Reason for upper-division designation
Orchestration is an in-depth study, neither a survey nor introduction. It has prerequisites of Perfa 1, Music Fundamentals, Perfa 114 Music Theory and Ear-Training and Perfa 117 Form and Analysis. The course objectives demand high levels of cognition and judgment: the ability to read a full orchestral score (learned in Perfa 117), understanding ranges of instruments (rarely are they fixed, ranges are usually flexible and dependent on variables), transpositions, principles of blending and specific traits of individual instruments. For example, students will learn that what is comfortable for a cello might work to some extent on a bassoon yet be completely awkward for a trombone.

2. Justification for Course
Most college music departments require six semesters of music theory for its majors, presently SMC requires just three: Music Fundamentals, Music Theory and Ear-Training, and Form and Analysis. We find a 6-course sequence bloated and unnecessary, yet our present theory curriculum is too light and does not adequately prepare students for graduate school or working in the field. In the Performing Arts Department's program review of 2007 our external reviewer, Dr. Jeffrey Miller, suggested adding a fourth course.

2a. Learning objectives: familiarity with the basic instruments of the orchestra, their ranges, transpositions, strengths, weaknesses, and how best to combine them. The instruments studied will be flute, piccolo, oboe, clarinet, bass clarinet, bassoon, horn, trumpet, trombone, tuba, percussion section, violin, viola, cello and bass. Their knowledge will be applied by orchestrating short piano pieces for woodwind quintet, brass quintet, string quintet and full orchestra. Students will learn essential concepts and terminology that relate to instrumental techniques such as pizzicato, arco, single, double and triple tonguing, flutter tonguing, tremolo, spiccato bowing, on the string, off the string and much more. By semester’s end students will have the primary skills needed to arrange music for a variety of small and large instrumental ensembles and be prepared to further study advanced orchestration techniques.

2b: Orchestration will advance the Performing Arts Department learning outcome (listed on p. 166 of the 2012-13 catalog) that states:
“Employ appropriately the basic technical terms generally used in an art form when discussing individual works, and identify specific elements of the aesthetic, historical and cultural context of a work of art by comparing it to others from the same context.”

“Adapt performance skills both in rehearsal and performance to the technical demands of specific masterworks of various styles and eras, as well as to original/contemporary works. “

2c. Kinds of assignments:
i. learning foreign names of instruments as commonly found in musical scores, transposition exercises (e.g. take a melody in one key and transpose it to another),
ii. learning ranges of instruments

iii. taking short piano works and orchestrating them respectively for woodwind quintet, brass quintet, string quintet and finally full orchestra. Final orchestra projects will be sight-read live by SMC's affiliate orchestra, the Contra Costa Chamber Orchestra.

This course will be required of all music majors therefore pass/fail grading will not be allowed.

3. Student Population will consist of music majors plus a handful of ambitious minors. The department intends to offer Orchestration every two years, as it does the other music theory courses, and expect 9-14 to enroll.

4. Relationship to Present College Curriculum
Orchestration will add a fourth semester to the department’s 3-semester sequence of music theory courses. No other course need be modified as a result. There will be no impact on courses outside the department.

5. Any Extraordinary Implementation Costs
Orchestration requires students learn the music notation and playback software “Finale.” The department is offering the course as an independent study to five students in spring of 2013 and has already paid for Finale to be purchased and installed by CATS in the Computer Lab and Dante 204. No additional costs are expected.

6. Library Resources

7. Course Credit and Grading Options
Orchestration will be worth one credit and meet three hours/weekly, thirty-nine hours per semester. Projected out-of-class time will range from 8-12 hours weekly. The class format will be lecture with frequent in-class demonstrations from live instrumentalists.

8. Prerequisites, Perfa 117 Form and Analysis.

9. Course Description Wording for Catalog
Characteristics of modern orchestral instruments. Representative scores from the repertoire will be analyzed, and assignments will consist of scoring for various ensembles such as woodwind quintet, brass quintet, string quintet and full orchestra.

10. Course Content: Tentative Syllabus
Unit One: Working with Finale (music notation software); transposition
Unit Two: The String Family -- foreign names, ranges, bowing and other techniques
Project No. 1: Scoring a short piano piece for string quintet
Unit Three: The Woodwind Family -- foreign names, ranges, tonguing and other techniques
Project No. 2: Scoring a short piano piece for woodwind quintet
Unit Four: The Brass Family -- foreign names, ranges, tonguing and other techniques
Project No. 3: Scoring a short piano piece for brass quintet
Unit Five: The Percussion Family
Project No. 4: Scoring a short piano piece for full orchestra (projects will be sight read by the Contra Costa Chamber Orchestra)

Final Exam

<table>
<thead>
<tr>
<th>Grading</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments</td>
<td>10%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>10%</td>
</tr>
<tr>
<td>Project Nos. 1-3</td>
<td>45%</td>
</tr>
<tr>
<td>Project No. 4</td>
<td>20%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>15%</td>
</tr>
</tbody>
</table>

Textbooks: Donald Freund: Instrument Studies for Eyes and Ears (Online)