



International Personal Trainers & Fitness Academy (IPTFA)

國際康體專才培訓學院

Advanced Program Design: The Science and Application of Hypertrophy Periodization

進階訓練計劃編寫與設計：訓練計劃的週期化科學與實務應用



Course Content:

This course is designed by senior fitness experts and strength and conditioning coaches from a practical perspective. It is closely tied to exercise science theory and real-world coaching scenarios, helping you upgrade from a trainee who “knows how to train yourself” to a professional coach who “can scientifically design precise programs.”

The core of the course debunks the myth that “resistance training only requires lifting weights to improve physique.” Effective resistance training is primarily the result of a systems-engineering process involving mechanical tension, muscle damage, metabolic stress, total training volume, training frequency, exercise order, movement tempo, rest configuration, degree of fatigue, and periodization. Based on scientific research evidence, students will design practical, advanced training programs that are executable, trackable, and dynamically adjustable for clients with different training backgrounds, recovery capacities, and muscle-building goals—completely moving away from the erroneous coaching model of randomly applying templates and blindly adding weight.

Target Audience:

課程內容：

本課程由資深健身專家、體能與肌力教練從實務視角出發設計，緊扣運動科學理論與現場操作場景，協助你從「自己會練」的訓練者，升級為「能科學設計精準課表」的專業教練。

課程核心打破「阻力訓練只要重訓就能改善體態」的迷思：有效的阻力訓練主要成因，是透過機械張力、肌肉損傷、代謝壓力、總訓練量、訓練頻率、動作次序安排、動作節奏、休息配置、力竭程度與週期化安排共同作用的系統工程。學員將以科學研究證據為基礎，為不同訓練基礎、不同恢復能力、不同增肌目標的客戶，設計出可執行、可追蹤、可動態調整的實用高級訓練課表，徹底告別亂套模板、盲目加重量的錯誤教學模式。

授課對象：



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- Fitness coaches, physical therapists, and athletic trainers who already possess basic resistance training knowledge
- Those who wish to gain a deeper understanding of training program design principles and practical application, and improve their ability to write training plans
- Professional strength and conditioning coaches who want to apply periodization planning, training volume prescription, and advanced training methods in daily coaching

Recommended Prerequisites:

Bronze-International Professional Fitness Personal Trainer Certificate Course, or a personal trainer certificate course from another institution

Course Duration:

Total duration: 12 hours, including theory, practical operation, and case discussion, ensuring students' theoretical and practical abilities are developed simultaneously.

Course Content:

Unit 1: The Science of Muscle Hypertrophy

- Break down the core logic of muscle growth from the underlying exercise physiology, and move beyond common hypertrophy myths.
- Master the three major drivers of hypertrophy: mechanical tension, muscle damage, and metabolic stress—their mechanisms and practical application boundaries.
- Differentiate the effects of different rest intervals and degrees of muscular failure on hypertrophy outcomes and overtraining risk.
- Class discussion: Use personal experience to provide a real case of “excessive metabolic stress but decreased strength,” and jointly analyze correction strategies.

Unit 2: Weekly Training Frequency, Volume Prescription, and Split

Establish a standardized training volume prescription system and move away from the “program by feel” model.

- Understand the definitions and practical uses of MV (maintenance volume), MEV (minimum effective volume), MAV (maximum adaptive volume), and MRV (maximum recoverable volume).
- Master weekly training frequency configurations for beginner/intermediate/advanced clients, learn to design different training splits, and apply them flexibly to different clients.

- 已具備基礎阻力訓練知識的健身教練、物理治療師、運動防護員
- 希望深入理解訓練寫作原理及實際應用、提升編寫訓練計劃能力
- 欲將週期化規劃、訓練量處方、進階訓練法落地應用於日常教學的專業體能教練

先修建議：

銅級國際專業康體私人教練證書課程 或持有其他機構私人教練證書課程

課程時數：

總時數 12 小時，其中包含理論、實務操作與個案案例討論，確保學員理論與實作能力同步到位。

課程大綱：

單元 1：肌肥大的科學

- 從運動生理底層拆解肌肉生長核心邏輯，擺脫坊間增肌迷思。
- 掌握肌肥大三大驅動因素：機械張力、肌肉損傷、代謝壓力的運作機制與實務應用邊界
- 分辨不同休息間隔、肌肉力竭程度對增肌成效與過度訓練風險的影響
- 課堂討論：結合自身經歷舉出「代謝壓力過高但力量下降」的實際案例，共同梳理修正方案

單元 2：每週訓練頻率、訓練量處方與分化

- 建立標準化訓練量處方體系，告別「憑感覺排課」模式。
- 了解 MV 維持量、MEV 最低有效量、MAV 最大適應量、MRV 最大可恢復量的定義與實際用法
- 掌握初/中/高階不同訓練水平客戶的每週訓練頻率配置，學會不同訓練模式的設計並靈活運用於不同客戶身上。



- Classroom practical: Select and apply appropriate training splits to design a 3–5 day per week training program.

Unit 3: Exercise Selection and Exercise Order

Establish a scientific exercise sequencing logic to maximize training efficiency while reducing injury risk.

- Understand the seven major resistance-training movements and the characteristics of various accessory exercises, and become proficient in the design logic of the A–E series.
- Arrange exercise order based on energy supply patterns, recovery dynamics, and central nervous system fatigue characteristics; flexibly use different resistance stimuli to improve training efficiency.
- Classroom practical: Use the A–E template to design a full-body training program.

Unit 4: Repetition Prescription, Intensity, Rest, and Tempo

- Use precise parameters to standardize exercise execution and eliminate ineffective training caused by momentum.
- Deepen understanding of the relationships among repetitions, 1RM %, RIR, and time under tension (TUT), and the standard operation of training tempo.
- Reasonably configure corresponding repetitions, intensity, and rest duration according to different goals: hypertrophy, strength, and metabolic stress.
- Classroom practical: Design 3 different goal-specific tempo prescriptions each for the squat, bench press, and row, and explain the corresponding physiological purpose.

Unit 5: Periodized Training

- Master a complete periodization planning system to steadily advance training progress over the long term and avoid stagnation.
- Understand the application of mesocycles/microcycles, learn quick 1RM estimation methods, and become proficient in the configuration logic of ACC and INT phases in block periodization.
- Master the applicable situations for linear and nonlinear periodization, and the progression rules of intensity and repetitions from ACC to INT.
- Classroom practical: Design a 12-week resistance training periodization plan including ACC1, ACC2, and INT1, specifying the core

- 課堂實作：選取及運用適合的訓練模式，設計一份每週 3-5 天的訓練課表

單元 3：運動選擇與運動順序

建立科學動作排序邏輯，最大化訓練效率同時降低受傷風險。

- 認識 7 大主要助力訓練的動作與各類輔助運動的特性，熟練 A–E 系列的設計邏輯
- 依據能量供應規律、恢復動態與中樞神經疲勞特性安排動作順序，靈活運用不同阻力刺激的訓練方式，從而提升訓練效率
- 課堂實作：以 A–E 模板設計一份覆蓋全身的訓練課表

單元 4：反覆次數設定、強度、休息與節奏

- 用精細參數標準化動作執行，消除慣性帶來的無效訓練。
- 深化反覆次數、1RM %、RIR、肌張力下時間的關聯，訓練節奏的標準操作
- 依據肌肥大、肌力、代謝壓力不同導向，合理配置對應的次數、強度與休息時長
- 課堂實作：為深蹲、臥推、划船三大動作各設計 3 種不同目標的節奏處方，說明對應生理目的

單元 5：週期化訓練

- 掌握完整週期化規劃體系，長期穩定推進訓練進度，避免訓練停滯。
- 認識中/微週期的應用情況，學會 1RM 快速預估方法，熟練模塊化週期的 ACC、INT 階段配置邏輯
- 掌握線性與非線性週期化的適用情況，從 ACC 到 INT 的強度與次數遞進規則
- 課堂實作：設計一份包含 ACC1、ACC2、INT1 週的**阻力訓練週期計劃，標明各階段核心參數



parameters of each phase.

Unit 6: Advanced Training Methods

Learn a variety of advanced training techniques to help clients break through long-term training plateaus.

- Understand the differences and appropriate timing of single-station, double-station, tri-set, and superset, and become proficient in the operational details of Myo-sets, mechanical drop sets, and the 1¼ training method.
- Master regression and progression pathways for major training movements, and clarify the configuration principle that advanced training methods should be uniformly placed in the latter part of the session.
- Classroom practical: Design a complete advanced training program for all muscle groups of the body, specifying rest configuration and RIR requirements.

Unit 7: Progress Review and Progressive Overload

Build an objective, trackable training outcome system and move away from the misconception of subjectively judging training effectiveness.

- Master total training volume calculation methods and session-to-session* progress check techniques, and distinguish between the two major progressive overload pathways: load progression and repetition progression.
- Build a coach-specific progress tracking table, review training status weekly, and dynamically adjust the program every 3–4 weeks.
- Classroom practical: Calculate total volume based on simulated client 4-week training data, and design a reasonable progressive overload strategy for the next phase.

Assessments include:

- Attendance and class participation: 10% of total grade
- Classroom practical exercises and periodization design assignments; individually assigned work:
- Independently complete 1 ACC accumulation block and 1 INT intensification block program design: 30% of total grade
- Final assignment: Complete an 8–12 week comprehensive hypertrophy program design and give an oral presentation explaining the program design logic and adjustment rationale: 60% of total grade

Course fee: HKD 4,800

Course Duration: 12 hours

單元 6：進階訓練法

學會多種進階訓練技術，幫助客戶突破長期訓練瓶頸。

- 理解單站、雙站、三合組、超級組的差異與適用時機，熟練 Myo-sets、機械式遞減組、（1¼）訓練法的操作細節
- 掌握主要訓練動作的降階與進階路徑，明確進階訓練法統一安排在課程後段的配置原則
- 課堂實作：以全身各肌肉群設計一個進階完整訓練方案，標明休息配置與 RIR 要求

單元 7：進度檢視與漸進式超負荷

建立客觀可追蹤的訓練成效體系，告別主觀判斷訓練效果的誤區。

- 掌握總訓練容量計算方法與 session-to-session 進度的檢查技巧，區分負荷進展與次數進展兩大超負荷路徑
- 搭建教練專用進度追蹤表，每週檢視訓練狀態、每 3–4 週動態調整課表
- 課堂實作：依據模擬客戶 4 週訓練數據計算總容量，設計下一階段合理的漸進式超負荷策略

評核包括：

- 出席率與課堂參與度：佔總成績 10%
- 課堂實作練習與週期化設計作業，個人指定作業：
- 獨立完成 1 個 ACC 積累模塊及 1 個 INT 轉化模塊課表設計：佔總成績 30%
- 期末作業：完成一份 8–12 週完整肌肥大課表設計並進行口頭報告，闡述課表設計邏輯與調整依據：佔總成績 60%

課程費用： HKD 4,800



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