New Course Request

Indiana University

South Bend Campus

Check Appropriate Boxes: Undergraduate credit [✓] Graduate credit [ ] Professional credit [ ]

1. School/Division: [ ] Business School, [ ] Arts
2. Academic Subject Code: MUS-A
3. Course Number: 102 (must be cleared with University Enrollment Services)
4. Instructor: Nuher, T.
5. Course Title: Audio Techniques 1

Recommended Abbreviation (Optional) (Limited to 32 Characters including spaces)

6. First time this course is to be offered (Semester/Year): Fall 2008
7. Credit Hours: Fixed at [ ] or Variable from _______ to _______
8. Is this course to be graded S-F (only)? Yes [ ] No [X]
9. Is variable title approval being requested? Yes [ ] No [X]
10. Course description (not to exceed 50 words) for Bulletin publication:

"Introduction to and use of studio equipment and recording procedures, microphone placement, recording techniques, editing concepts, and recording and signal processing equipment, leading to student recording projects. P: ATO1 Introduction to Audio Technology"

11. Lecture Contact Hours: Fixed at _______ or Variable from _______ to _______
12. Non-Lecture Contact Hours: Fixed at _______ or Variable from _______ to _______
13. Estimated enrollment: _______ of which _______ percent are expected to be graduate students.
14. Frequency of scheduling: [ ] Spring [ ] Fall
15. Will this course be required for majors? [ ] Yes [ ] No
16. Justification for new course: Second course in required major in sequence for B.S.
17. Are the necessary reading materials currently available in the appropriate library? [ ] Yes [ ] No
18. Please append a complete outline of the proposed course, and indicate instructor (if known), textbooks, and other materials.

19. If this course overlaps with existing courses, please explain with which courses it overlaps and whether this overlap is necessary, desirable, or unimportant.

A copy of every new course proposal must be submitted to departments, schools, or divisions in which there may be overlap of the new course with existing courses or areas of strong concern, with instructions that they send comments directly to the originating Curriculum Committee. Please append a list of departments, schools, or divisions thus consulted.

Submitted by:

David K. Bit [ ] Date 9-25-67 [ ]

Department Chairman/Division Director

Approved by:

[ ] Date 2-4-08 [ ]

Dean

Date

Dean of Graduate School (when required)

Date

Chancellor/Vice-President

Date

University Enrollment Services

After School/Division approval, forward the last copy (without attachments) to University Enrollment Services for initial processing, and the remaining four copies and attachments to the Campus Chancellor or Vice-President.
Hi Tamea,

The single page that is with the multiple recital course forms is from the IUB Jacobs School of Music Bulletin. This is the ONLY documentation of the courses that I have been able to find. We would like to add these courses to the 4082 (Spring, 2008) schedule, and do schedule changes for all of our current recital students into the new generic sections.

I forgot to print out a Bulletin description for the A102. Here's the material from the Jacobs School Bulletin (on-Line verswion)

"Jacobs School of Music
2007-2009
Academic Bulletin

www.music.indiana.edu
Office of Admissions
Jacobs School of Music
Indiana University
1201 East 3rd St-MU101
Bloomington, IN 47405
Local (812) 855-7998
Fax (812) 856-6086
Contact Music Admissions Office

Academic Courses—Recording Arts and Audio Technology and Church Music

Recording Arts and Audio Technology
Church Music

Recording Arts and Audio Technology

A102 Audio Techniques I (3 cr.) P: A101 Introduction to Audio Technology. Introduction to studio equipment and recording procedures including microphone use, basic studio techniques, editing concepts, and recording and signal processing equipment."

We'll next be offering this course in Spring, 2009.

David K. Barton, PhD
Professor of Music & Music Area Coordinator Director of Graduate Studies Ernestine M. Raclin School of the Arts Indiana University South Bend
A-102 AUDIO TECHNIQUES I

P: A101 Introduction to Audio Technology

Introduction and use of studio equipment and recording procedures, microphone placement, recording techniques, editing concepts and recording and signal processing Equipment. Student recording projects.
WEEK 1  a) Class Introduction, review basics of sound,
       b) Waveform characteristics

WEEK 2  a) Basics of sound, continued, loudness and perception
       b) Behavior of sound spaces, reverberation, tour auditorium

WEEK 3  a) Electronics basics, resistors and conductors
       b) Current and voltage, AC and DC circuits

WEEK 4  a) Capacitors, transformers, inductors, filters
       b) Tubes, transistors, op-amps, power supplies

WEEK 5  a) Signal flow, metering and levels, dynamic range
       b) Gain structure and headroom, playback and listening 068

WEEK 6  a) Review
       b) Exam 1

WEEK 7  a) Review microphones, types and application, stereo techniques
       b) Pre-amps and consoles, equalization, record in 068

WEEK 8  a) Pre-amps, equalization, record in 068
       b) record in 068 or auditorium
WEEK 9  a) Signal processing, compression/limiting, effects
     b) recording 068, recital hall, auditorium

WEEK 10 a) Digital audio, hard disc recording, files
       b) Sample rates, bit depth, D/A and A/D converters

WEEK 11 a) Digital recording, editing, error correction
      b) Analog and digital techniques/differences

WEEK 12 a) Review
       b) Exam 2

WEEK 13 a) Mixing techniques, EQ, processing, levels, effects
      b) record on campus or Steel Warehouse Studios

WEEK 14 a) Mixing techniques, processing, levels, effects
      b) Digital plug-ins, 068 or Steel Warehouse Studios

WEEK 15 a) Mixing and mastering, dither and noise shaping,
       b) Mastering EQ and compression/limiting

WEEK 16 a) Review
       b) Final Exam
Jacobs School of Music 2007-2009
Academic Bulletin

Academic Courses—Recording Arts and Audio Technology and Church Music

Recording Arts and Audio Technology
Church Music

Recording Arts and Audio Technology

A101 Introduction to Audio Technology (3 cr.) Introduction to the equipment and techniques employed in audio recording and sound reinforcement.

A102 Audio Techniques I (3 cr.) P: A101 Introduction to Audio Technology. Introduction to studio equipment and recording procedures including microphone use, basic studio techniques, editing concepts, and recording and signal processing equipment.

A111 Basic Electricity (3 cr.) P: Two years high school algebra, MATH M025 Pre-Calculus Mathematics, or equivalent. Fundamental principles of electricity and magnetism, with review of necessary algebra.

A112 Electronics I (3 cr.) P: A111 Basic Electricity. AC theory and introduction to circuit elements and active devices.

A150 Introductory Seminar in Recording Arts (1 cr.) P: A101 Introduction to Audio Technology. An introduction to critical listening for recording engineers and producers, with an emphasis on technical evaluation and aesthetic principles within the context of musical style.

A201 Audio Techniques II (3 cr.) P: A102 Audio Techniques I, and A150 Introductory Seminar in Recording Arts. Intermediate studio and recording procedures including signal processing, digital audio theory, and basic digital audio workstation techniques.

A202 Audio Techniques III (3 cr.) P: A201 Audio Techniques II. Advanced digital audio theory including media production, audio for Internet, and advanced digital audio workstation techniques.

A211 Electronics II (3 cr.) P: A112 Electronics I. System design and operation applied to audio, both analog and digital.

A270 Multitrack Studio Techniques I (3 cr.) P: A102 Audio Techniques I and A150 Introductory Seminar in Recording Arts. Multitrack studio and recording procedures with an emphasis on signal processing and mixdown techniques.

A311 Audio Repair and Maintenance I (3 cr.) P: A112 Electronics I. Instruction in basic maintenance of audio equipment and studio maintenance. Practical experience is emphasized.