

**Department:** Music

**Course No:** MUSI 279Q

**Title:** Twentieth Century Theory and Analysis

**Credits:** 3

**Contact:** Glenn Stanley

**WQ:** Q

**Catalog Copy:** 279Q. Twentieth Century Theory and Analysis. Either semester. Three credits. Prerequisite: MUSI 246 and MUSI 257 ; MATH 101 or passed Q Readiness Test or passed a Q course. With consent of instructor, MUSI 257 may be taken concurrently. *Bass.*

Analytical techniques appropriate to selected styles of twentieth century music. Problems in twentieth century counterpoint and composition.

**Q Criteria** : Analysis of twentieth-century atonal music is undertaken through the application of basic set theory and through the use of algebraic operations using modular arithmetic (mod 12). Concepts such as octave equivalence, enharmonic equivalence, and inversional equivalence allow for the formal study of properties of pitch classes (pcs) in both ordered and unordered sets. In atonal theory, pitch classes are represented by integers (mod 12) that form the elements of sets. Transformations of sets are expressed through the use of operations such as transposition ( $T_n$ ) and inversion ( $T_nI$ ). Properties of sets such as intervallic content and invariance are represented through the use of appropriate functions. Transformational operations are used to model compositional processes over the course of a piece or section of music. Analytical or compositional applications entail synthesizing interpretations of musical structures that derive from the information gained by applying the operations and functions indicated in #2 above. Results reveal how composers of atonal music manipulate pcs and pc sets, and how in a given piece specific kinds of properties of sets and relationships among different pcs and sets are exploited. Synthesis of this information requires prior musical knowledge that typically can be acquired only through formal study of musical works such as that offered in prerequisite 100 and 200 level music theory courses in this department.

**Role of Grad Students:** N/A