Title of Course: Instrumentation and Arranging

I. Catalogue Description (Credit Hours of Course):
   Fundamentals of orchestration and arranging using computer music notation software.
   Two (2) credit hours.

II. Co- or Prerequisite(s):

MM204 Twentieth Century Techniques

III. Purposes or Objectives of the Course (optional):
   1) To provide a comprehensive, accessible, and highly practical body of knowledge about the orchestration and arranging of music.
   2) To provide opportunities for students to practice orchestration and arranging through creative projects.

Add additional Objectives as needed

IV. Student Learning Outcomes (Minimum of 3):
   1) Demonstrate the ability to apply the principles of orchestration
   2) Demonstrate the ability to write an idiomatic musical arrangement
   3) Demonstrate the ability produce polished, professional music typesetting

Add additional SLOs as needed

2) Optional departmental/college requirements:
   A. Attend all class sessions
   B. Be prepared to respond when called upon by the instructor in class
   C. Participate in class discussions
   D. Complete all assignments (for specific assignments see section XI) and submit them for evaluation on the due dates
   E. Earn a composite passing grade on assignments and five creative projects (see section XI)

3) Course Content or Outline (Indicate number of class hours per unit or section):

I. Orchestration defines structure 2 hours
   A. Defining form: phrases and sections: Star Spangled Banner
   B. Orchestrating everything: dynamics and articulations
   C. Timbral weight (thickness)
   D. Vertical structure
      1. Melody, bassline, chords
      2. Example: Brahms, Variations on a Theme of Haydn
      3. Example: Mendelssohn: Scottish Symphony
      4. Example: Star Spangled Banner
   E. Freezing: Star Spangled Banner
   F. Activation: Star Spangled Banner
   1. Orchestration defines form
   2. Details of orchestration
H. Mel Powell: five rules of thumb

II. Computer musical notation
   1. Basics of the Finale program
      1. Score layout
      2. Note entry
   2. Producing a score

Project 1: A simple orchestration using Finale

III. Solo, "choral," tutti, and episodic textures
   1. Music as a "choral" art
   2. Soloistic music: Bartok's parlando and rhythmically strict music
   3. "Brownification": doubling parts of a chord in all sections
   4. Henry Brant's timbral categories
   5. Alfred Schnittke's notion of a timbral scale
      1. Timbral consonance and dissonance
      2. Timbral modulation
   6. Timbral weight
   7. Timbral blend: juxtaposition, interlocking, enclosure
   8. Accidental unisons
   9. Kinoforms (types of motion)
      1. Going-to and arrived-at music
      2. Example: Tchaikovsky, *March Slav*
   10. Harmonic fluctuation (consonance-dissonance movement): Hindemith
   11. The orchestral unison
   12. Beginnings and endings

IV. Orchestration as performance—performance as orchestration
   1. Notation: a graphic representation of music
   2. Notation: performance instructions
      1. Score preparation and performance instructions
      2. Imagining the performance
      3. Phrasings and bowings
      4. Breaking figurations up between instruments
   3. Conductors reorchestrate (Ormandy, Slatkin)

V. The physical qualities of instruments:
   1. Families of instruments
   2. Standard playing techniques
   3. Extended techniques
   4. Plucked or hammered strings
   5. Nontraditional instruments
   6. Creating superinstruments
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>VI.</td>
<td>The art of transcription</td>
<td>2 hours</td>
</tr>
<tr>
<td></td>
<td>A. Bach-Busoni: <em>Chaconne</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B. Handel-Halvorsen: <em>Passacaglia</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C. Debussy, <em>Syrinx</em>: flute, clarinet, guitar, chamber orchestra</td>
<td></td>
</tr>
<tr>
<td>VII.</td>
<td>Idiomatic scoring for instruments using Finale</td>
<td>1 hour</td>
</tr>
<tr>
<td></td>
<td>A. Articulations, dynamics, and other instructions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B. Transposition and range</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Project 2: Idiomatic transcription using the Finale software</td>
<td></td>
</tr>
<tr>
<td>VIII.</td>
<td>From sketch to sound world</td>
<td>2 hours</td>
</tr>
<tr>
<td></td>
<td>A. Hindemith and sketching</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B. Single line sketch</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Example: Bach, <em>G Minor Fugue</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Single line sketch</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Antecedent and consequent</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Harmonic reduction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C. Orchestrating piano music</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Creating a sound world</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Example: Mussorgsky, <em>Pictures at an Exhibition</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Project 3: Orchestrating a portion of <em>Pictures at an Exhibition</em></td>
<td></td>
</tr>
<tr>
<td>IX.</td>
<td>Historical Orchestration: Writing for Orchestras Then and Now</td>
<td>3 hours</td>
</tr>
<tr>
<td></td>
<td>A. Renaissance: Praetorius (flexible orchestration)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B. Baroque</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Bach: symbolic groups</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Handel: unusual and changeable combinations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Recent flexible orchestration: Faure and Rutter Requiems</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C. Classical</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Haydn: polyphonic approach</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Brass freezing: horn pedal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Beethoven: reorchestrated by Wagner</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Stopped and open horn</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Natural woodwinds</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Keyboard figuration orchestrated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D. Romantic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Berlioz: <em>Symphonie Fantastique</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Mendelssohn: <em>Reformation Symphony</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Brahms: <em>Academic Festival Overture</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Wagner: <em>Magic Fire Music</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E. Early Modernism</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Debussy—Symbolist approach</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Example: <em>Afternoon of a Faun</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Example: <em>Rondes du Printemps</em></td>
<td></td>
</tr>
</tbody>
</table>
2. Strauss: *Don Quixote*
3. Respighi: *Fountains of Rome*

X. Writing for voices
   2 hours
   A. Chorus
      1. Finding pitches
      2. Every detail is obvious: Holst, *Hymns from the Rig Veda*
      3. The sound of text: managing consonants and vowels
   B. Solo voice

Project: Choral writing, add chorus to *Pictures at an Exhibition*

XI. Writing for Band
   2 hours
   A. Concept of sound
      1. Like an organ (Widor)
      2. Like an orchestra without strings (Holst, *First Suite* and the *Planets*)
      3. Like a jazz band (using saxophones)
      4. Like a percussion ensemble (Roy Harris)
      5. A broken consort has different timbres: the need to add noise to tone

XII. Writing for Piano
     1 hour
     A. "Orchestrating" for Piano
        1. Tone color
        2. Techniques
           a. Scales
           b. Arpeggios
           c. Staccato
           d. Octave technique
           e. Thirds
           f. Pedals
     B. Extraneous Noises
     C. Extended Techniques

XIII. Consorts and Chamber Music
     2 hours
     A. Whole and Broken Consorts
        1. Flute ensemble
        2. Single Reeds
        3. String orchestra
        4. Brass ensemble
        5. Guitar ensemble
        6. Percussion ensemble
     B. Chamber music
        1. Counterpoint
        2. Doubling
        3. The piano as center for the ensemble
           a. Beethoven, *Variations for Flute and Piano*
           b. Arensky, *Piano Trio*
        4. Orchestrating chamber music
           a. Brahms, *Piano Quintet*
Project 4: Chamber Music arrangement using Finale

XIV. Electronic Sound 2 hours
A. Synthesis of timbre
B. Henry Brant—timbral groups like waveforms
C. Control of the envelope
D. Control of piece (sequencer)
E. Intuitive sketching with microphone (Bartok's parlando concept, Subotnick)
F. Wendy Carlos and orchestrated synths
G. Spatial location and surround sound
H. Creating super-instruments
I. Orchestration as signal
J. John Adams and electronics
K. L. Acoustic pieces that use electronic music techniques
   1. John Adams: *HarmonieLehre*
   2. Terry Riley: *In C*

XV. Recorded Sound 2 hours
A. Recording, mixing, editing as an extension of orchestration
B. Click track and reference tracks
C. Mixdown as orchestration: Philip Glass and multitrack recording
D. Working with samples
E. Computer programs with multiple samples
   1. Different articulations
   2. Key Switches
F. Mixing real instruments and simulated instruments

Project 4: Orchestration using sampled sounds

XVI. Producing a complete score with Finale 2 hours
A. Editing and typesetting
B. The score and parts

Final Project: Producing a complete score and parts

Please Attach copy of class syllabus and schedule as an example

Signature:________________________________________________________ Date____________________________
Chair

Signature:________________________________________________________ Date____________________________
Dean
Title: Instrumentation and Arranging

MM314-XX, Spring Semester 2016

I. Catalog Description and Credit Hours of the Course:
Fundamentals of orchestration and arranging using computer music notation software.
Two (2) credit hours.

II. Prerequisites: MM204 Twentieth Century Techniques

III. Instructor: Dr. Robert Fruehwald, RCS357
Office Hours: to be determined
Telephone: 651-2337
Email: rfruehwald@semo.edu
Location: TBD
Final Examination: TBD

IV. Purposes or Objectives of the Course:
A. To provide a comprehensive, accessible, and highly practical body of knowledge about the orchestration and arranging of music.
B. To provide opportunities for students to practice orchestration and arranging through creative projects.

V. Student Learning Outcomes:
A. Demonstrate the ability to apply the principles of orchestration
B. Demonstrate the ability to write an idiomatic musical arrangement
C. Demonstrate the ability to produce polished, professional music typesetting

VI. Expectations of Students:
A. Attend all class sessions
B. Be prepared to respond when called upon by the instructor in class
C. Participate in class discussions
D. Complete all assignments (for specific assignments see section VIII) and submit them for evaluation on the due dates
E. Earn a composite passing grade on assignments and five creative projects (see section VIII)

VII. Academic Honesty
Academic honesty is one of the most important qualities influencing the character and vitality of an educational institution. Academic misconduct or dishonesty is inconsistent with membership in an academic community and cannot be accepted. Violations of academic honesty represent a serious breach of discipline and may be considered grounds for disciplinary action, including dismissal from the University. Academic dishonesty is defined to include those acts that would deceive, cheat, or defraud so as to promote or enhance one’s scholastic record. Knowingly or actively assisting any person in the commission of an above-mentioned act is also academic dishonesty. Students are responsible for upholding
the principles of academic honesty in accordance with the “University Statement of Student Rights” found in the undergraduate or graduate bulletin. The University requires that all assignments submitted to faculty members by students be the work of the individual student submitting the work. An exception would be group projects assigned by the instructor. In this situation, the work must be that of the group. Additional information on Academic Honesty may be found at the following link:
http://www.semo.edu/facultysenate/handbook/5d.html

VIII. Civility
Information on the University’s expectation demeanor and interpersonal interaction and communication may be found at the following link:
http://www.semo.edu/pdf/Conduct_Faculty_Resource_Guide.pdf

IX. Accessibility
The University’s policies for Students with Disabilities may be found at the following links:
http://www.semo.edu/ds/facultyinfo.html, and
http://www.semo.edu/pdf/old/ds_working_with_studentsS2.pdf

X. Questions, comments or requests regarding this course or program should be taken to your instructor. Unanswered questions or unresolved issues involving this class should be taken to the Department Chair, Dr. Kevin Hampton (x2544; Seminary Building 252; email: khampton@semo.edu).

XI. Course Content or Outline and Hours: repertoire listed for each succeeding section is representative, provided for illustrative purposes only.
I. Orchestration defines structure 2 hours
   A. Defining form: phrases and sections: Star Spangled Banner
   B. Orchestrating everything: dynamics and articulations
   C. Timbral weight (thickness)
   D. Vertical structure
      1. Melody, bassline, chords
      2. Example: Brahms, Variations on a Theme of Haydn
      3. Example: Mendelssohn: Scottish Symphony
      4. Example: Star Spangled Banner
   E. Freezing: Star Spangled Banner
   F. Activation: Star Spangled Banner
   G. Analysis: Prokofiev, Lieutenant Kije Suite
      1. Orchestration defines form
      2. Details of orchestration
   H. Mel Powell: five rules of thumb

II. Computer musical notation 1 hours
   A. Basics of the Finale program
      1. Score layout
      2. Note entry
   B. Producing a score

Project 1: A simple orchestration using Finale
III. Solo, "choral," tutti, and episodic textures  3 hours
   A. Music as a "choral" art
   B. Soloistic music: Bartok's parlando and rhythmically strict music
   C. "Brownificatio
   n": doubling parts of a chord in all sections
   D. Henry Brant's timbral categories
   E. Alfred Schnittke's notion of a timbral scale
      1. Timbral consonance and dissonance
      2. Timbral modulation
   F. Timbral weight
   G. Timbral blend: juxtaposition, interlocking, enclosure
   H. Accidental unisons
   I. Kinoforms (types of motion)
      1. Going-to and arrived-at music
      2. Example: Tchaikovsky, March Slav
   J. Harmonic fluctuation (consonance-dissonance movement): Hindemith
   K. The orchestral unison
   L. Beginnings and endings

IV. Orchestration as performance—performance as orchestration  1 hour
   A. Notation: a graphic representation of music
   B. Notation: performance instructions
      1. Score preparation and performance instructions
      2. Imagining the performance
      3. Phrasings and bowings
      4. Breaking figurations up between instruments
   C. Conductors reorchestrate (Ormandy, Slatkin)

V. The physical qualities of instruments:  4 hours
   A. Families of instruments
   B. Standard playing techniques
   C. Extended techniques
   D. Plucked or hammered strings
   E. Nontraditional instruments
   F. Creating superinstruments

VI. The art of transcription  2 hours
   A. Bach-Busoni: Chaconne
   B. Handel-Halvorsen: Passacaglia
   C. Debussy, Syrinx: flute, clarinet, guitar, chamber orchestra

VII. Idiomatic scoring for instruments using Finale  1 hour
   A. Articulations, dynamics, and other instructions
   B. Transposition and range

Project 2: Idiomatic transcription using the Finale software

VIII. From sketch to sound world  2 hours
   A. Hindemith and sketching
B. Single line sketch
   1. Example: Bach, *G Minor Fugue*
      a. Single line sketch
      b. Antecedent and consequent
      c. Harmonic reduction

C. Orchestrating piano music
   1. Creating a sound world
   2. Example: Mussorgsky, *Pictures at an Exhibition*

Project 3: Orchestrating a portion of *Pictures at an Exhibition*

IX. Historical Orchestration: Writing for Orchestras Then and Now  3 hours

   A. Renaissance: Praetorius (flexible orchestration)
   B. Baroque
      1. Bach: symbolic groups
      2. Handel: unusual and changeable combinations
      3. Recent flexible orchestration: Faure and Rutter Requiems
   C. Classical
      1. Haydn: polyphonic approach
      2. Brass freezing: horn pedal
      3. Beethoven: reorchestrated by Wagner
      4. Stopped and open horn
      5. Natural woodwinds
      6. Keyboard figuration orchestrated
   D. Romantic
      1. Berlioz: *Symphonie Fantastique*
      2. Mendelssohn: *Reformation Symphony*
      3. Brahms: *Academic Festival Overture*
      4. Wagner: *Magic Fire Music*

E. Early Modernism
   1. Debussy—Symbolist approach
      a. Example: *Afternoon of a Faun*
      b. Example: *Rondes du Printemps*
   2. Strauss: *Don Quixote*
   3. Respighi: *Fountains of Rome*

X. Writing for voices  2 hours
   A. Chorus
      1. Finding pitches
      2. Every detail is obvious: Holst, *Hymns from the Rig Veda*
      3. The sound of text: managing consonants and vowels
   B. Solo voice

   Project: Choral writing, add chorus to *Pictures at an Exhibition*

XI. Writing for Band  2 hours
   A. Concept of sound
1. Like an organ (Widor)
2. Like an orchestra without strings (Holst, *First Suite* and the *Planets*)
3. Like a jazz band (using saxophones)
4. Like a percussion ensemble (Roy Harris)
5. A broken consort has different timbres: the need to add noise to tone

XII. Writing for Piano

A. "Orchestrating" for Piano
   1. Tone color
   2. Techniques
      a. Scales
      b. Arpeggios
      c. Staccato
      d. Octave technique
      e. Thirds
      f. Pedals
   B. Extraneous Noises
   C. Extended Techniques

XIII. Consorts and Chamber Music

A. Whole and Broken Consorts
   1. Flute ensemble
   2. Single Reeds
   3. String orchestra
   4. Brass ensemble
   5. Guitar ensemble
   6. Percussion ensemble
   B. Chamber music
      1. Counterpoint
      2. Doubling
      3. The piano as center for the ensemble
         a. Beethoven, *Variations for Flute and Piano*
         b. Arensky, *Piano Trio*
      4. Orchestrating chamber music
         a. Brahms, *Piano Quintet*
         b. Debussy, *Sonata* for flute, viola, and harp
         c. Ravel: *Introduction and Allegro*

Project 4: Chamber Music arrangement using Finale

XIV. Electronic Sound

A. Synthesis of timbre
B. Henry Brant—timbral groups like waveforms
C. Control of the envelope
D. Control of piece (sequencer)
E. Intuitive sketching with microphone (Bartok's parlando concept, Subotnick)
F. Wendy Carlos and orchestrated synths
G. Spatial location and surround sound
I. Creating super-instruments
J. Orchestration as signal
K. John Adams and electronics
L. Acoustic pieces that use electronic music techniques
   1. John Adams: HarmonieLehre
   2. Terry Riley: In C

XV. Recorded Sound 2 hours
   A. Recording, mixing, editing as an extension of orchestration
   B. Click track and reference tracks
   C. Mixdown as orchestration: Philip Glass and multitrack recording
   D. Working with samples
   E. Computer programs with multiple samples
      1. Different articulations
      2. Key Switches
   F. Mixing real instruments and simulated instruments

Project 4: Orchestration using sampled sounds

XVI. Producing a complete score with Finale 2 hours
   A. Editing and typesetting
   B. The score and parts

Final Project: Producing a complete score and parts

VII. Textbooks: None, the students are encouraged to buy the Finale music notation software (Finale is available to students in the Arts Resource Center for those who choose not to buy the software). Musical scores used in the class are available for free download from IMSLP: Petrucci Music Library, http://imslp.org/wiki/. Musical examples may vary from those listed in the syllabus.

VIII. Grading: 4 Creative Projects……….. 400 points
         Final Creative Project………. 200 points
         Total Points: 600 points

Grading will be on a 10% basis (90%=A, 80%=B, 70%=C, 60%=D). Music majors must attain a grade of C or better.

MoSPE Standards: 1C, 1C2, 4C2, 6C1, 6C4,