**SPRING 2019**

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| **Meeting days:** | T Th | **Instructor:** Professor Chaz Celaya | |
| **Meeting times:** 10am-1055am | | **Phone:** 619-849-2782 | |
| **Location:** Ingram Recording Lab | | **E-mail:** ccelaya@pointloma.edu | |
| **Final Exam:** (day/time) | TBA | **Office hours:** Th 100-400p | |

**PLNU Mission**
**To Teach ~ To Shape ~ To Send**

Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service becomes an expression of faith. Being of Wesleyan heritage, we aspire to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

**COURSE DESCRIPTION**

This course introduces students to the recording process from the standpoint of the engineer, producer, and mixdown and mastering engineer. Concepts include signal flow, mic placement, control surface automation, the recording process from pre-production to mastering, plug-in instantiation, analog summing.  All students will acquire enough experience to record, mix and master a track for demo purposes. The final project takes an artist's composition from initial recording to finished master.

**COURSE LEARNING OUTCOMES**

By the end of the semester you will demonstrate your ability to
- record several master-quality recordings with the help of a master engineer
- record at least a rough 2-track demo of two of your own songs
- assist a lead engineer in a professional studio environment
- listen critically to the production values of commercially recorded songs and apply those same techniques to your own recordings.
- successfully take a student musical piece and acting as the lead engineer, move the project from initial demo through final master.

**COURSE METHODOLOGY**

It is important for all musicians to be familiar with the recording process.  This course will build on the concepts established in Digital Audio I and II by providing hands-on experience in a recording studio environment. This recording course is designed to introduce the most important concepts, immediately followed by an assignment to reinforce the ideas. The CMC has one, large, main digital

state-of-the-art recording studio and several pre-production practice rooms. As songs are written, edited and completed, students move to the pre-production rooms and create recorded demos of the song. Each week, faculty demonstrate a new recording principal, which moves students gradually to a place where they can record, edit and master tracks that sound 'master-quality'. Students approach recording in this sequence of topics:

- Signal flow & microphone theory
- Pre-production
- Multi-tracking
- Mixing & automation
- Mastering
- Backing-up data

Signal flow & microphone theory – signal flow is perhaps the most important fundamental concept required of every engineer. Where does the signal come from and where does it go? Being able to trace the signal from microphone, through microphone pre-amplifier to the equalization stage and so on allows students to capture/shape their sound and troubleshoot the many problems that inevitably occur during a session. Microphones are the portals through which most sound travels from the acoustic world to the digital domain. Students learn about microphone design, pickup patterns and the actual process of changing sound waves to an electric voltage and then a binary number.

Pre-production – studio time is valuable and expensive, so it is important for students to learn how to plan their session wisely. This includes getting the song ready for recording, choosing players and rehearsing the song, setting up loops/samples in advance and a million other little details that threaten to de-rail a recording session.

Multi-tracking – the modern recording session involves recording each part to a separate 'track'. Often players who contribute to a song will never see each other – they will arrive at the studio, record their part and then leave. Later, another player will arrive or, via the Internet, contribute their part from across the country. Students learn to manage and 'orchestrate a session' to take advantage of each player's strengths.

Mixing and automation – after all of the parts have been recorded, they need to be 'mixed together' down to two tracks. Learning to adjust the relative volumes of each recorded part and using computer automation to take care of the physical task of making those changes requires a lot of practice and trial & error. Students make multiple mixes of each song to determine 'how it will play' in various environments including their car stereo, laptop speakers, high-end P.A., etc.

Mastering – is the process of taking all of the songs for a CD and putting them in the correct order, balancing the volume and compression of each song and essentially adding the final sonic polish.

Backing-up data – in all of the rush to record and get a song finished it is critically important to backup data properly and consistently to prevent data loss.

## COURSE SCHEDULE AND ASSIGNMENTS

Course schedule and assignments are maintained in Canvas. You can find them under the headings "Modules" and "Syllabus."

## REQUIRED TEXTS & SUPPLIES

1) David Miles Huber, *Modern Recording Techniques,* 9th Edition. (Focal Press/ Routledge, New York), 2018. ISBN: 978-1-138-95437-3
2) Sylvia Massy, *Recording Unhinged, Creative and Unconventional Music Recording Techniques.* (Hal Leonard, 2016). ISBN: 9781495011276
3) USB 3.0 Flash Drive. Minimum 32GB for transferring and backing up projects and sessions.
4) A set of professional over the ear "closed back" headphones. Industry standard options are: Sony MDR-7506, Beyerdynamic DT-770. More affordable options: Monoprice 605055 or Monoprice 8323.

## ASSESSMENT AND GRADING

| Assignment distribution by percentage: | | Grade scale: | |
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| • Reading Assignments 20% | | A=93-100 | C=73-76 |
| • Recording Assignments 50% | | A-=92-90 | C-=70-72 |
| • Session Assisting 10% | | B+=87-89 | D+=67-69 |
| • Final Project 20% | | B=83-86 | D=63-66 |
| | | B-=80-82 | D-=60-62 |
| | | C+=77-79 | F=0-59 |

## INCOMPLETES AND LATE ASSIGNMENTS

All assignments are to be submitted/turned in by the beginning of the class session when they are due—including assignments posted in Canvas. Incompletes will only be assigned in extremely unusual circumstances.

## FINAL EXAMINATION POLICY

Successful completion of this class requires taking the final examination **on its scheduled day**. The final examination schedule is posted on the Class Schedules site. No requests for early examinations or alternative days will be approved.

## PLNU COPYRIGHT POLICY

Point Loma Nazarene University, as a non-profit educational institution, is entitled by law to use materials protected by the US Copyright Act for classroom education. Any use of those materials outside the class may violate the law.

## PLNU ACADEMIC HONESTY POLICY

Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. Academic dishonesty is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for that assignment or examination, or, depending on the seriousness of the offense, for the course. Faculty should follow and students may appeal using the procedure in the university Catalog. See Academic Policies for definitions of kinds of academic dishonesty and for further policy information.

## PLNU ACADEMIC ACCOMMODATIONS POLICY

If you have a diagnosed disability, please contact PLNU's Disability Resource Center (DRC) within the first two weeks of class to demonstrate need and to register for accommodation by phone at 619-849-2486 or by e-mail at DRC@pointloma.edu. See Disability Resource Center for additional information.

## PLNU ATTENDANCE AND PARTICIPATION POLICY

Regular and punctual attendance at all classes is considered essential to optimum academic achievement. If the student is absent from more than 10 percent of class meetings, the faculty member can file a written report which may result in de-enrollment. If the absences exceed 20 percent, the student may be de-enrolled without notice until the university drop date or, after that date, receive the appropriate grade for their work and participation. See Academic Policies in the Undergraduate Academic Catalog.