

## 108.3.2 即時互動電聲 (1)

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### 課程介紹、聲音原理、軟體安裝

- Google Classroom 課程代碼: **urj5euf**
- 課程大綱、成績計算、作業說明: [https://docs.google.com/document/d/1g\\_e5QUyc4UvZ3o7UXj6bVxmoUQujrqlgec3kC225HQI/edit](https://docs.google.com/document/d/1g_e5QUyc4UvZ3o7UXj6bVxmoUQujrqlgec3kC225HQI/edit)
- 聲音原理與音效: <https://drive.google.com/file/d/1R34TmDhnq2JqHqOjHlz0-KkDO1qYd7jM/view?usp=sharing>
  - 頻率、聲波、泛音、震幅、延遲、殘響、濾波
  - 更深入了解聲音的奧秘: <https://www.youtube.com/watch?v=GFR8UJK3Mzc>
- 即時電聲的可能性
  - 實際軟體示範
  - 作品欣賞
    - Piano Hero by Stefan Prins <https://www.youtube.com/watch?v=6N8qK8KA3bY>
    - Doppel by Michael Beil <https://www.youtube.com/watch?v=ihR7TWYkgoQ>
- 參考書介紹 Electronic and Experimental Music by Thom Holmes
- 安裝Max/Msp與Ableton Lives
  - Max/Msp: <https://cycling74.com/products/max>
  - Ableton Live: <https://www.ableton.com/en/live/>