes a combination of final examination, quizzes, and project. Assessment Language: English Assessment Methods: • Quizzes (Multiple choice, short answer, problem solving), 20% (Formative/Summative) • Project (Written Assignment), 30% (Formative/Summative) • Final Examination (Multiple choice, short answer, problem solving), 50% (Summative) All assessment criteria are included in the course description. Feedback on correct answers is provided for every quiz question. A detailed rubric for the written assignment is also available through the e-learning platform.</p> <p>Student Evaluation Languages English</p>														

STUDENT EVALUATION

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

Student evaluation methods

- MultipleChoice (Formative, Summative)
- WrittenAssignment (Formative, Summative)
- ComputerExamination (Summative)

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

- Sport Nutrition, 4th ed., 2025, Asker Jeukendrup, Michael Gleeson, Human Kinetics
- Nutrition for Sport, Exercise, and Health, 2nd ed., 2024, Marie Spano, Laura Kruskall, D. Travis Thomas, Human Kinetics

Additional bibliography for study

- Recent positions, as reflected in position statements and in reviews by scientific societies.
- ACSM's Nutrition for Exercise Science, 2nd ed., 2024, Dan Benardot, Wolters Kluwer
- NSCA's Guide to Sport and Exercise Nutrition, 2nd ed., 2021, Bill Campbell, Human Kinetics
- Sports and Exercise Nutrition, 5th ed., 2018, William D. McArdle, Wolters Kluwer
- Basic Foundation of Nutrition for Sports Performance, 2022, Byerly, LibreTexts, <https://oercommons.org/courses/basic-foundation-of-nutrition-for-sports-performance>

EXERCISE TESTING

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM17	SEMESTER	4th Semester
COURSE TITLE	EXERCISE TESTING		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE	Specific Background		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES - General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Upon successful completion of the course, students will be able to:			
Knowledge			
<ul style="list-style-type: none"> Understand the principles of validity, reliability and objectivity in exercise testing in both laboratory and field settings. Explain cardiopulmonary, metabolic, and anaerobic responses to different exercise testing protocols. Describe the theoretical foundations of strength testing, anaerobic evaluation, fitness testing, muscle biopsy and tissue analysis. Distinguish between maximal and submaximal aerobic assessment methodologies and interpret VO₂max prediction 			

techniques.

- Recognize the physiological factors affecting performance, adaptation and fatigue.

Skills

- Conduct cardiopulmonary exercise testing (CPET) safely and accurately.
- Implement submaximal aerobic tests, predict VO_2max , and analyze errors in estimation.
- Perform isokinetic and field-based strength testing, sprint testing, agility testing, and anaerobic capacity.
- Analyze, interpret, and present exercise testing data using scientific methodology.

Abilities

- Apply theoretical knowledge to real athlete assessments.
- Evaluate athlete performance and physiological status using valid and reliable tools.
- Produce complete, evidence-based athlete testing profiles.
- Communicate scientific findings and testing outcomes clearly and professionally.
- Integrate laboratory and field reports into practical training recommendations.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Practical application of knowledge

Search, analysis and synthesis of data and information, ICT Use

Decision making

Autonomous work

Teamwork

Working in an international environment

Working in an interdisciplinary environment

Production of new research ideas

Project design and management

Equity and Inclusion

Demonstration of social, professional and moral responsibility and sensitivity to gender issues

Critical thinking

Promoting free, creative and inductive reasoning

3. COURSE CONTENT

(1) Foundations of Exercise Testing

(Concepts, reliability, validity, objectivity, ethics)

(2) Cardiopulmonary Exercise Testing (CPET) and VO_2max Determination

(Gas exchange analysis, anaerobic ventilatory threshold, VO_2 kinetics)

- (3) Prediction of Aerobic Capacity
(Submaximal testing, equations, nomograms)
- (4) Protocols for the Physiological Assessment of Team Sports and Individual Players / Responses to Exercise
(Continuous vs intermittent exercise protocols, HR, lactate, ventilation)
- (5) Muscle Strength Assessment
(Methods, equipment, training relevance)
- (6) Practical Strength Assessment by Isokinetic Dynamometry
(Protocols, angular velocities, asymmetries)
- (7) Anaerobic Fitness Evaluation
(Wingate, RSA, MART, jumping tests, fatigue mechanisms)
- (8) Aerobic Field Testing in Team Sports and Individuals
(Field VO₂max estimation, new technologies, telemetric ergospirometry system)
- (9) Speed, Agility and High-Intensity Exercise Testing
(Sprint profiling, agility protocols)
- (10) Neuromuscular and Cognitive Fatigue
(Dual-tasking, cognitive load, decision-making)
- (11) Youth and Developmental Testing
(Age-appropriate aerobic, anaerobic, and strength tests)
- (12) Muscle Biopsy Analysis of Athletes in Different Sports
(Biopsies, histochemistry, capillary density, CSA)
- (13) Integrated Athlete Evaluation
(Test report writing, interpretation, applied recommendations)

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD Face to face, Distance learning, etc.	Face to face										
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students	USE OF ICT <ul style="list-style-type: none"> Use of ICT in Teaching Use of ICT in Laboratory Education Use of ICT in Communication with students Use of ICT in Evaluation of students Description eLearning platform for educational material, assignments, communication Email communication with students Use of electronic presentations (slides, videos) Use of ICT in student evaluation and final exams grading assisted by electronic means Use of ICT in communication with students										
TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc. The supervised and unsupervised workload per activity is indicated here, so that total workload per semester	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="background-color: #e0f0ff;">Activity</th> <th style="background-color: #e0f0ff;">Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>13</td> </tr> <tr> <td>Laboratory</td> <td>13</td> </tr> <tr> <td>FieldExercise</td> <td>13</td> </tr> <tr> <td>StudyCreation</td> <td>78</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	13	Laboratory	13	FieldExercise	13	StudyCreation	78
Activity	Workload/semester										
Lectures	13										
Laboratory	13										
FieldExercise	13										
StudyCreation	78										

<p>complies to ECTS standards</p>	<table border="1"> <thead> <tr> <th data-bbox="858 286 1166 376">Activity</th> <th data-bbox="1166 286 1437 376">Workload/semester</th> </tr> </thead> <tbody> <tr> <td data-bbox="858 376 1166 432">writingProject</td> <td data-bbox="1166 376 1437 432">33</td> </tr> <tr> <td data-bbox="858 432 1166 488">Total</td> <td data-bbox="1166 432 1437 488">150</td> </tr> </tbody> </table>	Activity	Workload/semester	writingProject	33	Total	150
Activity	Workload/semester						
writingProject	33						
Total	150						
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description Evaluation process includes a combination of written examinations, laboratory reporting, and project work. Assessment Language: English Assessment Methods: • Final Written Examination (Multiple Choice, Short Answer, Problem Solving), 25% • Laboratory Report (analysis, interpretation, presentation of data), 25% • Athlete Testing Portfolio (written assignment with applied interpretation), 25% • Formative assessment during laboratory sessions (feedback, performance check), 25% All assessment criteria are included in the course description. Feedback is provided electronically and during dedicated office hours. Detailed rubrics for laboratory reports and the final portfolio are provided through the e-learning platform.</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p>						

5. SUGGESTED BIBLIOGRAPHY

<p>EUDOXUS</p>
<ul style="list-style-type: none"> - Kenney, W. L., Wilmore, J. H., & Costill, D. L. (2022). Physiology of sport and exercise. Human kinetics. - Ozemek, C., Bonikowske, A., Christle, J., & Gallo, P. (2025). ACSM's guidelines for exercise testing and prescription. Lippincott Williams & Wilkins. - French, D., & Ronda, L. T. (Eds.). (2021). Nsca's essentials of sport science. Human Kinetics.
<p>Additional bibliography for study</p>
<p>-</p>

FUNDING SPORTS AND SPONSORSHIP

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM18	SEMESTER	4th Semester
COURSE TITLE	FUNDING SPORTS AND SPONSORSHIP		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE	General Background		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES none General prerequisites none		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Knowledge: To have a god understanding of: Understand how sport organizations are funded Understand and evaluate marketing and sponsorship theory Apply the principles of sponsorship in the international sport industry Understand and explain international sport consumer behaviour and its value for sport sponsorship Critically evaluate sponsorship strategy			

Evaluate sport sponsorship programs
Design a sport sponsorship proposal

Skills:

Critically analyzing funding opportunities
Solving problems, based on sponsorship analysis
Communicating the sport sponsorship plans

Abilities

Handling criticism
Synthesize
Research
Sponsorship planning
Market research
Problem solving
Teamwork

General skills

1. Communication
2. Interpersonal skills
3. Networking
4. Relationship skills
5. Teamwork
6. Self-management (e.g., time management, goal setting, etc.)
7. Stress management (e.g., taking time out, prioritizing tasks, etc.)
8. Work ethic (e.g., ability to work long hours without complaining)

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Practical application of knowledge
Search, analysis and synthesis of data and information, ICT Use
Adaptation to new situations
Decision making
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas

Project design and management
 Equity and Inclusion
 Respect for the natural environment
 Demonstration of social, professional and moral responsibility and sensitivity to gender issues
 Critical thinking
 Promoting free, creative and inductive reasoning

3. COURSE CONTENT

1. The funding sources in the sport business market
2. Branding the Sport Product
3. Intro to Sponsorship
4. Sponsorship Exercises
5. Sponsorship Objectives
6. Case Studies a) Bayern Munich b) Ford c) London Marathon
7. Sponsorship Strategy / Strategic Marketing Analysis
8. Sponsorship Exercises
9. Sponsorship Rights
10. The Sponsorship Proposal /
11. Case Studies, a) Luxury Brands b) Adidas
12. Sponsorship Evaluation

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD Face to face, Distance learning, etc.	Face to face															
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students	USE OF ICT <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students Description Basic computer skills for the use of standard software and online learning platforms															
TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc. The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1" data-bbox="858 1433 1436 1843"> <thead> <tr> <th data-bbox="858 1433 1165 1523">Activity</th> <th data-bbox="1165 1433 1436 1523">Workload/semester</th> </tr> </thead> <tbody> <tr> <td data-bbox="858 1523 1165 1579">Lectures</td> <td data-bbox="1165 1523 1436 1579">39</td> </tr> <tr> <td data-bbox="858 1579 1165 1635">BibliographyAnalysis</td> <td data-bbox="1165 1579 1436 1635">20</td> </tr> <tr> <td data-bbox="858 1635 1165 1691">Seminars</td> <td data-bbox="1165 1635 1436 1691">11</td> </tr> <tr> <td data-bbox="858 1691 1165 1747">writingProject</td> <td data-bbox="1165 1691 1436 1747">60</td> </tr> <tr> <td data-bbox="858 1747 1165 1803">Laboratory</td> <td data-bbox="1165 1747 1436 1803">20</td> </tr> <tr> <td data-bbox="858 1803 1165 1843">Total</td> <td data-bbox="1165 1803 1436 1843">150</td> </tr> </tbody> </table>		Activity	Workload/semester	Lectures	39	BibliographyAnalysis	20	Seminars	11	writingProject	60	Laboratory	20	Total	150
Activity	Workload/semester															
Lectures	39															
BibliographyAnalysis	20															
Seminars	11															
writingProject	60															
Laboratory	20															
Total	150															

STUDENT EVALUATION

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

Description

Evaluation process includes a combination of Final exams: 20% (Essay Development) Group Assignment: 60% Quiz: 20% (multiple choices Assessment Language: English

Student Evaluation Languages

English

Student evaluation methods

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

-

Additional bibliography for study

Leng, H.K, & Zhang, J. (2023). Sports Sponsorship and Branding: Global Perspectives and Emerging Trends. London: Routledge
 Cornwell, B. (2020). Sponsorship in Marketing. London: Routledge
 Funk, D., Alexandris, K., McDonald, H. (2022). Sport consumer behaviour: marketing strategies. London: Routledge.

- Deloitte (2024). Annual Review of Football Finance
- Sponsorship Market Overview (2024). European Sponsorship Association
- The European Champions Report 2024. KPMG
- Deloitte (2024). The rise of sports investments. Deloitte Development LLC.
- Sponsorship Research Study at a Glance (2023). SMA.
- UEFA Annual Report 2022-2023
- Market Trends Report (2023). The Voice of the Sponsorship, Sports & Entertainment Industry
- The Evolution of Sponsorship (2023). World Federation of Advertisers
- Deloitte (2021). Sponsoring Sports in today’s Digital Age.
- Sponsor United (2023). 21 Sponsorship-21 Years in Review.
- NewZoo (2022). Global Esports & Live Streaming Market Report: Key Trends-Market Sizing and Forecasts
- NewZoo (2023). Global E-Sports Market Report.
- Nielsen (2022). Fans are Changing the Game- 2022 Global Sport Marketing Report
- Nielsen (2021). The changing value of sponsorship.
- SEER (2021). Press Reset: Sponsorship now and next.

Journals
 Sport Marketing Quarterly
<http://www.fitinfotech.com/smqElectricVersion/smqWVU.tpl>
 Sport Management Review
<http://www.journals.elsevier.com/sport-management-review/>
 European Sport Management Quarterly
<http://www.tandfonline.com>
 Journal of Sport Management
<http://journals.humankinetics.com/jsm>
 International Journal of Sport Marketing and Sponsorship



ΜΟΝΑΔΑ ΔΙΑΣΦΑΛΙΣΗΣ ΠΟΙΟΤΗΤΑΣ Α.Π.Θ.

<http://www.imrpublications.com/journal-landing.aspx?volno=L&no=L>

Sport Business and Management: An international journal

<http://www.emeraldinsight.com/journal/sbm>

Professional journal

Sport Business Journal

<http://www.sportsbusinessdaily.com/Journal.aspx>

Academic Associations

Sport Marketing Association, <http://www.sportmarketingassociation.com/>

European Association for Sport Management <http://www.easm.net/>

North American Society for Sport Management <https://www.nassm.com/>



1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM19	SEMESTER	4th Semester
COURSE TITLE	SPORTS AND EXERCISE MEDICINE		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSE TYPE	General Background		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES none General prerequisites none		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	NO		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Upon successful completion of the course, students will be able to:			
Knowledge			
<ul style="list-style-type: none"> • Understand physiological responses and adaptations to acute and chronic exercise. • Explain the relationship between physical activity, exercise, and health across the lifespan. • Describe the role of sport and exercise in the prevention and management of chronic diseases (e.g., cardiovascular disease, diabetes, obesity). • Recognize risk factors, contraindications, and safety considerations related to sport and exercise participation. 			

• Understand basic principles of sport and exercise prescription for health promotion and disease prevention.

Skills

- Assess basic health- and fitness-related parameters in apparently healthy individuals.
- Design safe and effective exercise programs for health improvement based on athlete and individual needs.
- Apply evidence-based guidelines for physical activity, sports and exercise.
- Monitor exercise responses and modify programs to ensure safety and effectiveness.
- Communicate exercise and health-related information clearly to diverse populations.

Abilities / Competencies

- Integrate theoretical knowledge with practical application in health-related sports and exercise settings.
- Demonstrate professional responsibility and ethical awareness in sports, exercise and health practice.
- Promote healthy lifestyle behaviors through physical activity, sports and exercise.
- Work effectively as part of a multidisciplinary health or exercise team.
- Critically evaluate scientific information related to sports and exercise medicine.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Practical application of knowledge
Search, analysis and synthesis of data and information, ICT Use
Adaptation to new situations
Decision making
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Equity and Inclusion
Respect for the natural environment
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

1. Introduction to Sports & Exercise Medicine: wellness & clinical scope
2. Exercise-induced syndromes- symptoms – systemic disorders
3. Cardiovascular disorders in sport (screening, sudden cardiac events, hypertension)
4. Respiratory conditions: asthma, EIB (Exercise-Induced Bronchoconstriction), infections
5. Metabolic disorders: diabetes, obesity, energy balance & exercise prescription

6. Neurological & neuromuscular conditions in athletes (concussion, seizures)
7. Gastrointestinal and renal issues related to endurance sports
8. Heat-related illness, hypothermia, altitude & environmental stress syndromes
9. Overtraining syndrome, fatigue, sleep disturbances & recovery strategies
10. Female athlete health: RED-S, menstrual dysfunction, bone health
11. Mental health in sport: anxiety, depression, burnout, disordered eating
12. Infectious diseases in sport, travel medicine & team health protocols
13. Anti-doping, medications in sport & legal/ethical considerations

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face</p>												
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description eLearning platform for educational material, assignments, communication Email communication with students Use of electronic presentations (slides, videos) Use of ICT in student evaluation and final exams grading assisted by electronic means Use of ICT in communication with students</p>												
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<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course</p>	<p>Description Evaluation process includes a combination of final examination, quizzes, and project. Assessment Methods: • Quizzes (Multiple choice, short answer, problem solving), 20% (Formative/Summative) • Project (Written Assignment), 30% (Formative/Summative) • Final Examination (Multiple choice, short answer, problem solving), 50% (Summative) All assessment criteria are included in the course description. Feedback on correct answers is provided for every quiz question. A detailed rubric for the written assignment is also available through the e-learning platform</p> <p>Student Evaluation Languages</p>												

assessment and how students are informed

English

Student evaluation methods

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

1. Essential Sports Medicine: A Clinical Guide for Students and Residents Second Edition 2021 by Gerardo Miranda-Comas (Editor), Grant Cooper (Editor), Joseph Herrera (Editor), Scott Curtis (Editor), Springer
2. Brukner & Khan's Clinical Sports Medicine: The Medicine of Exercise, Volume 2, 5e, Peter Brukner, Karim Khan, McGraw-Hill Education / Australia 2019

Additional bibliography for study

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HEALTH AND EXERCISE PSYCHOLOGY

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM20	SEMESTER	4th Semester
COURSE TITLE	HEALTH AND EXERCISE PSYCHOLOGY		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE	Scientific Area		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES - General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes	Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.		
	-		

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use
Adaptation to new situations
Decision making
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Project design and management
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

-

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	Face to face											
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Communication with students <p>Description</p> <p>-</p>											
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester</p>	<table border="1" data-bbox="858 1637 1437 1942"> <thead> <tr> <th data-bbox="858 1637 1166 1727">Activity</th> <th data-bbox="1166 1637 1437 1727">Workload/semester</th> </tr> </thead> <tbody> <tr> <td data-bbox="858 1727 1166 1783">Lectures</td> <td data-bbox="1166 1727 1437 1783">39</td> </tr> <tr> <td data-bbox="858 1783 1166 1839">Bibliography Analysis</td> <td data-bbox="1166 1783 1437 1839">25</td> </tr> <tr> <td data-bbox="858 1839 1166 1895">Study Creation</td> <td data-bbox="1166 1839 1437 1895">25</td> </tr> <tr> <td data-bbox="858 1895 1166 1942">Examinations</td> <td data-bbox="1166 1895 1437 1942">40</td> </tr> </tbody> </table>		Activity	Workload/semester	Lectures	39	Bibliography Analysis	25	Study Creation	25	Examinations	40
Activity	Workload/semester											
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Study Creation	25											
Examinations	40											

<p>complies to ECTS standards</p>	<table border="1"> <thead> <tr> <th data-bbox="858 286 1166 376">Activity</th> <th data-bbox="1166 286 1437 376">Workload/semester</th> </tr> </thead> <tbody> <tr> <td data-bbox="858 376 1166 432">Laboratory</td> <td data-bbox="1166 376 1437 432">9</td> </tr> <tr> <td data-bbox="858 432 1166 488">writingProject</td> <td data-bbox="1166 432 1437 488">12</td> </tr> <tr> <td data-bbox="858 488 1166 539">Total</td> <td data-bbox="1166 488 1437 539">150</td> </tr> </tbody> </table>	Activity	Workload/semester	Laboratory	9	writingProject	12	Total	150
Activity	Workload/semester								
Laboratory	9								
writingProject	12								
Total	150								
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description -</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p>								

<p>5. SUGGESTED BIBLIOGRAPHY</p>	
<p>EUDOXUS</p>	<p>-</p>
<p>-</p>	<p>-</p>
<p>Additional bibliography for study</p>	<p>-</p>
<p>-</p>	<p>-</p>

5th Semester

ADVANCED BIOMECHANICS

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM21	SEMESTER	5th Semester
COURSE TITLE	ADVANCED BIOMECHANICS		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE Background, General Knowledge, Scientific Area, Skill Development	General Background		
PREREQUISITES	PREREQUISITES - General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		

2. LEARNING OUTCOMES

Learning Outcomes
Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.

- Upon successful completion of the course, students will be able to:
- Process biomechanical data and analyse complex sport movements using advanced biomechanical principles
 - Conduct single-athlete biomechanical evaluations for performance monitoring
 - Quantify movement variability using linear and nonlinear methods
 - Conduct a comprehensive, data-driven biomechanical assessment of a sport technique

- Present biomechanical findings clearly and professionally

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use
Decision making
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Equity and Inclusion
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

- (1) Introduction to Advanced Biomechanics
- (2) Signal Processing for Motion Analysis
- (3) Timing, Detection, and Profiling of Key Sports Movement Events
- (4) 3D Technique Analysis of sports Movements
- (5) Force Production and Joint Mechanics in sports
- (6) Single athlete performance profiling
- (7) Variability and consistency in skilled athletic movement
- (8) Movement Stability, Coordination and skill control
- (9) Force time strategies in explosive sports actions
- (10) Musculoskeletal Modelling for sport Performance
- (11) Data-Driven Approaches and Machine Learning in Sport
- (12) Advanced Biomechanical Evaluation of Sports Techniques
- (13) Athletic Biomechanics Research Presentations

LABORATORIES

- (1) Week 1 & 2 (Lab 1): 3D Motion Capture of sport skills and Data Extraction
- (2) Week 3 & 4 (Lab 2): Filtering and Processing athletic Motion Signals
- (3) Week 5 & 6 (Lab 3): Joint Loading and Power Analysis in athletic Movements
- (4) Week 7 & 8 (Lab 4): Intra-Subject Variability in Repeated sports Movements

- (5) Week 9 & 10 & 11 (Lab 5): Nonlinear Indicators of Performance and Fatigue
 (6) Week 12 & 13 (Lab 6): Comprehensive Biomechanical Evaluation of a selected sport Technique

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	Face to face												
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description eLearning platform for educational material, assignments, communication Email communication with students Use of electronic presentations (slides, videos) Use of ICT in student assessment and final exams grading assisted by electronic means Use of ICT in communication with students</p>												
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1" data-bbox="858 1025 1437 1391"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>26</td> </tr> <tr> <td>Laboratory</td> <td>24</td> </tr> <tr> <td>FieldExercise</td> <td>50</td> </tr> <tr> <td>BibliographyAnalysis</td> <td>50</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	26	Laboratory	24	FieldExercise	50	BibliographyAnalysis	50	Total	150
Activity	Workload/semester												
Lectures	26												
Laboratory	24												
FieldExercise	50												
BibliographyAnalysis	50												
Total	150												
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description</p> <ul style="list-style-type: none"> • Written examinations: 60% (Final exam 50%, Quizzes in selected lectures 10%) • Laboratory assignments: 20% • Biomechanical Analysis Project: 20% <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p>												

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

Nick Stergiou (2020) Biomechanics and Gait Analysis (Elsevier)
McGinnis, P. (2020) Biomechanics of Sport and Exercise. (Human Kinetics).
Bartlett, R. (2007). Introduction to Sports Biomechanics: Analysing Human Movement Patterns (Routledge).
Hay, J. G. (1993) The Biomechanics of Sports Techniques (Prentice Hall).
Winter, D.A (2009) – Biomechanics and Motor Control of Human Movement (Willey)

Additional bibliography for study

-

ADVANCED MOTOR CONTROL & MOTOR LEARNING

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM22	SEMESTER	5th Semester
COURSE TITLE	ADVANCED MOTOR CONTROL & MOTOR LEARNING		
TEACHING ACTIVITIES If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.		TEACHING HOURS PER WEEK	ECTS CREDITS
		3	6.0
COURSE TYPE Background, General Knowledge, Scientific Area, Skill Development	Specific Background		
PREREQUISITES	PREREQUISITES - General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes			
Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
-			

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
 ICT Use, Adaptation to new situations,
 Decision making,
 Autonomous work,
 Teamwork,
 Working in an international environment,
 Working in an interdisciplinary environment, Production of
 new research ideas

Project design and management
 Equity and Inclusion
 Respect for the natural environment
 Sustainability
 Demonstration of social, professional and moral responsibility
 and sensitivity to gender issues
 Critical thinking
 Promoting free, creative and inductive reasoning

Practical application of knowledge
 Search, analysis and synthesis of data and information, ICT Use
 Autonomous work
 Teamwork
 Critical thinking
 Promoting free, creative and inductive reasoning

3. COURSE CONTENT

-

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face</p>												
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description -</p>												
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>Laboratory</td> <td>6</td> </tr> <tr> <td>Bibliography Analysis</td> <td>50</td> </tr> <tr> <td>Examinations</td> <td>55</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	Laboratory	6	Bibliography Analysis	50	Examinations	55	Total	150
Activity	Workload/semester												
Lectures	39												
Laboratory	6												
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Examinations	55												
Total	150												

<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description</p> <p>-</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p>
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5. SUGGESTED BIBLIOGRAPHY

EUDOXUS
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Additional bibliography for study
-

SPORT COACHING

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM23	SEMESTER	5th Semester
COURSE TITLE	SPORT COACHING		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE	Specific Background		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES none General prerequisites none		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Upon successful completion of the course, students will be able to:			
Knowledge <ul style="list-style-type: none"> • Be familiar with current scientific information regarding the principles, design, implementation, and guidance of the coaching process • Be familiar with issues of governance of sports clubs and organizations 			
Skills			

- Be familiar with the development of motor skills and movement control
- Choose appropriate procedures and behaviors for rational sport coaching

Abilities

- Manage the coach's relationships with other involved individuals
- Be effective in human resource management in sports organizations
- Effectively promote the sports product in the media

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
 ICT Use, Adaptation to new situations,
 Decision making,
 Autonomous work,
 Teamwork,
 Working in an international environment,
 Working in an interdisciplinary environment, Production of
 new research ideas

Project design and management
 Equity and Inclusion
 Respect for the natural environment
 Sustainability
 Demonstration of social, professional and moral responsibility
 and sensitivity to gender issues
 Critical thinking
 Promoting free, creative and inductive reasoning

Decision making
 Teamwork
 Project design and management
 Equity and Inclusion
 Demonstration of social, professional and moral responsibility and sensitivity to gender issues
 Critical thinking

3. COURSE CONTENT

1. SPORTS COACHING AND MENTORING
2. SPORT COACHING AS A SOCIAL PROCESS
3. LEADERSHIP – THE ROLE OF THE COACH
4. COACHING PHILOSOPHY – COACH RESPONSIBILITIES
5. MANAGEMENT OF ATHLETES IN TRAINING AND COMPETITION
6. COMMUNICATION AND RELATIONSHIPS WITH ATHLETES
7. SUCCESS – FAILURE MANAGEMENT
8. TECHNICAL AND TACTICAL ANALYSIS
9. STRUCTURE AND FUNCTIONING OF PROFESSIONAL CLUBS
10. CONFIDENTIALITY, TRUST, AND SAFETY OF ATHLETES
11. VERBAL, WRITTEN, AND ELECTRONIC COMMUNICATION WITH THE MEDIA
12. SCOUTING - USE OF VIDEO/DATA
13. METHODS OF EVALUATING ATHLETES

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD

Face to face

Face to face, Distance learning, etc.											
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description eLearning platform for educational material, assignments, communication Email communication with students Use of electronic presentations (slides, videos) Use of ICT in student evaluation and final exams grading assisted by electronic means Use of ICT in communication with students</p>										
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Activity	Workload/semester										
Lectures	39										
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<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description Evaluation process includes a combination of final examination, and project.</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p> <ul style="list-style-type: none"> • MultipleChoice (Formative) • WrittenAssignment (Formative) • PublicPresentation (Formative) 										

5. SUGGESTED BIBLIOGRAPHY

<p>EUDOXUS</p>
<p>Gould, D., & Mallett, C. (Eds.). (2021). Sport coaches' handbook. Human Kinetics Publishers. Dieffenbach, K., & Thompson, M. (Eds.). (2020). Coach education essentials. Human Kinetics Publishers. Connolly, F., & White, P. (2017). Game changer. Simon and Schuster. Gill, A. (2014). Foundations of sports coaching. Routledge.</p>
<p>Additional bibliography for study</p>
<p>Gould, D., & Mallett, C. (Eds.). (2021). Sport coaches' handbook. Human Kinetics Publishers. Dieffenbach, K., & Thompson, M. (Eds.). (2020). Coach education essentials. Human Kinetics Publishers.</p>



ΜΟΝΑΔΑ ΔΙΑΣΦΑΛΙΣΗΣ ΠΟΙΟΤΗΤΑΣ Α.Π.Θ.

Connolly, F., & White, P. (2017). Game changer. Simon and Schuster.
Gill, A. (2014). Foundations of sports coaching. Routledge.



1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM24	SEMESTER	5th Semester
COURSE TITLE	PSYCHOLOGY OF PERFORMANCE		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE	Scientific Area		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES - General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes	Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.		
	-		

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
 ICT Use, Adaptation to new situations,
 Decision making,
 Autonomous work,
 Teamwork,
 Working in an international environment,
 Working in an interdisciplinary environment, Production of
 new research ideas

Project design and management
 Equity and Inclusion
 Respect for the natural environment
 Sustainability
 Demonstration of social, professional and moral responsibility
 and sensitivity to gender issues
 Critical thinking
 Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use
 Adaptation to new situations
 Decision making
 Autonomous work
 Teamwork
 Working in an international environment
 Working in an interdisciplinary environment
 Production of new research ideas
 Project design and management
 Demonstration of social, professional and moral responsibility and sensitivity to gender issues
 Promoting free, creative and inductive reasoning

3. COURSE CONTENT

-

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	Face to face											
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Communication with students <p>Description -</p>											
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Activity	Workload/semester											
Lectures	39											
BibliographyAnalysis	25											
writingProject	12											
StudyCreation	25											

<p>complies to ECTS standards</p>	<table border="1"> <thead> <tr> <th data-bbox="858 286 1166 376">Activity</th> <th data-bbox="1166 286 1437 376">Workload/semester</th> </tr> </thead> <tbody> <tr> <td data-bbox="858 376 1166 432">Laboratory</td> <td data-bbox="1166 376 1437 432">9</td> </tr> <tr> <td data-bbox="858 432 1166 488">Examinations</td> <td data-bbox="1166 432 1437 488">40</td> </tr> <tr> <td data-bbox="858 488 1166 539">Total</td> <td data-bbox="1166 488 1437 539">150</td> </tr> </tbody> </table>	Activity	Workload/semester	Laboratory	9	Examinations	40	Total	150
Activity	Workload/semester								
Laboratory	9								
Examinations	40								
Total	150								
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description -</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p>								

5. SUGGESTED BIBLIOGRAPHY

<p>EUDOXUS</p>
<p>-</p>
<p>Additional bibliography for study</p>
<p>-</p>

HUMAN GROWTH AND DEVELOPMENT

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	EM1	SEMESTER	5th Semester
COURSE TITLE	HUMAN GROWTH AND DEVELOPMENT		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE	General Background		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES None General prerequisites None		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Upon successful completion of the course, students will be able to:			
Knowledge			
<ul style="list-style-type: none"> Outline developmental stages from conception through infancy, early and middle childhood, adolescence, and emerging adulthood. Describe physical growth patterns and neurodevelopmental processes, emphasizing the interaction between biological maturation and environmental input. Describe key developmental milestones across cognitive, emotional, social, and motor domains. 			

- Explain how environmental and biological factors (genetics, stress, nutrition, attachment, culture, movement and play opportunities) influence child development.
- Explain the relationship between growth, learning, behavior, and movement participation in sport and educational contexts.

Skills

- Recognize typical motor development and growth patterns relevant to movement participation.
- Interpret developmental variability in childhood and adolescence.
- Observe and interpret child development indicators in movement, behavior, and social interaction.
- Select age-appropriate learning or movement activities for diverse child-development needs.
- Use developmental reasoning to propose suitable physical-activity or learning tasks respectfully supporting safe, inclusive participation.
- Work individually or in small groups on developmental case-based tasks and present clear applied conclusions.

Abilities

- Apply child-development knowledge to sport, movement and educational planning contexts.
- Critically reflect on developmental assumptions and ethical considerations in child-related academic discussions.
- Promote creative and inductive thinking when addressing child development, movement and learning challenges.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use
Decision making
Teamwork
Critical thinking
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

- (1) Psychomotor development: A dynamic child-development perspective starting at conception.
- (2) Prenatal influences: The impact of environmental and biological factors on prenatal development.
- (3) Infancy: Child development and psychomotor growth characteristics in infancy.
- (4) Early childhood: Developmental features of children in early childhood.
- (5) Social environment & motor growth: The influence of the social context on motor and cognitive development.
- (6) Puberty & adolescence: Developmental transitions, body changes, emotion, and peer interaction.
- (7) Environmental shaping: The role of daily environmental input in child development.

- (8) Movement & learning: How the body and movement support understanding and expression.
- (9) Cognitive development: The growth of thinking, memory, attention, and learning.
- (10) Motor–cognition link: How movement experience supports cognitive organization.
- (11) Emotion, sport & regulation: Emotional growth and self-regulation in sport and exercise contexts.
- (12) Growth through sport: How sport and play environments support adaptive development and cooperation.
- (13) Developmental assessment: Introductory developmental evaluation methods in education and sport settings.

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face</p>												
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description eLearning platform for educational material, assignments, communication Email communication with students Use of electronic presentations (slides, videos) Use of ICT in student evaluation and final exams grading assisted by electronic means Use of ICT in communication with students</p>												
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 50%;">Activity</th> <th style="width: 50%;">Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>writingProject</td> <td>30</td> </tr> <tr> <td>Examinations</td> <td>61</td> </tr> <tr> <td>Other</td> <td>20</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	writingProject	30	Examinations	61	Other	20	Total	150
Activity	Workload/semester												
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<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description Evaluation process includes a combination of written exams, quizzes, and a project. Assessment Language: English Assessment Methods: • Quizzes (multiple choice, short answer, problem solving), 20% (Formative/Summative) • Project (written assignment), 30% • Final examination (multiple choice, short answer, problem solving), 50% (Summative) All assessment criteria are included in the course description. Instant feedback is provided for quiz responses, and a detailed project rubric is accessible through the e-learning environment.</p> <p>Student Evaluation Languages English</p>												

STUDENT EVALUATION

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

Student evaluation methods

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

- Cameron, N., & Schell, L. (Eds.). (2021). Human growth and development. Academic Press.
- Haywood, K., & Getchell, N. (2024). Life span motor development. Human kinetics.
- Goodway, J. D., Ozmun, J. C., & Gallahue, D. L. (2019). Understanding Motor Development: Infants, Children, Adolescents, Adults: Infants, Children, Adolescents, Adults. Jones & Bartlett Learning.

Additional bibliography for study

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INTERNATIONAL SPORT FOR ALL POLICY

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	EM2	SEMESTER	5th Semester
COURSE TITLE	INTERNATIONAL SPORT FOR ALL POLICY		
TEACHING ACTIVITIES If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	TEACHING HOURS PER WEEK		ECTS CREDITS
	3		6.0
COURSE TYPE Background, General Knowledge, Scientific Area, Skill Development	General Background		
PREREQUISITES	PREREQUISITES none General prerequisites none		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Knowledge: To have a god understanding of: Sport for all principles Sport for all policies internationally Sustainability goals Sport policy development Sports for all policies internationally Sport development models			

Sport policy plans
Sport policy strategies

Skills:

Critically analyzing sport policy
Solving problems, based on market analysis
Communicating the sport policy plans

Abilities

Handling criticism
Synthesize
Research
Event planning
Market research
Problem solving

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Practical application of knowledge
Search, analysis and synthesis of data and information, ICT Use
Adaptation to new situations
Decision making
Autonomous work
Teamwork
Production of new research ideas
Equity and Inclusion
Respect for the natural environment
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

1. Introduction to Sport Policy
2. Community sport development: Health and Inclusion
3. Diversity, Equity, and Inclusion in Sport Governance
4. Ethics in Sport Organizations
5. Amateur Sport in the Community

6. Campus Recreation and Intercollegiate Athletics
7. Olympic Sport
8. Planning for Sport for All
9. Professional Individual Sports
10. Professional Sport Leagues Beyond North America
11. Esports
12. Presentations

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	Face to face														
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description eLearning platform for educational material, assignments, communication Email communication with students Use of electronic presentations (slides, videos) Use of ICT in student evaluation and final exams grading assisted by electronic means Use of ICT in communication with students</p>														
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1" data-bbox="858 1189 1437 1603"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>BibliographyAnalysis</td> <td>20</td> </tr> <tr> <td>Seminars</td> <td>11</td> </tr> <tr> <td>StudyCreation</td> <td>60</td> </tr> <tr> <td>writingProject</td> <td>20</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	BibliographyAnalysis	20	Seminars	11	StudyCreation	60	writingProject	20	Total	150
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Seminars	11														
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Total	150														
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p>	<p>Description Evaluation process includes a combination of • Final exams: 30% (Essay development) • Group project: 50% • Quiz: 20% (multiple choice) Assessment Language: English All assessment criteria are included in the course description. Feedback on correct answers is provided for every quiz question. A detailed rubric for the written assignment is also available through the e-learning platform. Basic computer skills for the use of standard software and online learning platforms</p> <p>Student Evaluation Languages</p>														

Please indicate all relevant information about the course assessment and how students are informed

English

Student evaluation methods

- MultipleChoice (Formative)
- WrittenAssignment (Formative)
- EssayReport (Formative)

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

-

Additional bibliography for study

Hums, M.A., Kluch, Y., Schmidt, S.H., & MacLean, J.C. (2023). Governance and Policy in Sport Organizations (5th ed.). Routledge. <https://doi.org/10.4324/9781003303183>

Grix, J., Brannagan, P. M., & Houlihan, B. (2024). Comparative elite sport development: systems, structures and public policy. Routledge.

Viollet, B., Scelles, N., & Peng, Q. (2023). From sport policy to national federation sport policy: an integrative literature review and conceptualisation attempt. Sustainability, 15(4), 2949.

Gammelsæter, H. (2021). Sport is not industry: bringing sport back to sport management. European Sport Management Quarterly, 21(2), 257-279.

Ouyang, Y., Lee, P. C., & Ko, L. M. (2022). A systematic review of the development of sport policy research (2000–2020). Sustainability, 15(1), 389.

Greenwell, T. C., Danzey-Bussell, L. A., & Shonk, D. J. (2024). Managing sport events. Human Kinetics.

Journals

Sport Marketing Quarterly

<http://www.fitinfotech.com/smqElectricVersion/smqWVU.tpl>

Sport Management Review

<http://www.journals.elsevier.com/sport-management-review/>

European Sport Management Quarterly

<http://www.tandfonline.com>

Journal of Sport Management

<http://journals.humankinetics.com/jsm>

International Journal of Sport Marketing and Sponsorship

<http://www.imrpublications.com/journal-landing.aspx?volno=L&no=L>

Sport Business and Management: An international journal

<http://www.emeraldinsight.com/journal/sbm>



ΜΟΝΑΔΑ ΔΙΑΣΦΑΛΙΣΗΣ ΠΟΙΟΤΗΤΑΣ Α.Π.Θ.

Professional journal

Sport Business Journal

<http://www.sportsbusinessdaily.com/Journal.aspx>

Academic Associations

Sport Marketing Association, <http://www.sportmarketingassociation.com/>

European Association for Sport Management <http://www.easm.net/>

North American Society for Sport Management <https://www.nassm.com/>



6th Semester

CLINICAL EXERCISE PHYSIOLOGY

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM25	SEMESTER	6th Semester
COURSE TITLE	CLINICAL EXERCISE PHYSIOLOGY		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE Background, General Knowledge, Scientific Area, Skill Development	Specific Background		
PREREQUISITES	PREREQUISITES - General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Upon successful completion of the course, students will be able to:			
Knowledge			
<ul style="list-style-type: none"> Explain basic clinical exercise physiology concepts in relation to cardiovascular, pulmonary, and metabolic diseases. Describe acute exercise responses and chronic adaptations in healthy individuals and clinical populations. 			

- Explain blood pressure and ventilatory control during exercise.
- Describe the pathophysiology of major chronic diseases and their interaction with exercise.
- Identify screening, risk stratification, and safety principles for exercise participation.
- Outline principles of exercise prescription for clinical populations.

Skills

- Interpret physiological responses to exercise in healthy and clinical populations.
- Apply screening tools and risk stratification to support safe exercise participation.
- Design basic exercise prescriptions using current guidelines.
- Modify exercise programs based on disease-specific considerations.
- Recognize abnormal exercise responses and apply safety and communication protocols.

Abilities

- Apply clinical exercise physiology principles to assess and manage exercise participation in individuals with chronic diseases.
- Adapt exercise interventions based on physiological responses and risk level.
- Integrate exercise within clinical assessment and multidisciplinary care pathways

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Equity and Inclusion
Critical thinking
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

- (1) Introduction to Clinical Exercise Physiology (Scope of the field and the role of the clinical exercise physiologist)
- (2) Review of core exercise physiology concepts relevant to pathology
- (3) Cardiovascular Physiology & Acute Responses to Exercise in healthy individuals and in individuals with cardiovascular diseases (Coronary artery disease, heart failure)
- (4) Blood pressure control during exercise in normotensive and hypertensive individuals
- (5) Control of breathing during exercise - Ventilation, gas exchange, respiratory mechanics - ventilatory thresholds
- (6) Pathophysiology of Pulmonary diseases (COPD, interstitial lung disease, pulmonary hypertension, asthma) and acute

responses to exercise

- (7) Metabolic exercise physiology, mitochondrial function and dysfunction due to inactivity
- (8) Endocrine regulation of metabolism during exercise,
- (9) Metabolic disorders (diabetes, obesity, metabolic syndrome) – acute and chronic adaptations to exercise
- (10) Screening & Risk Stratification (Questionnaires for participation to physical activity and exercise
- (11) The role of exercise in Clinical Assessments
- (12) Introduction to Exercise Prescription for Clinical Populations (FITT principles, Disease-specific adaptations to exercise, Recognizing abnormal signs/symptoms during exercise –Management of adverse events, communication protocols)
- (13) Clinical Case Studies

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD Face to face, Distance learning, etc.	Face to face														
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students	USE OF ICT <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Communication with students • Use of ICT in Evaluation of students Description -														
TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc. The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="background-color: #e6f2ff;">Activity</th> <th style="background-color: #e6f2ff;">Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>Laboratory</td> <td>20</td> </tr> <tr> <td>writingProject</td> <td>15</td> </tr> <tr> <td>BibliographyAnalysis</td> <td>61</td> </tr> <tr> <td>StudyCreation</td> <td>15</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	Laboratory	20	writingProject	15	BibliographyAnalysis	61	StudyCreation	15	Total	150
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STUDENT EVALUATION Description of the evaluation process Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others Please indicate all relevant information about the course assessment and how students are informed	Description Evaluation process includes a combination of final examination, quizzes, and project. Assessment Language: English Assessment Methods: • Midterm Exam: 25% (Multiple-choice questions Short-answer questions) (Formative/Summative) • Written Assignment or Case Study (5%) Case-based problem solving) Submitted in electronic form • Formative quizzes available on e-learning (not graded) Final Written Exam (70%) (Multiple-choice questions, Short-answer questions (Summative) All assessment criteria are included in the course description. Feedback on quiz/assignment grade is provided at submission. A detailed rubric for the written assignment is also available through the e-learning platform Student Evaluation Languages English														

STUDENT EVALUATION

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

Student evaluation methods

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

Textbooks

- ACSM's Guidelines for Exercise Testing and Prescription (latest edition).
- ACSM Clinical Exercise Physiology – Jonathan Ehrman et al.
- Essentials of Clinical Exercise Physiology – Ehrman, Kerrigan, Keteyian

Additional bibliography for study

- American College of Sports Medicine position stands and consensus statements
- European Society of Cardiology (ESC) exercise guidelines
- American Heart Association clinical exercise recommendations
- Selected peer-reviewed articles provided through e-learning

SPORT INJURIES

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM26	SEMESTER	6th Semester
COURSE TITLE	SPORT INJURIES		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE	Specific Background		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES - General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Students in the course should understand the following <ol style="list-style-type: none"> 1. Prevention of sports Injuries and preparation for sports 2. Risk factors in sports injuries 3. Basic science of musculoskeletal injuries in sports and therapeutic procedures 4. Injury Management, options and possibilities 			
Abilities <ol style="list-style-type: none"> 1. Therapeutic exercises in musculoskeletal injuries 			

2. Criteria to return to sports

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Practical application of knowledge
Search, analysis and synthesis of data and information, ICT Use
Adaptation to new situations
Decision making
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Project design and management
Equity and Inclusion
Respect for the natural environment
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

1. Introduction to sports injuries: Frequency, etiology, predisposing factors, evaluation, scientific support team.
2. Injuries to the immature skeleton: Frequency, etiology, types of injuries, predisposing factors, evaluation, prevention.
3. Muscle injuries: Frequency, etiology, mechanisms of injury, evaluation, basic principles of rehabilitation, prevention.
4. Tendon and Syndesmotomic injuries: Frequency, etiology, mechanisms of injury, evaluation, basic principles of rehabilitation, prevention.
5. Bone injuries: Frequency, etiology, mechanisms of injury, evaluation, basic principles of rehabilitation, prevention.
6. Cartilage injuries: Frequency, etiology, mechanisms of injury, evaluation, basic principles of rehabilitation, prevention.
7. Common Spine injury in sports
8. Common Shoulder, Elbow and wrist injury in sports
9. Common Knee injury in sports
10. Common Ankle injury in sports
11. Groin Pain and hip injury in sports
12. Principles of sports injury rehabilitation
13. Criteria to return to sports

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face</p>												
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description e-Learning platform for educational material, assignments, communication Email communication with students Use of electronic presentations (slides, videos) Use of ICT in student evaluation and final exams grading assisted by electronic means Use of ICT in communication with students</p>												
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1" data-bbox="858 869 1437 1234"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>BibliographyAnalysis</td> <td>61</td> </tr> <tr> <td>writingProject</td> <td>30</td> </tr> <tr> <td>Examinations</td> <td>20</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	BibliographyAnalysis	61	writingProject	30	Examinations	20	Total	150
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5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

Bruckner and Khans, Clinical sports medicine (5th Edition), Vol 1 Injuries. McGraw Hill Education ISBN9781743761380
Lars Peterson and Per Renstrom, Sports Injuries (4th Edition), CRC Press, ISBN9781841847054

Additional bibliography for study

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EXERCISE AND HEALTH

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM27	SEMESTER	6th Semester
COURSE TITLE	EXERCISE AND HEALTH		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE	General Knowledge		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES None General prerequisites ---		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Upon successful completion of the course, students will be able to:			
Knowledge <ul style="list-style-type: none"> Principles linking physical activity, fitness, and health Physiological, biomechanical, and psychological effects of exercise Health benefits of physical activity and the preventive role of exercise Evidence-based methods for designing and adapting exercise programs Foundational concepts supporting advanced studies in sports science and related fields 			

Skills

- Analyzing how exercise influences body systems and psychological processes
- Designing, evaluating, and adapting exercise programs for diverse populations
- Evaluating exercise-induced benefits and preventive effects of physical activity
- Applying exercise principles safely and effectively in practical settings
- Communicating exercise-related concepts to individuals and groups

Abilities

- Integrating theoretical knowledge with practical application in health and exercise contexts
- Critical thinking in assessing exercise effects and program design
- Problem-solving in tailoring exercise interventions to individual needs
- Promoting health, preventing disease, and enhancing physical performance through exercise

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
 ICT Use, Adaptation to new situations,
 Decision making,
 Autonomous work,
 Teamwork,
 Working in an international environment,
 Working in an interdisciplinary environment, Production of
 new research ideas

Project design and management
 Equity and Inclusion
 Respect for the natural environment
 Sustainability
 Demonstration of social, professional and moral responsibility
 and sensitivity to gender issues
 Critical thinking
 Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use
 Decision making
 Autonomous work
 Working in an international environment
 Working in an interdisciplinary environment
 Production of new research ideas
 Equity and Inclusion
 Demonstration of social, professional and moral responsibility and sensitivity to gender issues
 Critical thinking
 Promoting free, creative and inductive reasoning

3. COURSE CONTENT

1. Introduction to Exercise and Health (overview of course, definitions of health, physical activity, and fitness).
2. Physiological Basis of Physical Activity (basic human anatomy and physiology relevant to exercise (cardiovascular, respiratory, musculoskeletal systems).
3. Energy Systems and Exercise Metabolism (ATP production, aerobic vs anaerobic metabolism, and energy demands during exercise).
4. Exercise and Cardiovascular Health (how exercise impacts heart function, blood pressure regulation, and cardiovascular disease prevention).
5. Exercise and Metabolic Health (preventive effects on obesity, diabetes, lipid profiles, and insulin sensitivity).
6. Musculoskeletal Health and Physical Activity (bone density, muscle strength, flexibility, injury prevention).
7. Exercise Across the Lifespan (physical activity recommendations for children, adults, and older adults).

8. Mental Health and Physical Activity (beneficial exercise effects on stress, anxiety, depression, cognition, and sleep).
9. Exercise Prescription Principles (FITT principle, training intensity, duration, frequency, and progression).
10. Nutrition, Hydration, and Exercise (energy balance, macronutrients, hydration strategies, and supplementation basics).
11. Sedentary Behavior and Public Health (health risks of inactivity).
12. Special Populations and Exercise Considerations (chronic diseases, pregnancy, disabilities, and individual adaptations).
13. Conclusions.

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face</p>										
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description eLearning platform for educational material, assignments, communication Email communication with students Use of electronic presentations (slides, videos) Use of ICT in student evaluation and final exams grading assisted by electronic means Use of ICT in communication with students</p>										
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Lectures	39										
writingProject	41										
BibliographyAnalysis	70										
Total	150										
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description Evaluation process includes a combination of final examination and project. Assessment Language: English Assessment Methods: • Project (Written Assignment), 20% (Formative/Summative) • Final Examination (Multiple choice), 80% (Summative) All assessment criteria are included in the course description. A detailed rubric for the written assignment is also available through the e-learning platform.</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p> <ul style="list-style-type: none"> • MultipleChoice (Summative) 										

STUDENT EVALUATION

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

- WrittenAssignment (Formative)

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

- Physical Exercise for Human Health. Junjie Xiao, Springer, 2024, Singapore.

Additional bibliography for study

- Physical Activity and Health. The Evidence Explained. 3rd Edition. D.J. Stensel, A.E. Hardman, J.M.R. Gill. Routledge, 2022, London & New York.

PROMOTING ACTIVE LIFESTYLE

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CM28	SEMESTER	6th Semester
COURSE TITLE	PROMOTING ACTIVE LIFESTYLE		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE	Specific Background		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES		
	- General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	NO		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes	Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.		
	-		

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
 ICT Use, Adaptation to new situations,
 Decision making,
 Autonomous work,
 Teamwork,
 Working in an international environment,
 Working in an interdisciplinary environment, Production of
 new research ideas

Project design and management
 Equity and Inclusion
 Respect for the natural environment
 Sustainability
 Demonstration of social, professional and moral responsibility
 and sensitivity to gender issues
 Critical thinking
 Promoting free, creative and inductive reasoning

Practical application of knowledge
 Search, analysis and synthesis of data and information, ICT Use
 Adaptation to new situations
 Decision making
 Autonomous work
 Teamwork
 Working in an international environment
 Working in an interdisciplinary environment
 Production of new research ideas
 Project design and management
 Equity and Inclusion
 Respect for the natural environment
 Promoting free, creative and inductive reasoning

3. COURSE CONTENT

-

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face</p>
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description -</p>

<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>StudyCreation</td> <td>30</td> </tr> <tr> <td>BibliographyAnalysis</td> <td>61</td> </tr> <tr> <td>Examinations</td> <td>20</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	StudyCreation	30	BibliographyAnalysis	61	Examinations	20	Total	150
Activity	Workload/semester												
Lectures	39												
StudyCreation	30												
BibliographyAnalysis	61												
Examinations	20												
Total	150												
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description -</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p>												

5. SUGGESTED BIBLIOGRAPHY

<p>EUDOXUS</p>
<p>-</p>
<p>Additional bibliography for study</p>
<p>-</p>

NEW TECHNOLOGIES / AI

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	EM3	SEMESTER	6th Semester
COURSE TITLE	NEW TECHNOLOGIES / AI		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSE TYPE	General Background		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES - General prerequisites -		
TEACHING & EXAMINATION	Greek		
COURSE OFFERED TO ERASMUS STUDENTS	NO		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Upon successful completion of the course, students will be able to: Knowledge <ul style="list-style-type: none"> • Explain the core concepts and mechanisms of artificial intelligence, including neural networks, machine learning, and generative models. • Describe how large language models (LLMs) are trained and deployed, with attention to transformer architecture and inference mechanisms. • Identify current AI tools applicable to education, sports training, and organizational administration, including their strengths and limitations. 			

- Evaluate key ethical considerations in AI use, including data privacy, algorithmic bias, transparency, and compliance with legal and institutional frameworks.

- Understand the role of prompt engineering and input design in shaping AI outputs, including how prompting strategies influence reasoning and generation.

Skills

- Design effective prompts using techniques such as Chain-of-Thought reasoning, few-shot examples, and role-based instructions for task optimization.

- Create multimodal content (text, images, video, and interactive media) using AI tools to support education, communication, and performance analysis.

- Implement automated workflows that integrate AI tools into professional contexts such as coaching, training planning, and administrative systems.

- Critically assess AI-generated content for factual accuracy, ethical soundness, and relevance, using cross-referencing and fact-checking protocols.

- Develop custom AI applications and solutions tailored to specific use cases in sports science, pedagogy, or institutional operations.

- Integrate AI tools responsibly into everyday practices, aligning usage with ethical standards and organizational policies.

Abilities

- Apply AI systems as collaborative tools in problem-solving scenarios across education, training, and management.

- Adapt emerging AI technologies (including autonomous agents and multimodal systems) to meet the needs of real-world sports and educational environments.

- Synthesize physical education and sport science expertise with AI capabilities to innovate within professional practice.

- Design human-AI workflows that balance automation with human oversight to support decision-making and efficiency.

- Select appropriate AI tools for diverse use cases based on evaluation of functionality, reliability, and contextual fit.

- Communicate AI concepts, implications, and applications to interdisciplinary teams and stakeholders in accessible and responsible ways.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Practical application of knowledge

Search, analysis and synthesis of data and information, ICT Use

Adaptation to new situations

Decision making

Autonomous work

Working in an international environment

Working in an interdisciplinary environment

Production of new research ideas

Critical thinking

3. COURSE CONTENT

1. The AI Paradigm Shift: From Search Engines to Generative Engines; History and Definitions.
2. Demystifying the Black Box: How LLMs work; Probability distributions; Understanding "Hallucinations."
3. Prompt Engineering Workshop: Zero-shot, Few-shot, and Chain-of-Thought prompting techniques.
4. Ethics & Integrity: Algorithmic bias, GDPR/Data Privacy, and Academic Integrity in the age of AI.
5. AI for Content Creation: Generating lesson plans, rubrics, and differentiated reading materials.
6. Multimodal AI: Text-to-Image and Text-to-Video tools for educational resource design.
7. Personalized Learning: Adaptive learning platforms and Intelligent Tutoring Systems.
8. Assessment & Feedback: Using AI for formative feedback and grading assistance (Human-in-the-loop).
9. Administrative Automation: Streamlining scheduling, email, and data entry for sport management.
10. The Changing Role of the Educator: From "Sage on the Stage" to Facilitator/Mentor.
11. Professional Development: Building a Personal Learning Network (PLN) with AI.
12. Project Workshop: Peer review and synthesis of the Capstone Design Project.
13. Future Trends: Autonomous Agents, AGI, and the future of work in sports and education.

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD Face to face, Distance learning, etc.	Face to face												
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students	USE OF ICT <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students Description eLearning platform for educational material, assignments, communication Email communication with students Use of electronic presentations (slides, videos) Use of ICT in student evaluation and final exams grading assisted by electronic means Use of ICT in communication with students												
TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc. The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr style="background-color: #e6f2ff;"> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>BibliographyAnalysis</td> <td>30</td> </tr> <tr> <td>Other</td> <td>30</td> </tr> <tr> <td>writingProject</td> <td>51</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	BibliographyAnalysis	30	Other	30	writingProject	51	Total	150
Activity	Workload/semester												
Lectures	39												
BibliographyAnalysis	30												
Other	30												
writingProject	51												
Total	150												

STUDENT EVALUATION

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

Description

Formative: A1: Prompt Engineering Portfolio (30%): A curated collection of AI interactions demonstrating skill evolution. A2: AI Policy Critique (30%): Analysis and drafting of a responsible use policy. Summative: A3: Capstone Project (40%): Creation of a comprehensive AI-integrated educational or management resource. Students are explicitly informed about the assessment process, grading criteria, and submission deadlines through the Course Syllabus and the university's eLearning platform. Transparency: Detailed grading rubrics are provided for every major assignment (Portfolio, Policy Critique, and Capstone Project) at the beginning of the semester. Feedback: Continuous formative feedback is provided during workshops, while summative feedback and grades for assignments are released via the eLearning platform. All assessment criteria are included in the course description.

Student Evaluation Languages

Greek

Student evaluation methods

- WrittenAssignment (Formative)
- LaboratoryAssignment (Formative)
- EssayReport (Summative)

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

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Additional bibliography for study

Rodafinos, A. (2023). AI tools in Education: Effectively integrate artificial intelligence into teaching, learning, and administration. Payhip.

Chan, C.K.Y., & Colloton, T. (2024). Generative AI in Higher Education: The ChatGPT Effect. Routledge.

Holmes, W., & Miao, F. (2023). Guidance for generative AI in education and research. UNESCO.

Marzouqi, A., et al. (Eds.) (2024). Artificial Intelligence in Education: The Power and Dangers of ChatGPT in the Classroom. Springer.

-Related Journals:

International Journal of Artificial Intelligence in Education (Springer).

Computers and Education (Elsevier).

DATA ANALYSIS IN MOVEMENT SCIENCE

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	EM4	SEMESTER	6th Semester
COURSE TITLE	DATA ANALYSIS IN MOVEMENT SCIENCE		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE	Skill Development		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES		
	- General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes	Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.		
	-		

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use
Decision making
Autonomous work
Teamwork
Working in an interdisciplinary environment
Project design and management
Critical thinking

3. COURSE CONTENT

-

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face</p>										
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description -</p>										
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1" data-bbox="858 1565 1437 1874"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>25</td> </tr> <tr> <td>Laboratory</td> <td>25</td> </tr> <tr> <td>StudyCreation</td> <td>100</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	25	Laboratory	25	StudyCreation	100	Total	150
Activity	Workload/semester										
Lectures	25										
Laboratory	25										
StudyCreation	100										
Total	150										

<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description</p> <p>-</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p>
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5. SUGGESTED BIBLIOGRAPHY

EUDOXUS
-
Additional bibliography for study
-

7th Semester

EXERCISE REHABILITATION

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CMPA1	SEMESTER	7th Semester
COURSE TITLE	EXERCISE REHABILITATION		
TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.			
		3	6.0
COURSE TYPE	Specialty / Orientation		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES - General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		

2. LEARNING OUTCOMES

Learning Outcomes
Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.

After the successful completion of the course, students will have acquired theoretical and practical knowledge and skills in clinical exercise delivery, healthy lifestyle intervention and wellness programs for people living with chronic conditions and disabilities. Specifically, they will become familiar with the planning and organization of physical activities for people with chronic diseases and disabilities, understand the impact of injury, illness, disorders, and disease on a person's physical and mental health, function, and quality of life, will know the basic characteristics and particularities of people with chronic diseases and disabilities, as well as how the

body responds to exercise in health and disease and will understand the role of exercise in improving the quality of life of patients. They will specialize in the rehabilitation process and they will know how to design and deliver safe and effective exercise programs tailored to individual needs, helping clinical populations and complex rehabilitation cases recover from injury and manage health conditions. Furthermore, students will get acquainted with various forms of effective exercise targeting the secondary prevention of chronic diseases.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Practical application of knowledge
Adaptation to new situations
Decision making
Autonomous work
Working in an international environment
Working in an interdisciplinary environment
Equity and Inclusion

3. COURSE CONTENT

- (1) The role of rehabilitation programs in patients with chronic diseases and disabilities
- (2) Inclusion of patients with chronic diseases into exercise programs - Testing of functional capacity
- (3) Therapeutic exercise programs' organization and planning to improve aerobic capacity, muscle strength, flexibility and body composition
- (4) Behavior change and motivational strategies, monitoring progress and ethics for a high-quality exercise rehabilitation
- (5) Aqua-training for patients with chronic diseases
- (6) Exercise in patients with type II diabetes
- (7) Exercise in patients with arterial hypertension
- (8) Exercise programs in patients with chronic kidney disease
- (9) Exercise in patients with malignancies
- (10) Exercise programs for obese patients
- (11) Exercise programs for patients with psychiatric disorders
- (12) Exercise in patients with osteoporosis
- (13) Exercise programs for patients with dementia

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD Face to face, Distance learning, etc.	Face to face
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<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description eLearning platform for educational material, assignments, communication Email communication with students Use of electronic presentations (slides, videos) Use of ICT in student evaluation and final exams grading assisted by electronic means Use of ICT in communication with students</p>												
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1" data-bbox="858 674 1437 1037"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>writingProject</td> <td>30</td> </tr> <tr> <td>BibliographyAnalysis</td> <td>61</td> </tr> <tr> <td>Examinations</td> <td>20</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	writingProject	30	BibliographyAnalysis	61	Examinations	20	Total	150
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Examinations	20												
Total	150												
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description Evaluation process includes a combination of final examination, quizzes, and project. Assessment Language: English Assessment Methods: • Quizzes (Multiple choice, short answer, problem solving), 20% (Formative/Summative) • Project (Written Assignment), 30% (Formative/Summative) • Final Examination (Multiple choice, short answer, problem solving), 50% (Summative) All assessment criteria are included in the course description. Feedback on correct answers is provided for every quiz question. A detailed rubric for the written assignment is also available through the e-learning platform.</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p> <ul style="list-style-type: none"> • EssayDevelopmentQuestions (Summative) • WrittenAssignment (Formative) • ContinuousEvaluation (Formative) 												

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

-

Additional bibliography for study

Suggested bibliography (books):

- American College of Sports Medicine, Moore G.E., Durstine J.L., Painter P.L. (2016). ACSM's Exercise Management for Persons with Chronic Diseases and Disabilities. 4th Edition, Eds Human Kinetics (ISBN 978-1450434140)
- Dunleavy K. & Slowik A.K. (2020). Therapeutic exercise prescription. Eds Elsevier (ISBN: 9780323280532)
- Saxton J. (2011). Exercise and Chronic Disease. An Evidence-Based Approach. Eds Routledge (ISBN 9780415498616)

Relevant articles in scientific journals:

- Brawner CA, Churilla JR, Keteyian SJ. Prevalence of physical activity is lower among individuals with chronic disease. *Med Sci Sport Exerc*, 2016, 48 (6):1062-1067
- Bunæs-Næss H, Kvæl LAH, Nilsson BB, Heywood S, Heiberg KE. Aquatic high-intensity interval training (HIIT) may be similarly effective to land-based HIIT in improving exercise capacity in people with chronic conditions: a systematic review and meta-analysis. *BMJ Open Sport Exerc Med*. 2023, 14;9(4):e001639
- Bullard T, Ji M, An R, et al. A systematic review and meta-analysis of adherence to physical activity interventions among three chronic conditions: cancer, cardiovascular disease, and diabetes. *BMC Public Health*, 2019, 19 (1):636
- Collado-Mateo D, Lavín-Pérez AM, Peñacoba C, Del Coso J, Leyton-Román M, Luque-Casado A, Gasque P, Fernández-Del-Olmo MÁ, Amado-Alonso D. Key Factors Associated with Adherence to Physical Exercise in Patients with Chronic Diseases and Older Adults: An Umbrella Review. *Int J Environ Res Public Health*, 2021, 18(4):2023.
- Crawford L, Maxwell J, Colquhoun H, et al. Facilitators and barriers to patient-centred goal-setting in rehabilitation: A scoping review. *Clin Rehabil*, 2022, 36(12):1694-1704
- Figueiredo C, Padilha CS, Dorneles GP, Peres A, Krüger K, Rosa-Neto JC, Lira FS. Type and Intensity as Key Variable of Exercise in Metainflammation Diseases: A Review. *Int J Sports Med*, 2022, 43(9):743-767
- Gonzalez K, Fuentes J, Marquez JL. Physical inactivity, sedentary behavior and chronic diseases. *Korean J Fam Med*, 2017, 38 (3):111-115
- Luan X, Tian X, Zhang H, Huang R, Li N, Chen P, Wang R. Exercise as a prescription for patients with various diseases. *J Sport Health Sci*, 2019, 8(5):422-441
- Pedersen BK, Saltin B. Exercise as medicine - evidence for prescribing exercise as therapy in 26 different chronic diseases. *Scand J Med Sci Sport*, 2015, 25 (Suppl 3):1-72
- Saqib ZA, Dai J, Menhas R, Mahmood S, Karim M, Sang X, Weng Y. Physical Activity is a Medicine for Non-Communicable Diseases: A Survey Study Regarding the Perception of Physical Activity Impact on Health Wellbeing. *Risk Manag Healthc Policy*, 2020, 13:2949-2962
- Verhoeven JE, Han LKM, Lever-van Milligen BA, Hu MX, Révész D, Hoogendoorn AW, Batelaan NM, van Schaik DJF, van Balkom AJLM, van Oppen P, Penninx BWJH. Antidepressants or running therapy: Comparing effects on mental and physical health in patients with depression and anxiety disorders. *J Affect Disord*, 2023, 329:19-29
- Wade DT. What is rehabilitation? An empirical investigation leading to an evidence-based description. *Clin Rehabil*, 2020, 34 (5):571-583

EXERCISE TESTING AND PRESCRIPTION IN CLINICAL POPULATION

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CMPA2	SEMESTER	7th Semester
COURSE TITLE	EXERCISE TESTING AND PRESCRIPTION IN CLINICAL POPULATION		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE	Specialty / Orientation		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES		
	- General prerequisites		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Upon successful completion of the course, students will be able to:			
Knowledge <ul style="list-style-type: none"> • Understand the basic principles of exercise physiology and their application in clinical exercise science. • Understand cardiopulmonary and metabolic responses to exercise. • Recognize the health benefits of physical activity and exercise in disease prevention and management. • Understand the principles of pre-exercise health screening and risk evaluation. • Understand health-related physical fitness concepts and clinical exercise testing methodologies. 			

- Understand the fundamentals of cardiopulmonary exercise testing (CPET) and exercise electrocardiography.
- Understand training principles and exercise prescription for cardiopulmonary and metabolic diseases.

Skills

- Interpret cardiopulmonary exercise testing data in clinical populations.
- Analyze cardiopulmonary, metabolic, and electrocardiographic exercise responses.
- Design and adapt individualized exercise programs for individuals with cardiopulmonary and metabolic diseases.
- Apply exercise safety and risk management principles in clinical settings.
- Make evidence-based decisions regarding exercise prescription.
- Effectively collaborate within interdisciplinary healthcare teams.

Abilities

- Perform pre-exercise health screening and risk stratification in healthy and clinical populations.
- Conduct clinical exercise testing and physical fitness assessments.
- Perform cardiopulmonary exercise testing in a laboratory setting.
- Apply basic and applied ECG principles during exercise testing.
- Calculate exercise training intensities based on clinical and functional data.
- Apply functional field tests to assess functional capacity in clinical populations.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use
Decision making
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Equity and Inclusion
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

- (1) Basic principles of exercise physiology for clinical exercise science
- (2) Cardiopulmonary and metabolic responses during Exercise
- (3) Benefits of physical activity and exercise

- (4) Pre-exercise health screening and evaluation
- (5) Health-related physical fitness and clinical exercise testing
- (6) Cardiopulmonary exercise test (Lab)
- (7) Interpretation of cardiopulmonary exercise test data in clinical populations (Lab)
- (8) Functional capacity field-tests in clinical exercise science (Practical session)
- (9) Foundations of ECG for exercise specialists
- (10) Applied ECG for cardiopulmonary exercise test (Lab)
- (11) Principles of exercise training for health and clinical application
- (12) Exercise prescription in cardiopulmonary diseases
- (13) Exercise prescription in metabolic and other diseases

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD Face to face, Distance learning, etc.	Face to face														
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students	USE OF ICT <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students Description eLearning platform for educational material, assignments, communication Email communication with students Use of electronic presentations (slides, videos) Use of ICT in student evaluation and final exams grading assisted by electronic means Use of ICT in communication with students														
TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc. The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="background-color: #e1f5fe;">Activity</th> <th style="background-color: #e1f5fe;">Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>BibliographyAnalysis</td> <td>46</td> </tr> <tr> <td>Laboratory</td> <td>9</td> </tr> <tr> <td>Other</td> <td>24</td> </tr> <tr> <td>Examinations</td> <td>32</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	BibliographyAnalysis	46	Laboratory	9	Other	24	Examinations	32	Total	150
Activity	Workload/semester														
Lectures	39														
BibliographyAnalysis	46														
Laboratory	9														
Other	24														
Examinations	32														
Total	150														
STUDENT EVALUATION Description of the evaluation process Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written	Description Evaluation process includes a combination of midterm and final examination Assessment Language: English Assessment Methods: • Midterm Exam: 50% • Final Exam: 50% • Optional formative assessments (e.g., quizzes, assignments, lab reports) may be used for feedback but do not contribute to the final grade. Formats: • Multiple Choice Questions •														

Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

Short Answer Questions • Problem-Solving Questions Type: Summative assessments measuring achievement of course learning outcomes.
 Passing Criteria: Minimum passing grade is 50% Student Information and Feedback: • Assessment guidelines and rubrics are provided at the start of the course. • Marks and feedback are returned promptly after each assessment. • Students may consult the instructor for clarification and guidance • All assessment criteria are included in the course description.

Student Evaluation Languages

English

Student evaluation methods

- MultipleChoice (Summative)

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

- ACSM's Guidelines for Exercise Testing and Prescription, Edition 12th, Author ACSM -OZEMEK CEMAL, ISBN/ISSN 9781975219208, Publication Year 2025
- Advanced Fitness Assessment and Exercise Prescription 9th Edition, Authors Ann L. Gibson, Dale R. Wagner, Vivian H. Heyward, ISBN: 9781718216112, Human Kinetics, 2025

Additional bibliography for study

- Relevant scientific journals

PROJECT - PART I

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CMPA3	SEMESTER	7th Semester
COURSE TITLE	PROJECT - PART I		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	6	12.0	
COURSETYPE	Skill Development		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES		
	- General prerequisites		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	NO		
COURSE URL	-		
2. LEARNING OUTCOMES			
<p>Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>			
<p>Upon successful completion of the course, students will be able to:</p> <p>Knowledge</p> <ul style="list-style-type: none"> Describe the theoretical background and core concepts of the subject area of the thesis. Explain the current research literature and development trends of the field. Understand the principles of research ethics, academic integrity, and proper bibliographic referencing. <p>Skills</p> <ul style="list-style-type: none"> Search for, evaluate, and synthesize scientific sources from databases and literature. 			

- Design and organize an appropriate research methodology for the problem under study.
- Collect, process, and analyze data using appropriate tools or software.
- Formulate evidence-based conclusions.
- Produce a scientific written report according to academic standards (structure, citations, formatting).

Abilities

- Critically evaluate scientific data and make informed decisions.
- Address complex problems using analytical and creative thinking.
- Work responsibly, autonomously, and in accordance with professional ethics.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
 ICT Use, Adaptation to new situations,
 Decision making,
 Autonomous work,
 Teamwork,
 Working in an international environment,
 Working in an interdisciplinary environment, Production of
 new research ideas

Project design and management
 Equity and Inclusion
 Respect for the natural environment
 Sustainability
 Demonstration of social, professional and moral responsibility
 and sensitivity to gender issues
 Critical thinking
 Promoting free, creative and inductive reasoning

Practical application of knowledge
 Search, analysis and synthesis of data and information, ICT Use
 Adaptation to new situations
 Decision making
 Autonomous work
 Teamwork
 Working in an international environment
 Working in an interdisciplinary environment
 Production of new research ideas
 Project design and management
 Equity and Inclusion
 Demonstration of social, professional and moral responsibility and sensitivity to gender issues
 Critical thinking
 Promoting free, creative and inductive reasoning

3. COURSE CONTENT

- Selection of the thesis topic and definition of the research problem in the field of exercise for health and rehabilitation
- Search of scientific literature in academic databases
- Evaluation of the reliability and relevance of sources
- Creation and organization of a bibliographic reference database
- Preparation of a literature review
- Formulation of research questions or hypotheses
- Design of the experimental procedure or study protocol
- Planning of timeline and resources
- Presentation and approval of the research proposal

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face</p>										
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description ICT tools are used throughout the thesis process to support research organization, ensure scientific documentation, perform data analysis, and effectively communicate the results. Specifically, the following will be used:</p> <ul style="list-style-type: none"> - An eLearning platform for educational material, assignment submission, and communication with the supervisor - Academic databases, institutional digital libraries, and reference management tools for literature search and management - Word processing software, formatting templates, and automated content generation tools for writing the thesis - Questionnaire creation tools (e.g., Google Forms), recording of experimental measurements via software or sensors (where required), spreadsheets (Excel, Google Sheets) for data organization, statistical software, diagram and figure creation software, presentation software, and submission of the final thesis to the institutional repository - Use of plagiarism detection tools (e.g., Turnitin) 										
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1" data-bbox="858 1167 1437 1473"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>BibliographyAnalysis</td> <td>150</td> </tr> <tr> <td>writingProject</td> <td>50</td> </tr> <tr> <td>StudyCreation</td> <td>100</td> </tr> <tr> <td>Total</td> <td>300</td> </tr> </tbody> </table>	Activity	Workload/semester	BibliographyAnalysis	150	writingProject	50	StudyCreation	100	Total	300
Activity	Workload/semester										
BibliographyAnalysis	150										
writingProject	50										
StudyCreation	100										
Total	300										
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description Student assessment is continuous and formative and aims to monitor progress during the preparation of the thesis as well as to evaluate the quality of the final outcome. It includes regular meetings with the supervisor, review of intermediate deliverables, and evaluation of the final written document and presentation. • Continuous assessment – 50% (Formative) The research process and the student’s consistency throughout the preparation of the thesis are evaluated, specifically: progress according to the timeline, quality of the literature review, appropriateness of methodological design, participation in supervision meetings, ability to solve problems and incorporate feedback, compliance with academic ethics. • Project – 50% (Formative/Final) The final deliverable and presentation are evaluated: scientific</p>										

STUDENT EVALUATION

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

documentation and understanding of the topic, methodological correctness and adequacy of analysis, quality and originality of results, structure, clarity, and academic writing, proper use of bibliographic references, oral presentation of the project.

Student Evaluation Languages

English

Student evaluation methods

- ContinuousEvaluation (Formative)
- WrittenAssignment (Formative, Summative)

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

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Additional bibliography for study

-

TECHNOLOGY IN SPORTS

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CMPB1	SEMESTER	7th Semester
COURSE TITLE	TECHNOLOGY IN SPORTS		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSE TYPE	General Background		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	<p>PREREQUISITES</p> <p>-</p> <p>General prerequisites</p> <p>Familiarity with computers and basic software (spreadsheets, databases) Interest in sports science and athletic performance Willingness to work with measurement equipment and software Attention to detail in data collection and analysis Basic statistical and mathematical reasoning No specialized programming knowledge required Practical experience with sports is beneficial but not required</p>		
TEACHING & EXAMINATION	Greek		
COURSE OFFERED TO ERASMUS STUDENTS	NO		
COURSE URL	-		
2. LEARNING OUTCOMES			
<p>Learning Outcomes</p> <p>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p>			
<p>Upon successful completion of this course, students will be able to:</p> <p>Knowledge</p> <ul style="list-style-type: none"> Explain the role of technology in modern sport, including performance analysis, athlete monitoring, training optimization, and organizational management. 			

- Describe key biomechanical and physiological principles underpinning sports technology applications, including kinematics, kinetics, and movement analysis.
- Identify major categories of sports technology (e.g., wearables, motion capture, performance testing systems, analytics platforms) and their appropriate use cases.
- Explain how data analytics and artificial intelligence are applied in coaching, performance prediction, and sports management.
- Evaluate ethical, legal, and regulatory considerations related to athlete data collection, privacy, and technology use in sport.

Skills

- Operate sports technology equipment and software for performance assessment, monitoring, and feedback.
- Collect, process, and interpret biomechanical, physiological, and performance data from wearable devices and sensor systems.
- Apply video analysis and motion capture tools to assess technique and support performance improvement.
- Design training and monitoring programs informed by technology-based performance insights.
- Analyze athlete data to support injury prevention, rehabilitation monitoring, and wellness management.
- Produce clear and professional performance reports that integrate quantitative data with qualitative evaluation.
- Troubleshoot common technical, data-quality, and implementation issues associated with sports technology systems.

Abilities

- Integrate sports technology with sport science knowledge to support evidence-based decision-making.
- Evaluate and select appropriate technological solutions based on sport-specific needs, context, and resource constraints.
- Adapt emerging technologies (e.g., AI-driven analytics, IoT systems, VR/AR tools) to practical sport environments.
- Design technology-supported training and performance ecosystems that combine human expertise with data-driven insights.
- Implement sports technology systematically within teams or organizations, considering operational, ethical, and performance-related factors.
- Communicate technology-derived insights effectively to athletes, coaches, and management using accessible and meaningful formats.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Practical application of knowledge
Search, analysis and synthesis of data and information, ICT Use
Adaptation to new situations
Decision making
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Project design and management
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

1. Evolution of Sports Tech: History of measurement; The "Arms Race" in equipment; Enhancing vs. Measuring performance.
2. Biomechanics & Motion Capture: Kinematics vs. Kinetics; Gold standard lab methods vs. Field methods (Computer Vision).
3. Wearables I (External Load): GPS/GNSS technology; Sampling rates; Metrics (Distance, Speed, Accelerations).
4. Wearables II (Internal Load): Heart Rate Variability (HRV), Smart Textiles (EMG), and Sleep Trackers.
5. Validation & Reliability: Statistical tools for method comparison (Bland-Altman, CV, Correlation).
6. Notational Analysis: Principles of video tagging; Creating code windows; Event frequency matrices.
7. Sports Analytics Fundamentals: Introduction to Big Data; Derived metrics (Efficiency, xG); Data cleaning pipelines.
8. Data Visualization: Dashboard design principles; Communicating data to coaches and athletes.
9. Injury Prevention Tech: Acute/Chronic Workload Ratio (ACWR); Force plates for asymmetry testing; Return-to-Play protocols.
10. Virtual (VR) & Augmented Reality (AR): Cognitive training platforms; Simulation for decision-making; Fan engagement.
11. Esports Performance: Metrics unique to gaming (APM, Gaze tracking); Physiological demands of Esports.
12. Ethics & Privacy: The "Quantified Self"; GDPR in sports; Data ownership and surveillance issues.
13. Innovation Trends: Future of Sports Tech; Smart Stadiums; Entrepreneurship in Sport 4.0.

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	Face to face												
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description</p> <p>Use of ICT in Course Teaching (Laboratories/workshops on AI Tools, Video Analysis, educational materials available in elearning LMS)</p> <p>Use of ICT in Laboratory Teaching (Sensors, GPS units, Analysis Software)</p> <p>Use of ICT in Student Assessment (Data projects, Dashboards)</p>												
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1" data-bbox="858 1341 1437 1704"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>Laboratory</td> <td>30</td> </tr> <tr> <td>Other</td> <td>30</td> </tr> <tr> <td>StudyCreation</td> <td>51</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	Laboratory	30	Other	30	StudyCreation	51	Total	150
Activity	Workload/semester												
Lectures	39												
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Other	30												
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Total	150												
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written</p>	<p>Description</p> <p>Formative: Laboratory Assignment Summative: A1: Validation Lab Report (30%): A formal scientific report comparing the accuracy of a consumer wearable device against a criterion measure (requires data collection & statistical analysis). A2: Performance Dashboard (30%): Submission of a functional, interactive Excel/Power BI dashboard based on a provided</p>												

Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

season dataset. A3: Innovation Capstone (40%): A comprehensive proposal for a new technology integration or product (Pitch deck + Technical specs). Students are explicitly informed about the assessment process, grading criteria, and submission deadlines through the Course Syllabus and the university's eLearning platform (Moodle/Open eClass). Transparency: Detailed grading rubrics are provided for the Lab Report, Dashboard, and Capstone Project at the beginning of the semester. Feedback: Formative feedback is provided during lab sessions on data handling techniques. Summative feedback and grades are released via the eLearning platform.

Student Evaluation Languages

Greek

Student evaluation methods

- LaboratoryReport (Formative)
- Other (Formative)
- LaboratoryAssignment (Summative)

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

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Additional bibliography for study

Allen, T., et al. (Eds.) (2025). Routledge Handbook of Sports Technology and Engineering (2nd Ed.). Routledge.
 Cullinane, A., et al. (2024). An Introduction to Performance Analysis of Sport. Routledge.
 Toner, J. (2024). Wearable Technology in Elite Sport: A Critical Examination. Routledge.

TRAINING PROCESS IN INDIVIDUAL SPORTS

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CMPB2	SEMESTER	7th Semester
COURSE TITLE	TRAINING PROCESS IN INDIVIDUAL SPORTS		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSE TYPE	Specific Background		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES None General prerequisites Basic computer skills for the use of standard software and online learning platforms.		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Upon successful completion of the course, students will be able to:			
1) in terms of the acquired knowledge <ul style="list-style-type: none"> • to understand key principles of training planning individual sports. • to recognize the modifications of training planning among different individual sports. • to understand the differences regarding the requirements in speed, endurance, strength, and flexibility among different sports. • to understand how periodization models apply in different individual sports. 			

2) in terms of the acquired skills

- to develop critical thinking regarding training plans aligned with sport-specific demands.
- to design specific sport-specific training schemes.

3) in terms of the acquired abilities

- to create procedures for monitoring the evolvement of the training process in a sport-specific base.
- to design and implement training plans tailored for individual sport athletes.
- to evaluate the achievement of goals set in the training regime
- to implement contemporary evidence-based training theories in individual sport training schemes.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Practical application of knowledge

Search, analysis and synthesis of data and information, ICT Use

Decision making

Autonomous work

Teamwork

Working in an international environment

Working in an interdisciplinary environment

Production of new research ideas

Equity and Inclusion

Demonstration of social, professional and moral responsibility and sensitivity to gender issues

Critical thinking

Promoting free, creative and inductive reasoning

3. COURSE CONTENT

1. Introduction to sports training in individual sports
2. Trainability and adaptation in physical fitness parameters
3. Physical preparation planning
4. Principles of constructing, monitoring and adjusting training plans
5. Training plan structure in track and field events 1: sprints and jumps
6. Training plan structure in track and field events 2: throws and endurance events
7. Training plan structure in swimming
8. Training plan structure in artistic gymnastics
9. Training plan structure in rhythmic gymnastics

10. Training plan structure in tennis / racket sports
11. Training plan structure in taekwondo
12. Modification in training plan structure in Paraspport athletes
13. Contemporary evidence-based training schemes

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face Distance learning</p>																		
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description</p> <ul style="list-style-type: none"> • eLearning.auth.gr platform for educational material, assignments, and teacher-to-students group communication • Email communication with students via webmail.auth.gr • Use of electronic presentations and multimedia material (slides, videos) • Use of ICT in student evaluation (quizzes, polls, and final exams grading assisted by electronic means) • Use of ICT in communication with students via zoom.auth.gr 																		
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="color: #0070C0;">Activity</th> <th style="color: #0070C0;">Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>25</td> </tr> <tr> <td>FieldExercise</td> <td>14</td> </tr> <tr> <td>BibliographyAnalysis</td> <td>25</td> </tr> <tr> <td>StudyCreation</td> <td>30</td> </tr> <tr> <td>Other</td> <td>6</td> </tr> <tr> <td>Examinations</td> <td>30</td> </tr> <tr> <td>writingProject</td> <td>20</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	25	FieldExercise	14	BibliographyAnalysis	25	StudyCreation	30	Other	6	Examinations	30	writingProject	20	Total	150
Activity	Workload/semester																		
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BibliographyAnalysis	25																		
StudyCreation	30																		
Other	6																		
Examinations	30																		
writingProject	20																		
Total	150																		
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course</p>	<p>Description</p> <p>Evaluation process includes a combination of final examination, quizzes, and group project. Assessment Language: English Assessment Methods: • Quizzes (Multiple choice, short answer, problem solving): 20% (Formative/Summative) • Group Project (Written Assignment): 30% (Concluding) • Presentation in audience: 10% (Formative) • Final Examination (Multiple choice, short answer, problem solving): 40% (Summative) All assessment criteria are included in the course description. Feedback on correct answers is provided for every quiz question. A detailed rubric for the written assignment and the presentation in audience are also available through the e-learning</p>																		

assessment and how students are informed

platform.

Student Evaluation Languages

English

Student evaluation methods

- MultipleChoice (Summative)
- ShortAnswerQuestions (Formative, Summative)
- WrittenAssignment (Summative)
- PublicPresentation (Formative)

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

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Additional bibliography for study

- Suggested bibliography for the D.P.E.S.S.-A.U.Th. at Thessaloniki Library:

- DePauw, K. P., & Gavron, S. J. (2005). Disability sport (2nd edition). Human Kinetics. [<https://search.lib.auth.gr/Record/486723>]
- Jastrjembskaia, N., & Titov, Y. (1999). Rhythmic gymnastics. Human Kinetics. [<https://search.lib.auth.gr/Record/339300>]
- Kovacs, M., Roetert, P., & Ellenbecker, T. S. (2016). Complete conditioning for tennis (2nd edition). Human Kinetics. [<https://search.lib.auth.gr/Record/1162342>]
- Montgomery, J., & Chambers, M. (2009). Mastering swimming. Human Kinetics. [<https://search.lib.auth.gr/Record/915737>]
- Strüder, H. K., Yona, U., Scholz, K., & Hollmann, W. (2023). Track & field: Training & movement science, theory and practice for all disciplines. Meyer & Meyer Sport. [<https://search.lib.auth.gr/Record/1166344>]

- Relevant scientific journals:

- Journal of Strength and Conditioning Research [<https://journals.lww.com/nsca-jscr/pages/default.aspx>]
- International Journal of Strength and Conditioning [<https://journal.iusca.org/index.php/Journal>]
- Strength and Conditioning Journal [<https://journals.lww.com/nsca-scj/pages/default.aspx>]

PROJECT - PART I

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CMPB3	SEMESTER	7th Semester
COURSE TITLE	PROJECT - PART I		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	6	12.0	
COURSETYPE	Skill Development		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES		
	- General prerequisites		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	NO		
COURSE URL	-		
2. LEARNING OUTCOMES			
<p>Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p> <p>Upon successful completion of the course, students will be able to:</p> <p>Knowledge</p> <ul style="list-style-type: none"> Describe the theoretical background and core concepts of the subject area of the thesis. Explain the current research literature and development trends of the field. Understand the principles of research ethics, academic integrity, and proper bibliographic referencing. <p>Skills</p> <ul style="list-style-type: none"> Search for, evaluate, and synthesize scientific sources from databases and literature. Design and organize an appropriate research methodology for the problem under study. 			

- Collect, process, and analyze data using appropriate tools or software.
- Formulate evidence-based conclusions.
- Produce a scientific written report according to academic standards (structure, citations, formatting).

Abilities

- Critically evaluate scientific data and make informed decisions.
- Address complex problems using analytical and creative thinking.
- Work responsibly, autonomously, and in accordance with professional ethics.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
 ICT Use, Adaptation to new situations,
 Decision making,
 Autonomous work,
 Teamwork,
 Working in an international environment,
 Working in an interdisciplinary environment, Production of
 new research ideas

Project design and management
 Equity and Inclusion
 Respect for the natural environment
 Sustainability
 Demonstration of social, professional and moral responsibility
 and sensitivity to gender issues
 Critical thinking
 Promoting free, creative and inductive reasoning

Practical application of knowledge
 Search, analysis and synthesis of data and information, ICT Use
 Adaptation to new situations
 Decision making
 Autonomous work
 Teamwork
 Working in an international environment
 Working in an interdisciplinary environment
 Production of new research ideas
 Project design and management
 Equity and Inclusion
 Respect for the natural environment
 Demonstration of social, professional and moral responsibility and sensitivity to gender issues
 Critical thinking
 Promoting free, creative and inductive reasoning

3. COURSE CONTENT

- Selection of the thesis topic and definition of the research problem in the field of sport performance
- Search of scientific literature in academic databases
- Evaluation of the reliability and relevance of sources
- Creation and organization of a bibliographic reference database
- Preparation of a literature review
- Formulation of research questions or hypotheses
- Design of the experimental procedure or study protocol
- Planning of timeline and resources
- Presentation and approval of the research proposal

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face</p>										
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description ICT tools are used throughout the thesis process to support research organization, ensure scientific documentation, perform data analysis, and effectively communicate the results. Specifically, the following will be used:</p> <ul style="list-style-type: none"> - eLearning platform for educational material, assignment submission, and communication with the supervisor - Academic databases, institutional digital libraries, and reference management tools for literature search and management - Word processing software, formatting templates, and automated content generation tools for writing the thesis - Questionnaire creation tools (e.g., Google Forms), recording of experimental measurements via software or sensors (where required), spreadsheets (Excel, Google Sheets) for data organization, statistical software, diagram and figure creation software, presentation software, and submission of the final thesis to the institutional repository - Use of plagiarism detection tools (e.g., Turnitin) 										
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1" data-bbox="858 1133 1437 1440"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>BibliographyAnalysis</td> <td>150</td> </tr> <tr> <td>writingProject</td> <td>50</td> </tr> <tr> <td>StudyCreation</td> <td>100</td> </tr> <tr> <td>Total</td> <td>300</td> </tr> </tbody> </table>	Activity	Workload/semester	BibliographyAnalysis	150	writingProject	50	StudyCreation	100	Total	300
Activity	Workload/semester										
BibliographyAnalysis	150										
writingProject	50										
StudyCreation	100										
Total	300										
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description Student assessment is continuous and formative and aims to monitor progress during the preparation of the thesis as well as to evaluate the quality of the final outcome. It includes regular meetings with the supervisor, review of intermediate deliverables, and evaluation of the final written document and presentation. - Continuous assessment – 50% (Formative). The research process and the student’s consistency throughout the preparation of the thesis are evaluated, specifically: progress according to the timeline, quality of the literature review, appropriateness of methodological design, participation in supervision meetings, ability to solve problems and incorporate feedback, compliance with academic ethics. - Project – 50% (Formative/Final). The final deliverable and presentation are evaluated: scientific documentation and understanding of the topic, methodological</p>										

STUDENT EVALUATION

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

correctness and adequacy of analysis, quality and originality of results, structure, clarity, and academic writing, proper use of bibliographic references, oral presentation of the project.

Student Evaluation Languages

English

Student evaluation methods

- Continuous Evaluation (Formative)
- Written Assignment (Formative, Summative)

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

-

Additional bibliography for study

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EXERCISE FOR CARDIOMETABOLIC DISEASES

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	HEM1	SEMESTER	7th Semester
COURSE TITLE	EXERCISE FOR CARDIOMETABOLIC DISEASES		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE	Skill Development		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES none General prerequisites none		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	NO		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Upon successful completion of the course, students will be able to:			
Knowledge <ul style="list-style-type: none"> Understand pathophysiology of cardiometabolic diseases: Including type 2 diabetes, metabolic syndrome, obesity, hypertension, dyslipidemia, and cardiovascular disease. Evaluate outcomes of exercise interventions on cardiometabolic health: Mechanisms of insulin sensitivity improvement, blood pressure regulation, lipid metabolism, and inflammation reduction. integrate evidence-based guidelines into clinical practice: Evidence-based recommendations for aerobic, resistance, flexibility, 			

and combined training in patients with cardiometabolic conditions.

- Conduct risk assessment and safety considerations: Identifying high-risk patients, contraindications, and monitoring strategies during exercise interventions.
- Support behavioral and lifestyle modification strategies: Role of motivation, adherence, and behavior change models in long-term exercise programs.
- Understand the interaction with pharmacologic therapy: How exercise complements medications and when adjustments may be needed.

Skills

- Conduct comprehensive exercise assessments tailored to individuals with cardiometabolic diseases.
- Design and implement safe and effective individualized exercise programs.
- Monitor physiological responses to exercise (heart rate, blood pressure, glucose, perceived exertion) and adjust programs accordingly.
- Apply risk stratification protocols to prevent adverse events during exercise.
- Educate patients and communities on safe participation and lifestyle interventions.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Practical application of knowledge
Decision making
Autonomous work
Teamwork
Working in an international environment
Production of new research ideas
Project design and management
Equity and Inclusion
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

1. Introduction: Cardiometabolic diseases, prevalence, and the role of exercise
2. Pathophysiology of cardiovascular diseases, diabetes, obesity, dyslipidemia and metabolic syndrome
3. Risk assessment: screening, medical history, and laboratory markers
4. Principles of exercise prescription for cardiometabolic diseases
5. Aerobic training: mechanisms, programming, and clinical benefits in cardiometabolic diseases
6. Resistance training: safety, intensity, and adaptation in cardiometabolic diseases

7. Combined and interval training strategies in cardiometabolic diseases
8. Exercise and weight management, nutrition, and metabolic control in cardiometabolic diseases
9. Monitoring responses to exercise: vital signs, glucose, BP, and performance in patients with cardiometabolic diseases
10. Exercise in special populations: older adults, obese, or comorbid patients with cardiometabolic diseases
11. Behavior change strategies and adherence to exercise programs in patients with cardiometabolic diseases
12. Case studies: individualized programming and clinical outcomes
13. Practical workshops: program design, monitoring, and evidence-based application

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD Face to face, Distance learning, etc.	Face to face												
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students	USE OF ICT <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students Description eLearning platform for educational material, assignments, communication Email communication with students Use of electronic presentations (slides, videos) Use of ICT in student evaluation and final exams grading assisted by electronic means Use of ICT in communication with students												
TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc. The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr style="background-color: #e6f2ff;"> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>60</td> </tr> <tr> <td>FieldExercise</td> <td>30</td> </tr> <tr> <td>ClinicalExercise</td> <td>40</td> </tr> <tr> <td>Internship</td> <td>20</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	60	FieldExercise	30	ClinicalExercise	40	Internship	20	Total	150
Activity	Workload/semester												
Lectures	60												
FieldExercise	30												
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Total	150												
STUDENT EVALUATION Description of the evaluation process Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others Please indicate all relevant information about the course	Description Evaluation process includes a combination of final examination, quizzes, and project. Assessment Language: English Assessment Methods: • Quizzes (Multiple choice, short answer, problem solving), 20% (Formative/Summative) • Project (Written Assignment), 30% (Formative/Summative) • Final Examination (Multiple choice, short answer, problem solving), 50% (Summative) Student Evaluation Languages English												

assessment and how students are informed

Student evaluation methods

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

1. Cardiorespiratory Fitness in Cardiometabolic Diseases. Prevention and Management in Clinical Practice, Editors: Peter Kokkinos, Puneet Narayan, Springer 2019
2. Exercise for Cardiovascular Disease Prevention and Treatment. From Molecular to Clinical, Part 2, Editors: Junjie Xiao, Springer 2017
3. ACSM's Exercise Management for Persons With Chronic Diseases and Disabilities, 4th edition. Editors: Geoffrey E. Moore, J. Larry Durstine, Patricia L. Painter, Human Kinetics 2016

Additional bibliography for study

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EXERCISE FOR PULMONARY DISEASES

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	HEM2	SEMESTER	7th Semester
COURSE TITLE	EXERCISE FOR PULMONARY DISEASES		
TEACHING ACTIVITIES If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.		TEACHING HOURS PER WEEK	ECTS CREDITS
		3	6.0
COURSE TYPE Background, General Knowledge, Scientific Area, Skill Development	Specific Background		
PREREQUISITES	PREREQUISITES - General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Upon successful completion of the course, students will be able to: Knowledge <ul style="list-style-type: none"> • Describe the fundamental principles and goals of Pulmonary Rehabilitation in accordance with current European Respiratory Society guidelines. • Explain the role of exercise professionals within pulmonary rehabilitation programs. • Describe key aspects of pulmonary pathophysiology relevant to exercise training and rehabilitation. • Explain mechanisms of exercise limitation in patients with pulmonary diseases. 			

- Describe methods of exercise capacity assessment prior to exercise training in patients with pulmonary disease.
- Identify key cardiopulmonary exercise testing variables related to exercise limitation.
- Describe principles of exercise prescription and disease-specific rehabilitation approaches for COPD, asthma, interstitial lung disease, and pulmonary hypertension.

Skills

- Interpret spirometry, lung volumes, and diffusing capacity of the lungs results in the context of pulmonary rehabilitation.
- Use field-based exercise tests to assess functional exercise capacity.
- Design and adapt aerobic exercise programs for patients with pulmonary diseases.
- Implement resistance training programs considering muscle dysfunction and patient frailty.
- Integrate breathing techniques and respiratory muscle training into exercise programs.
- Recognize and manage exercise-induced oxygen desaturation and other exercise-related symptoms.

Abilities

- Apply individualized exercise interventions for patients with pulmonary diseases based on clinical assessment.
- Adapt exercise programs according to disease type, severity, and patient response.
- Safely supervise exercise in patients at increased clinical risk.
- Integrate exercise into center-based, home-based, and tele-rehabilitation pulmonary programs.
- Analyze clinical case studies to support evidence-based exercise decision-making.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use
Adaptation to new situations
Decision making
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Project design and management
Equity and Inclusion
Respect for the natural environment
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

- (1) Introduction to Pulmonary Rehabilitation (Definitions, goals, guidelines, role of exercise professionals in Pulmonary Rehabilitation)
- (2) Brief Review of Pulmonary Pathophysiology (focused on rehab-relevant aspects for patients with COPD, asthma, bronchiectasis, ILD, pulmonary hypertension, CF) and mechanisms of exercise limitation
- (3) Functional Assessment Before Exercise Training in pulmonary patients (Spirometry, diffusing capacity tests and interpretation for rehabilitation) - field testing in pulmonary patients
- (4) CPET key variables for identifying exercise limitations in pulmonary patients
- (5) Exercise Prescription for Pulmonary Rehabilitation (FITT for aerobic exercise, Intensity selection, and Progression models and individualization)
- (6) Applying Aerobic Exercise Training in patients with Pulmonary Disease, managing exercise-induced desaturation
- (7) Resistance Training for Patients with pulmonary disease, Adaptations for frail patients
- (8) Respiratory Muscle Training and Breathing Techniques
- (9) Disease-Specific Rehabilitation Approaches
- (10) ILD: management of severe exertional desaturation
- (11) Pulmonary Hypertension: safety thresholds and supervised exercise
- (12) Tele-Rehabilitation & Home-Based pulmonary rehabilitation
- (13) Program Implementation - Clinical Case Studies

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD Face to face, Distance learning, etc.	Face to face														
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students	USE OF ICT <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Communication with students • Use of ICT in Evaluation of students Description eLearning platform for educational material, assignments, communication Email communication with students Use of electronic presentations (slides, videos) Use of ICT in student evaluation and final exams grading assisted by electronic means Use of ICT in communication with students														
TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc. The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="background-color: #e6f2ff;">Activity</th> <th style="background-color: #e6f2ff;">Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>Laboratory</td> <td>20</td> </tr> <tr> <td>Interactive Learning</td> <td>15</td> </tr> <tr> <td>Bibliography Analysis</td> <td>61</td> </tr> <tr> <td>writing Project</td> <td>15</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	Laboratory	20	Interactive Learning	15	Bibliography Analysis	61	writing Project	15	Total	150
Activity	Workload/semester														
Lectures	39														
Laboratory	20														
Interactive Learning	15														
Bibliography Analysis	61														
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Total	150														

STUDENT EVALUATION

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

Description

Evaluation process includes a combination of final examination, quizzes, and project. Assessment Language: English Assessment Methods: • Midterm Exam: 25% (Multiple-choice questions Short-answer questions) (Formative/Summative) • Written Assignment or Case Study (5%) Case-based problem solving) Submitted in electronic form • Formative quizzes available on e-learning (not graded) Final Written Exam (70%) (Multiple-choice questions, Short-answer questions (Summative) All assessment criteria are included in the course description. Feedback on quiz/assignment grade is provided at submission. A detailed rubric for the written assignment is also available through the e-learning platform.

Student Evaluation Languages

English

Student evaluation methods

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

- ACSM’s Guidelines for Exercise Testing and Prescription (latest edition)
- ERS/ATS Pulmonary Rehabilitation Guidelines
- Pulmonary Rehabilitation (ERS Handbook)
- Clinical Exercise Physiology – Ehrman et al. (respiratory chapters) –
- Relevant scientific journal articles

Additional bibliography for study

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PERFORMANCE TRAINING AND MONITORING

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	PEM1	SEMESTER	7th Semester
COURSE TITLE	PERFORMANCE TRAINING AND MONITORING		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSE TYPE	Specific Background		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES - General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Upon successful completion of the course, students will be able to:			
Knowledge			
<ul style="list-style-type: none"> • Understand key principles of training load, adaptation, fatigue, and performance monitoring. • Describe internal and external load markers and their relevance to sport performance. • Explain technologies used in athlete monitoring (GPS, IMU, HR/HRV, force plates). • Understand the methodological basis of speed, agility, endurance, strength, and power assessments. • Recognize fatigue markers and injury-risk indicators. 			

- Describe periodization models and monitoring frameworks.

Skills

- Collect, process, and analyze performance monitoring data using modern tools.
- Conduct valid field tests for speed, agility, aerobic capacity, strength, and power.
- Use athlete management systems for data integration and workflow creation.
- Create dashboards and visualizations for performance reporting.
- Interpret performance trends and make evidence-based training recommendations.
- Develop monitoring plans aligned with sport-specific demands.

Abilities

- Design and implement complete monitoring systems for individuals or teams.
- Evaluate workload adaptations, fatigue, and injury risks using multi-source data.
- Produce coach-friendly reports and presentations.
- Apply ethical standards related to data privacy and informed consent.
- Work collaboratively within interdisciplinary performance support teams.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Practical application of knowledge
Search, analysis and synthesis of data and information, ICT Use
Adaptation to new situations
Decision making
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Project design and management
Equity and Inclusion
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

- (1) Introduction to Performance Monitoring and Training
(Purpose and benefits; key terminology; monitoring cycle (collect–analyze–interpret–act))
- (2) Principles of Training Load

(External vs internal load; dose–response; acute vs chronic workload; overtraining concepts)
(3) External Load Monitoring (GPS, accelerometers, IMUs; velocity and distance metrics; high-speed running; data accuracy)
(4) Internal Load Monitoring (Heart rate, HRV, lactate; RPE and session-RPE; cardiac drift and physiological responses)
(5) Speed and Agility Assessment (Timing gates; sprint profiling; repeated sprint ability; force–velocity; agility/COD tests)
(6) Endurance & Aerobic Capacity Testing (Telemetry with Ergospirometry Real-time gas analysis; integrating metabolic data; applications in performance monitoring, VO ₂ max and HRmax protocols; incremental tests; field vs laboratory assessments)
(7) Injury Risk & Fatigue Monitoring (Neuromuscular, metabolic, mental fatigue markers; wellness questionnaires; load–injury models)
(8) Data Analysis & Visualization (Data cleaning; key metrics; dashboards; trend interpretation; coach-friendly reports)
(9) Athlete & Team Management Systems (Smartabase, Catapult, Hudl, Wimu, Apex, Statsports, Polar Team Pro; wearable integration; workflow building)
(10) Designing & Monitoring a Program / Periodization Models (Sport-specific monitoring setup; selecting valid tests; planning cycles; block periodization; ethics; applied case study)
(11) Kinematic assessment of sport technique (Evaluation of key performance indicators using kinematic analysis Methods 1: 2D and 3D video kinematic analysis & Methods 2: IMUs and wearable sensors)
(12) Kinetic evaluation of sport performance (Evaluation of key performance indicators using kinetic analysis; Methods 1: hand-held dynamometry & Methods 2: field assessments using portable force-plates)
(13) Sport performance diagnostic tests: vertical jump ability (Selection criteria to evaluate the desired key performance indicator; Methods 1: data acquisition procedure & Methods 2: data analysis, interpretation, and reporting)

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD Face to face, Distance learning, etc.	Face to face
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description</p> <p>eLearning platform for educational material, assignments, communication</p> <p>Email communication with students</p> <p>Use of electronic presentations (slides, videos)</p> <p>Use of ICT in student evaluation and final exams grading assisted by electronic means</p> <p>Use of ICT in communication with students</p>

<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>13</td> </tr> <tr> <td>Laboratory</td> <td>13</td> </tr> <tr> <td>FieldExercise</td> <td>13</td> </tr> <tr> <td>StudyCreation</td> <td>78</td> </tr> <tr> <td>writingProject</td> <td>33</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	13	Laboratory	13	FieldExercise	13	StudyCreation	78	writingProject	33	Total	150
Activity	Workload/semester														
Lectures	13														
Laboratory	13														
FieldExercise	13														
StudyCreation	78														
writingProject	33														
Total	150														
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description Evaluation process includes a combination of written examinations, laboratory reporting, and project work. Assessment Language: English Assessment Methods: • Final Written Examination (Multiple Choice, Short Answer, Problem Solving), 25% • Laboratory Report (data collection, analysis, interpretation), 25% • Performance Monitoring Portfolio (season plan, dashboards, reporting), 25% • Formative assessment during laboratory and field sessions, 25% All assessment criteria are included in the course description. Feedback is provided electronically and during dedicated office hours. Detailed rubrics are provided through the e-learning platform.</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p>														

5. SUGGESTED BIBLIOGRAPHY

<p>EUDOXUS</p>
<ul style="list-style-type: none"> - Science & Application of High-Intensity Interval Training, P. Laursen, M. Bucchiet, 2024. Human Kinetics Publishers. - Monitoring Training and Performance in Athletes, M. McGuigan, 2017. Human Kinetics Publishers. - Heart Rate Training, 2nd Eds. R. Benson, D. Connolly, 2020. Human Kinetics Publishers. - Essentials of Strength Training and Conditioning, 5th Eds. G. Gregory Haff, N. Travis Tripplet. 2026.
<p>Additional bibliography for study</p>
<p>-</p>

HIGH-LEVEL SPORT PERFORMANCE

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	PEM2	SEMESTER	7th Semester
COURSE TITLE	HIGH-LEVEL SPORT PERFORMANCE		
TEACHING ACTIVITIES If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.		TEACHING HOURS PER WEEK	ECTS CREDITS
		3	6.0
COURSETYPE Background, General Knowledge, Scientific Area, Skill Development	Skill Development		
PREREQUISITES	PREREQUISITES - General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
-			

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use
Decision making
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Equity and Inclusion
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

-

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face</p>						
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description -</p>						
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p>	<table border="1"> <thead> <tr> <th data-bbox="858 1697 1166 1794">Activity</th> <th data-bbox="1166 1697 1437 1794">Workload/semester</th> </tr> </thead> <tbody> <tr> <td data-bbox="858 1794 1166 1845">Lectures</td> <td data-bbox="1166 1794 1437 1845">39</td> </tr> <tr> <td data-bbox="858 1845 1166 1897">writingProject</td> <td data-bbox="1166 1845 1437 1897">30</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	writingProject	30
Activity	Workload/semester						
Lectures	39						
writingProject	30						

<p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1"> <thead> <tr> <th data-bbox="858 286 1166 376">Activity</th> <th data-bbox="1166 286 1437 376">Workload/semester</th> </tr> </thead> <tbody> <tr> <td data-bbox="858 376 1166 432">Examinations</td> <td data-bbox="1166 376 1437 432">20</td> </tr> <tr> <td data-bbox="858 432 1166 488">BibliographyAnalysis</td> <td data-bbox="1166 432 1437 488">61</td> </tr> <tr> <td data-bbox="858 488 1166 539">Total</td> <td data-bbox="1166 488 1437 539">150</td> </tr> </tbody> </table>	Activity	Workload/semester	Examinations	20	BibliographyAnalysis	61	Total	150
Activity	Workload/semester								
Examinations	20								
BibliographyAnalysis	61								
Total	150								
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description -</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p>								

5. SUGGESTED BIBLIOGRAPHY

<p>EUDOXUS</p>
<p>-</p>
<p>Additional bibliography for study</p>
<p>-</p>

8th Semester

EXERCISE AND AGING

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CMPA4	SEMESTER	8th Semester
COURSE TITLE	EXERCISE AND AGING		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.			
	3	6.0	
COURSETYPE Background, General Knowledge, Scientific Area, Skill Development	Specific Background		
PREREQUISITES	PREREQUISITES - General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
-			

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
 ICT Use, Adaptation to new situations,
 Decision making,
 Autonomous work,
 Teamwork,
 Working in an international environment,
 Working in an interdisciplinary environment, Production of
 new research ideas

Project design and management
 Equity and Inclusion
 Respect for the natural environment
 Sustainability
 Demonstration of social, professional and moral responsibility
 and sensitivity to gender issues
 Critical thinking
 Promoting free, creative and inductive reasoning

Search, analysis and synthesis of data and information, ICT Use
 Decision making
 Autonomous work
 Teamwork
 Working in an international environment
 Working in an interdisciplinary environment
 Production of new research ideas
 Equity and Inclusion
 Critical thinking
 Promoting free, creative and inductive reasoning

3. COURSE CONTENT

-

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	Face to face										
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description -</p>										
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester</p>	<table border="1"> <thead> <tr> <th data-bbox="858 1635 1166 1727">Activity</th> <th data-bbox="1166 1635 1437 1727">Workload/semester</th> </tr> </thead> <tbody> <tr> <td data-bbox="858 1727 1166 1783">Lectures</td> <td data-bbox="1166 1727 1437 1783">39</td> </tr> <tr> <td data-bbox="858 1783 1166 1839">Bibliography Analysis</td> <td data-bbox="1166 1783 1437 1839">45</td> </tr> <tr> <td data-bbox="858 1839 1166 1895">writing Project</td> <td data-bbox="1166 1839 1437 1895">30</td> </tr> <tr> <td data-bbox="858 1895 1166 1939">Study Creation</td> <td data-bbox="1166 1895 1437 1939">20</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	Bibliography Analysis	45	writing Project	30	Study Creation	20
Activity	Workload/semester										
Lectures	39										
Bibliography Analysis	45										
writing Project	30										
Study Creation	20										

<p>complies to ECTS standards</p>	<table border="1"> <thead> <tr> <th data-bbox="858 286 1166 376">Activity</th> <th data-bbox="1166 286 1437 376">Workload/semester</th> </tr> </thead> <tbody> <tr> <td data-bbox="858 376 1166 432">Examinations</td> <td data-bbox="1166 376 1437 432">16</td> </tr> <tr> <td data-bbox="858 432 1166 488">Total</td> <td data-bbox="1166 432 1437 488">150</td> </tr> </tbody> </table>	Activity	Workload/semester	Examinations	16	Total	150
Activity	Workload/semester						
Examinations	16						
Total	150						
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description -</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p>						

<p>5. SUGGESTED BIBLIOGRAPHY</p>	
<p>EUDOXUS</p>	<p>-</p>
<p>-</p>	<p>-</p>
<p>Additional bibliography for study</p>	
<p>-</p>	<p>-</p>

SPORTS CARDIOLOGY

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CMPA5	SEMESTER	8th Semester
COURSE TITLE	SPORTS CARDIOLOGY		
TEACHING ACTIVITIES If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	TEACHING HOURS PER WEEK		ECTS CREDITS
	3		6.0
COURSETYPE Background, General Knowledge, Scientific Area, Skill Development	Specific Background		
PREREQUISITES	PREREQUISITES none General prerequisites none		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	NO		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Upon successful completion of the course, students will be able to: Knowledge <ul style="list-style-type: none"> • Understand the cardiovascular physiology in athletes: Normal and adaptive changes in heart structure and function due to athletic training. • Understand exercise-induced cardiac remodeling: Recognition of physiologic versus pathologic changes (e.g., athlete’s heart vs. cardiomyopathies). • Recognize common cardiovascular conditions in athletes: Including arrhythmias, hypertension, ischemic heart disease, 			

congenital heart defects, and myocarditis.

- Conduct risk stratification for sudden cardiac events: Identification of high-risk individuals and preventive strategies.
- Implement preventive strategies, diagnostic tools and investigations: Use of ECG, echocardiography, cardiac MRI, stress testing, and biomarkers in evaluating athletes.
- Provide guidelines for safe participation in sports: Understanding international and national recommendations for competitive and recreational athletes.
- Understand pharmacologic considerations in athletes: Knowledge of antiarrhythmics, beta-blockers, and other cardiovascular drugs, including anti-doping regulations.

Skills

- Perform detailed cardiovascular assessments tailored to athletes and exercisers.
- Interpret exercise ECGs and other diagnostic tests in the context of athletic populations.
- Identify abnormal findings versus physiologic adaptations in athletes.
- Design individualized exercise prescriptions for patients with cardiovascular risk or disease.
- Apply pre-participation screening protocols to detect underlying cardiac pathology.
- Respond effectively to acute cardiovascular emergencies during sports activities.

Abilities / Competencies

- Make evidence-based clinical decisions regarding safe participation in sports.
- Integrate knowledge from cardiology, sports medicine, and physiology for holistic care.
- Communicate cardiovascular risks and recommendations clearly to athletes, coaches, and multidisciplinary teams.
- Promote preventive cardiology practices and lifestyle modifications in athletic populations.
- Demonstrate professionalism, ethical responsibility, and adherence to anti-doping and safety standards.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Practical application of knowledge

Adaptation to new situations

Decision making

Autonomous work

Teamwork

Production of new research ideas

Equity and Inclusion

Critical thinking

Promoting free, creative and inductive reasoning

3. COURSE CONTENT

1. Introduction to Sports Cardiology: Scope, athlete heart health, and clinical relevance
2. Cardiovascular physiology and adaptation to acute and chronic exercise

3. Pre-participation cardiac screening and risk stratification in athletes
4. Noninvasive methods for the evaluation of the cardiovascular system
5. Cardiac imaging, exercise testing, and biomarker interpretation in athletes
6. Arrhythmias: recognition, evaluation, and management in sport contexts
7. Cardiomyopathies: hypertrophic, dilated, restrictive – diagnosis and exercise considerations
8. Hypertension, metabolic syndrome, and other cardiovascular risk factors in sport
9. Ischemic heart disease and exercise: prevention, monitoring, and safe practice
10. Sudden cardiac death in athletes: risk factors, prevention, and emergency response
11. Return-to-play protocols after cardiac events or procedures
12. Case studies: athlete management, emergency planning, and multidisciplinary care
13. Practical workshops, simulations, and integration of evidence-based sports cardiology practice

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	Face to face												
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description</p> <p>eLearning platform for educational material, assignments, communication</p> <p>Email communication with students</p> <p>Use of electronic presentations (slides, videos)</p> <p>Use of ICT in student evaluation and final exams grading assisted by electronic means</p> <p>Use of ICT in communication with students</p>												
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1" data-bbox="858 1319 1437 1682"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>60</td> </tr> <tr> <td>Laboratory</td> <td>30</td> </tr> <tr> <td>FieldExercise</td> <td>20</td> </tr> <tr> <td>BibliographyAnalysis</td> <td>40</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	60	Laboratory	30	FieldExercise	20	BibliographyAnalysis	40	Total	150
Activity	Workload/semester												
Lectures	60												
Laboratory	30												
FieldExercise	20												
BibliographyAnalysis	40												
Total	150												
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in</p>	<p>Description</p> <p>Evaluation process includes a combination of final examination, quizzes, and project. Assessment Methods: • Quizzes (Multiple choice, short answer, problem solving), 20% (Formative/Summative) • Project (Written Assignment), 30% (Formative/Summative) • Final Examination (Multiple choice, short answer, problem solving), 50% (Summative)</p>												

audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

Student Evaluation Languages

English

Student evaluation methods

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

1. Sports Cardiology: Care of the Athletic Heart from the Clinic to the Sidelines 1st ed. 2021 Edition by David J. Engel (Editor), Dermot M. Phelan (Editor), Springer
2. Textbook of Sports and Exercise Cardiology, Axel Pressler, Josef Niebauer 2020 Springer

Additional bibliography for study

-

PROJECT - PART II

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CMPA6	SEMESTER	8th Semester
COURSE TITLE	PROJECT - PART II		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	6	12.0	
COURSETYPE	Skill Development		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES		
	- General prerequisites		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	NO		
COURSE URL	-		
2. LEARNING OUTCOMES			
<p>Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p> <p>Upon successful completion of the course, students will be able to:</p> <p>Knowledge</p> <ul style="list-style-type: none"> Recognize the main scientific approaches, methodologies, and tools used in the field of study. Distinguish research problems and formulate clear research questions or hypotheses. Understand the basic techniques for data collection, analysis, and interpretation (qualitative and/or quantitative). <p>Skills</p> <ul style="list-style-type: none"> Design and organize an appropriate research methodology for the problem under study. 			

- collect, process, and analyze data using appropriate tools or software.
- Formulate evidence-based conclusions.
- Produce a scientific written report according to academic standards (structure, citations, formatting).
- Present the work orally and in writing with clarity, accuracy, and scientific terminology.
- Manage time and the implementation stages of a research project

Abilities

- Independently conduct a complete scientific study from conception to final presentation.
- Critically evaluate scientific data and make informed decisions.
- Address complex problems using analytical and creative thinking.
- Adapt the methodology when research or practical obstacles arise.
- Communicate scientific ideas to both specialized and non-specialized audiences.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Practical application of knowledge
Search, analysis and synthesis of data and information, ICT Use
Adaptation to new situations
Decision making
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Project design and management
Equity and Inclusion
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

- Implementation of the experimental procedure
- Collection and recording of data
- Ensuring validity and reliability of measurements
- Data processing and analysis
- Interpretation of results in relation to the literature
- Discussion of limitations and proposals for future research
- Writing of the final thesis document

- Preparation of the presentation and public defense

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face Distance learning</p>										
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description ICT tools are used throughout the thesis process to support research organization, ensure scientific documentation, perform data analysis, and effectively communicate the results. Specifically, the following will be used:</p> <ul style="list-style-type: none"> - An eLearning platform for educational material, assignment submission, and communication with the supervisor - Academic databases, institutional digital libraries, and reference management tools for literature search and management - Word processing software, formatting templates, and automated content generation tools for writing the thesis - Questionnaire creation tools (e.g., Google Forms), recording of experimental measurements via software or sensors (where required), spreadsheets (Excel, Google Sheets) for data organization, statistical software, diagram and figure creation software, presentation software, and submission of the final thesis to the institutional repository - Use of plagiarism detection tools (e.g., Turnitin) 										
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1" data-bbox="858 1227 1437 1536"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Laboratory</td> <td>50</td> </tr> <tr> <td>BibliographyAnalysis</td> <td>150</td> </tr> <tr> <td>writingProject</td> <td>100</td> </tr> <tr> <td>Total</td> <td>300</td> </tr> </tbody> </table>	Activity	Workload/semester	Laboratory	50	BibliographyAnalysis	150	writingProject	100	Total	300
Activity	Workload/semester										
Laboratory	50										
BibliographyAnalysis	150										
writingProject	100										
Total	300										
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course</p>	<p>Description Student assessment is continuous and formative and aims to monitor progress during the preparation of the thesis as well as to evaluate the quality of the final outcome. It includes regular meetings with the supervisor, review of intermediate deliverables, and evaluation of the final written document and presentation. • Continuous assessment – 50% (Formative) The research process and the student’s consistency throughout the preparation of the thesis are evaluated, specifically: progress according to the timeline, quality of the literature review, appropriateness of methodological design, participation in supervision meetings, ability to solve problems and incorporate feedback,</p>										

assessment and how students are informed

compliance with academic ethics. • Project – 50% (Formative/Final) The final deliverable and presentation are evaluated: scientific documentation and understanding of the topic, methodological correctness and adequacy of analysis, quality and originality of results, structure, clarity, and academic writing, proper use of bibliographic references, oral presentation of the project.

Student Evaluation Languages

English

Student evaluation methods

- ContinuousEvaluation (Formative)
- WrittenAssignyment (Formative, Summative)

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

-

Additional bibliography for study

-

OPTIMIZING PERFORMANCE IN SPORT

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CMPB4	SEMESTER	8th Semester
COURSE TITLE	OPTIMIZING PERFORMANCE IN SPORT		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE	Skill Development		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES		
	- General prerequisites		
	-		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes	Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.		
	-		

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
 ICT Use, Adaptation to new situations,
 Decision making,
 Autonomous work,
 Teamwork,
 Working in an international environment,
 Working in an interdisciplinary environment, Production of
 new research ideas

Project design and management
 Equity and Inclusion
 Respect for the natural environment
 Sustainability
 Demonstration of social, professional and moral responsibility
 and sensitivity to gender issues
 Critical thinking
 Promoting free, creative and inductive reasoning

Decision making
 Autonomous work
 Teamwork
 Working in an international environment
 Working in an interdisciplinary environment
 Production of new research ideas
 Equity and Inclusion
 Demonstration of social, professional and moral responsibility and sensitivity to gender issues
 Critical thinking
 Promoting free, creative and inductive reasoning

3. COURSE CONTENT

-

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	Face to face										
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description -</p>										
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester</p>	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>writingProject</td> <td>30</td> </tr> <tr> <td>Examinations</td> <td>20</td> </tr> <tr> <td>BibliographyAnalysis</td> <td>61</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	writingProject	30	Examinations	20	BibliographyAnalysis	61
Activity	Workload/semester										
Lectures	39										
writingProject	30										
Examinations	20										
BibliographyAnalysis	61										

<p>complies to ECTS standards</p>	<table border="1"> <thead> <tr> <th data-bbox="858 286 1166 376">Activity</th> <th data-bbox="1166 286 1437 376">Workload/semester</th> </tr> </thead> <tbody> <tr> <td data-bbox="858 376 1166 432">Total</td> <td data-bbox="1166 376 1437 432">150</td> </tr> </tbody> </table>	Activity	Workload/semester	Total	150
Activity	Workload/semester				
Total	150				
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description -</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p>				

<p>5. SUGGESTED BIBLIOGRAPHY</p>	
<p>EUDOXUS</p>	<p>-</p>
<p>-</p>	<p>-</p>
<p>Additional bibliography for study</p>	<p>-</p>
<p>-</p>	<p>-</p>

COACHING IN TEAM SPORTS

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CMPB5	SEMESTER	8th Semester
COURSE TITLE	COACHING IN TEAM SPORTS		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE	Specialty / Orientation		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES None General prerequisites None		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	NO		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes	Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.		
Upon successful completion of the course, students will be able to:			
Knowledge			
<ul style="list-style-type: none"> Team sports as complex adaptive systems (constraints-led, self-organization). Tactical periodization for teams integrating technical, tactical, and physical components. Collective performance benchmarking (KPIs, cohesion, transitions). Ethical coaching and collective decision-making. Media and staff management in team contexts. 			
Skills			

- Design team-focused drills emphasizing rotations, spacing, transitions, and unit coordination.
- Plan a competitive week and seasonal macro-cycle based on game model.
- Lead time-outs and in-game tactical interventions.
- Analyze team behaviour using KPIs and video/analytics software.
- Integrate coaching staff and manage multi-disciplinary sessions.

Abilities

- Lead teams with evidence-based interventions.
- Evaluate collective performance using tactical and cohesion metrics.
- Deliver effective team communication under game conditions.
- Apply ethical coaching principles in collective contexts.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Practical application of knowledge
Search, analysis and synthesis of data and information, ICT Use
Adaptation to new situations
Decision making
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Project design and management
Equity and Inclusion
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

- 1: Team Sports as Complex Adaptive Systems, Ethics, and Leadership
- 2: Coaching Styles and Feedback in Team Sports
- 3: Game Model and Styles of Play
- 4: Technical and Tactical Drill Design for Teams
- 5: Tactical Periodization and Team Planning
- 6: In-Game Management: Time-Outs and Tactical Interventions
- 7: Team Transitions and Decision-Making
- 8: Performance Analysis: Team Key Performance Indicators (KPIs), Video, and Analytics
- 9: Media and Communication for Team Coaching

- 10: Organization of Coaching Staff and Team Management
- 11: Training for Skill Development in Team Sports
- 12: Mental and Psychological Preparation in Team Sports
- 13: Student Presentations – Team Coaching Projects

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face</p>												
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description eLearning platform for educational material, assignments, communication Email communication with students Use of electronic presentations (slides, videos) Use of ICT in student evaluation and final exams grading assisted by electronic means Use of ICT in communication with students</p>												
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 50%;">Activity</th> <th style="width: 50%;">Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>BibliographyAnalysis</td> <td>61</td> </tr> <tr> <td>writingProject</td> <td>30</td> </tr> <tr> <td>Other</td> <td>20</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	BibliographyAnalysis	61	writingProject	30	Other	20	Total	150
Activity	Workload/semester												
Lectures	39												
BibliographyAnalysis	61												
writingProject	30												
Other	20												
Total	150												
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description Evaluation process includes a combination of final examination, quizzes, and project. Assessment Language: English Assessment Methods: • Quizzes (Multiple choice, short answer, problem solving), 20% (Formative/Summative) • Project (Written Assignment), 30% (Formative/Summative) • Final Examination (Multiple choice, short answer, problem solving), 50% (Summative) All assessment criteria are included in the course description. Feedback on correct answers is provided for every quiz question. A detailed rubric for the written assignment is also available through the e-learning platform</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p>												

STUDENT EVALUATION

Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

- MultipleChoice (Formative)
- WrittenAssignment (Formative)
- ProblemSolving (Formative)

5. SUGGESTED BIBLIOGRAPHY

EUDOXUS

-

Additional bibliography for study

- Suggested bibliography:

- Clemente, F. M., Rocha, S., & Lima, R. (2022). Team sports training: The complexity model. Routledge.
- Davids, K., Hristovski, R., Araújo, D., Balagué, N., Button, C., & Passos, P. (2013). Complex systems in sport. Routledge.
- Giatsis, G. (2023). Performance indicators in women's volleyball Olympics and World Championships (2014–2021). International Journal of Sports Science & Coaching, 18(2), 452–462.
- Issurin, V. B. (2016). Periodization in team sport games—A review of current knowledge and modern trends in practice. Journal of Human Kinetics, 54(1), 185–190.
- Woods, C. T., McLaren, S. J., O'Donoghue, P., Davies, I. G., & Robertson, S. (2019). Training programme designs in professional team sport: An ecological dynamics exemplar. International Journal of Sports Science & Coaching, 14(4), 501–512.

PROJECT - PART II

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	CMPB6	SEMESTER	8th Semester
COURSE TITLE	PROJECT - PART II		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	6	12.0	
COURSETYPE	Skill Development		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES		
	- General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	NO		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes	Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.		
	-		

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
 ICT Use, Adaptation to new situations,
 Decision making,
 Autonomous work,
 Teamwork,
 Working in an international environment,
 Working in an interdisciplinary environment, Production of
 new research ideas

Project design and management
 Equity and Inclusion
 Respect for the natural environment
 Sustainability
 Demonstration of social, professional and moral responsibility
 and sensitivity to gender issues
 Critical thinking
 Promoting free, creative and inductive reasoning

Practical application of knowledge
 Search, analysis and synthesis of data and information, ICT Use
 Adaptation to new situations
 Decision making
 Autonomous work
 Teamwork
 Working in an international environment
 Working in an interdisciplinary environment
 Production of new research ideas
 Project design and management
 Equity and Inclusion
 Respect for the natural environment
 Demonstration of social, professional and moral responsibility and sensitivity to gender issues
 Critical thinking
 Promoting free, creative and inductive reasoning

3. COURSE CONTENT

-

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face</p>
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description -</p>

<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>BibliographyAnalysis</td> <td>150</td> </tr> <tr> <td>Laboratory</td> <td>50</td> </tr> <tr> <td>StudyCreation</td> <td>100</td> </tr> <tr> <td>Total</td> <td>300</td> </tr> </tbody> </table>	Activity	Workload/semester	BibliographyAnalysis	150	Laboratory	50	StudyCreation	100	Total	300
Activity	Workload/semester										
BibliographyAnalysis	150										
Laboratory	50										
StudyCreation	100										
Total	300										
<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description -</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p>										

<p>5. SUGGESTED BIBLIOGRAPHY</p>	
<p>EUDOXUS</p>	<p>-</p>
<p>-</p>	<p>-</p>
<p>Additional bibliography for study</p>	<p>-</p>
<p>-</p>	<p>-</p>

ADAPTED PHYSICAL ACTIVITY

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 7 – Master’s or equivalent level		
COURSE CODE	HEM3	SEMESTER	8th Semester
COURSE TITLE	ADAPTED PHYSICAL ACTIVITY		
TEACHING ACTIVITIES If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	6.0	
COURSE TYPE Background, General Knowledge, Scientific Area, Skill Development	Specific Background		
PREREQUISITES	PREREQUISITES - General prerequisites -		
TEACHING & EXAMINATION	Greek English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
Upon successful completion of the course, students will be able to: Knowledge <ul style="list-style-type: none"> • Recognize the basic concepts/principles of Adapted Physical Activity. • Recognize the individual characteristics related to motor, sensory, cognitive and developmental disabilities and interpret their effects on physical activity and sports. • Describe assessment practices and design educational programs. • Interpret concepts of active and healthy lifestyles, according to the model of the International Classification of Functioning, Disability and Health (ICF). 			

- Know normal and atypical motor development
- Recognize the psychosocial factors that influence the participation of individuals with disabilities in physical activity and sports.
- Understand the method of sports classification used to ensure fair competition in sports.

Skills

- Document educational progress in the motor, cognitive, and emotional/social domains of human behavior, using standardized, valid, and reliable observational tools and techniques.
- Implement individualized and/or group exercise programs responsive to diverse needs, abilities, and limitations
- Modify rules, equipment, environments, and teaching methods to promote full participation and goal achievement.
- Transfer skills to different educational settings with different challenges
- Select a variety of teaching strategies, such as universal design of learning, differentiated instruction, and ecological theory.
- Demonstrate effective collaboration with professionals such as physical therapists, speech therapists, occupational therapists, and families of students with disabilities.
- Select instruction in a manner that is appropriate to the cognitive, sensory, and motor levels of students with disabilities.
- Select appropriate strength and conditioning programs for wheelchair athletes, such as forward thrusting, with an emphasis on corrective exercises and high-intensity, low-volume strength training to avoid overtraining.
- Analyze physiological factors in athletes with motor disabilities, such as energy expenditure.
- Explain the priority that should be given to the athlete's individual abilities and not the disability when analyzing performance and adapting support.

Abilities

- Create safe, supportive and inclusive exercise and recreation environments for people with disabilities.
- Demonstrate professionalism and empathy in interactions with students with disabilities, promoting dignity and autonomy.
- Assess the progress of students with disabilities.
- Implement exercise programs based on ongoing feedback and assessment.
- Advocate for inclusion and equal access to PE and sports.
- Integrate the principles of Adapted Physical Activity into broader exercise or training practices to achieve accessibility for all.
- Demonstrate familiarity with adapted equipment, such as special balls, ramps or communication devices.
- Understand the challenges faced by people with disabilities and inspire them to actively participate in Physical Education and sports.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
 ICT Use, Adaptation to new situations,
 Decision making,
 Autonomous work,
 Teamwork,
 Working in an international environment,
 Working in an interdisciplinary environment, Production of new research ideas

Project design and management
 Equity and Inclusion
 Respect for the natural environment
 Sustainability
 Demonstration of social, professional and moral responsibility and sensitivity to gender issues
 Critical thinking
 Promoting free, creative and inductive reasoning

Practical application of knowledge

Decision making
 Autonomous work
 Teamwork
 Working in an interdisciplinary environment
 Production of new research ideas
 Equity and Inclusion
 Demonstration of social, professional and moral responsibility and sensitivity to gender issues
 Critical thinking
 Promoting free, creative and inductive reasoning

3. COURSE CONTENT

- (1) Introduction to Adapted Physical Activity
- (2) Design, Assessment, Teaching and Counseling in Adapted Physical Education
- (3) Individual Differences: Motor Disabilities - Movement Neuroscience and Applied Biomechanics
- (4) Individual Differences: Intellectual Disability, Down Syndrome, Autism Spectrum Disorders
- (5) Individual Differences: Sensory Disabilities
- (6) Students with Special Educational Needs
- (7) Adapted Sports: From rehabilitation to elite Sports – Sports classification
- (8) Design and implementation of educational programs to raise awareness about disability and sport
- (9) Sports technology and assistive devices
- (10) Health, fitness, exercise prescription in specific disabilities
- (11) Recreation and wellness
- (12) Professional roles in Adapted Physical Activity
- (13) Internship - Practical application

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD Face to face, Distance learning, etc.	Face to face												
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students	USE OF ICT <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Laboratory Education • Use of ICT in Communication with students • Use of ICT in Evaluation of students Description -												
TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc. The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="background-color: #e0f0ff;">Activity</th> <th style="background-color: #e0f0ff;">Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>50</td> </tr> <tr> <td>Laboratory</td> <td>50</td> </tr> <tr> <td>FieldExercise</td> <td>25</td> </tr> <tr> <td>BibliographyAnalysis</td> <td>25</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	50	Laboratory	50	FieldExercise	25	BibliographyAnalysis	25	Total	150
Activity	Workload/semester												
Lectures	50												
Laboratory	50												
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BibliographyAnalysis	25												
Total	150												

<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description</p> <p>-</p> <p>Student Evaluation Languages</p> <p>Greek English</p> <p>Student evaluation methods</p> <ul style="list-style-type: none"> • MultipleChoice () • ShortAnswerQuestions () • EssayDevelopmentQuestions () • WrittenAssignment ()
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5. SUGGESTED BIBLIOGRAPHY

<p>EUDOXUS</p> <ul style="list-style-type: none"> - Sherrill, C. (2005). Adapted Physical Activity, Recreation, and Sport. - Evagelinou, C. (2025). Paralympic School Day. Salto Publisher

Additional bibliography for study

<ul style="list-style-type: none"> - Roth, K., Bittner, M., Foster, E., Pyfer, J., Zittel, L. (2026). Principles and Methods of Adapted Physical Education: An Evidenced-Based Pedagogical Approach - Winnick, J.P, Porretta, D.(2016) Adapted Physical Education and Sport - DePauw, C & Gavron.S. (2005). Disability and Sport - Hardin, R., Pate, J.R (2024). Introduction to adaptive sport and recreation - Liberman, L.J., Houston-Wilson, C & Grenier, M. (2025). Strategies for inclusion: Physical Education for everyone. Human Kinetics - Hodge,S., Lieberman, L., Murata, N., (2017). Essentials of teaching adapted physical education: Diversity, culture, and inclusion - Horvat, M., Croce, R., Pesce, C., Fallaize, A.F. (2019). Developmental and adapted physical education: Making ability count. - Haegele, J., Hodge,H., Shapiro, D. (2020). Routledge handbook of adapted physical education. - Ozemek, C., Bonikowske,A. Christle, J., Gallo, P. (2025). ACSM's guidelines for exercise testing and prescription - Vanlandewicjk, Y & Thomson, W. W. (2011). The Paralympic athlete - Goosey-Tolfrey, V. (2010). Wheelchair Sport: A complete guide for athletes, coaches, and teachers - Leitschuh, C. and Johnson, M. (2024). Adapted Physical Activity across the Life Span. Human Kinetics <p>Relevant scientific journals:</p> <ul style="list-style-type: none"> - Adapted Physical Activity Quarterly - Palestra - European Journal of Adapted Physical Activity - Research Quarterly for Exercise and Sport - European Journal of Special needs Education - International Journal of Special Education - Developmental Medicine and Child Neurology - Journal of Human Movement Studies - Perceptual and Motor Skills - Motor Control

HEALTH AND LIFELONG PHYSICAL ACTIVITY

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	HEM4	SEMESTER	8th Semester
COURSE TITLE	HEALTH AND LIFELONG PHYSICAL ACTIVITY		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE	Specialty / Orientation		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES		
	- General prerequisites		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
<p>Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</p> <p>This course will explore the determinants of physical activity and sedentary behavior across the life span. It will consider the evidence underpinning physical activity recommendations in early years, children and adolescents, and older adults, and barriers and facilitators to activity in these populations, as well as the benefits of physical activity in determining health in specific populations, such as women during menopause or pregnancy.</p> <p>Upon successful completion of the "Health and Lifelong Physical Activity" course, students should be able to:</p> <ul style="list-style-type: none"> - Explain the health benefits of Lifelong Physical Activity: Articulate the comprehensive physical, mental, and emotional benefits of regular physical activity for lifelong health and disease prevention (e.g., cardiovascular health, weight management, reduced risk of type 2 diabetes and certain cancers, stress reduction, improved mood and sleep). 			

- - Identify fitness components: Distinguish and describe the components of health-related physical fitness: cardiovascular endurance, muscular strength, muscular endurance, flexibility, and body composition.
- - Recognize safety considerations: Be aware of safety requirements, risk factors for chronic diseases, environmental stressors, and appropriate emergency procedures (like basic first aid/CPR) when participating in various physical activities.
- Analyze influencing factors: Analyze how varied personal, social, cultural, and environmental factors shape opportunities for health behaviors and physical activity patterns.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Practical application of knowledge
Search, analysis and synthesis of data and information, ICT Use
Adaptation to new situations
Decision making
Autonomous work
Equity and Inclusion

3. COURSE CONTENT

1. Definitions of health, physical activity, sedentary behavior, and fitness
2. Physical, mental, and emotional benefits of regular physical activity
3. Sedentary lifestyle risks - The dangers of inactivity and prolonged sitting ("sitting disease")
4. The components of physical fitness (cardiovascular endurance, muscular strength and endurance, flexibility and mobility, and body composition) - Skill-Related Fitness Components (agility, balance, coordination, power, reaction time, and speed) - Fitness assessment
5. Principles of exercise programming
6. Physical activity for children and adolescents
7. Physical activity for older adults
8. Gender differences and physical activity for pregnant and menopausal women
9. Physical activity for people with medical conditions
10. Developing an active lifestyle - Goal setting for health and fitness - Motivation and adherence - Strategies to overcome barriers to exercise and maintain long-term consistency
11. Safety, injury prevention, and special populations - Safe practices, environmental considerations, managing common exercise injuries
12. Current trends in fitness and wearable technology
13. Lifelong physical activity and wellness

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD

Face to face

Face to face, Distance learning, etc.													
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description eLearning platform for educational material, assignments, communication Email communication with students Use of electronic presentations (slides, videos) Use of ICT in student evaluation and final exams grading assisted by electronic means Use of ICT in communication with students</p>												
<p>TEACHING ORGANIZATION The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>writingProject</td> <td>30</td> </tr> <tr> <td>BibliographyAnalysis</td> <td>61</td> </tr> <tr> <td>Examinations</td> <td>20</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	writingProject	30	BibliographyAnalysis	61	Examinations	20	Total	150
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<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description Evaluation process includes a combination of final examination, quizzes, and project. Assessment Language: English Assessment Methods: • Quizzes (Multiple choice, short answer, problem solving), 20% (Formative/Summative) • Project (Written Assignment), 30% (Formative/Summative) • Final Examination (Multiple choice, short answer, problem solving), 50% (Summative) All assessment criteria are included in the course description. Feedback on correct answers is provided for every quiz question. A detailed rubric for the written assignment is also available through the e-learning platform.</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p>												

5. SUGGESTED BIBLIOGRAPHY

<p>EUDOXUS</p>
<p>-</p>
<p>Additional bibliography for study</p>
<p>Suggested bibliography (Books): - Bouchard C., Blair S.N., Haskell W.L. (2012). Physical Activity and Health. 2nd Edition, Human Kinetics Publisher (ISBN: 978-</p>

1450425995)

- Foreman J. (2020). Exercise is Medicine: How Physical Activity Boosts Health and Slows Aging. Eds Oxford University Press (ISBN: 978-0190685461)
- Hardman, A. & Stensel, D. (2009). Physical activity and health: the evidence explained. 2nd edition. Eds Routledge (ISBN: 9780415632966)
- Smith, A & Biddle, S. Youth Physical Activity and Sedentary Behaviour (Eds). (2008) Champaign, IL: Human Kinetics
- Zhu W., Owen N. (2017). Sedentary Behavior and Health: Concepts, Assessments, and Interventions. First Edition, Human Kinetics Publisher (ISBN: 978-1450471282)

Relevant articles in scientific journals:

- Han Y., Hu Y., Yu C., Guo Y., Pei P., Yang L., Chen Y., Du H., Sun D., Pang Y., Chen N., Clarke R., Chen J., Chen Z., Li L., Lv J., on behalf of the China Kadoorie Biobank Collaborative Group. Lifestyle, cardiometabolic disease, and multimorbidity in a prospective Chinese study. *European Heart Journal*, 2021, 42(34):3374–3384
- Macpherson H., Teo W.P., Schneider L.A., Smith A.E. A Life-Long Approach to Physical Activity for Brain Health. *Front Aging Neurosci*, 2017, 9:147
- Marquez D.X., Aguiñaga S., Vásquez P.M., Conroy D.E., Erickson K.I., Hillman C., Stillman C.M., Ballard R.M., Sheppard B.B., Petruzzello S.J., King A.C., Powell K.E. A systematic review of physical activity and quality of life and well-being. *Transl Behav Med*, 2020, 10(5): 1098-1109
- Neuffer PD, Bamman MM, Muoio DM, et al. Understanding the cellular and molecular mechanisms of physical activity-induced health benefits. *Cell Metabol*, 2015, 22 (1):4-11
- Ungvari Z., Fazekas-Pongor V., Csiszar A., Kunutsor S.K. The multifaceted benefits of walking for healthy aging: from Blue Zones to molecular mechanisms. *Geroscience*, 2023, 45(6):3211-3239

Relevant scientific journals:

Journal of Physical Activity and Health, Journal of Aging and Physical Activity, Preventive Medicine, International Journal of Behavioural Nutrition and Physical Activity, Lancet and British Medical Journal

SPORT DEVELOPMENT

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	PEM3	SEMESTER	8th Semester
COURSE TITLE	SPORT DEVELOPMENT		
TEACHING ACTIVITIES If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	TEACHING HOURS PER WEEK		ECTS CREDITS
	3		6.0
COURSETYPE Background, General Knowledge, Scientific Area, Skill Development	Scientific Area		
PREREQUISITES	PREREQUISITES - General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.			
-			

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
 ICT Use, Adaptation to new situations,
 Decision making,
 Autonomous work,
 Teamwork,
 Working in an international environment,
 Working in an interdisciplinary environment, Production of
 new research ideas

Project design and management
 Equity and Inclusion
 Respect for the natural environment
 Sustainability
 Demonstration of social, professional and moral responsibility
 and sensitivity to gender issues
 Critical thinking
 Promoting free, creative and inductive reasoning

Practical application of knowledge
 Search, analysis and synthesis of data and information, ICT Use
 Adaptation to new situations
 Decision making
 Autonomous work
 Teamwork
 Working in an international environment
 Working in an interdisciplinary environment
 Production of new research ideas
 Project design and management
 Equity and Inclusion
 Demonstration of social, professional and moral responsibility and sensitivity to gender issues
 Critical thinking
 Promoting free, creative and inductive reasoning

3. COURSE CONTENT

-

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD Face to face, Distance learning, etc.</p>	<p>Face to face</p>
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) Use of ICT in Teaching, in Laboratory Education, in Communication with students</p>	<p>USE OF ICT</p> <ul style="list-style-type: none"> • Use of ICT in Teaching • Use of ICT in Communication with students • Use of ICT in Evaluation of students <p>Description -</p>

<p>TEACHING ORGANIZATION</p> <p>The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research& analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards</p>	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>Laboratory</td> <td>30</td> </tr> <tr> <td>Examinations</td> <td>51</td> </tr> <tr> <td>writingProject</td> <td>30</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	Laboratory	30	Examinations	51	writingProject	30	Total	150
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5. SUGGESTED BIBLIOGRAPHY

EUDOXUS
-
Additional bibliography for study
-

APPLIED SPORTS PSYCHOLOGY

1. GENERAL			
FACULTY	Physical Education and Sport Sciences		
SCHOOL	Sport and Exercise Sciences for Health and Performance		
LEVEL OF STUDIES	ISCED level 6 – Bachelor’s or equivalent level		
COURSE CODE	PEM4	SEMESTER	8th Semester
COURSE TITLE	APPLIED SPORTS PSYCHOLOGY		
TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.	3	6.0	
COURSETYPE	Scientific Area		
Background, General Knowledge, Scientific Area, Skill Development			
PREREQUISITES	PREREQUISITES		
	- General prerequisites -		
TEACHING & EXAMINATION	English		
COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE URL	-		
2. LEARNING OUTCOMES			
Learning Outcomes	Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.		
	-		

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use, Adaptation to new situations,
Decision making,
Autonomous work,
Teamwork,
Working in an international environment,
Working in an interdisciplinary environment, Production of
new research ideas

Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility
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Activity	Workload/semester										
Lectures	39										
Bibliography Analysis	25										
writing Project	12										
Study Creation	25										

	Activity	Workload/semester
	Laboratory	9
	Examinations	40
	Total	150

<p>STUDENT EVALUATION Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Description -</p> <p>Student Evaluation Languages English</p> <p>Student evaluation methods</p>
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