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Physical Education and Sports Science Email: ssm@nie.edu.sg

#### SPORT SCIENCE & MANAGEMENT SS1022 PHYSICAL ACTIVITY IN LIFE COURSE WELLNESS

Academic Year	2024-25 <b>Semester</b> 1				
Course Coordinator					
Course Code	SS1022				
Course Title	Physical Activity in Life Course Wellness				
Pre-requisites	-				
No of AUs	3				
Contact Hours	39				

## Course Aims

This course aims to provide you with knowledge and understanding of the primary importance of daily physical activity, limited and high-quality sedentary time and their collective impact on life course wellness. The impact of adequate amounts, regularity of physical activity, and its role in preventing non-communicable diseases will be foregrounded. The course provides a strong foundation for using physical activity to promote healthy lifestyle choices in the community.

## Intended Learning Outcomes (ILO)

By the end of this course, you should be able to:

- 1. understand and explain the terminologies used to describe life course physical activity.
- 2. explain the life course physical activity through the lens of the socioecological and life course models of health.
- 3. practise and describe the role that physical activity plays in life course wellness.
- 4. explain the seminal roles that physical activity plays in preventing major noncommunicable diseases, addictions and substance abuse.
- 5. elaborate on the strengths and limitations of community physical activity programmes.

## Course Content

The following topics will be covered:

- 1. Physical activity & sedentary behaviour in life course wellness
- 2. Physical activity as life course prevention in the life of selected NCDs
- 3. Physical activity in life course body composition weight management
- 4. Physical activity & sport in life course body image disorders
- 5. Physical activity in life course nutrition



- 6. Physical activity in life course addictions- alcohol & tobacco
- 7. Physical activity life course programmes in the community
- 8. Physical activity as a life course is a vital sign in disease prevention

# NTU Competencies & Graduate Attributes

## NTU Competencies

Character	
Competence	
Cognitive agility	

# **NTU Graduate Attributes**

Graduate Attributes	Level (i.e., basic, intermediate, advanced)
Self-management	Intermediate
2. Sense making	Intermediate
3. Collaboration	Intermediate
4. Communication	Intermediate

## Assessment (includes both continuous and summative assessment)

Component	ILO Tested	Weighting	Team/ Individual	Assessment Rubrics
1. Group Presentation	1, 2, 3, 4, 5	20%	Team	Appendix 1
2. Group Report	1, 2, 3, 4, 5	30%	Team	Appendix 2
3. Individual Essay	1, 2, 3, 4, 5	50%	Individual	Appendix 3
Total		100%		

## Formative Feedback

Feedback for learning will be verbally provided during each activity class session, where you have the opportunity to learn approaches to formulating problem questions related to each activity or input session.

For the group presentation, you will be given verbal qualitative feedback on the presentation.

For the group report & individual essay, written qualitative feedback will be given after the assessments are marked.

## Learning and Teaching Approach

Approach	How does this approach support you in achieving the learning outcomes?
Lectures & Practical	Lectures will provide information for key learning concepts and theories and support understanding of key concepts. Practical

Activities activities are for hands-on experiential learning.			
	Online Learning	Time will be given for learning from online materials as a part of the flip teaching approach. These materials will support key concepts covered in lectures and practical activities.	

## **Reading and References**

#### **NIE Research and Publications**

- Condello, G., Cortis, C., Tessitore, A., & Chia, M. (Eds.). (2022). *Behavioral Determinants of Physical Activity Participation Across the Lifespan*. Frontiers Media SA. https://doi.org/10.3389/978-2-88976-281-1
- 2. Aishah Abdul Rahman, Teo Wei Peng, Terence Chua, & Michael Chia. (In press). Physical activity as a tool for learning. In A. Jamaludin (Ed.), *Applying the Science* of *Learning to Education: An Insight into the Mechanisms that Shape Learning* (Springer Book Series). Springer Singapore.
- 3. Chia, M., Leong, L. K., & Quek, J. J. (2004). Healthy, Well and Wise: *Take Personal Responsibility in Daily Effort for a Life of Wellness*. National Institute of Education, Singapore.

#### Other Readings and References

Specific readings and references will be sign-posted for each week on NTULearn (most current research evidence)

#### **Course Policies and Student Responsibilities**

#### (1) General

You are expected to complete all assigned pre-class readings and activities, attend all classes – lecture and laboratory – punctually, submit all scheduled assignments and take tests by due dates. You are not allowed to swap laboratory groups without express permission from the course coordinator. You are expected to take responsibility to follow up with course notes, assignments and course-related announcements for sessions they have missed. You are expected to participate in all discussions and class activities unless there is a valid medical reason not to do so.

## (2) Absenteeism

Absence from class without a valid reason will affect your overall course grade. Valid reasons include falling sick, supported by a medical certificate and participation in NTU's approved activities supported by an excuse letter from the relevant bodies.

If you miss a lecture, you must inform the course instructor via email prior to the start of the class.

(3) Absence Due to Medical or Other Reasons

If you are sick and not able to complete a test or submit an assignment, you have to submit the original Medical Certificate (or another relevant document) to the Sport Science &

Management (or Home School) administration to obtain official leave. Without this, the missed assessment component will not be counted towards the final grade. There are no make-ups allowed.

#### (4) Attire and safety

You are expected to participate in practical laboratory activities. Some of these activities involve exercise. You are expected to wear appropriate attire for participation, obey laboratory safety rules, and take appropriate care of and return all equipment after use.

#### Academic Integrity

Good academic work depends on honesty and ethical behaviour. The quality of your work as a student relies on adhering to the principles of academic integrity and to the NTU Honour Code, a set of values shared by the whole university community. Truth, Trust and Justice are at the core of NTU's shared values.

As a student, it is important that you recognise your responsibilities in understanding and applying the principles of academic integrity in all the work you do at NTU. Not knowing what is involved in maintaining academic integrity does not excuse academic dishonesty. You need to actively equip yourself with strategies to avoid all forms of academic dishonesty, including plagiarism, academic fraud, collusion, and cheating. If you are uncertain of the definitions of any of these terms, go to the <u>NTU Student Academic Integrity</u> <u>Policy and Procedures link</u> in the Student Portal for more information. Consult your instructor(s) if you need any clarification about the requirements of academic integrity in the course.

Special note: Generative AI tools will be allowed to the extent stipulated for each assignment in the assignment instructions, and any such use must be duly referenced or disclosed.

#### **Course Instructors**

Instructor	Office Location	Phone	Email	
TBA				

## Planned Weekly Schedule

Week	Торіс	ILO	Readings/ Activities
1	Physical activity	1,2,3	Selected readings on
2	sedentary behaviour in life course holistic health		NTULearn (to be kept current when the course is launched)
3	Physical activity as life course prevention of selected non- communicable diseases	1,2,3, 1,2,3,	Selected readings on NTULearn (to be kept current when the course is launched)
4	Physical activity in life course body composition weight management		
5	Physical activity as life course prevention of	1,2,3,	Selected readings on NTULearn (to be kept
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	selected non- communicable diseases		current when the course is launched)
7	Mid-course revision & consolidation Novel physical activity examples	1,2,3,	Two-way group feedback
	R	ecess Week	
8	Physical activity & sport in life course body image & sleep disorders	1,2,3,4	Selected readings on NTULearn (to be kept current when the course is launched)
8	Physical activity in life course addictions- substance abuse	1,2,3,4	Selected readings on NTULearn (to be kept current when the course is launched)
9	Physical activity in life course nutrition	1,2,3	Selected readings on NTULearn (to be kept current when the course is launched)
10	Physical activity life course programmes in the community	1,2,3,4,5	Selected readings on NTULearn (to be kept current when the course is launched)
11	Group presentation	1,2,3,4,5	
12	Physical activity as a life course is a vital sign in disease prevention	1,2,3, 5	Selected readings on NTULearn (to be kept current when the course is launched)
13	Course epilogue	1,2,3,4,5	

Appendix 1: Assessment Criteria for Group Presentation (20% Final Grade – marked out of 100)

	A+, A, A-	B+, B	B-, C+, C	D+, D	F
Quality of presentation (max 25)	Information provided clearly answers the question set out. Presentation is clear, and the flow is coherent and logical. Pace is appropriate.	Information mostly answers the question set. Presentation is mostly clear, and the flow generally coherent and logical.	There are weaknesses or absences in the information provided, and the flow of presentation is unclear at times.	Much of the information provided does not answer the question, and the flow is difficult to understand.	Little relevant information and unclear flow.
Demonstrati on of material (max 40)	Able to clearly demonstrate and thoroughly explain concepts or issues when queried. Able to answer questions in a poised and articulate manner with high confidence.	Good demonstratio n or explanation of concepts or issues when queried. Able to answer most of the questions clearly and with confidence.	Clear but basic demonstratio n or explanation of concepts or issues when queried. Able to answer some of the questions clearly but lacks confidence at times.	Poor demonstratio n and weak explanation of concepts or issues when queried. Has difficulty answering questions and lacks confidence.	Unable to demonstrate or explain concepts or issues when queried. Unable to answer questions.
Use of technology (max 10)	Uses relevant technology very well to supplement and enhance the quality of presentation.	Good use of technology to improve the presentation.	Some use of technology to help improve the presentation.	Little use of relevant technology in the presentation.	No clear use of technology in the presentation.
Communicat ion and teamwork* (max 25)	Communicat ion is very clear and easy to understand. All members of the team make active contributions	Communicat ion is clear and easy to understand most of the time. Most members of the team make good contributions	Communicat ion is unclear at times. Varied contributions of different team members.	Communicat ion is unclear and there and difficult to understand. Most contributions are provided by a single	Communicat ion is unclear and not possible to understand. No team member makes an active contribution.

				team	
				member.	
*All individuals within the group are expected to contribute to work involved in the planning,					
data collection and output. An individual's score may vary from that of the team based on					
feedback and o	bservations in t	his area.			

Appendix 2: Assessment Criteria for Laboratory Work/Report (20%) + Peer Assessment (10%) (i.e. 30% of Final Grade – marked out of 100)

	A+, A, A-	B+, B	B-, C+, C	D+, D	F
Team: Groupwork and data collection* (max 20)	Clear teamwork, planning and group cohesion with appropriate division of work by each member of the group contributing to the successful collection of data.	Good teamwork and cohesion, but improvemen t needed in the planning of roles by group members for data collection.	Obvious improvemen ts needed in teamwork and cooperation of members to improve data collection.	Team members were working in small cliques with infrequent whole-group cooperation.	Poor teamwork with little or no cooperation among group members during data collection processes.
Individual: Structure and clarity of writing & presentatio n (max 10)	Well structured. Very minor grammatical and spelling errors. Table and/or figures are well presented.	Some improvemen t in structure is possible. Few grammatical and spelling errors. Tables and/or figures are well presented.	Improvemen t in structure is needed. Obvious grammatical and spelling errors. Tables and figures need improving.	Poor structure. Many spelling and grammatical errors. Poor presentation of tables and figures.	Coherent structure absent. Copious spelling and grammatical errors. Very poor presentation of tables and figures.
Individual: Introduction , background , aims, hypotheses and objectives (max 20)	Background statement of the problem is clearly defined. Aim clear.	Background statement of the problem could be clearer. Minor improvemen t in defining the aim of the study is needed.	Background statement of the problem and aim needs obvious improvemen t.	Background statement and aim need many improvement s.	Background statement and aim are unclear and incoherent.
Individual: Methods (max 20)	Comprehensi ve description of methods.	Good description of methods with few errors.	Methods described but with some errors or omissions.	Methods described difficult to follow and omissions.	Little coherent description of the methods.
Individual: Data analysis and	Appropriate data analysis applied and interpretation of results.	Good data analysis and interpretatio n of results	Incorrect data analysis in parts and interpretatio	Poor data analysis and interpretation of results.	Inappropriat e or very poor data analysis and

interpretatio n (max 20)		with few errors.	n of results incorrect or inappropriat e in parts.		interpretatio n of results.	
Individual: Discussion and concluding remarks (max 10)	Conclusion(s) clearly related to results.	Conclusion( s) clear with small errors.	Some conclusion(s ) are not supported by study results.	Conclusion(s ) generally inappropriate or incorrect.	Conclusion( s) unclear, poor and inappropriat e.	
*All individuals within the group are expected to contribute to work involved in the planning, data collection and output. An individual's score may vary from that of the team based on feedback and observations in this area.						

For the peer evaluation component (10%), group members within each group will be asked to rate each of their peers, and the score received for each group member will be the average of the scores from their peers' round to the nearest integer (e.g., the student gets a score of 9, 8 and 8, respectively from the 3 other group members and will receive a score of 8 (average of 8.3).

Marks	10, 9	8, 7	6, 5	4, 3	2, 1
		, ,			Little or weak effort; was
	crucial	contributed	contributed to	minimal	detrimental to
	component of the group's	the group	• .	standards of the group	the group
	success				

Appendix 3: Assessment Criteria for Individual Essay (50% Final Grade – marked out	
of 100)	

	A+, A, A-	B+, B	B-, C+, C	D+, D	F
Individual: Presentatio n and writing (max 20)	Well presented with very minor grammatical and spelling errors. Tables and/or figures were very clear.	Good presentation with some improvement s needed in grammar and spelling. Tables and/or figures are well presented.	Some obvious improvement s in presentation, grammar and spelling are needed along with tables and figures.	Clear improvement s in presentation, spelling, grammar and tables and figures are needed.	Poor presentation with copious spelling and grammatical errors. Very poor presentation of tables and figures.
Individual: Content (max 50)	Relevant content is included, which clearly answers the questions posed in a clear manner supported by information from a range of scientific sources.	Most of the content is relevant and answers the questions, supported by a good range of scientific sources.	Some relevant content is included, but it could be presented more clearly and better supported by scientific sources.	Much of the content fails to answer the questions posed, could be presented more clearly and has little support from scientific sources. Significant knowledge gap.	Content has little or no relevance to the questions posed, is unclear and mostly opinion. Very significant knowledge gap.
Critical thinking (max 30)	The available evidence and information is critically analysed, and gaps in studies and knowledge identified.	Good attempt at critically analysing available evidence and identifying current knowledge gaps.	Some critique of the evidence and some gaps in knowledge identified.	Poor attempt at critical analysis of the evidence available.	Little or no critical analysis of information.