MTA 301 PLACEMENT EXAM STUDY GUIDE
Fall 2017

MTA 301 (Instrumentation/Orchestration) is the prerequisite course for MTA 302 (Advanced Orchestration). Graduate students must pass a placement exam in order to pass out of MTA 301 in the fall semester. This exam is offered in the week prior to the beginning of the Fall 2017 semester.

MTA 301 uses *Instrumentation/Orchestration* by Alfred Blatter. You are highly encouraged to use this book when preparing for the exam.

The exam consists of the following topics:

**OVERTONE SERIES:** be able to write out an overtone series up through the 10th partial on any given note. Know how it works to produce pitches on string and brass instruments.

**STRINGS:** open strings and ranges for all instruments; names for all parts of the instruments and bows; clefs used for each instrument; various bow strokes and pizzicato techniques; natural and artificial harmonics; multiple stops (be able to identify which pitches are assigned to what strings in two, three, and four note chords); know how dynamics and bow speed are related; and be able to describe and notate several special effects (sul ponticello, col legno battuto, tremolo, etc.) and how they are produced.

**WOODWINDS:** how sound is produced on each type of instrument (single and double reed instruments and the flute family); ranges, clefs, and transpositions for piccolo, flute, B-flat clarinet, B-flat bass clarinet, oboe, english horn, bassoon, and contrabassoon; be able to convert a woodwind score from C to a transposed score and vice versa; explain the basic tonguings and articulations used by woodwinds; and know how to notate legato, non-legato, and staccato passages.

**BRASS:** how sound is produced on each type of instruments (know how the mouthpieces and tubing function, as well as the difference between rotary, valve, and slide systems); ranges, clefs, and transpositions for C trumpet, B-flat trumpet, F horn, tenor trombone, bass trombone, and tuba; be able to convert a brass score from C to a transposed score and vice versa; know at least six mutes playable by trumpet and trombone, as well as be able to describe stopped horn; explain the basic tonguings and articulations used by brass; and know how to notate legato, non-legato, and staccato passages.

**PERCUSSION:** research these instruments: timpani, marimba, tam tam, tom toms, suspended cymbal, tubular chimes, congas, crash cymbals, temple blocks, xylophone, wood block, vibraphone, gong, bongos, bass drum, crotales, triangle, glockenspiel, guiro, slide whistle, cowbell, snare drum, and claves.

Be able to divide this list of percussion instruments into WOODS of definite and indefinite pitch, METALS of definite and indefinite pitch, and SKINS of definite and indefinite pitch. Also, be able to name several types of mallets/beaters that can be used for each instrument. Know which have short decays and which have long decays. For the keyboard percussion instruments, know all ranges, clefs, and transpositions. Also know which keyboard instruments have sustaining pedals and motors.

**ORCHESTRATION:** you will be given a few measures written for piano that you will have to score for the strings, woodwinds, and/or brass families.