

Bergen Community College
Division of Arts and Humanities
Department of Performing Arts

Course Syllabus

Advanced Studio Recording MUS 261

Semester and year:
Course Number:
Meeting Times and Locations:

Instructor:
Office Location:
Phone: 201-447-7143
Departmental Secretary: Ms. Barbara Bliss
Office Hours:
Email Address:

Course Description:

Studio Recording Techniques introduces students to the concepts of recording live instruments and vocals in a state of the art digital recording studio. Students will learn techniques for recording orchestral instruments as well as instruments used in popular music. Topics covered include studio signal flow, microphone selection and placement, use of outboard and software-based effects processors, overdubbing, creating composite audio tracks, and mixing. Students are expected to spend additional time in the studio and/or music technology lab working on assigned projects.

2 lecture hours, 2 lab hours, 3 credits

Prerequisite: MUS 151 Introduction to Digital Audio Recording

Student Learning Objectives:

As a result of meeting the requirements of this course, students will be able to

- 1) Assess and treat recording studio acoustics to attain optimal recorded sound
- 2) Plan, set up, produce and engineer complex studio sessions involving multiple musicians performing live
- 3) Select and position microphones for optimal recording of a full variety of instruments and scenarios with particular emphasis on large drumsets, piano, string and wind instruments and live ensembles and groups
- 4) Use modulation effects and keying effects such as triggering and ducking to enhance recordings
- 5) Use editing and enhancement techniques such as tempo and pitch correction and sound replacement to improve sonic and performance deficiencies in recordings.
- 6) Use mix automation in non-linear editing software to add fluidity to music productions
- 7) Perform digital mastering for a variety of consumer formats

Assessment:

In support of the above-mentioned goals, the course will include individual and group project work, reading assignments, and a mid-term and final exam. Students are strongly encouraged to take an active part in class discussions.

Objectives will be assessed as follows:

1. Students will work on both individual and group projects requiring them to properly record and mix multi-track music productions in the recording studio and music production lab.
2. A mid-term and final exam will be used to measure the students' understanding of any audio or recording theory that cannot specifically be measured by their recording projects.
3. Students will be required to critique the work of other students to help develop critical listening skills and the ability to communicate music production concepts.

Course Content

Studio Recording Techniques introduces students to the concepts of recording live instruments and vocals in a state of the art digital recording studio. Students will learn techniques for recording orchestral instruments as well as instruments used in popular music. Topics covered include studio signal flow, microphone selection and placement, use of outboard and software-based effects processors, overdubbing, creating composite audio tracks, and mixing. Students are expected to spend additional time in the studio and/or music technology lab working on assigned projects.

Special Features of the Course

Technological literacy is one expectation of this course. Students will be encouraged to use such technology as microphones, mixing consoles, non-linear recording software and control surfaces, signal processors, preamps, and studio monitors.

Course Texts and/or Other Study Materials

Required: Ditmarr, Tim. *Audio Engineering 101: A Beginner's Guide to Music Production* 1st edition. Taylor & Francis Publishing. 2011. ISBN# 0240819152

Grading Policy

The final grade in this course will be determined by a student's overall mastery of the subject matter as evidenced on exams, quizzes, written assignments, consistent attendance and quality class participation.

Attendance, preparation and active participation	10%
Studio recording/mix project	20%
Mastering Project	15%
Live Sound Project	15%
Mid-term exam:	15%
Final exam:	15%
Ear Training exercise	5%
Concert evaluation	5%

Criteria for Evaluation: *Attendance and participation*

- consistent attendance**
- quality classroom responses
- overall contribution to in-class discussion and demonstrations

90-100 = A 86-89 = B+ 80-85 = B 76-79 = C+ 70 - 75 = C 65-69 = D
E =Unofficial Withdrawal W =Official Withdrawal INC=Incomplete 0-64 = F

Any work turned in late from the original due date shall be deducted by one letter grade. Two letter grades shall be deducted after the second week from the due date, and three letter grades after the third week from the original due date. There are no make-up examinations unless approved in advance by the instructor.

Attendance Policy

All students are expected to attend punctually every scheduled meeting of each course in which they are registered. Attendance and lateness policies and sanctions are to be determined by the instructor for each section of each course. These will be established in writing on the individual course outline. Attendance will be kept by the instructor for administrative and counseling purposes.

Students will be evaluated on attendance and participation in class using the following criteria: consistent attendance; evidence of studying text and assignments; completed daily assignments; quality classroom responses.

Bergen Community College Academic Policies

Bergen Community College is committed to academic integrity – the honest, fair and continuing pursuit of knowledge, free from fraud or deception. Please review the college catalogue or student handbook for further information on this topic.

Bergen Community College has adopted an internal grievance procedure to provide for prompt and equitable resolution of complaints alleging any action prohibited by federal regulation implementing Section 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act of 1990. (ADA). Please review the college catalogue for further information on this topic.

Bergen Community College is committed to providing its students and employees with an academic and work environment free from sexual harassment or discrimination. Please review the policy prohibiting sexual harassment in the college catalog.

Please review the statement on acceptable use of BCC technology in the college catalog.

Faculty hold 3 office hours per week, and as requested by students, by appointment. Students are encouraged to seek out their faculty member for academic needs.

Student and Faculty Support Services

All students are encouraged to visit and use the BCC Library. There are particularly excellent electronic references in the area of music available to our students.

Students are encouraged to use the student support services of the college. These services include: the Writing Center, the Tutorial Center, and the Office of Specialized Services.

The Distance Learning Office – for any problems you may have accessing your online courses Room C-334 201-612-5581

psimms@bergen.edu

Smartthinking Tutorial Service On Line at:
www.bergen.edu/library/learning/tutor/smart/index.asp

The Tutoring Center Room L-125 201-447-7908

The Writing Center Room L-125 201-447-7908

The Online Writing Lab (OWL) On Line at: www.bergen.edu/owl

The Office of Specialized Services (for Students with Disabilities) Room S-131 201-612-5270

The Sidney Silverman Library – Reference Desk Room L-226 201-447-7436

Course Outline:

Note to Students: This Course Outline and Calendar is tentative and subject to change, depending upon the progress of the class

Part I – Advanced Recording Techniques

Week	Topic	Objective(s) met
1	Studio acoustics – problems and solutions	1
2	Recording drums and percussion – mic selection and placement	2, 3
3	Recording electric and electronic instruments – use of DI boxes, miking amplifiers, using amp modelers and compressors	2, 3, 4, 6
4	Recording vocals – mic selection and placement, using compressors and pre-amps	2, 3, 4, 6
5	Recording orchestral instruments	2, 3, 4
6	Recording live groups/ensembles – use of gobos, ambient miking techniques, submixes, cue mixes	1, 2, 3, 4, 6

Part II – Advanced mixing techniques

7	Goals of professional mixing – masking issues, dynamic range issues, creating a stereo image	5
8	Advanced use of EQ in mixing – resolving masking and sculpting tone	5, 6
9	Advanced use of compression in mixing – controlling dynamics, shaping sound envelopes, ducking	5, 6
10	Using noise gates – reducing leakage and phase cancellation, triggering	5, 6
11	Using artificial reverb – creating depth in the mix	5, 6
12	Using delays and modulation effects (flangers, choruses, phase shifters)	5, 6
13	Enhancing performance – sound replacement, correcting timing issues, pitch correction	5, 6

Part III - Mastering

14	Mastering for CD, DVD, Blue Ray and other physical formats	7
15	Mastering for internet audio and video formats	7

