國立清華大學課程大綱

科號 Course Number			學分 Credit		人數限制 Class Size	
中文名稱 Course Title	運動研究發展趨勢					
英文名稱 Course English Title	Trends and Development in Sports Studies					
任課教師 Instructor	姚在府					
上課時間 Time			上課教室 Room			

課程簡述(必填) (最多 500 個中文字) 本欄位資料會上傳教育部課程網

Brief Course Description (required)　(50-200 words if possible, up to 1000 letters

本課程導讀運動研究的未來趨勢、國際競技運動全球化發展、運動科技的前瞻發展及科學化競技運動訓練的未來，綜合不同運動領域導讀國際同儕審查研究文獻進行案例探討，科學文獻撰寫及分析，提升學生對於科學研究及文章發表認識及文章撰寫知能，推動運動科學選材與訓練領域發展，培養專業體育運動人才，強化學生對國際運動研究認識、科技輔助及健康相關領域之認知與應用，增進運動科學研究水準。

This course introduces the trends in sports research, the globalization of international competitive sports, the forward-looking development of sports technology, and the future sports training modalities in performance enhancement. The goal is to Improve students' knowledge of scientific research in sports science and promote the development of talent selection, identification, and training. This course is set up to cultivate professionals and strengthen students' understanding and application of international sports research, state-of-art training interventions in both performance and health-related fields, enhancing sports scientific research level.

請輸入課程內容「中文暨英文關鍵字」至少 5 個, 每個關鍵字至多 20 個中文, 以半形逗點分隔 (必填)

Please fill in at least 5 course keywords (up to 40 letters for each keyword) and use commas to separate them.(required)

中文關鍵字: 運動科學趨勢，運動訓練，表現提升，科技應用，智慧數據分析

英文關鍵字: Trends in sports science, sports training, performance enhancement, technology application, smart data analysis

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課程大綱 Detailed Course Syllabus

Ethical Statement in NTHU course syllabi: As per the Guidelines for Collaboration, Co-learning, and Cultivation of Artificial Intelligence Competencies in University Education, this course adheres to a policy of conditional openness. In order to comply with this policy, students are required to provide a brief explanation in the footnotes of the title page or after the reference in their assignments or reports, detailing how generative AI (e.g. usage of ChatGPT) was utilized for topic ideation, sentence refinement, or structural reference.

● 課程說明(Course Description)

本課程以介紹融入不同研究主題及方法，總覽當今整體運動科學研究發展及競技運動訓練表現和分析，預期學生從本課程習得相關知識用以強化自身競技運動表現，自我檢視精進運動表現能力及未來職涯發展。This course is designed to introduce and address the issues and trends happening in sports today. Performance analysis in sport is one of the leading topics in sport science to provide a better understanding of athletic development and to devise more effective methods for improving performance. Students would be expected to utilize the learned knowledge to formulate training protocol and to strengthen its sports performance.

● 指定用書(Text Books)

● 參考書籍(References)

　[書名：Understanding International Sport Organisations: Principles,

power and possibilities 作者：Lincoln Allison, Alan Tomlinson 出版社：

Taylor and Francis]

[書名：Sport Development and Olympic Studies Past, Present, and

Future 作者 :Stephan Wassong, Michael Heine, Rob Hess 出版社：

Routledge]

[書名：Routledge Handbook of Elite Sport Performance 作者：Dave

Collins, Andrew Cruickshank, Geir Jordet 出版社：Taylor and Francis]

[書名：Sport Science: Current and Future Trends for Performance

Optimization 作者：Pedro Morouço; Hideki Takagi; Ricardo Fernandes

出版社：ESECS/IPLeiria]

● 教學方式(Teaching Method)

綜述國際競技運動發展趨勢、運動科技的整體發展、科學化運動訓練,導讀指標

性相關文獻進行探究,學員就相關文獻進行口頭報告,鼓勵學員課堂上進行討論及

答辯,繳交期末報告。

● 教學進度(Syllabus)

週次 (Week)	課程大綱(Syllabus)	週次 (Week)	課程大綱(Syllabus)
1	國際競技運動組織架構及發展趨勢 Trends in international sports organization and development	9	視認知覺與運動訓練 Visual perceptual-cognitive and sports training
2	運動科學文獻閱讀與解釋 Reading and interpreting the Literature in exercise science	10	認知行為科學與運動表現 Cognitive-behavioral science and sports performance
3	動作追蹤與分析研究 Motion tracking and analysis studies	11	運動智慧大數據分析研究 studies that from big data to smart data analysis
4	智慧科技與運動資訊應用 Smart technology and sports informatics application	12	運動科技的應用與發展趨勢 Application and development trends in sports technology
5	實際賽事分析與表現預測討論	13	新興競技運動研究 Emerging sports studies

	Real-world competition and performance prediction studies		
6	科學化競技運動訓練展望 Perspectives in scientific-based sports training	14	睡眠,做夢與運動心像 Sleep, dreams, and sports visualization
7	運動強度與生理監控 The exercise intensity and its physiological correlates monitoring	15	運動傷害及疲勞恢復的心理衝擊 The Mental Impact of Sports Injury and Fatigue Recovery
8	運動心理與賽場表現 Sports psychology studies in-field performance	16	競技運動發展與奧運研究過去及未來Sport Development and Olympic Studies

● **成績考核(Evaluation)**

1.口頭報告(oral presentation)30%: 學生就相關文獻掌握程度、報告流暢度、結構嚴謹度及組織性進行綜合評量。Criteria include Structure, organization, fluency, and coherence of presentation.

2. 課堂表現(attendance and performance)25%: 學生課堂出席及互動、討論積極性與邏輯思辯能力。Interaction during class, active participation in discussion, and constructive criticism in a way of logic.

3. 期末評論報告(opinion essay)45%: 學生就運動科學研究未來發展，以文字撰述進行相關議題探討、思辨及評論。Submit a report to provide a scholarly review of recent trends in sports studies, describing the potential topics/questions that are not discussed in the current context of work.

● **可連結之網頁位址 相關網頁(Personal Website)**