

國立中正大學通識教育課程教學大綱

National Chung Cheng University Course Syllabus of General Education

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| 開課學年度/學期 School Year/ Semester | 114 學年度第 2 學期 2 nd semester, 114 | | |
| 課程名稱 (中文) Course Title (CH) | 進階數位音樂創作 | | |
| 課程名稱 (英文) Course Title (EN) | Advanced Digital Music Design | | |
| 課 碼 Course ID | | 學分數 Credit | 2 |
| 授 課 方 式 Instructional Methods | 請勾選(可複選) (Multiple Selection) : <input checked="" type="checkbox"/> 課堂講授 <input checked="" type="checkbox"/> 網路教學 <input checked="" type="checkbox"/> 分組討論 Lecturing Distant Learning Group Discussion <input type="checkbox"/> 校外教學 <input type="checkbox"/> 其他 _____ Fieldtrip Others | | |
| 教學目標及範圍 Course Objectives | 音樂審美觀與音樂鑑賞能力的探索與提升 Exploration and enhancement of musical aesthetics and appreciation skills 提升音樂創作與生活結合之關聯性的敏銳度 Heightening sensitivity to the connection between music creation and everyday life 將音樂創作思維的概念與自身專業技能結合 Integrating concepts of musical creativity with one's professional skills 自我表現力與學習力的提升 Enhancing self-expression and learning abilities | | |

| 授課大綱 (週次表及每週課程詳細內容說明) Schedule | 週次 Week | 主題 Topics |
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| | 1 | 和平紀念日補假 Substitute Holiday for Peace Memorial Day |
| | 2 | 課程簡介 (音樂創作主題分組、課程大綱) Course Introduction (Music Composition Topic Grouping and Course Overview) 樂曲風格安排與設計探討 (流行音樂風格) Discussion on Musical Style Arrangement and Design (Pop Music Style) |
| | 3 | 編曲實作 – 和弦進行設計、配器討論 Arranging Practice – Chord Progression Design, Instrumentation Discussion |
| | 4 | 編曲實作 – 節奏安排與設計 Arranging Practice – Rhythm Arrangement and Design |
| | 5 | 編曲實作 – 旋律安排與設計 Arranging Practice – Melody Arrangement and Design 編曲實作 – 歌詞創作 Arranging Practice – Lyric Writing |
| | 6 | 兒童節補假 Substitute Holiday for Children's Day |
| | 7 | 錄音室實作 1 Recording Studio Session I |
| | 8 | 錄音室實作 2 Recording Studio Practice II |
| | 9 | 作品後期混音輸出探究 1 Exploration of Post-production Mixing and Output I |
| | 10 | 勞動節 Labor Day |
| | 11 | 期中考週 – 作品樂曲整合與呈現 Midterm Week – Music Project Integration and Presentation |
| | 12 | 樂曲風格安排與設計探討 (電子音樂風格) Discussion on Musical Style Arrangement and Design (Electronic Music Style) 編曲實作 – 和弦進行設計、配器討論 Arranging Practice – Chord Progression Design, Instrumentation Discussion |
| | 13 | 編曲實作 – 節奏安排與設計 Arranging Practice – Rhythm Arrangement and Design |
| | 14 | 編曲實作 – 旋律安排與設計 Arranging Practice – Melody Arrangement and Design |
| | 15 | 錄音室實作 3 Recording Studio Session III |
| | 16 | 錄音室實作 4 Recording Studio Session IV |

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| | 17 | 作品後期混音輸出探究 2 Exploration of Post-production Mixing and Output II |
| | 18 | 期末考週 / 作品欣賞與評語 Final Week / Project Showcase and Feedback |

每週課程進度說明：

第一週 課程介紹

1. 教學內容：

- (1) 講解本學期上課規則、內容、評分標準
- (2) 創作風格方向引導

2. 教學目標：啟發學生對喜好之音樂風格的創作。

3. 指定閱讀教材：自編講義

第二週 樂曲風格安排與設計探討

1. 教學內容：

- (1) 引導學生至主題式音樂的製作

2. 教學目標：介紹若干不同的音樂類型。

3. 指定閱讀教材：自編講義。

4. 參考資料：《聽情歌，我們聽的其實是……：從認知心理學出發，探索華語抒情歌曲的結構與情感》，蔡振家、陳容珊著，臉譜出版社，2017年。

第三週 編曲實作—和弦進行設計、配器討論

1. 教學內容：

- (1) 和聲配置之基本原則
- (2) 配器之基本原則

2. 教學目標：認識與應用和弦色彩與配器之安排。

3. 指定閱讀教材：自編講義。

4. 參考資料：《流行音樂的特殊和絃進行訓練筆記（吉他、其他樂器適用）》，不拘時著，時空膠囊音樂社。

第四週 編曲實作 – 節奏安排與設計

1. 教學內容：

- (1) 鼓編排之原則
- (2) 過門句法編寫方式

2. 教學目標：認識節奏樂器的語言

3. 指定閱讀教材：《圖解編曲入門：掌握節拍、樂句、合奏 3 大要訣，單調旋律立即華麗變身，有型有款！》熊川浩孝、石田剛毅著

第五週 編曲實作 – 旋律安排與設計

- 1. 教學內容：**
 - (1) 旋律設計之概論
- 2. 教學目標：**認識旋律走向與動聽性
3. 指定閱讀教材：自編講義
4. 參考資料：《寫一首簡單的歌》，Rikky Rooksby 著。

第六週 編曲實作 – 歌詞創作

- 1. 教學內容：**
 - (1) 歌詞填入適當主題旋律的起伏
 - (2) 介紹韻腳的原理
- 2. 教學目標：**將旋律內容填入合適的歌詞內容
指定閱讀教材：自編講義
3. 參考資料：《歌詞的背後》，盧國沾著，2014年7月，三聯出版

第七週 錄音室實作

- 1. 教學內容：**
 - (1) 麥克風收音擺位及疑問
 - (2) 麥克風收音空間注意事項
- 2. 教學目標：**藉由認識不同場地需求來進行麥克風之架設
3. 指定閱讀教材：自編講義
4. 參考資料：《催生音樂：混音工程與製作》，游士昕著，2017。
- 5.

第八週 錄音室實作

- 1. 教學內容：**
繼上一週未完成進度補上。
- 2. 教學目標：**完成專案錄音
3. 指定閱讀教材：自編教材

第九週 作品後期混音輸出探究

- 1. 教學內容：**
 - (1) 認識標準混音法則
 - (2) 壓縮器、EQ 使用法則
- 2. 教學目標：**認識混音
3. 延伸閱讀教材：《催生音樂：混音工程與製作》，游士昕著，2017。

第十週 期中考週 – 作品樂曲整合與呈現

- 1. 教學內容：**
 - (1) 分析各個作品之間的差異性、同質性
- 2. 教學目標：**藉由聆賞學生作品，彼此尋找修正之處

3. 指定閱讀教材：自編講義
4. 參考資料：《催生音樂：混音工程與製作》，游士昕著，2017。

第十一週 樂曲風格安排與設計探討 (電子音樂風格)

1. 教學內容：

- (1) 電子音樂的介紹
- (2) 聆賞經典電子音樂作品，探討各個作品間的特色為何

2. 教學目標：認識電子音樂風格的特質

3. 指定閱讀教材：自編講義
4. 參考資料：《電子音樂：理論與實務》，高惠宗著，世界文物，1994

第十二週 編曲實作 – 和弦進行設計、配器討論

1. 教學內容：

- (1) 電子音樂的製作程序
- (2) 聲音設計使用

2. 教學目標：音樂風格確立

3. 指定閱讀教材：自編講義
4. 參考資料：《電子音樂：理論與實務》，高惠宗著，世界文物，1994

第十三週 編曲實作 – 節奏安排與設計

1. 教學內容：

- (1) 節奏安插設計
- (2) 織度的厚薄度

2. 教學目標：增添節奏的變化性

3. 指定閱讀教材：自編講義
5. 參考資料：《電子音樂：理論與實務》，高惠宗著，世界文物，1994

第十四週 編曲實作 – 旋律安排與設計

1. 教學內容：

- (1) 合成器的認識與應用
- (2) 旋律走向的安排與討論

2. 教學目標：認識合成器的原理，以及旋律的走向。

第十五週 錄音室實作

1. 教學內容：

- (1) 實際錄製學生自己的彈奏/吹奏
2. 後製取樣細節
3. 教學目標：利用真實的樂器來收音並後製
4. 指定閱讀教材：自編講義

第十六週 錄音室實作

1. 教學內容：同上週
2. 教學目標：同上週
3. 指定閱讀教材：自編講義

第十七週 期末考週 / 作品欣賞與評語

1. 教學內容：
(1) 讓學生各自評比每一位學生的作品，並說優缺點。
2. 教學目標：試著學會發現作品瑕疵
3. 指定閱讀教材：自編講義

第十八週 期末考週 / 作品欣賞與評語

1. 教學內容：同上週
2. 教學目標：同上週

指定閱讀教材：自編講義

Week 1 – Course Introduction

1. **Teaching Content:**
(1) Explanation of course rules, content overview, and grading criteria
(2) Guidance on selecting creative musical styles
2. **Teaching Objective:** Inspire students to create music in their preferred styles.
3. **Assigned Reading:** Instructor's handouts

Week 2 – Exploration of Musical Style Arrangement and Design

1. **Teaching Content:**
(1) Guiding students toward theme-based music production
2. **Teaching Objective:** Introduce various musical genres.
3. **Assigned Reading:** Instructor's handouts
4. **Reference:**
Listening to Love Songs: What We Are Really Hearing—A Cognitive Psychology Exploration of the Structure and Emotion in Mandopop Ballads, by Tsai Chen-Chia & Chen Jung-Shan, Faces Publishing, 2017.

Week 3 – Arranging Practice: Chord Progression Design & Instrumentation

1. **Teaching Content:**
(1) Basic principles of harmony arrangement
(2) Basic principles of instrumentation
2. **Teaching Objective:** Understanding and applying chord colors and instrumentation techniques
3. **Assigned Reading:** Instructor's handouts
4. **Reference:**
Special Chord Progression Training Notes for Pop Music, by Bujushi, Time Capsule Music

Week 4 – Arranging Practice: Rhythm Arrangement and Design

1. **Teaching Content:**
(1) Principles of drum arrangement
(2) Methods for writing fill-in phrases
2. **Teaching Objective:** Understanding the “language” of rhythm instruments
3. **Assigned Reading:**
Illustrated Guide to Arranging: Master Beat, Phrasing, and Ensemble Techniques, by Hirotaka Kumagawa & Takeki Ishida

Week 5 – Arranging Practice: Melody Arrangement and Design

- Teaching Content:**
(1) Overview of melody design
- Teaching Objective:** Understanding melodic direction and appeal
- Assigned Reading:** Instructor's handouts
- Reference:** *How to Write a Simple Song*, by Rikky Rooksby

Week 6 – Arranging Practice: Lyric Writing

- Teaching Content:**
(1) Fitting lyrics to appropriate melodic contours
(2) Introduction to rhyme schemes
- Teaching Objective:** Writing lyrics that appropriately match melodic content
- Assigned Reading:** Instructor's handouts
- Reference:** *Behind the Lyrics*, by Lu Kuo-Cham, Joint Publishing, 2014

Week 7 – Recording Studio Session I

- Teaching Content:**
(1) Microphone placement and related questions
(2) Acoustic considerations in microphone recording
- Teaching Objective:** Setting up microphones based on different recording environments
- Assigned Reading:** Instructor's handouts
- Reference:** *Creating Music: Mixing Engineering and Production*, by Yu Shih-Hsin, 2017

Week 8 – Recording Studio Session II

- Teaching Content:**
Continuation of unfinished work from the previous week
- Teaching Objective:** Completing project recording
- Assigned Reading:** Instructor's materials

Week 9 – Post-production Mixing and Output I

- Teaching Content:**
(1) Understanding standard mixing principles
(2) Use of compressors and EQ
- Teaching Objective:** Understanding basic mixing techniques
- Extended Reading:**
Creating Music: Mixing Engineering and Production, by Yu Shih-Hsin, 2017

Week 10 – Midterm Week: Integration and Presentation of Works

- Teaching Content:**
(1) Analyzing similarities and differences among student works
- Teaching Objective:** Identifying areas for improvement through listening and comparison
- Assigned Reading:** Instructor's handouts
- Reference:** *Creating Music: Mixing Engineering and Production*, by Yu Shih-Hsin, 2017

Week 11 – Musical Style Arrangement and Design (Electronic Music Styles)

- Teaching Content:**
(1) Introduction to electronic music
(2) Listening to classic electronic works and exploring their stylistic traits
- Teaching Objective:** Understanding the characteristics of electronic music genres
- Assigned Reading:** Instructor's handouts
- Reference:** *Electronic Music: Theory and Practice*, by Kao Hui-Tsung, 1994

Week 12 – Arranging Practice: Chord Progression Design & Instrumentation (Electronic Music)

- Teaching Content:**
(1) Workflow of electronic music production

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| | <p>(2) Sound design techniques</p> <ol style="list-style-type: none"> Teaching Objective: Establishing musical style Assigned Reading: Instructor's handouts Reference: <i>Electronic Music: Theory and Practice</i>, by Kao Hui-Tsung, 1994 <p>Week 13 – Arranging Practice: Rhythm Arrangement and Design (Electronic Music)</p> <ol style="list-style-type: none"> Teaching Content: <ol style="list-style-type: none"> (1) Rhythmic placement and design (2) Thickness and texture of musical layers Teaching Objective: Increasing rhythmic variety Assigned Reading: Instructor's handouts Reference: <i>Electronic Music: Theory and Practice</i>, by Kao Hui-Tsung, 1994 <p>Week 14 – Arranging Practice: Melody Arrangement and Design (Electronic Music)</p> <ol style="list-style-type: none"> Teaching Content: <ol style="list-style-type: none"> (1) Introduction and application of synthesizers (2) Arrangement and discussion of melodic direction Teaching Objective: Understanding synthesizer principles and melodic shaping <p>Week 15 – Recording Studio Session III</p> <ol style="list-style-type: none"> Teaching Content: <ol style="list-style-type: none"> (1) Recording students' own instrumental playing (2) Details of post-production sampling Teaching Objective: Using real instruments for recording and editing Assigned Reading: Instructor's handouts <p>Week 16 – Recording Studio Session IV</p> <ol style="list-style-type: none"> Teaching Content: Same as previous week Teaching Objective: Same as previous week Assigned Reading: Instructor's handouts <p>Week 17 – Final Week: Project Listening & Critique</p> <ol style="list-style-type: none"> Teaching Content: <ol style="list-style-type: none"> (1) Students evaluate each other's works, pointing out strengths and weaknesses Teaching Objective: Learning to identify issues in musical works Assigned Reading: Instructor's handouts <p>Week 18 – Final Week: Project Listening & Critique</p> <ol style="list-style-type: none"> Teaching Content: Same as previous week Teaching Objective: Same as previous week Assigned Reading: Instructor's handouts |
| <p>教科書及 延伸閱讀</p> <p>Course Materials and Additional Resources</p> | <p>爆音將軍：逆襲的音樂創作 The Sonic General: The Rebellion of Music Creation</p> <p>葉宛萍：數位樂理 easy 上手 Wan-Ping Yeh, Easy Music Theory for Digital Beginners</p> <p>魯斯拜：寫一首簡單的歌 Rikky Rooksby: How to Write a Simple Tune</p> <p>艾斯雷：Reason 的力量 Andrew Eisele: The Power in Reason</p> <p>游士昕：混音工程與後製 The Audio Mixing and Production</p> <p>自編課堂講義</p> <p>Instructor-Compiled Course Handout</p> |
| <p>與聯合國永續發展</p> | <p>目標 Goal: <u>4</u> 細項 Target : <u>4.3</u>、<u>4.4</u></p> |

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| <p>目標(SDGs)及 細項之對應 (請參閱 SDGs 對照表)</p> <p>UN SDGs Goals and Targets</p> | <p>目標 Goal: <u>8</u> 細項 Target : <u>8.5</u>、<u>8.6</u></p> <p>目標 Goal: <u>11</u> 細項 Target : <u>11.4</u></p> <p>(至多三個目標，每個目標至多三個細項) (3 Goals at most, 3 Targets at most for each Goal)</p> <p>範例：</p> <p>目標: <u>4</u> 細項 : <u>4.3</u> <u>4.5</u> <u>4.7</u></p> |
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| 核心能力指標設定 Core Ability Goals | 通識課程 核心能力指標 (請勾選主要的 3-5 項) Core Abilities of General Education (Select 3-5 main Goals) | 說明 Detail | 課程能培養學生此項核心能力者請打 Select if Correlated ✓ |
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| | (1)思考與創新 Thinking and Innovation | 能夠進行獨立性、批判性、系統性或整合性等面向的思考，或能以創意的角度來思考新事物。 | ✓ |
| | (2)道德思辨與實踐 Moral Thinking and Application | 能夠對於社會、文化中相關的倫理或道德議題，進行明辨、慎思與反省，或能實踐在日常生活中。 | ✓ |
| | (3)生命探索與生涯規劃 Life Exploration and Career Planning | 能夠主動探索自我的價值或生命的真諦，或能具體實踐在自我生涯的規劃或發展。 | |
| | (4)公民素養與社會參與 Citizenship and Community Engagement | 能夠尊重民主與法治的精神、關心公共事務及議題，或能參與社會事務及議題的討論與決策。 | |
| | (5)人文關懷與環境保育 Humanity and Environment Protection | 能夠具備同理、關懷、尊重、惜福等人文素養，或能擴及到更為廣泛的環境及生態議題。 | |

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| | <p>(6)溝通表達與團隊合作 Communication Skills and Teamwork</p> | <p>能夠善用各種不同的表達方式進行有效的人際溝通，或能理解組織運作，與他人完成共同的事物或目標。</p> | ✓ |
| | <p>(7)國際視野與多元文化 Global Perspectives and Cultural Differences</p> | <p>能夠了解國際的情勢與脈動，具備廣博的世界觀，或能尊重或包容不同文化間的差異。</p> | |
| | <p>(8)美感與藝術欣賞 Art Appreciation</p> | <p>能夠領略各種知識、事物或領域中的美感內涵，或能據此促成具美感內涵之實踐力。</p> | ✓ |
| | <p>(9)問題分析與解決 Problem Solving</p> | <p>能夠透過各種不同的方式發現問題，解析問題，或能進一步透過思考以有效解決問題。</p> | |
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| <p>授課教師資料 Professor Information</p> | <p>姓名 Name : 張介凡 Chieh-Fan Chang <input type="checkbox"/>專任教師 Full-time 學系 Department(所 Institute, 中心 Center) : 職稱 Title : <input type="checkbox"/>兼任教師 Adjunct 服務單位 Unit : 通識教育中心 General Education Center 職稱 Title : 助理教授 Assistant Professor</p> <p>學經歷 Education and Work Experience: 美國明尼蘇達大學音樂藝術博士 DMA., University of Minnesota – Twin Cities</p> <p>專業領域 Profession : 數位音樂教學、小號演奏教學、樂團訓練 Technology on Digital Music, Trumpet Performance and Education, and Band Training</p> |
| <p>備註 Note</p> | <p>建議曾修習過數位音樂創作者成績高於 85 分者尤佳 It is recommended that students who have previously taken Digital Music Design and achieved a score above 85 are especially suitable.</p> |