

多声道立体声音乐录音

## Multi-channel Music Production

1. Introduction
2. Duration and class contact
3. Weekly syllabus
4. Reading Material
5. Further Reading / self study
6. Assessment
7. Lecturer's contact

### 1. Introduction

In this term you will learn how to record and mix music in stereo and in 5.1 surround. You will also learn the steps to master a CD, SACD or DVD-A. You will understand the principles of hearing in stereo and setting up microphones in stereo and for surround recordings.

### 2. Duration and class contact

The course will run for 16 weeks for the full day of thursday (8 hours). Depending on opportunities we may go to places outside of BFA for recordings.

### 3. Weekly syllabus

This weekly program is sketchy: We have to change it according to the recording projects and available studios.

#### Week 01 – Sept 24th

Pro Tools software and hardware. Pro Tools editing and recording

#### Week 02 Oct 1st *holiday*

#### Week 03 Oct 8th

Revision of microphones. Charts, diagrams and usage.

**Week 04 Oct 15th**

Synchronization and MIDI in Pro Tools and other workstations.  
Concepts of stereo.

**Week 05 Oct 22nd**

More stereo techniques and practice.

**Week 06 Oct 29th**

CD mastering. Concept and practice.  
Mastering software Logic Waveburner.

**Week 07 Nov 5th**

The issue of quality in music recording.  
5.1 surround concepts.

**Week 08 Nov 12th**

Space design: Convolution reverb.  
Hearing: Electronica in 5.1 space (Steve Pagano + Speedy J- Umfeld, Tipper – Surrounded)

**Week 09 Nov 19th**

Recommendations by Dolby for a 5.1 studio.  
Hearing: More 5.1 orchestral music (film music and film mixes).

**Week 10 Nov 26th**

Written test about stereo and surround concepts and practical test.

**Week 11 Dec 3rd**

PRACTICAL: 5.1 MIXES

**Week 12 Dec 10th**

PRACTICAL: 5.1 MIXES

**Week 13 Dec 17th**

PRACTICAL: 5.1 MIXES

**Week 14 Dec 24th**

Critical thoughts on surround sound standard (Wendy Carlos, Ambisonics)  
PRACTICAL: 5.1 MIXES – critique.

**Week 15 Dec 31st**

Concept and practice of DVD authoring.

**Week 16 Jan 7th**

DVD authoring with our mixes.

#### **4. Reading Material**

There is no course book. I prepare and send you very detailed pdf material though.

#### **5. Further reading / self study :**

- Tomlinson Holman : 5.1 Up and running 2nd edition – Focal Press, Boston 2008
- “You are surrounded” – series of articles appeared on-line in “Sound on Sound”
- Guideline for Multichannel Music Mixing – online document by the Dolby Corp.
- Surround Mixing – online document by the Dolby Corp.

#### **6. Assessment**

The final mark is composed of your practical work during the term and a written test where you have to document your knowledge. In detail:

recording project	33% of the final score
final mix	33% of the final score
written test	33% of the final score

#### **7. Lecturer's contact**

Jurgen Frenz: E-mail : [1soundscape@gmail.com](mailto:1soundscape@gmail.com)