

PY.350 (COMPUTER MUSIC)

PY.350.409. Hip Hop Music Production 1. 2 Credits.

A history and workshop course designed to illuminate the history of Hip Hop music.

Area: P, Y

PY.350.410. Hip Hop Music Production 2. 2 Credits.

Conceived as a follow-up class to "Hip Hop Music Production: History and Practice 1", this course is designed to further explore production styles and techniques of prominent as well as lesser known producers, and to provide students with opportunities to build on production skills learned in "Hip Hop Music Production: History and Practice 1". Students will have the opportunity to produce hip hop in a number of different styles, as well as to learn mixing and mastering techniques used to bring a recording project to completion.

Prerequisite(s): Completion of Hip Hop Music Production 1 needed, PY.350.409[C].

Area: P, Y

PY.350.463. Introduction to Computer Music. 3 Credits.

A study of the techniques, repertoire, and aesthetics of computer music. Composition and research projects are completed using the resources of the Computer Music Studios. Participation in at least one public program.

Area: P, Y

PY.350.464. Introduction to Computer Music 2. 3 Credits.

A study of the techniques, repertoire, and aesthetics of computer music. Composition and research projects are completed using the resources of the Computer Music Studios. Participation in at least one public program.

Prerequisite(s): Completion of Introduction to Computer Music 1 needed, PY.350.463[C].

Area: P, Y

PY.350.465. Introduction to Web Design. 3 Credits.

Designed for music students with limited computer experience, this course will provide the skill and awareness to use the computer, the World Wide Web and Internet technologies to support your musical career from the classroom to the concert stage. (May be used for general and music electives.)

Area: P, Y

PY.350.466. Introduction to Programming. 3 Credits.

This course is designed for musicians and digital artists who wish to learn Multimedia Programming. We will use the Python programming language to examine techniques and algorithms to manipulate sounds, images, movies, text and web pages. Also, we will learn to acquire and use related open-source programs and libraries to simplify our work. No previous programming experience is required.

Area: P, Y

PY.350.545. Computer Music Seminar (UG). 1 Credit.

The seminar focuses on the work of student and faculty composers, with class discussion of on current developments in the field of computer music. Required for computer music majors. Open to others with permission of the faculty.

Prerequisite(s): Computer Music majors only. Non-majors interested in auditing the course should email department chair approval to peabodyregsitrar@jhu.edu.

PY.350.546. Computer Music Seminar (UG). 1 Credit.

The seminar focuses on the work of student and faculty composers, with class discussion of on current developments in the field of computer music. Required for computer music majors. Open to others with permission of the faculty.

Prerequisite(s): Computer Music majors only. Non-majors interested in auditing the course should email department chair approval to peabodyregsitrar@jhu.edu.

PY.350.691. Master's Thesis. 2 Credits.

A scholarly work describing the author's research activities as required for the Research track of the MM program in Computer Music.

Prerequisite(s): Computer Music majors only.;Completion of or co-enrollment in Research Practicum required, PY.350.842[C].

PY.350.693. Portfolio. 2 Credits.

The completion and submission of works of major proportions that utilize computer technology as required by the Master of Music degree program in Computer Music. The compositions must be written during your tenure at Peabody and be approved by your major teacher and departmental faculty. Graded on a S/U basis.

Prerequisite(s): Computer Music - Composition Track majors only.

PY.350.835. Studio Techniques. 3 Credits.

A course that covers advanced computer music studio techniques, including advanced use of MIDI, analog and digital synthesizer programming, sample editing and processing, Time Code and synchronization, and recording and production techniques. Prerequisite: Introduction to Computer Music or equivalent.

Prerequisite(s): Computer Music majors only.;Completion of Introduction to Computer Music 2 required, PY.350.464[C].

Area: P, Y

PY.350.837. Digital Music Programming 1. 3 Credits.

This course teaches computer programming theory and skills pertaining to computer music composition, performance, and research. The primary focus of the course is the Max/MSP/Jitter suite of programming tools. Prerequisites: Introduction to Computer Music; Studio Techniques, or equivalent.

Prerequisite(s): Completion of Introduction to Computer Music required, PY.350.464[C].

Corequisite(s): Students must co-register in Synthesis Theory 1, PY.350.867[C].

Area: P, Y

PY.350.838. Digital Music Programming 2. 2 Credits.

The purpose of Digital Music Programming II combined with Synthesis Theory II is to learn to implement Digital Audio Signal Processing theories and techniques in various programming environments suited to musical composition, performance and research. In particular, we will study SuperCollider, Pd, Processing, Arduino programming, and reading realtime interfaces. Prerequisites: Synthesis Theory I and Digital Music Programming I. Corequisite: Synthesis Theory II.

Prerequisite(s): Completion of Digital Music Programming 1 required, PY.350.837[C].

Corequisite(s): Students must co-register in Synthesis Theory 2, PY.350.868[C].

Area: P, Y

PY.350.840. History of Electroacoustic Music. 3 Credits.

The History of Electroacoustic Music is an overview of the development of electroacoustic music in the twentieth century. Intended for the student with little or no knowledge of this field's history and literature, the course is designed to provide a general familiarity with the major trends and developments as well as to allow for more detailed study on topics of particular interest to the class.

Prerequisite(s): Computer Music majors only.

Area: P, Y

PY.350.841. Research Practicum. 4 Credits.

An intensive course for those following the computer music research/technology track. Substantial individual projects will be pursued. Enrollment by permission of the instructor.

Prerequisite(s): Computer Music - Research Track majors only.

Non-Research Track Computer Music majors may take course with department approval.

PY.350.842. Research Practicum. 4 Credits.

An intensive course for those following the computer music research/technology track. Substantial individual projects will be pursued. Enrollment by permission of the instructor.

Prerequisite(s): Computer Music - Research Track majors only.

Non-Research Track Computer Music majors may take course with department approval.;Completion of previous semester required, PY.350.841[C].

PY.350.845. Computer Music Seminar (GR). 1 Credit.

The seminar focuses on the work of student and faculty composers, with class discussion of on current developments in the field of computer music. Required for computer music majors. Open to others with permission of the faculty.

Prerequisite(s): Computer Music majors only. Non-majors interested in auditing the course should email department chair approval to peabodyregsitrar@jhu.edu.

PY.350.846. Computer Music Seminar (GR). 1 Credit.

The seminar focuses on the work of student and faculty composers, with class discussion of on current developments in the field of computer music. Required for computer music majors. Open to others with permission of the faculty.

Prerequisite(s): Computer Music majors only. Non-majors interested in auditing the course should email department chair approval to peabodyregsitrar@jhu.edu.

PY.350.867. Synthesis Theory 1. 2 Credits.

This course examines digital signal processing techniques as applied to computer music applications. A primary focus is on the Csound music programming language. Designed for computer music majors and recording arts majors, but open to others with permission of instructor. Prerequisites: Introduction to Computer Music; Studio Techniques, or equivalent.

Prerequisite(s): Completion of Introduction to Computer Music required, PY.350.464[C].

Corequisite(s): Students must co-register in Digital Music Programming 1, PY.350.837[C].

Area: P, Y

PY.350.868. Synthesis Theory 2. 2 Credits.

The purpose of Synthesis Theory II combined with Digital Music Programming II is to learn to implement Digital Audio Signal Processing theories and techniques in various programming environments suited to musical composition, performance and research. In particular, we will examine advanced synthesis theory, animation, psychoacoustic principles, algorithmic composition and video processing, and realtime hardware interfaces. Prerequisites: Synthesis Theory I and Digital Music Programming I. Corequisite: Digital Music Programming II.

Prerequisite(s): Completion of Synthesis Theory 1 required, PY.350.867[C].

Corequisite(s): Students must co-register in Digital Music Programming 2, PY.350.838[C].

Area: P, Y