



AP[®] Music Theory

Teacher's Guide

David Lockart
North Hunterdon-Voorhees Regional School District
Hunterdon County, New Jersey

connect to college success[™]
www.collegeboard.com

The College Board: Connecting Students to College Success

The College Board is a not-for-profit membership association whose mission is to connect students to college success and opportunity. Founded in 1900, the association is composed of more than 5,000 schools, colleges, universities, and other educational organizations. Each year, the College Board serves seven million students and their parents, 23,000 high schools, and 3,500 colleges through major programs and services in college admissions, guidance, assessment, financial aid, enrollment, and teaching and learning. Among its best-known programs are the SAT®, the PSAT/NMSQT®, and the Advanced Placement Program® (AP®). The College Board is committed to the principles of excellence and equity, and that commitment is embodied in all of its programs, services, activities, and concerns.

For further information, visit www.collegeboard.com.

© 2007 The College Board. All rights reserved. College Board, Advanced Placement Program, AP, and the acorn logo are registered trademarks of the College Board. connect to college success is a trademark owned by the College Board. All other products and services mentioned herein may be trademarks of their respective owners. Visit the College Board on the Web: www.collegeboard.com.

Contents

Welcome Letter from the College Board	v
Equity and Access	vii
Participating in the AP Course Audit	xi
Preface	xii
Chapter 1. About AP Music Theory	1
Overview: Past, Present, Future	1
Course Description Essentials	3
Key Concepts and Skills	4
Chapter 2. Advice for AP Music Theory Teachers	9
Teacher Benefits	9
Developing AP Music Theory in Your School	10
Help from the College Board	11
Identifying Students for Your Course	14
Selecting a Textbook and Classroom Resources	15
Involving Parents	15
Teaching Tips	16
Working with Other Teachers	25
Become an AP Reader	26
Chapter 3. Course Organization	27
Syllabus Development	27
One Example of Course Organization	29
Nine Sample Syllabi	34
Chapter 4. Topics in AP Music Theory Pedagogy	123
Strategies for Improving Skills in Melodic Dictation	123
Teaching Harmonic Dictation	132
Thinking Horizontally: Learning Part Writing and Figured Bass Through Analysis	140
Teaching Tonal Sight-singing	154
Teaching Score Analysis	162
A Practical Guide to Using Popular Music in the Theory Curriculum	171
Listening to the Planet: Including the World Element in the AP Music Theory Curriculum	174
AP Vertical Teams® in Music Theory	185

Chapter 5. The AP Exam in Music Theory	193
Exam Format and Content	193
Preparing Students.....	195
Exam Administration.....	200
Classroom Activities After the Exam.....	201
Exam Scoring	202
AP Grade Report.....	203
Using the AP Instructional Planning Report	203
College AP Policies.....	204
Chapter 6. Resources for Teachers	206
Useful Information Sources	206
Bibliography.....	206
Technology in the AP Music Theory Classroom	218
How to Address Limited Resources.....	227
Professional Development	228
Chapter 7. Terms and Symbols Used on the AP Music Theory Exam	232



Welcome Letter from the College Board

Dear AP® Teacher:

Whether you are a new AP teacher, using this AP Teacher's Guide to assist in developing a syllabus for the first AP course you will ever teach, or an experienced AP teacher simply wanting to compare the teaching strategies you use with those employed by other expert AP teachers, we are confident you will find this resource valuable. We urge you to make good use of the ideas, advice, classroom strategies, and sample syllabi contained in this Teacher's Guide.

You deserve tremendous credit for all that you do to fortify students for college success. The nurturing environment in which you help your students master a college-level curriculum—a much better atmosphere for one's first exposure to college-level expectations than the often large classes in which many first-year college courses are taught—seems to translate directly into lasting benefits as students head off to college. An array of research studies, from the classic 1999 U.S. Department of Education study *Answers in the Tool Box* to new research from the University of Texas and the University of California, demonstrate that when students enter high school with equivalent academic abilities and socioeconomic status, those who develop the content knowledge to demonstrate college-level mastery of an AP Exam (a grade of 3 or higher) have much higher rates of college completion and have higher grades in college. The 2005 National Center for Educational Accountability study shows that students who take AP courses have much higher college graduation rates than students with the *same* academic abilities who do not have that valuable AP experience in high school. Furthermore, a Trends in International Mathematics and Science Study (TIMSS, formerly known as the Third International Mathematics and Science Study) found that even AP Calculus students who score a 1 on the AP Exam are significantly outperforming other advanced mathematics students in the United States, and they compare favorably to students from the top-performing nations in an international assessment of mathematics achievement. (Visit AP Central® at <http://apcentral.collegeboard.com> for details about these and other AP-related studies.)

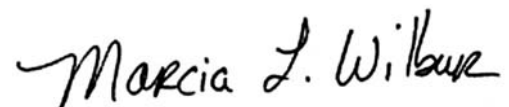
For these reasons, the AP teacher plays a significant role in a student's academic journey. Your AP classroom may be the only taste of college rigor your students will have before they enter higher education. It is important to note that such benefits cannot be demonstrated among AP courses that are AP courses in name only, rather than in quality of content. For AP courses to meaningfully prepare students for college success, courses must meet standards that enable students to replicate the content of the comparable college class. Using this AP Teacher's Guide is one of the keys to ensuring that your AP course is as good as (or even better than) the course the student would otherwise be taking in college. While the AP Program does not mandate the use of any one syllabus or textbook and emphasizes that AP teachers should be granted the creativity and flexibility to develop their own curriculum, it is beneficial for AP teachers to compare their syllabi not just to the course outline in the official AP Course Description and in chapter 3 of this guide, but also to the syllabi presented on AP Central, to ensure that each course labeled AP meets the standards of a college-level course. Visit AP Central at apcentral.collegeboard.com for details about the AP Course Audit, course-specific Curricular Requirements, and how to submit your syllabus for AP Course Audit authorization.

As the Advanced Placement Program® continues to experience tremendous growth in the twenty-first century, it is heartening to see that in every U.S. state and the District of Columbia, a growing proportion of high school graduates have earned at least one grade of 3 or higher on an AP Exam. In some states, between 18 and 20 percent of graduating seniors have accomplished this goal. The incredible efforts of

Welcome Letter

AP teachers are paying off, producing ever greater numbers of college-bound seniors who are prepared to succeed in college. Please accept my admiration and congratulations for all that you are doing and achieving.

Sincerely,

A handwritten signature in black ink that reads "Marcia L. Wilbur". The script is fluid and cursive, with the first letters of each word being capitalized and prominent.

Marcia Wilbur
Director, Curriculum and Content Development
Advanced Placement Program

Equity and Access

In the following section, the College Board describes its commitment to achieving equity in the AP Program.

Why are equitable preparation and inclusion important?

Currently, 40 percent of students entering four-year colleges and universities and 63 percent of students at two-year institutions require some remedial education. This is a significant concern because a student is less likely to obtain a bachelor's degree if he or she has taken one or more remedial courses.¹

Nationwide, secondary school educators are increasingly committed not just to helping students complete high school but also to helping them develop the habits of mind necessary for managing the rigors of college. As *Educational Leadership* reported in 2004:

The dramatic changes taking place in the U.S. economy jeopardize the economic future of students who leave high school without the problem-solving and communication skills essential to success in postsecondary education and in the growing number of high-paying jobs in the economy. To back away from education reforms that help all students master these skills is to give up on the commitment to equal opportunity for all.²

Numerous research studies have shown that engaging a student in a rigorous high school curriculum such as is found in AP courses is one of the best ways that educators can help that student persist and complete a bachelor's degree.³ However, while 57 percent of the class of 2004 in U.S. public high schools enrolled in higher education in fall 2004, only 13 percent had been boosted by a successful AP experience in high school.⁴ Although AP courses are not the only examples of rigorous curricula, there is still a significant gap between students with college aspirations and students with adequate high school preparation to fulfill those aspirations.

Strong correlations exist between AP success and college success.⁵ Educators attest that this is partly because AP enables students to receive a taste of college while still in an environment that provides more support and resources for students than do typical college courses. Effective AP teachers work closely with their students, giving them the opportunity to reason, analyze, and understand for themselves. As a result, AP students frequently find themselves developing new confidence in their academic abilities and discovering their previously unknown capacities for college studies and academic success.

Which students should be encouraged to register for AP courses?

Any student willing and ready to do the work should be considered for an AP course. The College Board actively endorses the principles set forth in the following Equity Policy Statement and encourages schools to support this policy.

1. Andrea Venezia, Michael W. Kirst, and Anthony L. Antonio, *Betraying the College Dream: How Disconnected K-12 and Postsecondary Education Systems Undermine Student Aspirations* (Palo Alto, Calif.: The Bridge Project, 2003): 8.

2. Frank Levy and Richard J. Murnane, "Education and the Changing Job Market." *Educational Leadership* 62(2) (October 2004): 83.

3. In addition to studies from University of California–Berkeley and the National Center for Educational Accountability (2005), see the classic study on the subject of rigor and college persistence: Clifford Adelman, *Answers in the Tool Box: Academic Intensity, Attendance Patterns, and Bachelor's Degree Attainment* (Washington, D.C.: U.S. Department of Education, 1999).

4. *Advanced Placement Report to the Nation* (New York: College Board, 2005).

5. Wayne Camara, "College Persistence, Graduation, and Remediation," *College Board Research Notes* (RN-19) (New York: College Board, 2003).

Equity and Access

The College Board and the Advanced Placement Program encourage teachers, AP Coordinators, and school administrators to make equitable access a guiding principle for their AP programs. The College Board is committed to the principle that all students deserve an opportunity to participate in rigorous and academically challenging courses and programs. All students who are willing to accept the challenge of a rigorous academic curriculum should be considered for admission to AP courses. The Board encourages the elimination of barriers that restrict access to AP courses for students from ethnic, racial, and socioeconomic groups that have been traditionally underrepresented in the AP Program. Schools should make every effort to ensure that their AP classes reflect the diversity of their student population.

The fundamental objective that schools should strive to accomplish is to create a stimulating AP program that academically challenges students and has the same ethnic, gender, and socioeconomic demographics as the overall student population in the school. African American and Native American students are severely underrepresented in AP classrooms nationwide; Latino student participation has increased tremendously, but in many AP courses Latino students remain underrepresented. To prevent a willing, motivated student from having the opportunity to engage in AP courses is to deny that student the possibility of a better future.

Knowing what we know about the impact a rigorous curriculum can have on a student's future, it is not enough for us simply to leave it to motivated students to seek out these courses. Instead, we must reach out to students and encourage them to take on this challenge. With this in mind, there are two factors to consider when counseling a student regarding an AP opportunity:

1. Student motivation

Many potentially successful AP students would never enroll if the decision were left to their own initiative. They may not have peers who value rigorous academics, or they may have had prior academic experiences that damaged their confidence or belief in their college potential. They may simply lack an understanding of the benefits that such courses can offer them. Accordingly, it is essential that we not gauge a student's motivation to take AP until that student has had the opportunity to understand the advantages—not just the challenges—of such course work.

Educators committed to equity provide all of a school's students with an understanding of the benefits of rigorous curricula. Such educators conduct student assemblies and/or presentations to parents that clearly describe the advantages of taking an AP course and outline the work expected of students. Perhaps most important, they have one-on-one conversations with the students in which advantages and expectations are placed side by side. These educators realize that many students, lacking confidence in their abilities, will be listening for any indication that they should not take an AP course. Accordingly, such educators, while frankly describing the amount of homework to be anticipated, also offer words of encouragement and support, assuring the students that if they are willing to do the work, they are wanted in the course.

The College Board has created a free online tool, AP Potential™, to help educators reach out to students who previously might not have been considered for participation in an AP course. Drawing upon data based on correlations between student performance on specific sections of the PSAT/NMSQT® and performance on specific AP Exams, AP Potential generates rosters of students at your school who have a strong likelihood of success in a particular AP course. Schools nationwide have successfully enrolled many more students in AP than ever before by using these rosters to help students (and their parents) see themselves as having potential to succeed in college-level studies. For more information, visit <http://appotential.collegeboard.com>.

Actively recruiting students for AP and sustaining enrollment can also be enhanced by offering incentives for both students and teachers. While the College Board does not formally endorse any one incentive for boosting AP participation, we encourage school administrators to develop policies that will best serve an overarching goal to expand participation and improve performance in AP courses. When such incentives are implemented, educators should ensure that quality verification measures such as the AP Exam are embedded in the program so that courses are rigorous enough to merit the added benefits.

Many schools offer the following incentives for students who enroll in AP:

- Extra weighting of AP course grades when determining class rank
- Full or partial payment of AP Exam fees
- On-site exam administration

Additionally, some schools offer the following incentives for teachers to reward them for their efforts to include and support traditionally underserved students:

- Extra preparation periods
- Reduced class size
- Reduced duty periods
- Additional classroom funds
- Extra salary

2. Student preparation

Because AP courses should be the equivalent of courses taught in colleges and universities, it is important that a student be prepared for such rigor. The types of preparation a student should have before entering an AP course vary from course to course and are described in the official AP Course Description book for each subject (available as a free download at apcentral.collegeboard.com).

Unfortunately, many schools have developed a set of gatekeeping or screening requirements that go far beyond what is appropriate to ensure that an individual student has had sufficient preparation to succeed in an AP course. Schools should make every effort to eliminate the gatekeeping process for AP enrollment. Because research has not been able to establish meaningful correlations between gatekeeping devices and actual success on an AP Exam, the College Board **strongly discourages** the use of the following factors as thresholds or requirements for admission to an AP course:

- Grade point average
- Grade in a required prerequisite course
- Recommendation from a teacher
- AP teacher's discretion
- Standardized test scores

Equity and Access

- Course-specific entrance exam or essay

Additionally, schools should be wary of the following concerns regarding the misuse of AP:

- Creating “Pre-AP courses” to establish a limited, exclusive track for access to AP
- Rushing to install AP courses without simultaneously implementing a plan to prepare students and teachers in lower grades for the rigor of the program

How can I ensure that I am not watering down the quality of my course as I admit more students?

Students in AP courses should take the AP Exam, which provides an external verification of the extent to which college-level mastery of an AP course is taking place. While it is likely that the percentage of students who receive a grade of 3 or higher may dip as more students take the exam, that is not an indication that the quality of a course is being watered down. Instead of looking at percentages, educators should be looking at raw numbers, since each number represents an individual student. If the raw number of students receiving a grade of 3 or higher on the AP Exam is not decreasing as more students take the exam, there is no indication that the quality of learning in your course has decreased as more students have enrolled.

What are schools doing to expand access and improve AP performance?

Districts and schools that successfully improve both participation and performance in AP have implemented a multipronged approach to expanding an AP program. These schools offer AP as capstone courses, providing professional development for AP teachers and additional incentives and support for the teachers and students participating at this top level of the curriculum. The high standards of the AP courses are used as anchors that influence the 6–12 curriculum from the “top down.” Simultaneously, these educators are investing in the training of teachers in the pre-AP years and are building a vertically articulated, sequential curriculum from middle school to high school that culminates in AP courses—a broad pipeline that prepares students step by step for the rigors of AP so that they will have a fair shot at success in an AP course once they reach that stage. An effective and demanding AP program necessitates cooperation and communication between high schools and middle schools. Effective teaming among members of all educational levels ensures rigorous standards for students across years and provides them with the skills needed to succeed in AP. For more information about Pre-AP® professional development, including workshops designed to facilitate the creation of AP Vertical Teams® of middle school and high school teachers, visit AP Central.

Advanced Placement Program
The College Board

Participating in the AP Course Audit

Overview

The AP Course Audit is a collaborative effort among secondary schools, colleges and universities, and the College Board. For their part, schools deliver college-level instruction to students and complete and return AP Course Audit materials. Colleges and universities work with the College Board to define elements common to college courses in each AP subject, help develop materials to support AP teaching, and receive a roster of schools and their authorized AP courses. The College Board fosters dialogue about the AP Course Audit requirements and recommendations, and reviews syllabi.

Starting in the 2007-08 academic year, all schools wishing to label a course “AP” on student transcripts must complete and return the subject-specific AP Course Audit form, along with the course syllabus, for all sections of their AP courses. Approximately two months after submitting AP Course Audit materials, schools will receive a legal agreement authorizing the use of the “AP” trademark on qualifying courses. Colleges and universities will receive a roster of schools listing the courses authorized to use the “AP” trademark at each school.

Purpose

College Board member schools at both the secondary and college levels requested an annual AP Course Audit in order to provide teachers and administrators with clear guidelines on curricular and resource requirements that must be in place for AP courses and to help colleges and universities better interpret secondary school courses marked “AP” on students’ transcripts.

The AP Course Audit form identifies common, essential elements of effective college courses, including subject matter and classroom resources such as college-level textbooks and laboratory equipment. Schools and individual teachers will continue to develop their own curricula for AP courses they offer—the AP Course Audit will simply ask them to indicate inclusion of these elements in their AP syllabi or describe how their courses nonetheless deliver college-level course content.

AP Exam performance is not factored into the AP Course Audit. A program that audited only those schools with seemingly unsatisfactory exam performance might cause some schools to limit access to AP courses and exams. In addition, because AP Exams are taken and exam grades reported after college admissions decisions are already made, AP course participation has become a relevant factor in the college admissions process. On the AP Course Audit form, teachers and administrators attest that their course includes elements commonly taught in effective college courses. Colleges and universities reviewing students’ transcripts can thus be reasonably assured that courses labeled “AP” provide an appropriate level and range of college-level course content, along with the classroom resources to best deliver that content.

For More Information

You should discuss the AP Course Audit with your department head and principal. For more information, including a timeline, frequently asked questions, and downloadable AP Course Audit forms, visit apcentral.collegeboard.com/courseaudit.

Preface

We all know the power of music. We become transformed when we experience a musical performance. We became musicians ourselves because this wonderful art came into our lives and led us on new paths of discovery. The study of music theory is the study of this language we love, and the AP Music Theory program gives us the opportunity to share our passion with students, leading them to their own discoveries in the rich variety of musical creations. Many of our students were attracted to music as young children—later the attraction was amplified through performance in concert bands, choirs, orchestras, as pianists, or even in rock bands. Drawing them into the study of music theory provides these young people with opportunities to increase their fluency in the musical language and to develop advanced musicianship skills that will enhance their love of the art.

This Teacher's Guide contains valuable information and suggestions for both new and experienced AP Music Theory teachers. New teachers may wish to systematically study the guide when preparing to implement and teach this course in their school. Every chapter has valuable information that will help them understand the course and the Music Theory Exam, offered each May. Experienced teachers may wish to read those sections that will enhance and improve their effectiveness in the classroom. Chapter 4, for example, has articles written by some of our nation's leading theory pedagogues. Here, discussions are provided in:

- Teaching Melodic Dictation
- Teaching Harmonic Dictation
- Teaching Sight-singing
- Teaching Part Writing and Figured Bass Realization
- Using Popular Music in the AP Music Theory Class
- Using World Music in the AP Music Theory Class

Chapter 1 provides an overview of the AP Music Theory course. Key concepts and skills are discussed, and there is a thorough description of the course content. Chapter 2 contains a wide variety of important topics, including advice on developing AP Music Theory in your school, teaching tips, advice on working with other teachers and parents, and information and programs available from the College Board.

In chapter 3 six experienced high school teachers and three college music theory professors share a course syllabus. These syllabi demonstrate how the AP Music Theory course and the equivalent college course can be organized and taught in a variety of ways and still be successful. AP Music Theory combines entry-level college or university music theory and aural skills courses. Each syllabus shows how the teacher combines knowledge content and skills development activities to best prepare their students for success within a specific school situation.

Chapter 4, as explained above, has helpful articles on several aspects of music theory pedagogy. Chapter 5 describes in detail the format of the AP Music Theory Exam and offers advice for preparing

students for the exam and methods for grading student work on practice exams. Chapter 6 provides invaluable resources for new and experienced teachers, including a comprehensive bibliography and a thorough list of available software and online technology resources, and chapter 7 offers a list of terms, symbols, and common vocabulary that may be included in the AP Music Theory Exam. Careful review of this list will provide insight into the scope and sequence of the AP Music Theory course.

Teachers are also encouraged to take advantage of AP Summer Institutes and workshops provided around the country—a current list can be found on AP Central. At these programs, experienced AP Music Theory Teachers discuss the course in detail and share successful teaching methods.

At the end of a year of AP Music Theory, students will feel the joy of accomplishment, having taken perhaps their first solid steps toward musical fluency. The magic of musical composition and music making will no longer be a mystery, and teachers will delight in knowing that their students are heading toward ever-expanding musical revelations.

Acknowledgements:

In addition to acknowledging the help and support of all of the contributors to this book, I would like to thank Mr. Michael Hughes, principal (at the time of this writing), and the administrative team at the North Hunterdon-Voorhees Regional High School District, as well as Brent Sandene, Janet Palumbo-Lavery, and Barbara Hames of ETS.

David Lockart
Annandale, New Jersey



David Lockart is the supervisor of music in the North Hunterdon-Voorhees Regional High School District in Hunterdon County, New Jersey. He teaches AP Music Theory, Choral Music, Voice, and Musical Theater. Mr. Lockart's award-winning choirs have toured throughout the eastern United States, Canada, and Europe. He is also a composer of choral music and a tenor soloist with various choirs and orchestras in the northeast United States.

As a consultant for the College Board, Mr. Lockart has lectured and taught at AP Summer Institutes throughout the United States. He served on the AP Music Theory Development Committee from 1998–2002 and has been a Reader for the AP Music Theory Exams.

Mr. Lockart received a Bachelor of Music degree from Westminster Choir College, where he studied conducting with Joseph Flummerfelt, and a Master of Choral Music degree from the University of Illinois, where he studied conducting with Harold Decker.

All photos courtesy of David Lockart.

Chapter 1

About AP Music Theory

by Gilbert DeBenedetti, Pittsburgh High School for the Creative and Performing Arts, Pennsylvania

Overview: Past, Present, Future

What Is Music Theory?

When I am particularly moved by a piece of music, I often feel compelled to find out just how the composer affected me so much. What were the chord progressions he or she used? What were those unusual notes in the melody? At other times I feel the opposite, that the music cannot and should not be analyzed and that to do so would violate its essence. These tendencies are contradictory, I know, but I have had to acknowledge them both and accept them as equally valid, for I cannot predict or control how I react. One thing is for sure, though: my tendency to analyze has the advantage of helping me understand and communicate my reactions to the music that is so dear to me. In a general sense, this analytical perspective is what music theory is all about.

Music theory is the study of the structure behind the music, the building blocks upon which each piece relies. A certain piece may suggest itself for analysis, or a whole body of music can move me to study the building blocks as abstractions. Each approach has its own rewards. As I study a score, I feel that I am in the presence of a composer I respect. I feel privileged to be able to glimpse his or her musical decisions and to observe how a creative mind works. On the other hand, studying music in the abstract—the scales, chords, and key relations used over time—gives me an appreciation for the beauty of the Western music tonal system that developed over many centuries. To me there is nothing more elegant than the circle of fifths. The relationships within it are countless, and I would be tempted to teach it even if it had nothing to do with our perception of music—which, as a bonus, it absolutely does.

To be more specific about the content of music theory, it is useful to take a historical perspective. What music theory is, after all, changes over time, as does any discipline. The traditional approach, popular in the mid-twentieth century, was to look at music vertically. Professors would use masterpieces of Western art music as examples, occasionally playing the examples on the piano, and students would diligently copy the chords the professor had written on the blackboard. A popular text at this time was Walter Piston's *Harmony* (1941), whose name itself is revealing: music theory was mostly the study of chords. To be sure, some chords were deemed more important than others, and chord progressions were touched on, but by and large the analysis of music was a vertical affair.

Although generalizations can be dangerous, many of today's music theory classes differ from this traditional model in several ways, by integrating singing and aural skills, encouraging active participation of students, and incorporating music other than European art music in the curriculum. Nowadays there is an appreciation for the relationship between the analysis of written music, which is generally knowledge-based and intellectual, and the analysis of music presented aurally (a skill acquired through much practice and more dependent on innate ability). To reinforce the learning of theoretical concepts, students may be asked to sing illustrative examples or play them on their instruments. As a result, many schools have integrated the teaching of aural

Chapter 1

skills, sight-singing, and keyboard skills into their theory classes. Going along with this trend is the willingness to use a wide variety of music to illustrate theoretical concepts, whether it be jazz, which is now recognized as a sophisticated art form; the popular music of the time, which, from the students' viewpoint, lends a sense of immediacy and relevance to the subject; or world music, which broadens students' musical horizons.

It should be mentioned that the developers of the AP Music Theory Exam have been in the forefront of these innovations. Almost half of the exam has been dedicated to aural skills ever since its inception in 1978, jazz and world music have been included for the last 15 years, and a sight-singing component was added in 1996.

So what of the future? The theories of Heinrich Schenker are little known to undergraduates but have been enthusiastically embraced by their professors over the past few decades. Schenker devised a more linear approach to tonal theory than that taught in the traditional model of the mid-twentieth century. This kind of analysis stressed the composer's tendency to elaborate or embellish harmonies and melodies. For instance, a composer may want to embellish the static tonic harmony in the first measure of figure 1 below, labeled "Reduction." He or she might do so by inserting a pedal (or neighboring) \sharp , as in the illustration labeled "Elaboration." In this case, it is questionable whether the \sharp is a chord in its own right. The voice leading is very smooth, and the moving voices are essentially neighbor notes ornamenting the overriding tonic harmony. Similarly, for melodic interest, a composer might substitute momentarily the soprano B in measure 2 of the reduction for a C, resulting in the 4–3 suspension in the elaboration.

Figure 1

Figure 1 displays two musical notations side-by-side, labeled "Reduction" and "Elaboration". Both are in 3/4 time and consist of three measures. The "Reduction" notation shows a simple harmonic progression: the first measure has a treble clef with a half note G and a bass clef with a half note E; the second measure has a treble clef with a half note A and a bass clef with a half note F; the third measure has a treble clef with a half note B and a bass clef with a half note G. The "Elaboration" notation shows a more complex progression: the first measure has a treble clef with a half note G and a bass clef with a half note E; the second measure has a treble clef with a half note A and a bass clef with a half note F; the third measure has a treble clef with a half note B and a bass clef with a half note G. Below the "Reduction" notation is the number 7. Below the "Elaboration" notation are the numbers 6, 4, 7, and 4—3.

If these embellishments are presented to students in written form, they should recognize that the \sharp and the suspension can be deleted without disturbing the overall harmonies; hence the analytical term "reduction." In these situations the student is asked to move in the opposite direction of the composer, removing rather than adding embellishments. These procedures frequently lead to rewarding discussions about how prominently an inserted chord or note is heard and about background and foreground levels of analysis.

For many years undergraduate texts inspired by Schenker were hard to come by. There was Edward Aldwell and Carl Schachter's groundbreaking *Harmony and Voice Leading* (1978), a densely written book even for first-year college students, let alone high school students, and John Clough and Joyce Conley's *Basic Harmonic Progressions* (1984), which is too elementary to be used as a first-year text. This linear approach, though, seems to be an idea whose time has come. Many recent texts now introduce \sharp chords and passing chords, for instance, as "linear chords" (Gauldin; Roig-Francolí) or "voice leading chords" (Clendinning and Marvin), or they use braces and parentheses to show that these chords embellish harmonies with more structural weight (Kostka and Payne). (See the bibliography in chapter 6 for information on works referenced here.)

Why Should We Teach AP Music Theory?

One purpose of teaching AP Music Theory is to give our students an appreciation for how music is composed, thereby helping them to perform more musically. If music theory is the study of the structure behind the music, as suggested in the previous section, then knowledge of this structure helps our students to study what they are to play or sing. The study and understanding of their music, in turn, results in intelligent and sensitive performances from our young musicians.

In addition, music theory can be studied for its intrinsic value. There can be a fascination with understanding how music can move us so deeply, as suggested at the outset of this chapter. To quote AP Music Theory teacher Peter Warsaw, from a previous edition of this Teacher's Guide, "Early and often I share with my students my own lifelong quest: my passion to explain why music slays me. What is it doing, and how does it do it? Why do I feel such powerful reactions to it? These are the questions that music theory can begin to explain."¹

Finally, an AP Music Theory course has its practical advantages. It can improve our students' chances of being accepted at colleges of their choice, and it can give them a head start in their studies as music majors in college. Furthermore, as students take AP courses and get advanced standing in college, the reputation of the high school and the district will be enhanced.

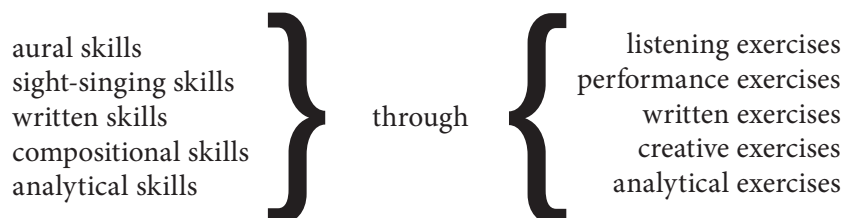
Course Description Essentials

About every three years, the College Board publishes an *AP Music Theory Course Description*, which is available for free on AP Central (<http://apcentral.collegeboard.com>), the College Board's Web site for AP professionals; a hard copy can be purchased from the College Board store (<http://store.collegeboard.com>).

This Course Description provides an outline of what most colleges and universities teach in their first-year curricula, and the topics covered are the basis for the development of the AP Music Theory Exam. The Course Description does not refer to any specific school, methodology, or textbook, so AP teachers reviewing it can feel free to use any approach that adequately covers the material. Sample questions that show the range of difficulty of the questions on the exam are also provided.

As stated in the Course Description:

The ultimate goal of an AP Music Theory course is to develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. The achievement of this goal may be best promoted by integrated approaches to the student's development of:



1. Kathlyn Y. Fujikawa, primary author, *Teacher's Guide to the Advanced Placement (AP) Course in Music Theory*. (New York: College Board, 1993): 14.

Key Concepts and Skills

Scope of the Course

First-year music theory is the basic course in tonal theory offered by colleges. It is the foundation for the study of the composition of European art music during the Common Practice period, and of Western folk and popular music. Historically, this time period in art music begins with the Baroque and includes all of the Classical and most of the Romantic eras. This substantial period of time, from roughly the early 1600s to the late 1800s, with its *tonal* harmonies, is distinguished from the *modal* music of the Renaissance which preceded it, and the *chromatic* (or “atonal”) music of the early twentieth century which followed it. Despite this traditional focus, many relevant concepts can still be illustrated by nontonal, non-European, and popular music. Accordingly, twentieth-century art music, world music, and popular music are often included on the AP Music Theory Exam.

As well as delimiting the time period involved, there are also bounds on the sophistication of what is studied in the first year at most colleges. There is little time to cover music fundamentals in the standard first-semester music theory course required for music majors. Before students walk in the door in the fall, they are already expected to be familiar with basic notation in treble and bass clefs, diatonic scales, the circle of fifths, intervals, and, on a superficial level, the construction of triads. They are also expected to have some related aural skills, and they must be willing to sing. Beginning AP Music Theory teachers need to be aware of these prerequisite skills and knowledge. In fact, many experienced AP teachers advise that the high school AP course be preceded by a course in music fundamentals. If this is not possible, the AP teacher may need to spend a greater amount of time on fundamentals before proceeding to more advanced topics.

In the college course, after a quick review of fundamentals, study in earnest might begin with the voicing of isolated triads in four parts. By the end of the course, students will have encountered secondary dominants and small forms and had at least an introduction to modulation. Once this material is mastered, the student is ready to go on to borrowed, Neapolitan, and augmented-sixth chords, to larger forms, to tonal counterpoint, and to courses in ethnomusicology.

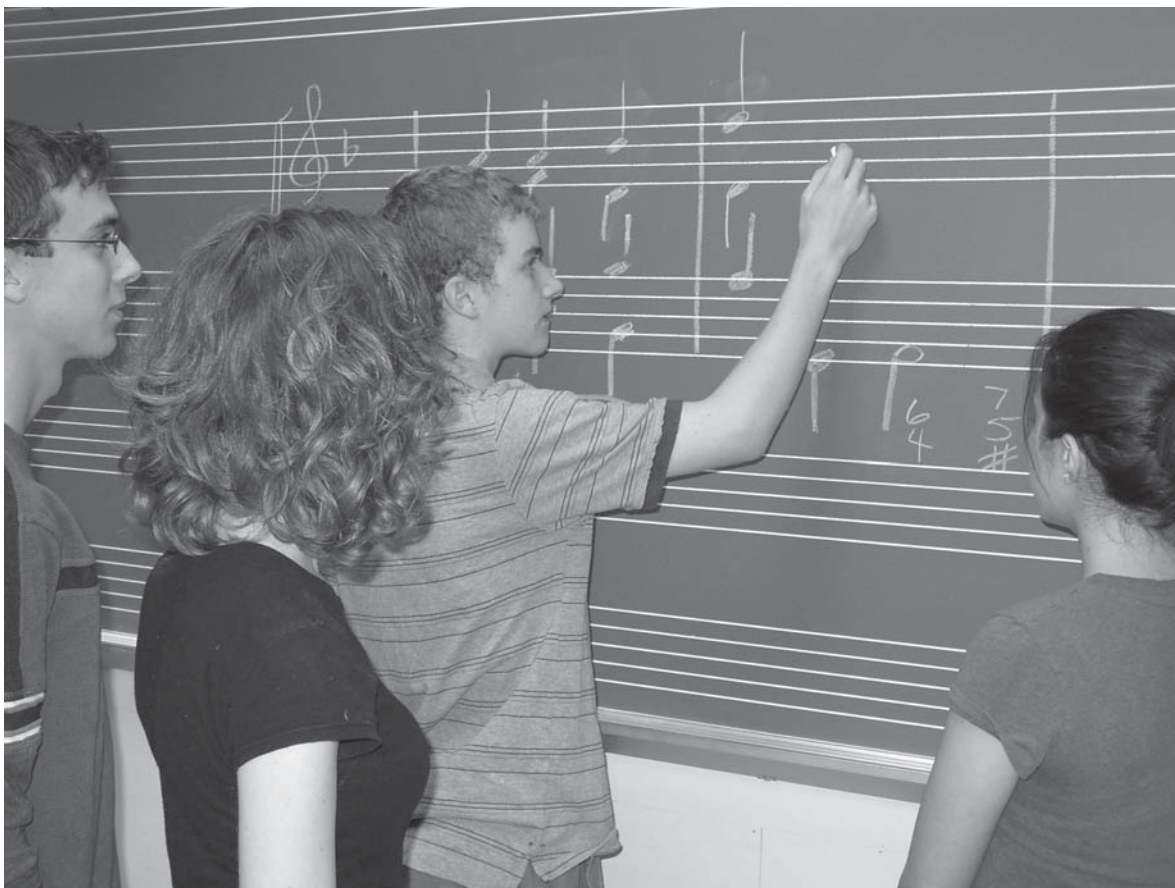
Content of the Course

The content for AP Music Theory is summarized in the Topics Covered section below. It is assumed that all the following topics will be taught with an **aural component**. Teachers should use recordings whenever possible to illustrate concepts, in order to help develop students’ listening skills, as most of the multiple-choice listening section of the exam involves the aural analysis of such “real” music. Examples should be sought from a wide variety of genres and musical traditions. Also, sight-singing and dictation should start at the very beginning of the course and be practiced almost daily. Sight-singing and aural skills require extra drill and practice, as they are learned more slowly and are more dependent on native ability than the intellectual abilities related to written theory. In these ways sight-singing and aural skills are similar to learning a musical instrument—progress depends on systematic, consistent, almost daily practice, even if the time spent on any particular day is short.

Topics Covered

Notation: Some topics, which are not always covered in a rudiments course, include alto and tenor clefs, the classification of meters, beaming rhythms according to the beat, and four-part notation on the grand staff.

Rhythm and meter: The AP course includes classification of meters (duple versus triple and simple versus compound), time signatures, rhythmic devices (such as hemiola, dotted rhythms, syncopation, triplets), and related topics such as tempo and accent.



Part writing from figured bass is an essential AP Music Theory skill.

Scales: Students should be familiar with the following written and aural scales: major, minor, pentatonic, chromatic, and whole-tone, as well as commonly used modes. The AP Exam refers to scale degrees both by name (tonic, supertonic, etc.) and by number (but not by solfège syllables). At least some of the time, therefore, sight-singing exercises should be sung on numbers, and students should be able to recognize scale degrees by number in melodies. Solfège syllables are not tested directly on the exam. In addition, teachers may want to emphasize half step and whole step relationships at this point.

Intervals: Intervals are often covered adequately in written form in a fundamentals course. However, AP students will need to be drilled intensively on the aural recognition and the singing of intervals.

Triads and seventh chords: AP students will have to make the leap from the “simple” spacing of triads (as compactly as possible with no doublings) to their voicing in four parts. Some score reading may involve even more voices. Students may also have their first experiences with chord inversions, seventh chords, Roman and Arabic numerals, and figured bass notation. Aural drills might include the recognition of chord quality and inversion.

Cadences: All cadence types should be covered, including the Phrygian half cadence. (See chapter 7 for the terminology used on the AP Exam.) Students’ first taste of harmonic dictation can begin with the presentation of brief two- to four-chord cadential formulas. From this introduction, harmonic dictations can lengthen systematically throughout the year. This approach is consistent with the common perception that the most important part of the phrase is the cadence.

Nonharmonic tones: All nonharmonic tones should be covered, with corresponding Arabic numerals in the figured bass, if applicable.

Chapter 1

Melody: Students should learn to recognize motives and motivic processes (fragmentation, phrase extension, and sequence) and phrases and phrase combinations (periods, double periods, and phrase groups).

Texture: Standard vocabulary for texture, including homophonic, polyphonic, and monophonic, should be supplemented by terms such as three- or four-part.

Voice leading: Voice leading tends to be the “meat” of a first-year college course in music theory. It focuses on diatonic harmonies: that is, harmonies taken strictly from the usual major and minor scales. Students will first study voice leading with triads, including learning to avoid using objectionable parallels and developing skills in using linear chords such as $\frac{4}{2}$ chords. Then they will move to voice leading with seventh chords, especially dominant sevenths. Seventh-chord inversions usually appear as linear chords. The only chromatic harmonies covered (harmonies whose notes do not belong to the four diatonic scales) are secondary dominants such as V/V or V^7/vi . After the introduction to harmonic dictation with cadences only, harmonic progressions will get steadily longer and incorporate harmonies relevant to the students’ written work. Concurrent with the study of voice leading, students might learn to harmonize a melody, in preparation for the last written free-response question on the AP Exam.

Modulation: Students are expected to spot a change of key or tonicizations that occur within a piece of written music. (The terms “phrase modulation” and “pivot chord modulation” are now included in the list of Terms and Symbols Used on the AP Music Theory Exam provided in chapter 7.)

Small forms and score analysis: Students should be familiar with binary, rounded binary, and ternary forms. The AP Exam uses lowercase letters for phrases or short sections, uppercase letters for long sections, and primes for notating similar (but not identical) music. Students will need some practice reading and analyzing scores for small ensembles. Sometimes it can be disorienting to look at a woodwind trio score after having studied four voices on a grand staff all year. One of the parts in these scores is frequently written in alto or tenor clef, often necessitating a much-needed year-end review.

Exam Overview and Development

The AP Music Theory Exam assesses these skills in the following format:

Section I. Multiple-choice questions (45 percent of grade)

Part A. With aural stimulus

- pitch and rhythm patterns
- analytical listening sets based on excerpts from music literature
- error dictation

Part B. Without aural stimulus

- score-reading sets
- fundamentals, analysis, terms and definitions
- part-writing error detection

Section IIA. Free-response questions (45 percent of grade)**Questions with aural stimulus**

- melodic dictation
- harmonic dictation—writing outside voices and chord symbols for a progression performed in four parts

Questions without aural stimulus

- realizing a figured bass
- realizing a Roman numeral progression in four parts
- composing a bass line and chord progression for a chorale-type melody

Section IIB. Sight-singing (10 percent of grade)

The AP Program reports AP grades ranging from 1 to 5, with 5 being the highest grade. In addition, two subscore grades are reported. The aural subscore reflects performance on multiple-choice and free-response questions with aural stimulus, including sight-singing exercises; the nonaural subscore reflects performance on multiple-choice and free-response questions without aural stimulus. As with the overall grade, subscore grades are reported on a scale of 1 to 5. New teachers and students should be aware that the AP Exam is more difficult than most tests typically used in high school classrooms. A student answering about half of the questions correctly would score in the midrange (about a 3) and be near the midpoint of all students who take the exam.

The selection and refinement of the exam questions is the responsibility of the Music Theory Development Committee, which includes a college professor as chair, two high school teachers, and two additional college professors. Committee members and additional faculty consultants develop both free-response and multiple-choice questions, which are then reviewed and revised at committee meetings. The Chief Reader for the exam (a college professor who oversees the scoring of the free-response questions) and two content specialists from ETS also attend these meetings and make suggestions. Most AP Exam questions are developed over a period of one or two years before students see them on the exam.

Test Reliability and Validity

The AP Program uses an array of statistics and employs several procedures to ensure the reliability of AP Exams. For example, individual item statistics are calculated to compare the reliability of a given multiple-choice question against the other questions in the same edition of the exam. To ensure that the composite grades issued in a given year are equivalent to those awarded in previous years, a percentage of multiple-choice questions from a previous exam are reused in such a way that they can serve as points of comparison between different editions of the exam (but the free-response questions published after each regular exam administration are never reused). Additionally, each multiple-choice question is examined to ensure that it does not unfairly discriminate against students of a given gender or from a specific racial or ethnic group.

Chapter 1

The validity of the content in the Course Description, and by extension in the exam, is also scrutinized to determine if it really reflects what is learned in a typical first-year college class. To ensure validity, the AP Program periodically conducts curriculum surveys involving music departments from colleges across the country, asking them which specific topics are covered in their first-year music theory courses. The results are carefully reviewed by the Music Theory Development Committee and posted on AP Central. As the committee reviews the results from the most recent survey, it updates the Course Description and the exam to reflect changes taking place in the college curriculum. Future revisions and updates to the AP Music Theory curriculum will be guided by ongoing College Board research, including surveys of effective instructional practices conducted among colleges and universities.

Additionally, the AP Program periodically conducts college comparability studies, which compare the performance of AP students on the AP Exam to the performance of college students who take portions of the exam at the conclusion of a comparable college-level course. The AP Program actively seeks input about exam content from college faculty who have recently taught the course. The majority of members of the Development Committee and of the AP Music Theory Exam Readers (who advise the committee on the free-response questions they score) are such college faculty. An important role of the Chief Reader, in fact, is to summarize suggestions collected at the AP Reading and report them back to the committee.

Validity for AP Exams can also be indirectly assessed by reviewing the policies that colleges and universities have established for awarding credit to students who take the exams. AP policies for many institutions are posted on AP Central. The sheer number of colleges listed that grant credit for AP grades lends credibility to the appropriateness of the material covered on the exams. College Web sites sometimes show the various ways in which a college may use AP grades. For instance, achieving a certain score on the Music Theory Exam may earn a student one or two semesters of college credit or placement; a student may be granted placement in an intermediate-level class devoted primarily to aural or written skills in music theory, or an integrated aural and written skills course (for music majors); non-music majors may earn general humanities credits.

While college faculty who serve as Readers and/or Development Committee members can and do have a direct influence on exam content and validity, ultimately the content of the AP Music Theory course is determined by the best practices in theory pedagogy and scholarly thinking in the field. Best practices in pedagogy and important scholarly findings can be gleaned from a variety of sources. Professors publish textbooks (see the list in chapter 6 of this guide), they contribute articles to journals such as the *Journal of Music Theory Pedagogy*, and they attend meetings of professional organizations such as the Society for Music Theory (SMT). SMT, the foremost professional organization for music theorists in the United States, has a traditional print journal, *Music Theory Spectrum*; an online journal, *Music Theory Online*; and a listserv. Perhaps most relevant to AP Music Theory teachers, SMT includes a Music Theory Pedagogy Interest Group, whose members discuss the teaching of lower-level college courses.

Chapter 2

Advice for AP Music Theory Teachers

by David Lockart

It was a surprise when I discovered that teaching AP Music Theory is easily as exciting and fulfilling as teaching a performance course, far surpassing my expectations. I quickly learned that my students were beginning to think like musicians. They became empowered by their new knowledge and their advancing skills. Every year since, the excitement in the classroom is real and affirming and joyful. I am reminded of my discovery when I hear from teachers who are apprehensive about teaching AP Music Theory. They are concerned about their atrophied theory and dictation skills and about writing lesson plans for a body of information they consider dry, evoking memories of those early-morning college theory lectures. But after their first year of teaching AP Music Theory, I hear from those teachers again, proudly reporting their excitement at receiving their students' AP grades (some 4s and 5s), telling me how proud they are to have taught the course, and how happy they are that the AP Music Theory course is offered in their school. By carefully sequencing the information presented in the course outline, becoming acquainted with the course and the exam, and learning a few techniques and methods, the world of AP Music Theory is demystified and may become one of the highlights of a music educator's career.

In this chapter I offer some practical advice that will help you develop a program in your school, recruit students, organize your course, and benefit from the many resources available. Teaching tips from other AP Music Theory teachers are also included. My hope is that you will begin your AP experience secure in the knowledge that you are on track to having a successful program.

Teacher Benefits

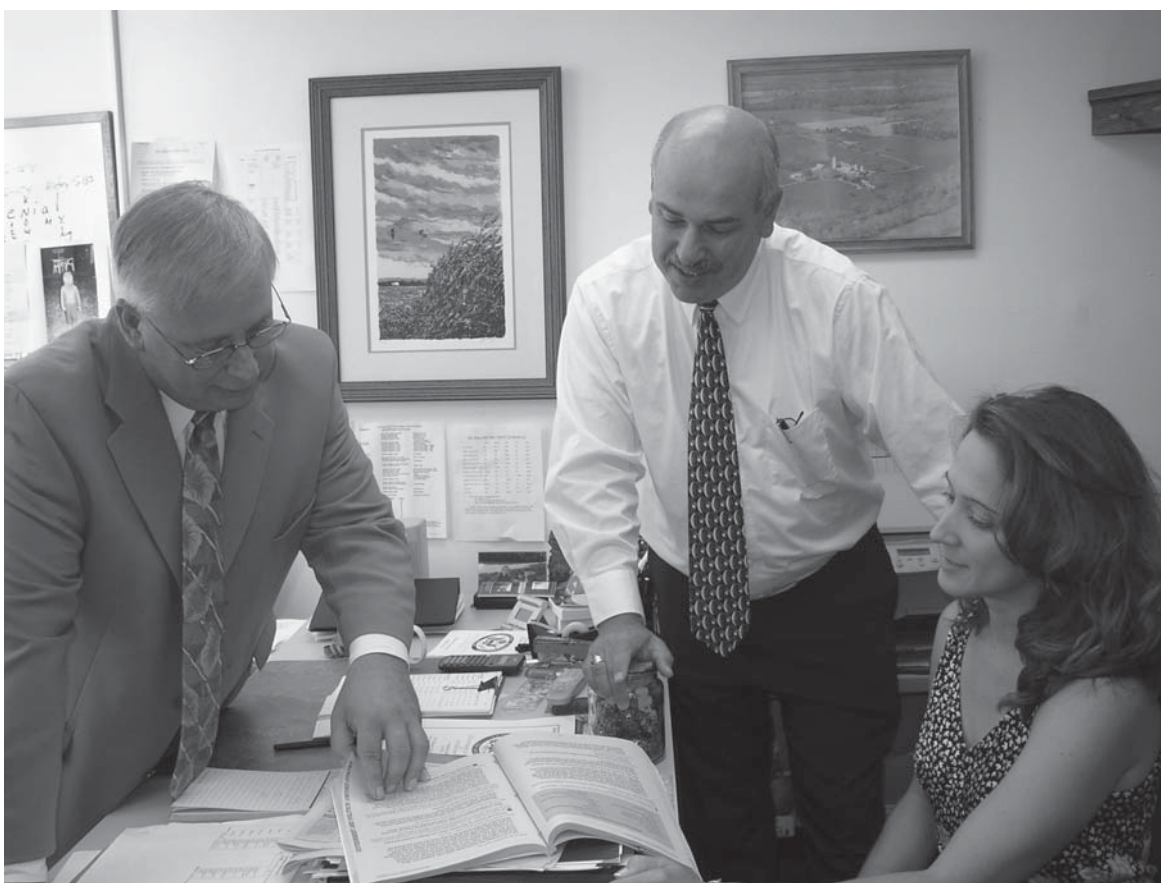
The benefits of the AP Program are many—for the school, students, district, and curriculum development—but one often-overlooked aspect is how AP Music Theory can benefit the teacher. Ensemble classes are near and dear to most music teachers' hearts. Teachers carry with them the cycle of rehearse-perform-rehearse-perform. As beautiful as that process is, the ever-upward spiral of the AP Music Theory curriculum offers a wonderful contrast. AP courses are generally smaller than ensemble classes, providing the opportunity for closer attention to individual student needs and accomplishments. Generally, AP classes attract the most motivated and talented students in the music program, providing the teacher with an opportunity to work closely with students who might especially benefit from the additional contact. Conversely, having AP Music Theory students in ensembles strengthens the overall musicianship of those ensembles. Teachers also find that their own score analysis skills, both in preparing a score for conducting and in a rehearsal setting, will be strengthened. Another plus is that teachers are able to transcend the limits of their performing ensembles' repertoire by studying and teaching an eclectic musical repertoire from a variety of recorded and printed sources.

Developing AP Music Theory in Your School

Enlisting Support

You, or an administrator, decide that you want AP Music Theory in your school. What should be your next considerations?

If Music Theory is the first AP course in your high school, the principal will need to designate an AP Coordinator. This person might be an administrator or a guidance counselor. The Coordinator will need to learn about this new role and work closely with you throughout the course development process. If AP Music Theory is being added to a school curriculum that has existing AP courses, it is important that you speak with other AP teachers and the AP Coordinator to learn how the program works, how the course fits into the music curriculum, and how the course compares to other AP courses at your school.



Careful planning is vital to establishing and building a successful AP program.

It is wise to have administrative support throughout the development process. Include your principal and AP Coordinator in your planning process, sharing with them questions and concerns about scheduling, staffing, and implementation. You will find that most administrators welcome the addition of a new AP course to the curriculum. Give them the current *AP Music Theory Course Description* and a sample syllabus. Enlist administrative help in developing an implementation schedule that corresponds to your school's curriculum development guidelines.

Literacy Programs and AP Music Theory

Many schools are implementing “Literacy Across the Curriculum” programs to enhance and increase students’ reading and comprehension skills, integrate programs, and develop unified pedagogical strategies. If this describes your school, be sure to point out to your administration that AP Music Theory teaches the language of music and increases musical literacy and the related vocabulary, so that musicians can effectively communicate with other musicians about music. Thus, fluency in the vocabulary of music theory can be seen as a beautiful marriage between language literacy and music literacy. (The “Terms and Symbols” list in chapter 7 of this Teacher’s Guide focuses on music theory vocabulary.)

Help from the College Board

Publications

Every AP Music Theory teacher should have copies of the print resources available from the College Board. With this Teacher’s Guide, you are already in possession of one important resource. Other key publications to add to your collection are:

AP Music Theory Course Description—Download for free from AP Central or purchase a print version from the College Board Store (store.collegeboard.com). The Course Description outlines course content and explains the various skills students are expected to demonstrate in the exam.

Released Exams—About every five years, the College Board releases an entire AP Music Theory Exam, to help teachers and students prepare for the exam. Released Exams include multiple-choice and free-response questions, the multiple-choice answer key, scoring guides for the free-response questions (thoroughly explained), and samples of actual student responses with explanations of the scores received. You can purchase Released Exams from the College Board Store.

AP Central

The AP Central Web site is a hub of information about all AP courses. Be sure to register (it’s free) so that you have full access to all the information available. The Music Theory Home Page (apcentral.collegeboard.com/musictheory) has links to:

- Resource materials
- Feature articles with advice and strategies by leading AP authorities
- Lesson plans
- Original review articles of textbooks, anthologies, supplementary materials, Web sites, and much more
- Institute and workshop listings and registration information
- Free-response questions, scoring guidelines, and audio files from previous AP Music Theory Exams

Every AP teacher should visit the site often, as the College Board frequently updates material and adds important and relevant information to keep teachers fully informed.

Electronic Discussion Groups (EDGs)

The EDGs on AP Central provide a moderated forum for the exchange of ideas, insights, and practices among AP teachers, AP Coordinators, consultants, Exam Readers, administrators, and college faculty. Messages can be viewed online and/or sent and received via e-mail. One of the great strengths of AP Music Theory is that its teachers are part of a big family, which is very evident on the EDG. Successful teachers are eager to share their knowledge and strategies or raise new questions for discussion, and new teachers seek advice on beginning a course. I urge you to register for this valuable service on the Music Theory Home Page.

Workshops and Summer Institutes

One common fear expressed by new AP Music Theory teachers is, *“I haven’t used my theory skills for many years. My chops are rusty. How can I possibly bring them back in time to teach this class?”* The first thing you must do is to allay your fears. Any professional musician can master the theory and aural skills in AP Music Theory. For the first year, you are learning along with the students. It isn’t necessary for you to develop mastery of all of the theory skills by the beginning of the course; these skills develop over time. To support this process, new AP teachers are strongly encouraged to set aside time to attend a College Board–endorsed AP Summer Institute (offered during the summer months) or an AP workshop (held across the country throughout the year).

AP Summer Institutes are intensive workshops, typically one week in length, that allow for in-depth study of course content as well as discussion of the nuts-and-bolts of teaching AP Music Theory. Many of these institutes are affiliated with colleges and universities that also provide college credit. Here you will practice your theory skills and carefully examine the scoring guidelines used for the AP Music Theory Exam. Gaps in your preparation will be discovered and filled. You will learn not only what skills you need to continue to develop but how to work on them and where to find resources to help. AP workshops are usually one day or one-half day in length and by necessity tend to focus on just a few teaching strategies.

Each year, many new teachers take advantage of these programs prior to teaching the course. At the end of the institute week, participants are more confident and better prepared to step into the classroom in the fall. All workshops and summer institutes provide professional development units, and most high schools have professional development programs that will cover the cost. A full listing of available workshops and summer institutes, as well as links to the coordinators of each and instructions on how to enroll, can be found on AP Central.

Get Acquainted with the Music Theory Course

A few years ago, my supervisor, anticipating my move from a middle school to the high school, sent me to an AP Summer Institute at Manhattan College. It had been quite a while since I had thought about that much theory! I was afraid I wouldn’t be able to answer all the questions quickly, and that I would be rusty with my skills in different keys. I also spent the summer before teaching the AP course for the first time getting acquainted with the textbook—I checked the answer key compulsively until I felt comfortable with my answers to the questions and problems. New AP teachers should take advantage of any refresher courses that are available to them. Reading books is good, but there’s nothing like the give and take of folks just like you in a classroom setting, admitting mistakes and trying new ideas together. After a few years teaching the course, I took Joel Phillips’ AP Summer Institute and got more updates and fresh ideas. I learned how to design lessons that include dictations, sight-singing, and analysis and saw that when lessons integrate various activities, students gain a more thorough grasp of each concept (intervals, voice leading, etc.) and how they are interconnected. The summer institutes have helped me tremendously—for the past two years, all my students who took the AP Exam have received a grade of 3 or higher.

—Kathy Spadafino, *East Brunswick High School,
East Brunswick, New Jersey*

College Board Grants

College Board Fellows Program

College Board Fellows is a competitive grant program that provides stipends for secondary school teachers planning to teach AP courses in schools that serve minority and/or low-income students who have been traditionally underrepresented in AP courses. The stipends assist teachers with the cost of attending an AP Summer Institute. To qualify, a school must have 50 percent or more underrepresented minority students and/or be located in an area where the average income level is equivalent to, or below, the national annual average for a low-income family of four (roughly \$36,000 in 2005). Approximately 250 awards are distributed each year.

Application forms become available each September on AP Central. Hard copies can be obtained through your College Board Regional Office or by emailing apequity@collegeboard.org.

Pre-AP Fellows Program

The College Board's Pre-AP program is an initiative for middle and high school teachers that provides educational strategies to engage their students in active, high-level learning, in preparation for the academic rigors of the AP curriculum. The goals of the program are:

- Building rigorous curricula
- Promoting access to AP for all students
- Introducing skills, concepts, and assessment methods to prepare students for success when they take AP and other challenging courses
- Strengthening curriculum and increasing the academic challenge for all students

One successful strategy is the AP Vertical Team, which is discussed in an article in chapter 4. The Pre-AP Fellows Program is an annual competitive grant program that provides funding to Vertical Teams from schools in minority dominant and/or economically disadvantaged areas with few or no AP courses to receive training in Music Theory, among other subjects. Grants go toward the team's attendance at an endorsed Pre-AP Summer Institute. For more information, go to AP Central, contact your College Board Regional Office, or e-mail apequity@collegeboard.org.

AP Start-Up Grant Program

Approximately 40 percent of secondary schools in the U.S. do not offer AP courses, and some schools that are offering courses are experiencing little success. This program was born out of a need to assist those schools. Grants cover the cost of professional development, classroom supplies and resources, and student support services. The assistance of a consultant is provided to guide teachers through the first academic year. The maximum award is \$30,000 per school, and funding is available for 10 schools. For more information, go to AP Central or contact your College Board Regional Office.

College Board Regional Offices

The College Board maintains six regional and three State Services offices to assist students and educators. Your questions and comments regarding College Board programs and services should be directed to these offices. They provide information and features specific to their region of the country, including:

- Programs
- Services
- Professional development opportunities
- Associational activities
- Legislative relations
- Governance structure

To locate your regional office, go to the Contact Us section of www.collegeboard.com.

Identifying Students for Your Course

Once you have the financial and administrative support to add AP Music Theory to your school's schedule, you will need to recruit students to take the course. I write a letter of introduction that explains the course and a bit about me, and I give it to students who, based on the music faculty's knowledge of their musicianship and scholarship, have been identified as those who would likely succeed in the class. In addition to students in performance classes, also consider as possible candidates rock musicians and pianists who aren't enrolled in the school's band, orchestra, or chorus. Another approach is to ask some of your students to make lists of those they think might benefit from taking this class.

A challenge unique to AP Music Theory is that students will need room in their schedule to take the class, and most students, being in choir, band, or orchestra, would rather not give up their performance class to make room for AP Music Theory. You may need to negotiate with other teachers and the administration to carve out time and space for your class. You can also explain to student musicians that taking Music Theory will enhance their performance skills.

Your enrollment policy should state that *all interested students are welcome in the class*. Students who enroll should have basic music reading or performance skills on an instrument or voice, available time for outside study, and high motivation to work hard to master the material covered. Those who feel that they lack the basic music skills or knowledge to begin the course might be encouraged to first take a class in music fundamentals, if one is available. However, extreme selectivity will both compromise enrollment numbers and deny some students an experience they desire.

My classes are comprised mostly of juniors and seniors. I teach sophomores occasionally, but I find that if they can wait a year or two, they more easily develop aural skills. I advise students considering a career in music to take AP Music Theory in their junior year, for their performance on the AP Exam will provide them with an important diagnostic tool for making a career choice.

Selecting a Textbook and Classroom Resources

There is no single recommended textbook or curriculum for AP Music Theory. The Course Audit information for Music Theory posted on AP Central contains a list of appropriate college-level textbooks for the course, and the Teachers' Resources section of AP Central has reviews of many texts. You will also find suggestions in the syllabi in chapter 3 and the bibliography in chapter 6.

In planning your course, you will need a textbook, scores for musical study, and recorded musical examples. Some textbook series provide everything you need, including accompanying workbooks, anthologies, CDs, Web sites, and instructor manuals. Contact the publishers and order a perusal copy, which is usually provided at no cost.

When selecting a textbook, consider your own teaching style. Do you like following a book and workbook closely, chapter by chapter? Or is your style less regimented, loosely following a textbook and other resources as you see fit? Both styles work, but make sure that you have a good match between your textbook and your teaching style.

Students will be analyzing musical scores as well as aurally analyzing musical performances. You should include a variety of recorded examples of many and diverse styles of music, including selections from classical, popular, and world music genres.

Score analysis should also cover a variety of genres and style periods. Providing quality recordings along with musical scores of some examples is invaluable in the process of integrating visual and aural analysis skills. One of the great joys of this curriculum is in the selection of wonderful musical examples. Try to make listening to quality repertoire part of every lesson.

Involving Parents

Disseminating information to parents and guardians during enrollment periods is critical to enlisting their influence on their child's course selection process. Some parents do not fully understand or appreciate the value and importance of musicianship and musical language fluency in a child's life. At North Hunterdon and Voorhees High Schools, AP Information Nights are provided. I distribute a brochure that describes both the course and the benefits the course will provide for students, including:

- Increased musical fluency
- Increased musicianship skills
- Development of leadership skills
- Increased self-esteem
- Advantage in collegiate audition process
- Increased musicianship in ensemble participation

I address questions about parental concerns, student apprehension, scheduling issues, and grade reporting from the AP Program to the high school and colleges.

Chapter 2

At our school, the next opportunity to speak to parents is at back-to-school night. There, in more detail, I explain the curriculum, distribute the syllabus and grading policy, and provide a description of year-end projects. I collect e-mail addresses and explain that I will call or e-mail parents for two reasons: if their child has performed at a very high level; or if their child is having difficulty, either by missing a critical concept that threatens the child's success, or because of some other motivational or performance issue. Maintaining healthy and proactive communication with parents is very beneficial to the overall success of the students.

Teaching Tips

“Help! How much time do I spend on aural skills? How much homework do I assign? Am I spending too much time on one topic, and not enough time on another? How much class time do I give for students to practice their skills and develop speed and agile thinking? Do I gear my lessons to the lower-achieving students or the higher-achieving students? And how do I teach to a class with such diverse levels of skill and ability? How do I incorporate aural skills grades? What is the correct sequencing of course content, written skill development, and aural skills? How do I create the most conducive classroom environment?”

These are common questions from soon-to-be AP Music Theory teachers, and there is no one specific correct answer to any of them: every teacher will have to eventually answer them for him or herself. Fear not, for the best solutions are discovered through the process of teaching! Even a beginning AP teacher can anticipate situations that might create difficulties and develop strategies to ameliorate such problems. For example, beginning composition assignments are often too vague, and students feel “lost.” You can ease anxiety by providing definite guidelines with respect to length, meter, mode, and overall shape (form/number of phrases, starting and ending pitches/chords, tension/release, melodic contour, harmonic vocabulary, textural models). As students become more experienced, you can specify less.

Chapter 3 contains nine sample syllabi showing a variety of methods for organizing and teaching music theory. Various schedules and school types are represented. Whether your school has a traditional schedule with 40- or 60-minute classes, or a traditional or modified block schedule, your task is to complete the course material within the allotted time.

Chapter 4 has excellent articles with in-depth strategies for teaching some of the skills that should be covered in the AP Music Theory course. New teachers will find methodologies to help them organize their material for the first year, and experienced teachers will gain new insights from the approaches of these various experts.

As difficult as it is, first-year AP Music Theory teachers should minimize their concern about their students' AP Exam grades. Regardless of how they do on the exam, students will still be better off than if they had not taken the course. Talk to your school administrators so that they have realistic expectations about what can be achieved in the first year of developing a new course and so that they will support your efforts to build the program.

A Typical Day in the AP Music Theory Classroom

It's a month into the school year, and the class is quickly and carefully moving through music theory fundamentals. Students have had a thorough review of meter and rhythm, major scales, and key signatures. Diatonic intervals were introduced yesterday, and today's lesson will focus on *chromatic* intervals. In each 45-minute lesson, I try to integrate multiple skills—singing, listening, analysis, writing, and dictation.

Like most days, students enter the room to find a melody on the board. I provide the first pitch (usually *do*) and give them a minute to silently practice the melody. Today I select a quiet and shy guitarist, who I know is nervous about singing alone, to sight-sing the melody. My students learn early that even though they may be nervous, they should try to sing, with the understanding that: a) they should not be worried about the tone quality of their voice, and b) if they make errors—which is fine—there is a mutually supportive atmosphere in the room. After a student sings, I give him or her positive and helpful comments to improve the performance. A second student is asked to perform, followed by all students singing the melody together. I opt to use the moveable *do* system.

Students are now focused and engaged, and we review last night's homework, the analysis of perfect, major, and minor intervals. When I am satisfied that all students understand any errors in their thinking, I explain the day's lesson, analysis of *chromatic* intervals, using an interval analysis box. (Shaded areas indicate *diatonic* intervals.)

o	m	M	+
	P		

I explain that the bottom note of an interval should be considered *do*, and using that key signature, students should determine the *diatonic* interval above that note; then, using the box, they should make half-step adjustments depending on the accidentals and applied key signature to determine the quality of the interval being analyzed.

For example, for the interval E to B \flat (a diminished 5th): first consider the key signature of E major. Place your finger on “P” and identify the *diatonic* perfect 5th above E (B). Then move your finger to the left one box while you apply the flat found in the example. Moving to the right or left, respectively, indicates increasing or decreasing the interval by half a step.

I pass out two worksheets. The first has 20 intervals to be analyzed during the time remaining in class. I circulate around the room, checking the students' responses and helping them refine their thinking. The second worksheet (which will be a homework assignment) has many examples. I explain that speed and accuracy are important in musical analysis, as they are an indication of a student's level of fluency.

The bell rings, and two students come up to ask if they could visit my office during their lunch period so that I can provide extra help on key signatures and major scales. I'm happy to comply, for I usually find that those students who are struggling with those topics quickly become frustrated and start guessing at the quality of intervals.

Chapter 2

Tomorrow, after reviewing the analysis of intervals the students completed at home, we will focus on aural analysis and dictation of *chromatic* intervals. We will compare *chromatic* intervals with *diatonic* intervals, and then listen, write, sing, and use these intervals in the context of a melody. Gradually, these intervals will be integrated into sight-singing exercises.

Studying Tonality Through Cadential Analysis

One of the major challenges in teaching music theory is students' limited exposure to a wide variety of musical genres. I am always encouraging my students to compose and analyze their own music. In one project, I ask them to select music from various periods, including pieces from the Renaissance, Baroque, Classical, and early Romantic periods. Students analyze these scores and study the composers' cadence structures. Then they compare the cadence usage of the great composers with the music they themselves have written. In this project, students collect data and make statistical comparisons with other students' findings. They discover similarities and differences and learn that their music is actually comparable to music composed in a particular time period and of a particular genre.

While my students worked on this project at the end of the year, they made the excellent suggestion that it could be a yearlong activity. As students develop their theory knowledge, they are able to build on the music they have been analyzing all along. What I really appreciate about these data is the expansive nature of the students' aural realization of the music they are analyzing.

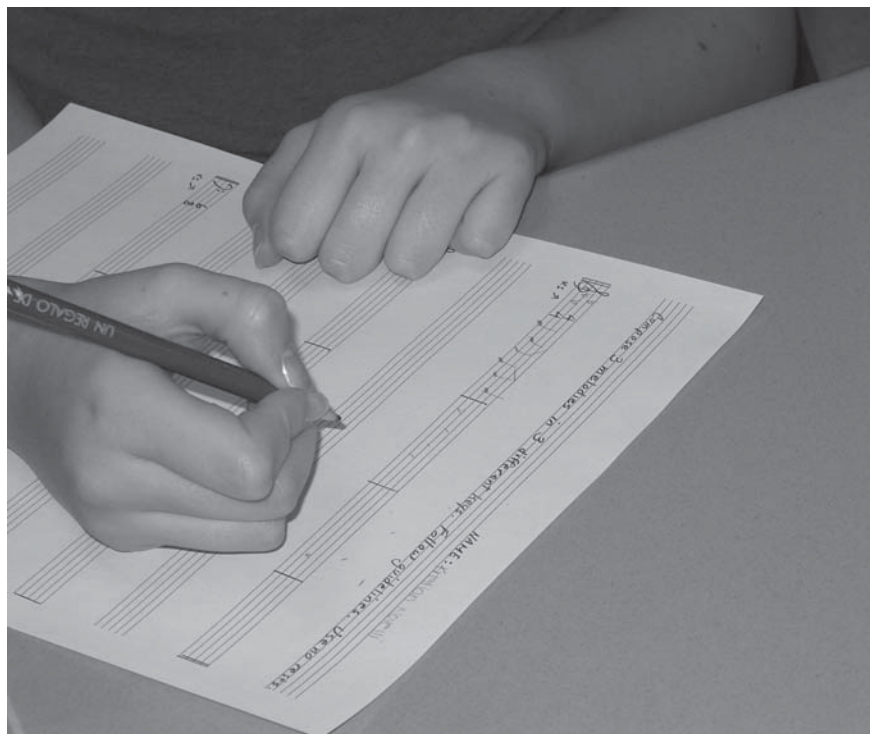
—Teresa Cobarrubia Yoder, Walsingham Academy
Williamsburg, Virginia

Give Students Frequent Opportunities to Write Music

Always work cyclically and realize “the end is near.” You can’t afford to wait until the spring to start sight-singing or analyzing music—for students to attain mastery, it is important to do everything every week. Using overhead transparencies is a wonderful way to generate musical examples while giving students opportunities to write music.

- Give every student a blank overhead sheet with a marker.
- Give students specific guidelines for their compositions: *Write an eight-measure melody in treble clef starting on an octave above middle C and ending on the D above the note you started with. Give your melody a title and use dynamic and expression marks* (students like doing this).
- Collect the melodies and use them for 1) error detection, 2) sight-singing practice, 3) melodic dictation, and 4) melodic analysis.
- Pass back the melodies (not necessarily to the students who wrote them) and have the students write another four measures, ending on the same note that the melody started on. Collect the sheets and play the melodies, collectively critiquing them.
- Pass back the melodies (not necessarily to the students who wrote them) and have students write a bass part on the second line. Discuss the harmonic implications of their choices. Have students write tenor and alto parts. Ask them to write a harmonic and melodic analysis of their compositions.
- Collect the compositions and use them for 1) harmonic detection, and 2) discussion of the melodic and harmonic analysis the students completed. You can also perform the compositions (singing or with students playing available instruments).

—Edward Trimis, John H. Francis Polytechnic High School,
Los Angeles



Give students specific guidelines for their compositions.

Create a Nurturing Classroom Atmosphere

Imagine you have handed out a sheet of melodies for sight-singing and you ask a student to perform. For many typical high school students, especially the nonvocal ones, nervousness and fear will compromise their ability to complete the task. In AP Music Theory, students are developing skills in note reading, writing, analysis, dictation, part writing, composition, and performance. For purposes of informal or formal assessment, some of these skills require students to demonstrate their ability by performing. Therefore, it is important to create a nurturing atmosphere of trust and mutual concern, which takes time. Students will be exposing their musicianship skills in class, and they need to feel safe from the reactions of their peers and their teacher.

For an example, let us look at the goal of having each student sing independently. At first, you could have the whole class sing, and later, half the class. Then have students sing in two, three, and four parts. Then, perhaps, have one row or column of students sing, followed by several (strategically) handpicked students throughout the room. Finally, individualize the responses. Over several months, students will begin to feel secure and free from the fear of ridicule from their peers. An alternate method preferred by some teachers is to require students to sing alone from the onset of the course. With this method, the shyness factor is immediately addressed.

You will soon discover if you have any students with poor pitch-matching abilities. They will need to spend more time strengthening their brain audition-vocal cord connection. Provide these students with individual help from you or other students. There are also software programs that incorporate a microphone and that can help students produce correct pitches.



Students may sing in groups before they sing independently.

Ideas for Teaching Sight-singing

One challenge I encounter year after year when teaching sight-singing is that while students do very well reading and singing melodies using primarily stepwise motion, they invariably become disoriented and lose the tonic as soon as they are confronted with melodic skips of any size. The time-honored tradition of teaching interval identification by associating each interval with familiar tunes (e.g., “Here Comes the Bride” for Perfect 4th, “My Bonnie Lies over the Ocean” for Major 6th) fails in the context of negotiating these intervals within a diatonic melody for just that reason. Singing a melody by simply chaining fragments of a variety of unrelated tunes requires the student to change the tonic for each new skip.

I learned a wonderful sight-singing warmup exercise from Dr. Andrew C. Fox, now retired from the University of Mississippi, which has served me well over the years. It eliminates the need to analyze and perform sight-singing melodies interval by interval. Instead, students focus on recognizing the tonic triad and the individual resolutions of the tendency tones in the key. The students sing by memory the following sequence of tones:

do-mi-sol-mi-do // fa-mi // la-sol // ti-do // re-do // sol-do

Dr. Fox called each one of these fragments a “hit-tune” and taught his students how to analyze sight-singing melodies for these fragments before attempting to sing. Once the “hit-tunes” are identified and bracketed, what’s left is usually just stepwise motion connecting one “hit-tune” to the next. Melodic skips are often simply one “hit-tune” moving to another, all within the context of a single tonic. Try this for yourself. It’s the closest thing to magic I have found!

I have found that it is easier to work in major keys until the students are able to apply this technique as second nature. Then we move to the minor mode by changing *mi* to *me* and *la* to *le*. (Keep *ti* the same—another way to reinforce the concept of leading tone.) Interestingly enough, the students seem to be able to shift instinctively from one mode to the other after a firm grounding in the major.

There are some fabulous side effects of using this “hit-tune” exercise. One is that students will begin to detect the fragments in the context of taking melodic and harmonic dictation. Because the AP Exam allows partial credit for the dictation exercises, a stray “hit-tune” here and there may yield an extra point or two. Also, *fa-mi // ti-do // re-do // sol-do* represents the typical voice leading when resolving V⁷ to I. This is especially helpful to students for whom the concept of correctly resolving a tritone makes no sense in the real world!

—Paula Turner, Craigmont High School,
Memphis, Tennessee

Teaching Key Signatures

Knowing key signatures is vital to the understanding of fundamental harmony, intervals, triads, and seventh chords. Outlined below are a few approaches to teaching key signatures. These processes assume moveable *do*.

First, students must have an understanding of the piano keyboard and know the difference between whole steps (major seconds) and half steps (minor seconds). Then, using a keyboard, they can construct major scales according to the series of whole and half steps.

Major scales = W W H W W W H

(and later) Natural minor scales = W H W W H W W

When students understand the concept of the construction of a major scale, the accidentals can be transferred to key signatures. Students should learn to recite the order of the sharps and flats as they are placed on the (grand) staff. To facilitate learning the order of the sharps, I teach the following mnemonic device: "Fat Cats Go Down At Eddie's Bar." The flats as they appear are, of course, those capital letters backwards. To help students develop their speed, it is wise to quickly wean them from using the mnemonic device.

To accommodate multiple learning styles, I also give the following tips:

- Visual learners:
 - o Major sharp key: the pitch $\frac{1}{2}$ step above the last sharp is *do*
 - o Major flat key: the second to last flat in the key signature is *do*
 - o Minor sharp key: the pitch a third below the major key *do* (it is always a minor 3rd) is the minor key *do*
 - o Minor flat key: the pitch a third below the second to last flat (also a minor 3rd) is the minor key *do*
- Memorization:
 - o No accidentals: C major or A minor
 - o One flat: F major or D minor

Transfer the key signatures to a circle of fifths chart, which may include pictographs of scales on a keyboard and accidentals as they appear on the staff. Demonstrate the magic of the circle of fifths by playing the progression C–C⁷–F–F⁷–B \flat , etc., through the enharmonic keys and back through the sharp keys to C major, illustrating the sound of the resolution of the dominant seventh chords. Students may not yet understand them, but they can hear how they want to resolve.

It is essential that you not move forward in your teaching of fundamentals until all students master key signatures. Use games, flash cards, computer-assisted drills, and other creative methods to facilitate memorization, for if students do not master key signatures, they cannot go on to learn intervals and chords.

—Edward Trimis, John H. Francis Polytechnic High School,
Los Angeles

Teaching Students with Varied Abilities

Depending on how your theory program is structured, students will enter your class in the fall with diverse sets of skills, abilities, strengths, and experience. A keyboard player may have thought harmonically for many years, whereas a flautist, for example, may not have. One might argue that a singer “thinks” pitches with much greater frequency than a woodwind or brass player whose finger positions largely determine pitch. Female singers and students who play high-pitched instruments generally have more difficulty hearing bass lines than male singers and instrumentalists playing lower-pitched instruments. Another differentiating factor is the variety of intellectual and musical intelligences, as well as differing musical experiences among students. Some students might be well-versed in key signatures and both clefs, while others might not be aware of note names. There are as many different levels of knowledge and ability as there are students in the room.

If your program begins with basic fundamentals, more advanced students will need to understand that they will be less challenged until other students rise to their level. Some teachers give advanced students alternative assignments, while others have advanced students tutor students who need additional help.

Helping Students Develop Aural Skills

Students’ aural abilities will differ greatly. Developing aural skills is a slow and steady process that must be addressed consistently throughout the course. Each lesson should include aural components, such as listening to literature, developing melodic and harmonic dictation skills, sight-singing, and developing a creative sense for melody and harmonic progression.

You might consider incorporating one of several computer-assisted aural skills programs so that students can progress at their own pace. Should you choose to teach aural skills to the entire class concurrently, try to select examples that are in the midrange of the students’ abilities, easy for a few yet challenging to most. With this method, you should carefully consider how to fairly assess a student’s improvement and ability. Many software programs provide methods to assess a student’s individual progress. For more information on software and online resources, see the technology section of chapter 6.

Homework

Homework is important. Students must develop speed and agility in writing and analyzing music, and class time is usually not sufficient for this. Whether assignments are from a workbook, textbook, or created by the teacher, time spent on reading, analyzing, and writing music, from simple melodies to complex harmonic analysis, is vital to developing agile fluency.

Each teacher will develop his or her own style for assigning homework. I find that consistent and short exercises work best, as they do not overburden students and do not take too much time to grade. Many times, especially for assignments that require analysis and writing (for example, a chord-writing worksheet), student responses can be reviewed during class. This gives you an opportunity to address topics that are particularly difficult for your class. Later in the year, nonaural free-response questions from AP Music Theory Released Exams can be assigned for homework so that students quickly develop a sense of what to expect on the exam. It is best to grade these assignments according to the exam scoring guidelines (available in the Released Exams or on AP Central). With practice, you’ll develop speed and efficiency in grading.

An Aid to Harmonization and Chord Choice

When learning part writing, students often are confused about which chord to choose to harmonize a given note. Just as each note may be harmonized by several chords, each chord presents several logical choices for the chord to follow. These tables provide the student with easy access to the more traditional choices of chord progression, as well as a quick reference to determine which scale degrees are contained in which chords. This will be useful for part-writing and for the free-response question on the AP Exam that involves harmonizing a melody (FR7).

Chords tend to progress in predictable ways—just think of any I–vi–IV–V song from the 1950s. Noted music theorist Allan Forte summarizes this by saying that chords tend to move up a 2nd, down a 3rd, or down a 5th. Students may find it easier to count in one direction instead of two: “Chord roots tend to progress up a 2nd, 4th, or 6th.” When choosing the next chord, refer to this table, which shows viable choices:

	↑2 nd	↑4 th	↑6 th
I	ii	IV	vi
ii	iii	V	vii ^o
iii	IV	vi	I
IV	V	vii ^o	ii
V	vi	I	iii
vi	vii ^o	ii	IV
vii ^o	I	iii	V

(In most cases, a I⁶ is preferable to a iii, and the latter must be resolved correctly and used with caution.) You should also note that students only need to derive (or memorize) the chords in the first row; the rest of the table can be constructed by going down the columns numerically.

A similar table can serve as an aid to recognition of which chords can be used to harmonize a given scale degree:

Scale Degree	Root of:	Third of:	Fifth of:	Seventh of:
1	I	vi	IV	ii
2	ii	vii ^o	V	iii
3	iii	I	vi	IV
4	IV	ii	vii ^o	V
5	V	iii	I	vi
6	vi	IV	ii	vii ^o
7	vii ^o	V	iii	I

—Scott Van Hoven, Pequannock Township High School,
Pompton Plains, New Jersey

Assessments

Skilled teachers know the difference between teaching and learning and develop a variety of methods to ensure that students understand concepts, can process information, and can apply their knowledge and skills. The process of developing young musicians is complex. Students learn to read music, analyze musical scores at various levels, perform, and develop intelligent understanding about music they hear. Each of these abilities continues to develop throughout the process. In fact, the study of music theory begins a lifelong journey of growth and improvement in the complex language of music.

Consider a variety of methods to track and assess your students' progress. Use questioning techniques on a daily basis to gauge understanding. Solicit student responses carefully and strategically. Train students to raise their hand, not call out answers. Wait for several seconds, so that you can determine the speed with which your students are able to process and answer a question. Frequently select students who do not raise their hand, so that the class understands that everyone is accountable for all information. When a student responds correctly, follow up your first question with a deeper, more difficult one. For example, "What is the Roman numeral analysis of that chord?", followed by "Why do you think the composer chose to use that chord there?" Skillful questioning is an important and valuable assessment device, and it can often lead to fascinating classroom discussions and debates. Questioning can also help you know when a more formal assessment should be employed.

Quizzes and tests can be used as objective devices to measure student growth. When creating these assessments, consider all aspects of developing musicianship. Factual knowledge is important, but even more so is the student's ability to process information. A greater value should be placed on what students can do, as opposed to what they know. Analysis of written notation, writing notation from Roman numerals and figures, and simple and complex musical composition exercises are all available types of written assessments. Aural skills assessments can be addressed in dictations, sight-singing, and multiple-choice questions based on listening to musical literature. Also, aural skills software programs can be set up to measure a student's individual progress.

To avoid routine, I use a wide variety of methods for student assessment, especially at the beginning of the year. I am careful not to place too much emphasis on tests and quizzes, though recognizing they are necessary tools in determining a grade. Student motivation and consistent growth is of primary importance. Projects, analysis and composition class work, and homework exercises provide a constant window into student progress, but they don't carry with them the academic pressure to score well. Musical success, then, becomes the motivation and students tend to remain happy, relaxed, and interested without the fear of academic failure resting on their shoulders.

Working with Other Teachers

AP Music Theory is a unique and specialized subject area, yet opportunities for interdisciplinary cooperation frequently present themselves. Occasionally, I invite teachers from other departments to class to discuss various related topics. Math and/or physics teachers can be brought in for a discussion of sound waves, the overtone series, and Pythagorean and tempered tuning. English teachers can be involved in discussions of poetic meter and setting a text to a melody. History teachers may enjoy discussing people and events from specific historical periods that relate to particular musical repertoire being studied. The relationship between music and art style periods is easily incorporated into a lesson plan. In turn, you may enjoy offering your time and expertise to bring musical examples into an English, history, theater, art, or language class. Working cooperatively with other teachers and other subject areas engenders a positive and nurturing community spirit, helping to lessen the sense of isolation many music teachers experience.

Become an AP Reader

There is an in-depth explanation of the process by which AP Exams are scored in chapter 5, but I can't pass up the opportunity to add to this "advice" chapter the suggestion that every AP Music Theory teacher consider becoming an AP Reader. Readers receive intensive training in the implementation of the scoring guidelines, which helps them improve their own understanding of the fine points of music theory underlying each free-response question. This process is an enormous aid to improving AP teachers' skill in helping students prepare for those questions. In addition to the learning that comes from scoring student responses, you will be surrounded by other high school and college educators from around the country who *love* music theory. Most Readers develop lifelong friendships with other Readers with whom they have experienced an exhausting, yet exhilarating week of collegiality, immersed in the fascinating subject of music theory.

Chapter 3

Course Organization

by David Lockart

Syllabus Development

A syllabus is a brief course summary that reflects a more thorough curriculum and that incorporates goals, objectives, and a complete course of study. You will find nine syllabi in this chapter, each quite different, reflecting music theory courses from schools that differ by type, size, socioeconomic milieu, and geographical location, and taught by teachers with different approaches and styles. Six syllabi are from successful high school AP Music Theory teachers, and three are submitted by outstanding college music theory instructors intimately familiar with the AP Music Theory program.

Your initial inclination may be to find and use the syllabus you like the best. However, you are best advised to develop a syllabus that reflects the specific needs of your students and school, and your unique teaching style.

These syllabi will show you how material is sequenced and the general time frames in which topics are introduced according to each school's schedule. As you are developing your syllabus, keep in mind that it should be flexible, as it will need to be adjusted and readjusted to maximize the efficiency and effectiveness of your individual teaching situation.

Considerations

Primary considerations include identifying the material to be covered and choosing how the information and skills taught will be sequenced, as music theory is spiral by nature. What knowledge and skills have your students developed prior to studying AP Music Theory? Have they taken a remedial or fundamentals class? Will you require your students to complete summer work prior to beginning class?

Because students come into AP Music Theory with varying abilities, experience, and theory knowledge, teaching the course will be less confusing if you begin with music fundamentals and not necessarily accommodate the more advanced students. By doing this, you can be assured that all knowledge gaps are filled in. However, you will need to be creative and craft your instruction to engage the advanced students in the early stages of the course. For example, experienced students could work independently while other students catch up, or you could use advanced students as tutors for remedial students.

Other teachers require students to complete a fundamentals course or do summer work assignments. Because of the sequential nature of the material, it is essential that your students have sufficient mastery of (select) fundamentals so that they are prepared for your course. You may choose to begin your course with a pretest and review of requisite material, devoting enough time to the review process to ensure that all students are ready. Each teacher must consider how to structure the course to a) produce the best possible curricular results and b) encourage student participation.

Whether your school is on a traditional or block schedule, it is important to organize instruction that fits within the school's academic calendar and provides enough time for students to master each concept and develop swift and agile thinking skills. You must develop a sense for how much time to devote to a given topic to ensure that students are able to master the concept, while allowing sufficient time to cover all necessary topics. I encourage you to remain open to teaching all connected topics you desire, but be sure that you reserve the necessary time to cover the concepts and skills addressed in the AP Exam.

Summer Study—Preparing Students for AP Music Theory

At Lone Peak High School, we teach only one level of music theory, and that is the AP course. I usually have between 25 and 30 students enrolled in my AP Music Theory class, and almost all students take the AP Exam and score well on it. Because our school doesn't have a Theory 1 or Beginning Music Theory class, it is imperative that I pre-assess students' musical skills before they take the plunge into AP Music Theory.

Before the end of the school year, I get a list of the students who have registered for AP Music Theory for the next year. I review the list and note the musical skills of each student I know (instrumental background, keyboard experience, years involved in performing ensembles, which ensembles, sight-reading level, etc.). Even though I will usually know many of the names on my class list, there are always a number of students who have not been in one of the choirs I direct. The band and orchestra teachers are very helpful in identifying the skill level of some of their students, but there are still students that none of us have taught. Before school is out for the summer, I meet with those students I don't know at all, or whose background seems to be a little sparse and who I think may need some extra work before the fall. I have a short list of things I'd like them to know before they come into the AP class:

- Names of all lines and spaces—both treble and bass clef
- Names of and knowledge of note and rest values
- Basic notation
- Basic keyboard—understanding the keyboard
- Basic music symbols and terms

This knowledge will provide students with the necessary foundation to proceed quickly through fundamentals. I suggest materials to help them catch up, or I give them some of the handouts I use with my beginning choir. I also provide students with my contact information if they have questions over the summer. Then, once or twice before school starts up again, I contact them to see how they are doing and to ask if they need any help.

—Lois Johnson, Lone Peak High School,
Highland, Utah

Selecting Materials

The syllabi in this chapter, and the resources listed in chapter 6, show the variety of textbooks, workbooks, scores, recorded examples, and associated materials from which you can choose course material. One of the best things about teaching this course is choosing musical scores and recorded examples, because you can select music that you love and wish to share with your students.

New AP teachers are encouraged to peruse a variety of textbooks before making a selection. Most publishers will provide free copies of textbooks for teacher consideration. Your school may have a textbook adoption procedure, so the text selection process should begin well in advance of the beginning of the course. Some textbooks include a complete package with workbooks, recorded examples, and online supplementary activities. While some texts are carefully regimented in how the material is taught, others allow greater flexibility for teaching concepts and selecting supporting materials. Take care to select a textbook that corresponds to your own teaching style.

Aural skills development may be addressed in a variety of ways. Computer-assisted programs allow students to progress at their own rate. Some teachers prefer to teach aural skills from the keyboard, with all students progressing with identical material. This method allows the teacher to quickly assess and address student needs. Ideally, a combination of methods can optimize aural skills instruction.

Student Assessment

Each syllabus describes the methods that the author uses to determine student achievement. Assessment devices vary but include tests, quizzes, assignments, class participation, homework, compositions, projects, dictations, and sight-singing exercises. Considering the nature of the development of theory skills, assessments should include a combination of reading, writing, analysis, performance, and aural recognition skills.

Be cautious when grading aural skills. Since students enter the course with a variety of abilities, grading policies should take into consideration a student's individual progress.

Syllabus Flexibility

A curriculum and syllabus should remain a flexible tool for organizing instruction. As you grow and gain experience as an AP Music Theory teacher, you will learn better and more efficient methods and tools for developing student musicianship. While your syllabus should be a consistent guide for the course, the document should be constantly adjusted to improve scheduling, sequencing, and pacing instruction. Eventually, the evolved syllabus will reflect a harmonious balance between teaching style, textbook and materials, school schedule, calendar year, and student achievement.

One Example of Course Organization

The artful process of sequencing the presentation of material and fitting it into the yearly schedule can be a challenge. The following description generally represents the organization of my North Hunterdon High School course. It illustrates my use of a variety of methods to integrate multiple resources. It should be noted, however, that there are textbook packages available that contain all of the resources necessary to teach the course.

In the process of developing our music students into young musicians, we need to teach fundamentals, writing skills, aural skills, analysis skills, and performance skills. Ideally, teachers will use a variety of activities to sequentially address student improvement in each of these skill areas. Within the span of the AP course, we can also begin the process of nurturing students' creativity by guiding the creation of several composition projects.

Let us consider the course to be organized in three phases. In Phase One, fundamentals are taught. Phase Two focuses on part writing and the development of analysis skills. Phase Three includes exam preparation and post-exam activities. Aural skills development spans all three phases. In reality, skills are being developed from the first day to the last day of the course; however, after fundamentals are mastered, we can engage in part writing, composition, and score analysis exercises that represent examples from the AP Exam and are much more interesting to students.

Note: In my district, a one-semester fundamentals course is offered but is not required; students with considerable experience and/or fundamentals knowledge are encouraged to enroll directly in AP Music Theory, with teacher approval. Some high schools ask students to take a fundamentals course first or offer the AP course as the second year of a two-year theory sequence. In these cases, you would not include fundamentals in your AP curriculum, effectively eliminating Phase One.

Chapter 3

Throughout the course, try to use a variety of activities with increasing levels of difficulty, and incorporating a variety of meters, keys, and modes, to address the various skill areas, such as:

- Rhythmic dictation
- Melodic dictation
- Harmonic dictation
 - o Notate only the melody
 - o Notate only the bass
 - o Indicate only the Roman numerals
 - o Combination of the above
- Score study
- Figured-bass realization
- Roman numeral realization
- Aural analysis of recorded music
- Harmonization of a melody
- Keyboard harmony
- Error detection
- Improvisation
- Sight-singing

Phase One: Fundamentals

At the beginning of the year, AP Music Theory takes on the feel of a language class, but one with kinetic motor activities as a major component of each lesson. As rhythm and notation are learned, students experience the joy of musically responding to a visual stimulus. Unfortunately, situations exist in performance classes where, for example, students in choir may learn from rote, or by listening to other singers, and students in band or orchestra learn simply to depress their fingers on a certain combination of keys or strings and not actually “think” pitch. AP Music Theory is a place where students learn to actually read real music notation, and their excitement is palpable.

Establishing a Common Language

One great joy early in the course is establishing a common language with your students. Theory terminology, explanations and definitions, and a working knowledge of notation on the staff provide a firm foundation on which to build skills and concepts. Fundamentals (beginning with “pulse” and ending somewhere around “seventh chords, inversions and diatonic Roman numerals in major and minor keys”) must be thoroughly mastered by students. Additionally, they must develop fast and facile cognition skills, especially in the areas

of intervals, inversions, chord writing, and harmonic analysis. Three crucial areas of knowledge, requiring absolute fluency and speed, are 1) knowledge of note names on the grand staff, 2) knowledge of key signatures, and 3) ability to analyze, write, and invert intervals. Teachers should not proceed until students are fully versed in each of these areas.

Attention to Aural Skills

Attention to aural skills from the beginning of the course is important. Whether students work independently with a software program, as a whole class with the teacher, or in a combination of the two, exercises in chord recognition based on an aural stimulus, writing intervals and chords, and melodic and harmonic dictation exercises should accompany each related concept. Devise exercises where students are reading, performing, writing, and aurally recognizing a variety of harmonic stimuli: simple and compound intervals, triads, seventh chords, inverted chords, and chords in the context of a key. With each new topic, find a piece of music to play that exemplifies the new concept. Soon students develop a sense of the wide variety of musical repertoire and realize that despite differences in genre, style period, or regional character, much music contains similar conceptual elements.

Students soon become capable of writing rhythms and melodies. Look for opportunities where students can be creative. Enjoyable student activities include the composition and performance of rhythmic pieces, in two or more parts, and melodies.

The Keyboard as a Teaching Tool

The keyboard is a vital tool in learning music theory, and keyboard skills are best introduced in Phase One. Playing the piano integrates several learning styles. When students approach the keyboard they cognitively consider a harmonic question. Their hand shape replicates their cognitive conclusions, and the resultant sound relates back to the concept. Visual and kinetic memory is subsequently used by students when visualizing harmonic information. As an aid, cardboard and plastic two-octave keyboards are available from vendors for students to use at their desks. Using white and black paper and markers, a 10-foot, two-octave keyboard can be constructed on the classroom wall.





Guitarists may try to learn chords by visualizing them on a fret board. (You may see them shape a chord with their left hand). Be sensitive to this, and impress on the guitarists that applying chords and intervals to the keyboard is advised, as the fret board doesn't apply well to inversions, doubling, or spacing.



The piano can be a useful tool when teaching such concepts as half steps and whole steps, intervals, triads, and scales.

Phase Two: Part Writing and Analysis

Roman numeral analysis of simple homophonic music, as well as identification of cadence types and phrase structure, evolves with each new score selected. During Phase Two, students will begin to develop an aural sense of cadences and chord progressions. It soon becomes necessary to introduce nonharmonic tones and secondary dominants (although some teachers might want to isolate secondary dominants and introduce the concept later in the year). Knowledge of seventh chords, Roman numeral analysis, and inversions prepares students for the introduction of voice-leading principles. Students begin to develop a sense of voice range and *tessitura* and recognize the importance of writing smooth vocal lines. Ample practice is necessary before students begin to see their own voice-leading mistakes. Written error-detection exercises are helpful at this time. The following set of shorthand marks can be used for correcting voice-leading exercises.

Error:	Mark:
Parallel fifths and octaves	
Spacing errors	
Unresolved leading tones	URLT
Unresolved chord 7th	UR7
Illegal interval (A2, A4, TT, etc.)	
Illegal inversion	ILL $\frac{6}{4}$
Hidden/direct fifths	HD/D5
Overlapping or crossed voices	
Incorrectly spelled chord	X

Because bass lines are provided, the realization of figured bass exercises usually precedes realization of Roman numeral progression exercises. For those teachers initially uncomfortable generating their own exercises for students, there are resources available that contain ample exercises. (See the Teachers' Resources section of AP Central.)

Students increasingly appreciate the beauty and logic of chord progressions as they learn how chords function within a tonal context. A preliminary foundation is achieved through the study of cadential progressions. Textbook explanations and charts that demonstrate the function of each Roman numeral and inversion in a progression are invaluable in the beginning. Students who are able to integrate this knowledge with their ear will soon begin to creatively experiment with chord combinations. Harmonization of given or student-composed melodies are satisfying exercises when students can play and hear their new musical creations.

Teaching Modes

At some point, modes must be introduced. Some teachers choose to teach modes when they are teaching major and minor scales. Others prefer to wait, so as not to oversaturate students with too much information at one time. The revised list of the terms and symbols used in the AP Music Theory Exam includes the Ionian, Dorian, Phrygian, Lydian, Mixolydian, Aeolian, and Locrian modes (see chapter 7).

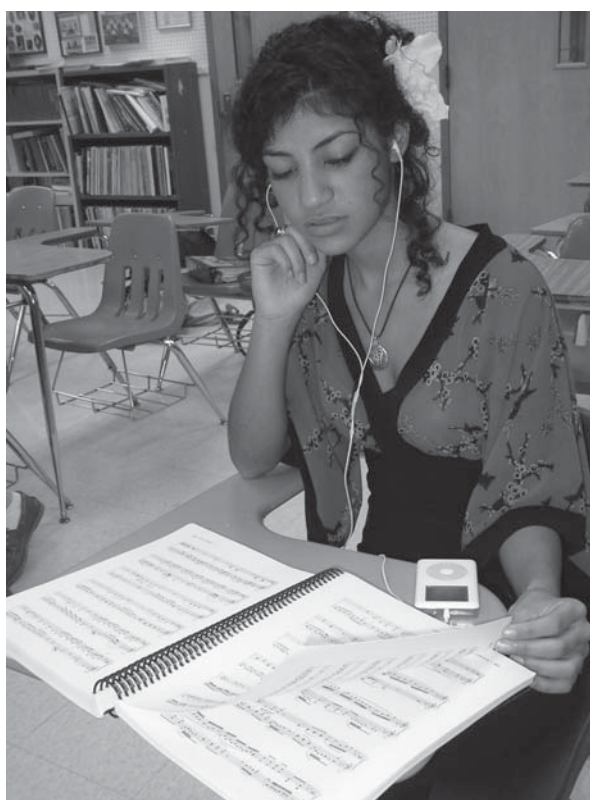
Two methods can be used to teach modes. First, you can teach the modes in reference to the white keys on the piano (i.e., the Lydian scale begins on F, or the fourth scale degree of the major scale). Or you can compare modes to major and minor scales (for example, the Dorian scale is a natural minor scale with a raised sixth scale degree). Be sure to point out the relation of the Ionian and Aeolian modes to the major and natural minor scales, respectively.

Species Counterpoint

You might consider dedicating some time to sixteenth-century counterpoint techniques, from composition of a *cantus firmus* through second species counterpoint. This helps students understand basic melodic and harmonic concepts based on intervallic relationships and also gives them an advantage when harmonizing a melody in eighteenth-century Common Practice style. In completing exercises similar to the free-response question on the AP Exam that tests the ability to harmonize a melody, students learn that they can apply sixteenth-century concepts, using a half-note harmonic rhythm, as opposed to a chord every beat—this effectively reduces their workload by half and still allows them to complete the exercise nicely.

Selecting Musical Scores

Scores from a variety of genres and style periods, including popular music, jazz, and world music, can be introduced for analytic purposes. Harmonic, melodic, formal, textural, and motivic elements can be studied. Similarly, recorded examples can be selected that give students experience in hearing and analyzing compositional elements in context. Rhythms, meters, mode, chord progressions, intervallic relationships, phrase forms, cadential progressions, texture, motivic elements, and key relationships are good topics from which to formulate questions. When selecting musical scores, consider including the harmonic analysis of a string quartet, or another piece that involves the alto or tenor clef.



Students should listen to examples from a wide range of music literature.

Aural Skills Enhancement

As the course progresses, students should continue to increase their aural skills. Provide ample opportunity for melodic and harmonic dictation exercises, as well as for composing melodies and harmonizing them with bass lines. Roman numerals that imply harmony should be included. Gear your in-class dictation exercises toward the same length, number of repetitions, tempo, and timing as on the AP Exam. Use different instruments and, occasionally, your voice when performing dictation melodies, perhaps using a music notation program such as *Finale* or *Sibelius* that provides a variety of timbres.

Phase Three, preparing students for the AP Exam and post-exam activities, is included in chapter 5.

Nine Sample Syllabi

The following syllabi provide a solid foundation for teachers in the process of developing and organizing their AP Music Theory course. They also provide a resource for experienced teachers who may wish to adjust their current course by adding new material, exploring new musical selections, or addressing a deficiency in their course as shown in the AP Instructional Planning Report provided to participating schools by the College Board each fall (see chapter 5).

Important Note: The AP Course Audit

The syllabi included in this Teacher's Guide were developed prior to the initiation of the AP Course Audit and the identification of the current AP Music Theory Curricular Requirements. These syllabi contain rich resources and will be useful in generating ideas for your AP course. In addition to providing detailed course planners, the syllabi contain descriptions of classroom activities and assignments, along with helpful teaching strategies. However, they should not necessarily be used in their entirety as models that would be authorized under the guidelines of the AP Course Audit. To view the current AP Curricular Requirements and examples of syllabi that have been developed since the launch of the AP Course Audit and therefore meet all of the AP Music Theory Curricular Requirements, please see AP Central:
<http://apcentral.collegeboard.com/courseaudit/resources>

Sample Syllabus 1

Courtenay L. Harter

Rhodes College

Memphis, Tennessee

College Profile

Location and Environment: Rhodes College is located in a quiet historic neighborhood in the vibrant city of Memphis, Tennessee. Over one hundred acres of wooded grounds and Gothic stone buildings provide an idyllic environment in which to live and learn.

The mission of the campus is described in the Rhodes Vision: “Rhodes College aspires to graduate students with a lifelong passion for learning, a compassion for others, and the ability to translate academic study and personal concern into effective leadership and action in their communities and the world.”

The faculty to student ratio is 11 to 1, with an average class size of 15 students. The most popular majors are business administration, biology, political science, English, and international studies. Students are active outside the classroom: over 80 percent participate in community service, 60 percent in academic internships, and 65 percent in sports.

Type: Liberal arts college offering both graduate and undergraduate degrees, including a Bachelor of Arts in Music

Total Enrollment: 1,692 students (1,677 undergraduates) representing 43 states and 8 countries other than the United States; 72 percent of students come from outside Tennessee, and 76 percent live on campus

Ethnic Diversity: In the fall of 2005, the undergraduate population included:

Black, non-Hispanic:	84 students
Asian or Pacific Islander:	58 students
Hispanic/Latino:	21 students
International:	8 students
American Indian/Alaskan Native:	6 students

AP Policy

Rhodes College grants course credit for an AP grade of 4 or 5 in most AP subjects. Students who are planning to major in a particular department are advised to consult with that department to determine whether they should enroll in upper-level courses or waive AP credit and take the first-semester course.

Personal Philosophy

My fundamental goals for each student, regardless of topic or level, are twofold: the development of critical listening skills and the development of a musical vocabulary. These two objectives are significant not only for the development of a musician—they also play a role in creating a well-rounded, inquisitive individual who is able to converse thoughtfully and intelligently about music. An obvious need for active listening to performances is inherent in these two objectives. Integrating performance into the classroom and relating instruction to performance focuses the practical musician on the end result of these studies.

Chapter 3

I design courses emphasizing aural proficiency so that students at any level will begin to develop comprehensive musicianship skills. In my experience, the majority of students tend to be weak in the many facets of aural skills. I try to integrate listening experiences into every session, thus reinforcing their importance.

While traditional sight-singing and dictation exercises are a part of my agenda, I encourage students to engage in independent learning through other activities as well. For instance, transcription assignments challenge students to think about how a composition is put together, not merely notate it on a musical staff. Analysis assignments—score study and aural evaluation—develop essay-writing skills: students are asked to clearly articulate their observations of various compositional features, explain how a composition is representative of a stylistic era, provide preliminary biographical information about the composer, and make their own aesthetic judgments. While specific to the course content, the repertoire for all of my assignments spans both classical and popular genres as well as a range of stylistic periods.

I take the opportunity to try many different pedagogies, from straight lecture format to letting the students run the class; from pop quizzes to group work on the board. Students learn something from every class presentation, even if it is which pedagogies do not work for them. I learn along with the students, as every class has a dynamic of its own.

Class Profile

Students in Music Theory I (the course I will discuss here) range from first-year through senior level but are primarily first- and second-year students. This is the first course in the music major or the music minor sequence. One section of this course is offered every fall semester. The course meets five days a week and comprises four semester credits toward a degree. Monday, Wednesday, and Friday classes meet for 50 minutes, while the Tuesday and Thursday classes meet for 75 minutes. The typical class enrollment is 25 students, most of whom pursue a major or minor in music.

In order to enroll in this course, students must either pass a departmental placement test (a multiple-choice fundamentals test stressing fluency in scales, key signatures, intervals, triads) or take the prerequisite course, the Elements of Music.

The Rhodes Department of Music suggests that a potential music major or minor enroll in a music class during the fall semester if at all possible to help them integrate into the department. Students who have had the AP Music Theory course in high school may have enough experience to wait until the spring semester course (Music Theory II). However, the typical first-year student will find Music Theory I a course they can succeed in while making the transition to college life. The course typically provides such a student with a good review, solidifying areas they may be weaker in (written skills, aural skills, keyboard skills, or repertoire knowledge). Students who have had AP Music Theory previously and do take this class find most of the material is familiar to them until after midterm, when new material begins (chapters 6 and 7 in the Roig-Francolí textbook).

Course Overview

Music Theory I, the first in a three-semester comprehensive musicianship sequence, is based on skill acquisition and style study, focusing on music from the Common Practice era. The contents of the course include:

- a review of the fundamentals of music
- an introduction to species counterpoint

- a basic review of or introduction to musical style
- an in-depth study of diatonic harmony, including harmonic progression and voice-leading principles
- an introduction to formal analysis
- beginning study of ear training, sight-singing, and keyboard harmony

Course Objectives

Students will:

- continue to develop music fundamentals
- gain competence in basic music-writing skills
- acquire familiarity with selected compositions and composers from the Common Practice repertoire
- develop aural skills as demonstrated through sonority identification, sight-singing, and transcriptions
- enhance facility at the keyboard: major and minor scales, triads, basic cadence patterns

Primary Textbooks

Benjamin, Thomas, Michael Horvit, and Robert Nelson. 2005. *Music for Sight-Singing*, 4th ed. Belmont, Calif.: Wadsworth.

Roig-Francolí, Miguel A. 2003. *Harmony in Context*. Boston: McGraw-Hill.
(text, workbook/anthology, and CD set required)

Date	Prepare for Class (R-F refers to Roig-Francolí text; BHN refers to Benjamin, Horvit, and Nelson text)	Keyboard Exercises	Assignments Due
Wed. 8/24	Syllabus Sing		
Thurs.	R-F Chapter A (Pitch: Notation and Intervals) R-F Chapter B (Rhythm and Meter) BHN vii–x	Diatonic Pitch Patterns #1	

Chapter 3

Date	Prepare for Class (R-F refers to Roig-Francolí text; BHN refers to Benjamin, Horvit, and Nelson text)	Keyboard Exercises	Assignments Due
Fri.	R-F Chapter G (Musical Style) Listening and Analysis: Mozart: Symphony No. 40 (first movement) Bach: Brandenburg Concerto No. 5 (first movement) Mahler: Symphony No. 5 (first movement)		
Mon. 8/29	BHN pp. 2–6 odd (Rhythm: One- and Two-Pulse Units; Pitch: The Major Scale)	Diatonic Pitch Patterns #2	R-F workbook pp. 3–4, 7–9
Tues.	R-F Chapter C (Tonality: Scales, Keys, and Transposition)		
Wed.	BHN pp. 7–9 odd (Pitch: The Major Scale)		
Thurs. 9/1	R-F Chapter E (The Rudiments of Harmony I: Triads and Seventh Chords)	R-F workbook pp. 27–28	R-F workbook pp. 11–12
Fri.	Listening and Analysis: Debussy: <i>La Mer</i> (one movement) Schubert: <i>Winterreise</i> (one movement)		
Mon. 9/5	LABOR DAY		
Tues.	R-F Chapter F (The Rudiments of Harmony II: Labeling Chords)		R-F workbook pp. 25–27
Wed.	BHN pp. 10–11 odd (Rhythm: Simple Meters)	R-F workbook pp. 33–34	
Thurs.			R-F workbook pp. 29–33

Date	Prepare for Class (R-F refers to Roig-Francolí text; BHN refers to Benjamin, Horvit, and Nelson text)	Keyboard Exercises	Assignments Due
Fri.	Listening and Analysis: Bach: Cantata No. 4, <i>Christ lag in Todesbanden</i> (Sinfonia, final chorale, one other movement) Stravinsky: <i>Symphony of Psalms</i> (one movement)		
Mon. 9/12	Test #1		
Tues.	R-F Chapter D, pp. 71–77 (Introduction to Species Counterpoint)		
Wed.	BHN pp. 14–17 odd (Pitch: Introducing Thirds)		
Thurs.	R-F Chapter 1 (The Connection of Chords)	Diatonic Pitch Patterns #3	Listening Chapter G Bartók: <i>Concerto for Orchestra</i> (one movement) Corelli: Concerto Grosso, Op. 6 (one complete concerto) Handel: <i>Water Music</i> (two contrasting movements) Haydn: Symphony No. 99 (fourth movement) Jacquet de la Guerre: Suite in D minor (two contrasting movements) Mendelssohn-Hensel: Lieder, Op. 9 (two contrasting songs) Martinez: Piano Sonata in E major (complete) Mozart: Symphony No. 39 (first movement) Palestrina: <i>Missa Brevis</i> (one movement) Schoenberg: <i>Pierrot Lunaire</i> (one movement) Schumann: <i>Dauidsbündlertänze</i> (one dance) Wagner: <i>Tristan und Isolde</i> (Prelude and Transfiguration)

Chapter 3

Date	Prepare for Class (R-F refers to Roig-Francolí text; BHN refers to Benjamin, Horvit, and Nelson text)	Keyboard Exercises	Assignments Due
Fri.	Listening and Analysis: Bach: Brandenburg Concerto No. 5 (second and third movements)		
Mon. 9/19	BHN pp. 18–19 odd (Pitch: Introducing Fourths)		R-F workbook pp. 36–37
Tues.	R-F Chapter 1 (The Connection of Chords)		Listening 1 Monteverdi: <i>Orfeo</i> (one complete scene) Vivaldi: <i>Four Seasons</i> (a complete season) The Beatles: <i>Sgt. Pepper's Lonely Hearts Club Band</i> (title track and one other track)
Wed.	BHN pp. 20–21 odd (Pitch: Introducing Fourths)		
Thurs.	R-F Chapter 2 (The Tonic and Dominant Triads in Root Position)	Diatonic Pitch Patterns #4	R-F workbook pp. 38–39
Fri.	Listening and Analysis: Mozart: Symphony No. 40 (second movement) Beethoven: Symphony No. 3 (second movement) Schubert: Symphony No. 8 (second movement)		
Mon. 9/26	BHN pp. 22–24 odd (Pitch: Tonic Triad in the Major Mode; Introducing Fifths, Sixths, and Octaves)		R-F workbook pp. 40–41
Tues.	R-F Chapter 2 (The Tonic and Dominant Triads in Root Position)		

Date	Prepare for Class (R-F refers to Roig-Francolí text; BHN refers to Benjamin, Horvit, and Nelson text)	Keyboard Exercises	Assignments Due
Wed.	BHN pp. 24–25 odd (Pitch: Tonic Triad in the Major Mode; Introducing Fifths, Sixths, and Octaves)		
Thurs.	R-F Chapter 3 (Harmonic Function; the Subdominant Triad in Root Position)		Transcription #1
Fri.	Listening and Analysis: Mozart: Symphony No. 40 (third movement) Beethoven: Symphony No. 3 (third movement)		
Mon. 10/3	BHN pp. 26–27 odd (Pitch: Tonic Triad in the Major Mode; Introducing Fifths, Sixths, and Octaves)	R-F workbook p. 43	R-F workbook pp. 42–43
Tues.	R-F Chapter 3 (Harmonic Function; the Subdominant Triad in Root Position)		Listening 2 Mozart: Symphony No. 40 (fourth movement) Beethoven: Symphony No. 3 (fourth movement) Schubert: Symphony No. 8 (first movement) Harbach/Kern: <i>Roberta</i> (one scene)
Wed.	BHN pp. 28–31 odd (Rhythm: 2:1 Subdivisions of the Beat)		
Thurs.	R-F Chapter 3 (Harmonic Function; the Subdominant Triad in Root Position)		R-F workbook pp. 44–45; #3 in class
Fri.	Listening and Analysis: Chopin: Op. 28, nos. 1, 6, 10		
Mon. 10/10	BHN pp. 32–34 odd (Pitch: I, V, and V ⁷ ; Introducing Sevenths)		R-F workbook pp. 46–47

Chapter 3

Date	Prepare for Class (R-F refers to Roig-Francolí text; BHN refers to Benjamin, Horvit, and Nelson text)	Keyboard Exercises	Assignments Due
Tues.	R-F Chapter 4 (Texture; Triads in First Inversion)		Listening 3 Schumann: Symphony No. 3 (two movements) Chopin: 24 Preludes, Op. 28 (one major, one minor)
Wed.	BHN pp. 35–36 odd (Pitch: I, V, and V ⁷ ; Introducing Sevenths)	R-F workbook p. 47	
Thurs.	R-F Chapter 4 (Texture; Triads in First Inversion)		R-F workbook pp. 48–51
Fri.	Listening and Analysis: Haydn: Symphony No. 94 (second movement) Beethoven: Symphony No. 7 (second movement)		
Mon. 10/17	FALL RECESS		
Tues.	FALL RECESS		
Wed.	BHN pp. 37–40 odd (Pitch: I, V, and V ⁷ ; Introducing Sevenths)		
Thurs.	R-F Chapter 4 (Texture; Triads in First Inversion)		
Fri.	Listening and Analysis: Sondheim and Bernstein: <i>West Side Story</i> (Symphonic Dances)		
Mon. 10/24	BHN pp. 41–44 odd (Rhythm: Anacruses and 4:1 Subdivisions of the Beat)		R-F workbook pp. 51–53

Date	Prepare for Class (R-F refers to Roig-Francolí text; BHN refers to Benjamin, Horvit, and Nelson text)	Keyboard Exercises	Assignments Due
Tues.	R-F Chapter 5 (Cadences)		Listening 4 Lassus: <i>Missa</i> (one movement) Haydn: Symphony No. 101 (fourth movement) Bach: <i>Well-Tempered Clavier</i> , Book I (one major, one minor) Beethoven: Symphony No. 6 (fourth and fifth movements)
Wed.	BHN pp. 45–49 odd (Pitch: I, V, and V ⁷ ; Introducing the Alto Clef)	R-F workbook p. 53	
Thurs.	R-F Chapter 5 (Cadences)		R-F workbook p. 54
Fri.	Listening and Analysis: Brahms: Symphony No. 4 (fourth movement) Mozart: Piano Sonata, K. 333 (first movement)		
Mon. 10/31	BHN pp. 49–53 odd (Pitch: I, V, and V ⁷ ; Introducing the Alto Clef)		R-F workbook pp. 56–58
Tues. 11/1	R-F Chapter 5 (Cadences)		
Wed.	BHN pp. 54–57 odd (Pitch: I, V, and V ⁷ ; Introducing the Alto Clef)		
Thurs.	Review Day		
Fri.	Test #2		
Mon. 11/7	BHN pp. 58–60 odd (Rhythm: Dots and Ties)		Transcription #2

Chapter 3

Date	Prepare for Class (R-F refers to Roig-Francolí text; BHN refers to Benjamin, Horvit, and Nelson text)	Keyboard Exercises	Assignments Due
Tues.	R-F Chapter 6 (Melodic Organization I: Phrase Structure)		Listening 5 Viardot-Garcia: “Die Beschwörung” from <i>Zwölf Gedichte von Pushkin</i> (two songs) Mozart: Piano Sonata, K. 284 (third movement) Mozart: Piano Sonata, K. 331 (first movement) Mozart: Piano Sonata, K. 333 (third movement) Hammerstein/Rodgers: <i>Oklahoma</i> (one scene)
Wed.	BHN pp. 61–66 odd (Pitch: Minor Mode)	R-F workbook p. 59	
Thurs.	R-F Chapter 6 (Melodic Organization I: Phrase Structure)	R-F workbook 6.3	R-F workbook 6.2
Fri.	Listening and Analysis: Rimsky-Korsakov: <i>Scheherazade</i> (conclusion)		
Mon. 11/14	BHN pp. 66–70 odd (Pitch: Minor Mode)		R-F workbook pp. 63–64
Tues.	R-F Chapter 7 (Melodic Organization II: Thematic Development; Phrase Extension; Formal Functions)		
Wed.	BHN pp. 70–74 odd (Pitch: Minor Mode)		
Thurs.	R-F Chapter 7 (Melodic Organization II: Thematic Development; Phrase Extension; Formal Functions)		R-F workbook pp. 60–62

Date	Prepare for Class (R-F refers to Roig-Francolí text; BHN refers to Benjamin, Horvit, and Nelson text)	Keyboard Exercises	Assignments Due
Fri.	Listening and Analysis: Beethoven: Symphony No. 5 (third movement)		
Mon. 11/21	BHN Chapter 7, #1–2 (Music from the Literature)		R-F workbook 7.1, 7.2, p. 71
Tues.	R-F Chapter 7 (Melodic Organization II: Thematic Development; Phrase Extension; Formal Functions)	R-F workbook 6.3	Listening 6 Reichardt: selected songs Chevalier de Saint-Georges: <i>Symphonie Concertante</i> Beach: Symphony No. 1 Falla: <i>The Three-Cornered Hat</i> (one movement) Chevalier de Saint-Georges: Violin Concerto (one movement)
Wed.	BHN Chapter 7, #3–4 (Music from the Literature)		
Thurs. 11/24	Thanksgiving Break		
Fri. 11/25	Thanksgiving Break		
Mon. 11/28	BHN Chapter 7, #5–6 (Music from the Literature)		R-F workbook 7.3, 7.4
Tues.	R-F Chapter 8 (Nonchord Tones)		Listening 7 Rimsky-Korsakov: <i>Scheherazade</i> (one movement) Paradis: <i>Sicilienne</i> Beethoven: Symphony No. 5 (one movement, not the first) Gershwin: <i>Oh, Kay!</i> (one scene)

Chapter 3

Date	Prepare for Class (R-F refers to Roig-Francolí text; BHN refers to Benjamin, Horvit, and Nelson text)	Keyboard Exercises	Assignments Due
Wed.	BHN Chapter 7, #7–8 (Music from the Literature)		
Thurs. 12/1	R-F Chapter 8 (Nonchord Tones)		R-F workbook 8.1–8.3
Fri.	Listening and Analysis: Mozart: Symphony No. 41 (first movement)		
Mon. 12/5	BHN Chapter 7, #9–11 (Music from the Literature)		R-F workbook 8.4–8.6
Tues.	R-F Chapter 8 (Nonchord Tones)		Listening 8 Amalie: Sonata in F major for Flute and Continuo (complete) Corelli: Sonata, Op. 5, No. 12 (<i>La Folia</i>) (complete) Mozart: Symphony No. 41 (one movement) Beethoven: Sonata No. 21, Op. 53 (first movement)
Wed. 12/7	Review, Questions, Course Evaluation		
	Test #3—during Exam Period		

Student Evaluation

Written assignments comprise 40 percent of a student's final grade. These assignments are subdivided into two categories:

Workbook Pages—25 percent

Listening Assignments—15 percent. These are generated from the textbook at the end of each chapter (the section entitled "Composers and Their Music"). A complete list of scores and recordings required for this course is available in the Media Center of Rhodes's Barret Library and on the school Web site; many recordings can also be found online in the Naxos Music Library.

Performance Skills—10 percent. This includes:

Prepared- and Sight-singing—Prepared-singing examples are generated from the Benjamin/Horvit/Nelson text and labeled as such on the course schedule. Sight-singing assignments are distributed in class, with a sample of the grading sheet.

Transcriptions—The ability to use musical notation to illustrate a heard or remembered passage is an integral part of developing the ear. These tasks are done mostly in class as short rhythmic, melodic, or harmonic examples; a few out-of-class assignments for more lengthy passages are shown on the course schedule.

Keyboard Skills—As the piano is an instrument readily found in most musical situations, it is necessary for students to develop these skills. The exercises listed in the workbook help students grasp theoretical concepts as well as improve personal performance.

Participation/In-Class Work—10 percent (sight-singing, keyboard). This includes class discussion, drills, pop quizzes, dictations, and attendance. Students are expected to attend all classes on time; in-class work done for a grade cannot be made up. The phrase "I can't" and variations thereof are not acceptable as an in-class response. Students who are absent over five times receive no credit for participation; tardiness equals one third of an absence.

Tests are 40 percent of the final grade. All tests are cumulative and taken in two formats: written and skills hearings. Skills hearings do not take place during regular class times but are scheduled individually. Tests are weighted as follows: Test #1, 10 percent; Test #2, 10 percent; Test #3, 20 percent.

Teaching Strategies

Workbook Assignments

There are a variety of assignments in the Roig-Francolí workbook, from analysis to composition, including the four-part voice leading. I find the correction of assignments to be a fruitful pedagogical device, because students have to return to and further critique their work. By finding their own mistakes, they will try to make fewer on future assignments.

Grading for most assignments is based on many of the rubrics from the AP Exam. I use the Code for Voice-Leading Corrections (below) to mark a student's paper, placing a number with a circle around it above the chord in question or between two chords to assist the student in finding the error.

Code for Voice-Leading Corrections (adapted from R. Bass, University of Connecticut)

1. RAISE THE LEADING TONE!!
2. essential chord tone omitted
3. wrong note(s)
4. incorrect doubling
5. incorrect spacing
6. overlapping or voice crossing
7. parallel octaves, unisons, and/or fifths
8. direct fifths and/or octaves
9. consecutive parallel fifths and/or octaves by contrary motion
10. augmented melodic interval
11. resolve the leading tone
12. awkward or poorly motivated skips
13. poor progression
14. poor choice of inversion
15. incorrect use of second-inversion triad
16. incorrect metric placement of cadential six-four
17. incorrect preparation for cadential six-four
18. incorrect resolution of seventh chord
19. poor nonharmonic tone
20. incorrect chord symbol or inversion figure (including quality of chord)
21. notational error

Listening Assignments

The general idea for the following worksheet is simply to have the student be accountable for the listening assignment. I expect general descriptions in the area of “Compositional Features,” as some students are still learning to define and listen for these features.

Typically, students can easily find Internet sources for biographical information; however, I have found a number of these to be spurious. If a teacher finds reputable electronic sources (and there are some), they could be listed for students to use.

Listening Assignment Worksheet

For each composition listed at the end of the chapter, make sure to complete information for items marked **. Make every effort to view a critical edition of a score and not a performance edition.

Composer

- ** Dates
- ** Basic biographical information

Composition (title and portion)

- ** Date
- ** Genre

Compositional Features (consult Roig-Francolí chapter G, pp. 115–131)

- ** Discuss at least two of the following in some detail:

- Rhythm, meter, tempo
- Melody
- Harmony and harmonic rhythm
- Tonality
- Texture
- Form and formal growth
- Dynamics
- Timbre and instrumentation

- ** Text

- Who wrote the text?
- What is the text about? (synopsis of the story and specific scene)

- ** How would you distinguish this work from a piece in the same genre by a composer of a different style period? Of the same style period? If you are able, give an example of each, and contrast them with the excerpt under consideration.

- ** Extra questions posed by Roig-Francolí in the given chapter.

- ** Bibliography

Make sure you can properly cite each source, including the author of the article. You may use the following sources for your biographical information (Internet sources are **not** acceptable!):

The New Grove Dictionary of Music and Musicians
International Encyclopedia of Women Composers
Baker's Biographical Dictionary of Musicians
Liner notes from a recording

Sight-singing

This grading template (adapted from R. Ashley, Northwestern University) emphasizes not stopping to correct mistakes but rather completing the phrase or melody in one take. I typically mark the upper half of the sheet with “+,” “√,” or “–” as the students complete their reading of the melody. These ratings may easily translate to the grading scale below, even at a later time (say, after class). Occasionally, I reorder the “Accuracy” items, or even add and subtract, depending on what elements I need to emphasize in class at a given time.

NAME:	EXERCISE:	DATE:
--------------	------------------	--------------

Attempts	Accuracy
_____ 1	_____ contour of the line(s)
_____ 2	_____ staying in the correct key
_____ 3	_____ meter/rhythmic accuracy, including maintaining a steady pulse
_____ 4(+)	_____ dynamics
	_____ phrasing
	_____ articulation
	_____ solfège syllables/note names
	_____ accuracy of overall pitch

Attempts	(score)	Features & Details	(score)
<input type="checkbox"/> 1	(30)	<input type="checkbox"/> all major features and all details	(70)
<input type="checkbox"/> 2	(20)	<input type="checkbox"/> all major features and most details	(60)
<input type="checkbox"/> 3	(10)	<input type="checkbox"/> most major features and most details	(50)
<input type="checkbox"/> 4(+)	(0)	<input type="checkbox"/> most major features and some details	(40)
		<input type="checkbox"/> some major features and some details	(30)
		<input type="checkbox"/> some major features and few details	(20)
		<input type="checkbox"/> few major features and few details	(10)
		<input type="checkbox"/> no major features, declining to sing, or absent	(0)

Grade:

Transcriptions

In-class transcriptions are evaluated against a scoring guideline similar to the AP scoring rubric. I create melodies that are similar to those the students are reading in the Benjamin/Horvit/Nelson book and harmonic progressions like those the students are seeing in the Roig-Francolí book.

I demonstrate methodology with many of these in-class transcriptions. My rules are that once the students have set up their staves, they must listen to the example twice before writing anything down; this is to help them to memorize short elements and analyze the melody for repetitions. I use the terms “exact,” “variation,” “sequence,” and “different” during their analysis of the melody. I do have them sing back the melody on a neutral syllable after they have heard it two more times, but this is the only time students are allowed to vocalize in these exercises. Later in the semester, when melodies are longer, I emphasize formal design of two phrases (see Roig-Francolí chapter 6), how they are related, and cadence types.

Out-of-class transcriptions vary in difficulty and focus. These examples tend to be more challenging; students are allowed to listen to the examples as many times as they feel necessary. I change the examples every year or two, but the type of assignment is similar, as illustrated below:

Transcription #1

- I provide lyrics to a song (e.g., Sting’s “Seven Days” and Nat King Cole’s “Straighten Up and Fly Right”) and ask students to add the rhythmic values to the text.
- I give them a twentieth-century composition and ask them how they might start to represent the music given their current level of musical training.
- Students listen to Schubert’s *Impromptu in G-flat major*, opening two phrases; this piece has a lot of inner voices that sometimes clutter the outer voices. I ask students to notate the melody line and, for extra credit, the bass line, which is much harder to hear in most recordings.

Transcription #2

- Students listen to about 30 seconds of Ginastera’s *Estancia*, and I ask for an accurate rhythmic transcription of the excerpt in three parts: full orchestra, bass drum, and tambourine. This task appears overwhelming at first, but there is a repetitive pattern that students should be able to discern; they can then figure out how long the excerpt is and when there is change in the pattern.
- Students transcribe the melody for the opening French horn solo in Schubert’s Symphony No. 9, showing both pitch and rhythm.
- Students listen to a recording of Yo-Yo Ma and Bobby McFerrin playing “Hush Little Baby” and transcribe the cello interlude, which is based on thirds and the dominant seventh chord. There are some chromatic pitches, but they are stepwise in nature. The rhythm is a little more interesting because there is some syncopation.

Transcription #3

Students are asked to create a form diagram (bubble diagram, arch map) for each of the five examples.

They must include the following:

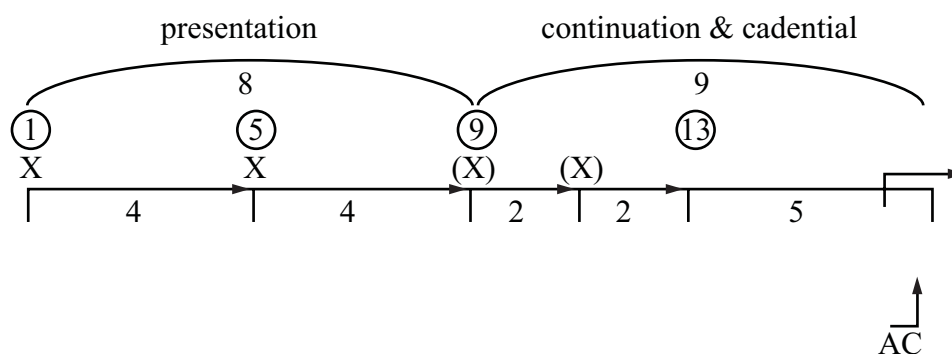
- time signature
- number of measures in each phrase
- cadence—labeled progressive or conclusive (extra credit given for the correct type)
- musical notation for each new thematic/motivic idea

See the examples below:

Transcription #3

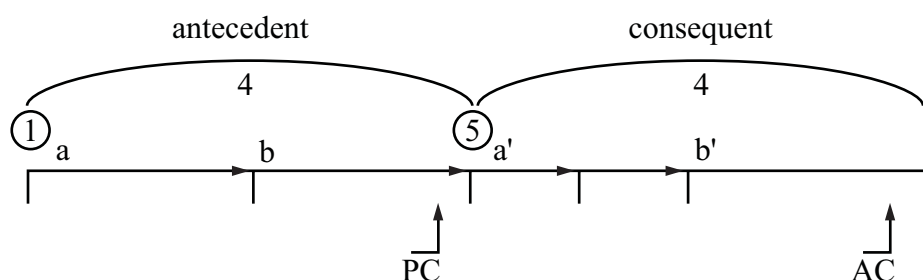
Example 1

This is a sentence structure. I would provide musical examples for the sections marked X (a measure or two would be plenty).



Example 2

This is a parallel period structure. I would provide musical examples for sections a and b (a measure or two would be plenty). I would provide a brief description (in prose) for the changes heard in a' and b'.



Keyboard Assignments

The diatonic pitch patterns included in the course are simply five-finger, two-handed examples to help students develop some facility at the keyboard. Assignments found in the workbook are keyboard-style chord progressions—one note in the left hand and three notes in the right hand. These assignments reinforce the voice-leading ideals in the textbook.

To introduce these examples, I typically walk the students through a voice-leading example on the board that results in the keyboard patterns presented on the workbook pages. Occasionally, I let every

Chapter 3

student get on the piano in front of the class to work this through while I watch over the student's shoulder. Students use a full-size photocopy of a keyboard at their desks; I also have students who are more proficient with the keyboard work with their peers as I work with those on the piano.

Out-of-Class Experiences

From the Rhodes College Music Department Concert Attendance Policy:

"Music is an aural art, which is most fully appreciated by engaging in the performance oneself or being exposed to the live performance of others. To ensure that students take advantage of opportunities to learn, both by performing publicly and by listening to other musicians, the Department of Music establishes each semester a minimum performance requirement and concert attendance requirement for majors, bridge majors, and minors."

I assign live performance opportunities based on what special events are being held in conjunction with our department—typically guest artists. These assignments are described on a sheet similar to the listening assignment worksheet. I usually require a paragraph or two on the performance with specific focus on a single composition during the concert or a concept that I know will occur during a particular composition.

Teacher Resources

A description of some of these items can also be found on the Teachers' Resources section of AP Central.

Aldwell, Edward, and Carl Schachter. 1989. *Workbook for Harmony and Voice Leading Volume 1*, 2nd ed. San Diego, Calif.: Harcourt Brace Jovanovich.

I use this text to supplement the Roig-Francolí with in-class examples, quizzes, and review sheets.

I use the following examples from both the text and workbook specifically:

Chapter 1: Key, Scales, and Modes

Chapter 2: Intervals

Chapter 5: Procedures of Four-Part Writing (voice-leading mistakes)

Chapters 6–10: (figured bass examples and good melodies for harmonization)

Arlin, Mary I., Charles H. Lord, Arthur E. Ostrander, and Marjorie S. Porterfield. 1989. *Music Sources: A Collection of Excerpts and Complete Movements*, 2nd ed. Englewood Cliffs, N.J.: Prentice Hall.

This anthology is topic oriented with short examples from the sixteenth to twentieth centuries in many different genres. Each section has a variety of examples, ranging in difficulty level as well.

Complete pieces are used in some places, including chapters containing only complete movements.

There are indexes for compositional techniques, forms, musical elements, and harmonic progressions.

Benjamin, Thomas, Michael Horvit, and Robert Nelson. 2001. *Music for Analysis: Examples from the Common Practice Period and the Twentieth Century*, 5th ed. Belmont, Calif.: Wadsworth.

This is another topic-oriented collection of pieces from the seventeenth to twentieth centuries that provides a complementary group of excerpts to the Arlin anthology. At the beginning of each topic area, the authors list "Questions for Analysis" that go beyond the topic at times. A useful checklist for analysis and a sample analysis are also provided.

Benward, Bruce, and Marilyn Saker. 2003. *Music in Theory and Practice, Volume 1*, 7th ed. Boston: McGraw-Hill.

I use this text to supplement the Roig-Francolí with in-class examples, quizzes, or review sheets.

I use the following examples from both the text and workbook specifically: chapters 9 and 10, short examples for the analysis of chords, cadences, and nonchord tones.

Briscoe, James, ed. 1987. *Historical Anthology of Music by Women*. Bloomington: Indiana University Press.
This is the supplemental anthology suggested by Roig-Francolí for some of his more obscure examples found in the Listening Assignments. A recording of the examples is also available from the publisher.

Burkhart, Charles. 2004. *Anthology for Musical Analysis*, 6th ed. Belmont, Calif.: Wadsworth.
This is an anthology used in most college programs; I refer to it for the specific examples that fit within the text. Pieces are ordered chronologically from the medieval period through the twentieth century. There are two appendixes, one for blues and rhythm changes, the other for chorale harmonizations; a general index of topics; and an index of chords, sequences, and modulations. The sixth edition also has a list of “Complete Short Pieces Suitable for First- and Second-Year Courses.”

DeVoto, Mark, ed. 1992. *Mostly Short Pieces: An Anthology for Harmonic Analysis*. New York: W.W. Norton.

This anthology is a chronological collection of sixteenth to twentieth century composers. It comes with an instructor’s manual that illuminates the pieces a little more than the anthology does. The manual also provides a few questions to provoke discussion in the classroom, as well as a list of some formal and harmonic devices for comparing the different pieces. Most of the pieces can be found on the Naxos Music Library Web site.

Kostka, Stefan, and Dorothy Payne. 1995. *Tonal Harmony with an Introduction to Twentieth-Century Music*, 3rd ed. New York: McGraw-Hill.

This is another useful supplement to the Roig-Francolí text in regard to in-class examples, quizzes, and review sheets. I use the following worksheets from both the text and workbook specifically:

- Elements of Pitch (1-2, 1-3, 1-4)
- Introduction to Triads and Seventh Chords (3-4)
- Diatonic Chords in Major and Minor Keys (4-1, 4-2)
- Cadences, Phrases, and Periods (10-1)

Lefkoff, Gerald. 1980. *Analyzed Examples of Four-Part Harmony: for the Study of Harmonic Dictation, Part Singing & Keyboard Reading*. Morgantown, W.V.: Glyphic Press.

I use this text to supplement the Roig-Francolí text in regards to in-class examples, quizzes, review sheets, or inspiration for harmonic transcription examples. The text is in two parts; the first part, “Pedagogical Examples,” is topic oriented, emphasizing position of triads and chords; the second part, “Examples of Literature,” includes four-part examples from the vocal literature.

Naxos Music Library
www.naxosmusiclibrary.com

This is a supplement to our college’s recorded music collection. Students can access the music on Naxos at any time of the day or night from any computer, on or off campus. Most of the examples and listening assignments in the textbook are available here. My students admit to spending a lot of time on this site, because when they listen to a single movement of a work and like it, they can continue listening to the complete composition.

Ricci Adams’ Music Theory Web Site
www.musictheory.net

I suggest this site to students who need to strengthen their fundamentals. It includes free exercises that drill written skills (keyboard notes, note identification for four different clefs, key signatures, intervals, and triads), as well as a few aural drills (scales, intervals, and chords). Students can also print manuscript paper from this site.

Student Activities

Listening and Analysis

For the assigned pieces, I have students complete a Listening Worksheet in a similar manner to a graded assignment. At the beginning of the semester, this helps students figure out what I require from them on the various assignments, and they also hear what their peers pick out while they listen. Students learn best from themselves, so I try to get a discussion going based on leading questions; for example, when students describe a compositional element in vague terms, I ask them to be more descriptive. I have even gotten students to circulate around the room with the biography of a composer, and they often learn a bit of trivia that no one has previously mentioned. (I always have a copy of the recording we are discussing with me in the class, in case we need to use it.)

At points in the semester when students are not taking this assignment seriously enough, I give them a listening quiz. As an example, I picked six excerpts of second movements from symphonies, including the Beethoven, Mozart, and Schubert students were assigned to listen to, for class discussion. Students were asked to describe two compositional elements from the excerpt that helped them decide which composer and/or composition was being played. I did explain at the end of the quiz that it was a very unfair test for them at this point in their musical careers, and that it does take a lot of listening to form opinions and ideas—hence, they need to take the assignments a little more seriously.

Solfège Menu

When teaching sight-singing, I rely heavily on the moveable *do* system and use *do*-based minor. Each system has its pluses and minuses, but I feel this system teaches the idea of relative pitch best.

I write the solfège syllables on the board and add the minor and chromatic pitches as they are needed. Typically, just *fi* is the chromatic pitch students will run across in various pieces at this level. I use the menu in a number of ways—as a warmup tool after singing scales, I have students sing the pitches as I point to them. I also have students memorize a pattern of pitches I point to and then sing them back (typically this activity has a rhythmic element to it as well). The menu is also a useful tool when working on sight-singing. I ask students to read through a melody using just rhythm and solfège without singing. After finding the more difficult spots in the passage, we work on those intervals on the menu away from the context of the music itself.

For example, in early stages, leaping from *do* up to *la* may be difficult. I relate *la* to *sol* with the following sequence of pitches on the menu:

do-mi-sol-la-sol-mi-do
do-sol-la-sol-do
do-sol-la-sol-la-do
do-la-sol-do

Introductory Solfège Menu

RE

DO
TI
TE
LA
LE
SOL
FI
FA
MI
ME
RE

DO
TI
TE
LA
LE
SOL
FI
FA

Complete Solfège Menu

RE
RA DI
DO
TI
TE LI
LA
LE SI
SOL
SE FI
FA
MI
ME RI
RE
RA DI
DO
TI
TE LI
LA
LE SI
SOL
SE FI
FA

Sample Syllabi 2 and 3

Michael Levi and Bruce Roter

The College of Saint Rose
Albany, New York

College Profile

Location and Environment: The College of Saint Rose, accredited by the New York Board of Regents and the Middle States Association, is located in Albany, the capital of New York State. It is an urban campus in an older neighborhood known as Pine Hills. Saint Rose was founded in 1920 by the Sisters of Saint Joseph of Carondolet, but it has been governed by a board of trustees since the 1970s. Most students are from the capital district and surrounding counties.

The college is composed of four schools: Arts and Humanities, Business, Education, and Math and Science. All schools offer bachelor’s and master’s degrees. The majority of students major in one of the education fields—elementary education, special education, literacy, or speech/communication disorders. Many are adult learners seeking teaching certification for music, science, history, English, or business. The student to faculty ratio is approximately 15 to 1.

The Music Department comprises 185 undergraduate and 57 graduate students. Two undergraduate majors, Music Education and Music Industry, are offered. Graduate students may earn a master’s degree in either Music Education or Music Technology. The college also offers a Certificate of Advanced Study for those students with a degree who desire to earn a certificate to teach music in the public schools.

Type: Liberal arts college offering 58 undergraduate and 33 graduate programs

Total Enrollment: 5,149 students, including 3,078 undergraduates

Ethnic Diversity: As of spring 2006, the total student population included:

African American/Black:	219 students
Hispanic/Latino:	177 students
Asian/Pacific Islander:	83 students
American Indian/ Alaskan Native:	11 students
Multiracial:	29 students
International:	3 students

AP Policy

The College of Saint Rose encourages the use of AP Exams and ordinarily grants credit toward graduation for those achieving a grade of 3 or higher. Some departments require a grade of 4 or better to grant credit. Each department has the discretion to determine the acceptable grade and number of credits awarded.

Students who score a 4 or 5 on the AP Music Theory Exam are awarded credit and advanced placement as follows:

- Students who receive an aural subscore of 4 or 5 are awarded 2 credits for MUS 103.
- Students who receive a nonaural subscore of 4 or 5 are awarded 3 credits for MUS 101.

All first year undergraduate music majors who have not received acceptable AP scores must take those courses.

The Music Department Listening List

The faculty of the Music Department at the College of Saint Rose has created the following list to help students build the foundation for a musical repertoire. The works, representing a diversity of styles and genres, are introduced five at a time during the six semesters of the music theory/music history sequence. These works may also be integrated in curricula for other classes (such as orchestration, keyboard, and conducting). *While excerpts of these works will be studied, it is the student's responsibility to know each work in its entirety.*

	Fall	Spring
1st Year	Palestrina: <i>Sicut cervus</i> Vivaldi: "Spring" from <i>The Four Seasons</i> Bach: Brandenburg Concerto No. 2 Mozart: Symphony No. 40 in G minor Chopin: Polonaise in A \flat , Op. 53, No. 6	Bach: G minor Fugue, the "Little" Beethoven: String Quartet, Op. 18, No.1 Schubert: <i>Gretchen am Spinnrade</i> and <i>Erlkönig</i> Tchaikovsky: Violin Concerto Barber: <i>Adagio for Strings</i>
2nd Year	Beethoven: Symphony No. 3, <i>Eroica</i> Brahms: Symphony No. 2 Wagner: <i>Tristan</i> , Prelude und Liebestod Debussy: <i>Prélude à l'après-midi d'un faune</i> Duke Ellington: <i>Diminuendo in Blue</i>	Handel: <i>Water Music</i> suite Haydn: Symphony No. 104 Mozart: Piano Concerto No. 21 Mahler: Symphony No. 1 Schoenberg: <i>Pierrot Lunaire</i>
3rd Year	Bach: B minor Mass [selections] Mozart: <i>Don Giovanni</i> [highlights] Schubert: "Trout" Quintet Copland: <i>Appalachian Spring</i> Davis: "So What?"	Puccini: <i>La Bohème</i> [highlights] Verdi: <i>Requiem</i> Stravinsky: <i>Le Sacre du printemps</i> Bartók: Concerto for Orchestra Husa: <i>Music for Prague 1968</i>

Music Theory at Saint Rose

This chapter includes syllabi for two separately taught one-semester courses that together comprise the initial sequence of written and aural skills covered in the AP Music Theory curriculum.

MUS 101, Comprehensive Musicianship 1

Contributed by Bruce Roter

Personal Philosophy

Music theory provides music students with both a means of communication and a vehicle for musical interpretation. Through the study of music theory, students can more effectively articulate their thoughts about music and derive a deeper understanding of it. The challenge in teaching music theory is that beginning lessons often seem remote from the ultimate goal of music analysis (the practical application of music theory where opinions and judgments are formed). It is therefore essential that music theory be combined with analysis even at the earliest stages. This *language immersion* strategy will keep students engaged and demonstrate to them the importance of music theory as an essential tool among their overall musicianship skills.

Chapter 3

Class Profile

MUS 101–102 (Comprehensive Musicianship 1 and 2) and MUS 201–202 (Comprehensive Musicianship 3 and 4) comprise a two-year sequence of courses that guides students from the fundamentals of music theory to its practical application (form and analysis). Within this sequence, students begin with music notation, progress through learning the building blocks of music (scales, intervals, chords, and voice leading), study the expansion of tonality through chromaticism, and ultimately conclude their studies with written analyses of musical works.

The Music Department at the College of Saint Rose offers three sections of first-year music theory, which merge into two sections in the second year. While the same material is covered in all sections, students are placed according to their prior knowledge of music theory as assessed by a placement examination administered to all first-year music students on the first day of class. AP students who have been awarded credit are exempt from MUS 101 and enter the sequence with MUS 102. Classes meet three times a week for 50 minutes.

Course Overview

Text:

Kostka, Stefan, and Dorothy Payne. 2004. *Tonal Harmony, with an Introduction to Twentieth-Century Music*, 5th ed. Boston: McGraw-Hill. Includes workbook and CDs.

The course involves:

1. Rhythmic and pitch notation (in treble, bass, alto, and tenor clefs)
2. Major and minor scales and key signatures
3. Intervals
4. Triads and seventh chords (in root position and inversions)
5. Chord function/Roman numeral nomenclature
6. Part writing in two and four voices
7. An introduction to the first five works on the Music Department's listening list

Competencies:

Notation/Score Reading

1. Comprehending the pitch and rhythmic/metric structure in a musical example
2. Writing and/or identifying key signatures and scales for any major or minor key
3. Writing and/or identifying melodic and harmonic intervals through an octave
4. Writing and/or identifying triads and seventh chords in root position or inversions

Roman Numeral Analysis

1. Writing Roman numeral analysis that identifies a chord in three ways: 1) its function within a key, 2) its quality, and 3) its inversion (if any)

Part Writing

1. Two-voice part writing according to standard procedures
2. Four-voice “chorale” style part writing according to traditional rules of voice leading

Literature and Analysis

1. Comprehend the role of analysis as the end product of music theory
2. Begin to formulate opinions as to why a composer used certain keys, scales, intervals, rhythms, chords, or voice leading
3. Gain familiarity with the first five selections of the Music Department's listening list

Course Organization

Week	Dates	Chapter/Topic	Homework Assignments (*from Kostka and Payne workbook unless indicated)
1	Aug. 28 30 Sept. 1	Placement exams Chapter 1: Review of fundamentals; notation The major scale; major key signatures	1-1* 1-2, 1-3
2	Sept. 4 6 8	Labor Day, No Class Minor scales; minor key signatures Scale degree names; Intervals (part 1)	1-4 1-5
3	Sept. 11 13 15	Intervals (part 2) Score studies: Vivaldi, "Spring" Score studies; review for quiz	1-7 Vivaldi handout on scales and intervals
4	Sept. 18 20 22	Quiz #1 Chapter 2: Rhythm: durational symbols Meter: simple time signatures	2-1 2-2
5	Sept. 25 27 29	Meter: compound/asymmetrical meters Score studies: Bach, Brandenburg Concerto No. 2; review for quiz Quiz #2	2-3, 2-4 Bach handout on rhythm and meter
6	Oct. 2 4 6	Chapter 3: Triads: qualities and inversions Seventh chords: qualities and inversions Inversion/figured bass symbols	3-1 3-2 3-3; 3-4 [A, B 1, 2]
7	Oct. 9 11 13	Columbus Day, No Class Review for midterm exam Midterm Exam	Study review materials

Chapter 3

Week	Dates	Chapter/Topic	Homework Assignments (*from Kostka and Payne workbook unless indicated)
8	Oct. 16 18 20	Chapter 4: Diatonic Chords: the minor scale Diatonic triads in major Diatonic triads in minor	4-1* A 4-1 B-C 4-1 D
9	Oct. 23 25 27	Diatonic seventh chords in major and minor keys Score studies: Mozart, Symphony No. 40; review for quiz Quiz #3	4-2 Mozart handout on triads and seventh chords.
10	Oct. 30 Nov. 1 3	Chapter 5: Voice Leading: introduction Two-voice writing/counterpoint Notating chords	5-1 Handout 5-2
11	Nov. 6 8 10	Voicing triads and use of parallel motion Score studies: Palestrina, <i>Sicut cervus</i> Score studies: Palestrina, continued	5-3 Palestrina handout on linear writing
12	Nov. 13 15 17	Chapter 6: Root position part writing Four-part textures: repeated roots Root progression by P4 th /5 th ; review for quiz	6-1 6-2
13	Nov. 20 22 24	Quiz #4 Thanksgiving Recess, No Class Thanksgiving Recess, No Class	
14	Nov. 27 29 Dec. 1	Root progression by 3rds/6ths Score studies: Chopin: Polonaise in A \flat , Op. 53, No. 6 Score studies: Chopin, continued	6-3 Chopin handout on chords/ root progressions 6-4
15	Dec. 4 6 8	Root progression by 2nds/7ths Root progression by 2nds/7ths Score studies: review works studied	6-5 A 6-6 B, C Final review handout
16	Dec. 11	Review for final exam.	Study review materials
	TBA	FINAL EXAM	

Teaching Strategies

Classes often begin with a review of the previous evening's homework assignment. Students are encouraged to participate by asking questions and sharing their answers; we put complex examples on the board for review and discussion. Examples that may have multiple correct answers (such as part-writing exercises) afford important opportunities for discussion. On these occasions, various correct options are placed on the board and played at the piano or (more effectively) sung by the class. Students critique these options and offer opinions as to the best solution or solutions.

We use rapid drilling to review basic fundamentals, such as key signatures and intervals (this is more interesting when students are asked to select another student to receive a question, or when the tables are turned and a student is asked to present a problem to the teacher). While this technique serves to solidify abstract understanding of these areas, guided discussions of music literature (score studies) help students understand how these and other musical elements are used in practice. I often ask analytical questions ("Why?") to encourage students to think creatively about a composer's intent in using a particular chord, harmonic progression, rhythm, or voice-leading technique.

Student Evaluation

Quizzes are worth one-half the midterm exam grade, and the midterm exam is worth one-half of the final exam grade. The lowest quiz grade is dropped (or half of the midterm or one-quarter of the final if need be). Makeup quizzes and exams are given at the instructor's discretion and only due to an excused absence. The final grade can also be affected by attendance (students are entitled to one unexcused absence, after which 3 points are deducted from the term grade for each subsequent absence). Additionally, throughout the semester 10 homework assignments are randomly surveyed to see if they have been done and are in good order. Each one counts for 10 points towards an additional quiz grade.

Final letter grades are assigned according to the following point averages: A = 95–100, A- = 90–94, B+ = 87–89, B = 83–86, B- = 80–82, C+ = 75–79, C = 70–74, D = 65–69, F = 64 or below.

Academic Integrity

"Undergraduate students should be aware that their first responsibility as students is to be academically honest" (*The College of Saint Rose Catalogue of Undergraduate Studies*). Students in music theory courses are bound by all of the college's rules regarding academic integrity. The rules, procedures, and penalties for academic dishonesty are reviewed at the beginning of the semester.

MUS 103–104, Ear Training and Solfège 1 and 2

Contributed by Michael Levi

Personal Philosophy

Ear training/aural skills are the most fundamental yet important skills for a musician to develop. Without them, the study of music becomes mathematical and academic. We need to teach these skills carefully, because there are many ways to process this type of information, and students tend to experience success at different rates.

Class Profile

MUS 103–104 and 203–204 are a two-year sequence of courses that develop student proficiency in sight-singing and dictation. The most fundamental and important music skills are developed throughout this

Chapter 3

two-year sequence of ear training. Students learn the processes involved with interpreting and reproducing musical sounds while developing aural/oral proficiency. The product can only be a success if the process is mastered.

The College of Saint Rose offers three sections of the aural skills course sequence, based on level of acceleration. Students are placed into a section by means of a background-experience assessment developed by members of the Music Department. MUS 103, sight-singing and dictation, is a critical course for the development of musicians. AP students who are awarded credit are placed into the most accelerated section (MUS 104) during the second semester. Classes meet twice a week for 50 minutes. All classes meet at the same time, enabling students to change sections as necessary.

Course Overview

Text:

Ottman, Robert. 2004. *Music for Sight Singing*, 6th ed. Upper Saddle River, N.J.: Prentice Hall.

The course involves:

1. Sight-singing using solfège syllables, moveable *do*, and Kodály hand signs.
2. Facility in correctly singing and maintaining a melodic line against one or more other parts.
3. Accuracy and facility in taking melodic dictation.
4. Introduction to harmonic dictation.

Competencies:

Sight-singing

1. Melodies in major keys
2. Intervals of the tonic triad
3. Treble, bass, alto and tenor clefs
4. Duple and triple meter, simple and compound time, syncopation and ties

Melodic Dictation

1. Major and minor melodies
2. Duple and triple meter, simple and compound time, syncopation and ties
3. Diatonic and some chromatic intervals

Harmonic Dictation

1. Simple chord progressions in major and minor keys
2. Two part dictation

I stress to students that competencies are SKILLS. Skills are developed through drill and practice. Class participation is only as effective as individual effort to cultivate personal proficiency in ear training. The responsibility for preparation rests with each student, and skills will vary directly with the amount of practice time.

Course Organization

Week 1

Placement testing—introduction—syllabus and grading procedures explained

Sight-singing: Hand signals—major arpeggio and patterns—echoing—singing pitches from major scales

Dictation: Rhythm—simple-duple and simple-triple patterns; melody—picking single pitches from major scale

Week 2

Sight-singing: Rhythm reading, Ottman chapter 1 (Diatonic Intervals) and beginning chapter 2 (Scale-line Melodies)—discussion of each example before performance, citing phrasing, repetitions, range, starting and ending pitches, etc.

Dictation: Level 1—treble and bass clefs, $\frac{2}{4}$, $\frac{3}{4}$, $\frac{4}{4}$ meter—discussion of strategies and information processing as each example is played—this continues throughout the entire course

Week 3

Sight-singing: Quiz on major arpeggio—continuance of chapter 2, singing 1–2 notes from major scale

Dictation: Level 1—treble and bass clefs, $\frac{2}{4}$, $\frac{3}{4}$, $\frac{4}{4}$ meter continued, picking two pitches from major scale

Week 4

Sight-singing: Chapter 2—discussion of each example before performance citing phrasing, repetitions, range, starting and ending pitches, etc., continued using group and individual singing

Dictation: Quiz—level 1—beginning level 2

Week 5

Sight-singing: Quiz on chapter 2—individual performance; begin chapter 3 (Intervals from the Tonic Triad, Major Keys, Simple Time)

Dictation: Quiz picking two notes from scale—more drill and practice in level 2

Week 6

Sight-singing: Work in chapter 3

Dictation: Quiz level 2, begin level 3

Week 7

Sight-singing: Work in chapter 3 continued

Dictation: Level 3 drill and practice

Week 8

Sight-singing: Quiz chapter 3, begin chapter 4 (Intervals from the Tonic Triad, Major Keys, Compound Time)

Dictation: Level 3 drill and practice continued

Harmonic Dictation: Begin process using I and V chords, major and minor—discussion of FUNCTION and cadence formulas

Week 9

Sight-singing: Work in chapter 4

Dictation: Quiz level 3—introduce level 4

Harmonic Dictation: Continue using I and V chords, major and minor—differentiation

Week 10

Sight-singing: Work in chapter 4 continued

Dictation: Exercises in level 4 continued

Harmonic Dictation: Introduce IV chords, major and minor

Week 11

Sight-singing: Work in chapter 4 continued

Dictation: Exercises in level 4 continued

Harmonic Dictation: Differentiation of i-IV and V chords, major and minor

Chapter 3

Week 12

Sight-singing: Quiz chapter 4, begin chapter 5 (Minor Keys; Intervals from the Tonic Triad, Simple and Compound Time)

Dictation: Exercises in level 4 continued

Harmonic Dictation: Differentiation of i-IV and V chords, major and minor, continued

Week 13

Review for final examination—student requests

Week 14

Final examination—chapter 5, Melodic Dictation level 4, Harmonic Dictation: I-IV-V chord progressions

Teaching Strategies

Dictation

Each class period is divided into segments which target strategies and exercises designed to develop dictation skills in rhythmic, melodic, and eventually harmonic areas. A sequenced curriculum for melodic dictation is used (see the chart at the end of this syllabus). All examples played in class are four measures long. As soon as sufficient material has been mastered in one level, a written quiz is given, and the class moves on to the next level. To ensure that students understand the changes from level to level, they are asked to write a dictation exercise in the new level.

Exercises are played five times on the piano. Playings 1, 2, 3, and 5 are at a moderately slow tempo. Playing 4 is twice as fast to enable students to make musical connections and “chunk” what they hear. I encourage students to discuss how they deal with information processing of music. Students present their problem-solving strategies and successful and unsuccessful attempts at writing exercises. Some of the common strategies include:

- Always getting the beginning and ending on the first playing
- Singing along with each note as it is played
- Notating the rhythm first, then the pitches
- Notating the pitches, then the bar lines, then the rhythm values
- Using algorithms to remember pitch/rhythm patterns

Examples of exercises in different levels are found at the end of this syllabus.

Sight-singing

We work on development of sight-singing skills during each class. Using the textbook, students read through the exercises using the Kodály/Curwin hand signs, moveable *do* solfège (shown at the end of this syllabus), and present features of the exercise to the class. Features may include such items as: motives (both rhythmic and melodic), repetitions, pickups, starting and ending pitches, sequences, inversions, and the like. Armed with this type of information, students then sing the exercise, sometimes in groups, sometimes as individuals. Students develop the techniques of reading ahead, looking for repetitions and patterns, and keeping the tonic in their short-term tonal memory.

Student Evaluation

A student's final grade for the course breaks down this way:

Attendance/participation	10 percent
Quizzes	65 percent
Final Exam	25 percent

Sight-singing quizzes consist of individual performances based upon criteria taken from the different chapters of the Ottman book. Some questions are instructor-developed, and some are taken from the book. Dictation exercises are instructor-developed and are used as an assessment of student progress in the current level of the dictation curriculum.

Four to eight quizzes are usual per semester. Sight-singing quizzes are scored using the general AP sight-singing scoring guideline (rubric), which normally uses a 9-point scale to score eight segments (chunks) of music. Melodic dictation quizzes are scored using the general AP rubric for melodic dictation questions without the “extra point” in the rubric being awarded—therefore, using an 8-point scale for eight segments of music. Harmonic dictation quizzes/questions are scored using the AP rubric for harmonic dictation; 1 point is awarded for each correct soprano and bass pitch, and 1 point is awarded for each correct Roman numeral (and Arabic numeral, as appropriate).

The final examination is in two parts—sight-singing and dictation—and is given on two separate days during the end of semester examination week.

Teacher and Student Resources for Music Courses at Saint Rose

The Music Department has a lab with 12 Macintosh computers containing software such as *Finale*, *Auralia*, *Band-in-a-Box*, and *GarageBand 2*. Students are introduced to these applications during the first weeks of class and encouraged to use them for their own drill and practice. Many students purchase their own copies of selected software for at-home practice. Students are also encouraged to discover online materials and Web sites to assist them with skill development. Various resource materials and CDs are available at the college library, including texts and workbooks for drill and practice, theory texts, and method books.

The college subscribes to a Web site where students can access works from the Music Department's listening list: www.classical.com.

Ear-training Software

Auralia. Fairfield, Vic., Australia: Rising Software. www.risingsoftware.com

eMusicTheory. N.p.: Robert Whelan. www.emusictheory.com

MACGamut. Columbus, Ohio: MacGamut Music Software. www.macgamut.com
(Note: This software is compatible with Macs *and* PCs.)

Practica Musica. Redmond, Wash.: Ars Nova Software. www.ars-nova.com/products.html

Chapter 3

Notation Software

Finale. Eden Prairie, Minn.: MakeMusic. www.finalemusic.com

Sibelius. London: The Sibelius Group. www.sibelius.com

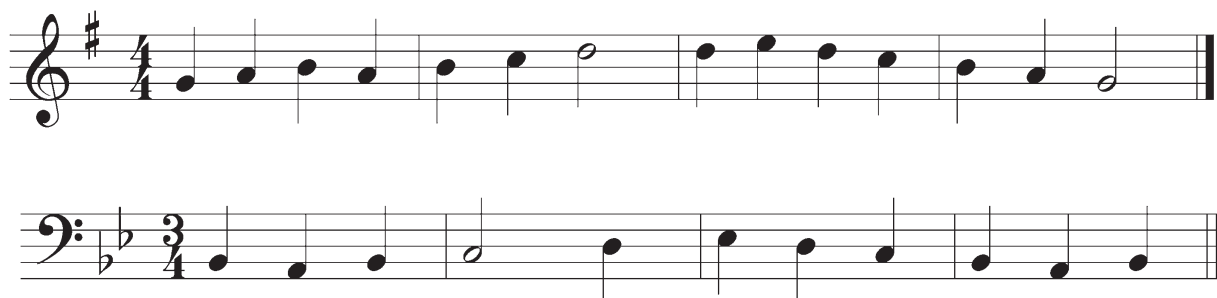
Musical Instrument Software

Band-in-a-Box. Victoria, B.C., Canada: PG Music. www.pgmusic.com

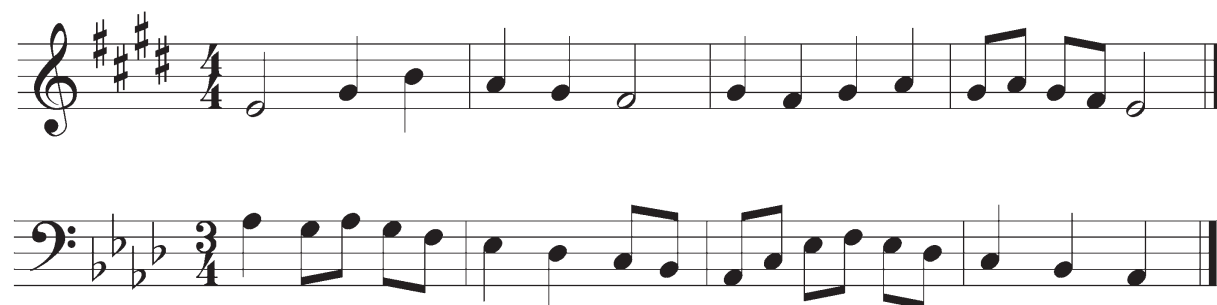
GarageBand. Cupertino, Calif.: Apple Computer. www.apple.com/ilife/garageband

Sample Melodic Dictation Melodies

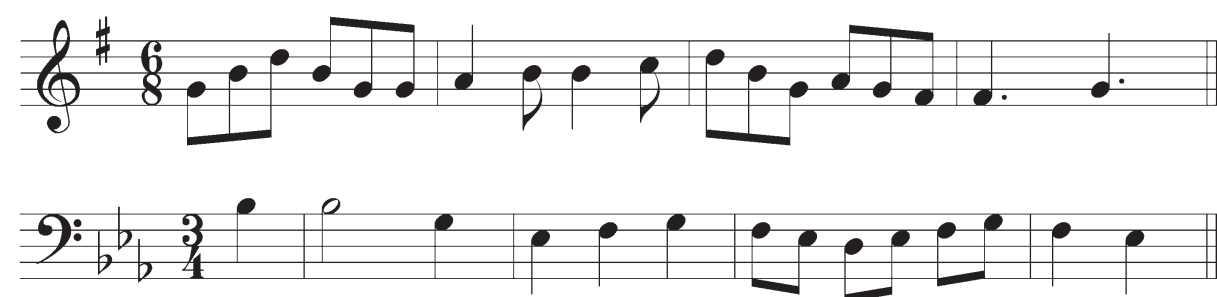
Level 1



Level 2



Level 3



Level 4

Two staves of music for Level 4. The top staff is in bass clef with a key signature of three flats (B-flat, E-flat, A-flat) and a 4/4 time signature. It contains a sequence of eighth and quarter notes, including a triplet of eighth notes. The bottom staff is in treble clef with a key signature of one sharp (F-sharp) and a 4/4 time signature. It contains a sequence of eighth and quarter notes, including a triplet of eighth notes.

Level 5

Two staves of music for Level 5. The top staff is in treble clef with a 4/4 time signature and contains a sequence of eighth and quarter notes, including a triplet of eighth notes. The bottom staff is in treble clef with a key signature of one flat (B-flat) and a 4/4 time signature. It contains a sequence of eighth and quarter notes, including a triplet of eighth notes.

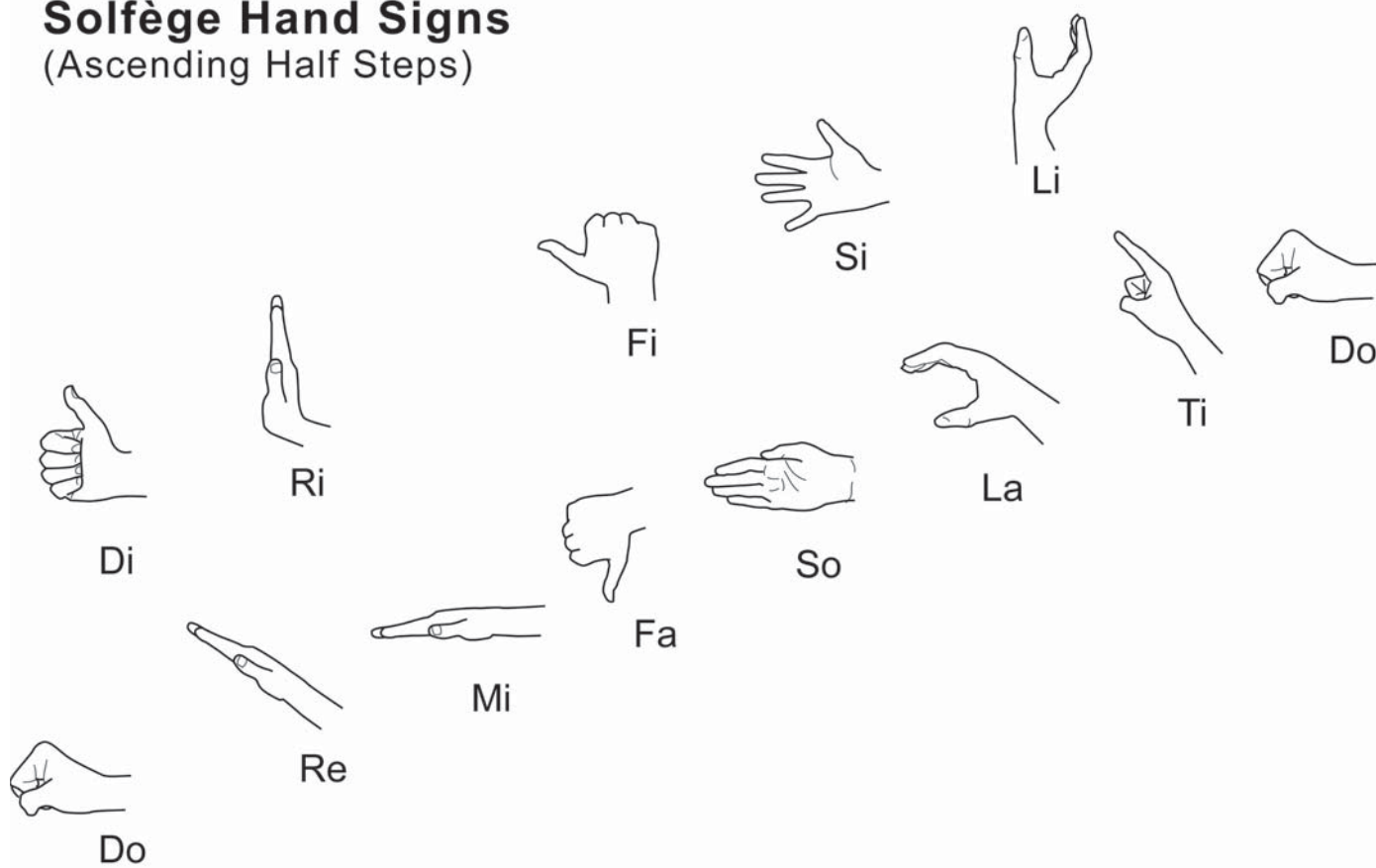
Melodic Dictation Skills Sequence

Level	Keys	Pitches	Melodic Skips	Range	Meter	Note Values	Rests	Pickups
1	M	Diatonic	None	M6	2-3-4/4	Whole, half, quarter	None	None
2	M	Diatonic	1-3-5 up	P8	2-3-4/4	Add dotted half and 8th	None	None
3	M	Diatonic	1-3-5 up and down	P8	Add 6	Add dotted quarter	None	1 beat
4	Mm	Raised 7th (m)	1-3-5-8 up and down	M9	2-3-4-6	Same	Whole, quarter	1 beat
5	Mm	Melodic min	1-5, 5-1, 5-8, 8-5	M10	2-3-4-6	Same	Whole, quarter	1 beat
6	Mm	Melodic min	7-2-5 up and down	M10	2-3-4-6	Same	Whole, quarter	1 beat
7	Mm	Melodic min	Maj/min arpeggio	M10	2-3-4-6	Add 16th	Add eighth	1/2 beat
8	Mm	Chromatic	3rds-chromatic alterations, nonharmonic tones	M10	Add 9	Add dotted 8th	Add dots	1/4 beat
9	Mm	Chromatic	Skips < 7	M10	Any	All	Add sixteenth	1/4 beat
10	Mm	Chromatic	Any skips	P12	Any	All	All	Any

All examples are four measures long and are played five times.

Solfège Hand Signs

(Ascending Half Steps)



Sample Syllabus 4

David Ashcraft

Sahuaro High School

Tucson, Arizona

School Profile

Location and Environment: Sahuaro High School is one of nine comprehensive high schools in the Tucson Unified School District, Arizona's second largest. This urban high school is located on the east side of Tucson, approximately 8 miles from the University of Arizona and in close proximity to Davis-Monthan Air Force Base. Other large Tucson employers include federal, state, and county government entities, and aerospace, defense, and mining companies. Tucson is located 60 miles north of the Mexican border and is a major center for astronomy, the optical sciences, and tourism.

A majority of Sahuaro students reside in the neighborhood. The socioeconomic make-up of the student body is primarily upper-middle class, although 16 percent of students qualify for reduced lunch subsidization. Approximately 15 percent of the student body attends each year under open enrollment. The school population includes National Merit Scholars as well as a large Exceptional Education component. Two percent of students are English Language Learners.

Choral music and general music are not offered consistently in the Sahuaro feeder school pattern, although students typically have access to band and orchestra in the elementary and middle schools. In addition to the students enrolled in choral and instrumental music ensembles at Sahuaro, several students in the music theory program are pianists, guitarists, or engaged in outside music study. The school has been designated a GRAMMY Signature School by the National Academy of Recording Arts and Sciences in recognition of the ongoing excellence of its comprehensive music program.

Grades: 9–12

Type: Public high school

Total Enrollment: 1,950

Ethnic Diversity: The student population includes:

Hispanic/Latino:	20 percent
African American:	7 percent
Asian American:	4 percent

College Record: Thirty percent of graduates attend a four-year college or university. An estimated 35 percent attend the local Pima Community College, and an unknown number attend other institutions of higher learning.

Personal Philosophy

Music theory is the crux, or DNA, of music study. To sing, play, or conduct without benefit of the knowledge afforded by theoretical knowledge and application creates a one-dimensional perspective. Possessing an in-depth understanding of the essence of the music maximizes meaningful interpretation and thorough mastery of the literature. Listening, audiating, and re-creating with integrity are manifestations of musical

Chapter 3

literacy and mastery that may only be accomplished by thoroughly studying the framework and science of sound and music. Music theory is the calculus of our art. It teaches creativity, reasoning, and problem solving. Focused theoretical study provides the additional dimension.

Class Profile

One section of AP Music Theory is offered at Sahuarro, normally every other year, depending on demand. Enrollment ranges from 16 to 24 students. Remedial or beginning music theory courses are not offered at Sahuarro, so students who are interested in taking AP Music Theory must meet with me and provide satisfactory evidence of preparation and knowledge of basic theory principles. Acceptable competency on an instrument or the voice is necessary. At the outset of the term, I give a “get acquainted quiz” covering fundamental topics such as key signatures, triads, and meters.

Course Overview

Music Theory class meets during “0 Hour” (6:45 to 7:30 a.m.) four days per week, excluding Thursday. Because of the limitations of a six-period day, this schedule allows students in all performing ensembles, as well as others who are taking a full course load, to enroll in a seventh class for credit without the need to curtail participation in the performance ensembles. Sixty-minute conference periods on Tuesday and Thursday mornings provide an opportunity for tutoring and independent lab work (e.g., keyboard and sight-singing practice, computer applications). A lab containing 16 Casio CT-670 keyboards is also available during the week, and students use it periodically to review scales, chords, progressions, and cadences. I encourage students to avail themselves of a variety of music theory Web sites for extra drill and practice.

Primary Texts

Harder, Paul, and Greg A. Steinke. 2003. *Basic Materials in Music Theory: A Programmed Course*, 10th ed. Upper Saddle River, N.J.: Prentice Hall.

Steinke, Greg A. 2002. *Harmonic Materials in Tonal Music: A Programmed Course—Parts 1 and 2*. Upper Saddle River, N.J.: Prentice Hall.

Other Resources

Horvit, Michael, Timothy Koozin, and Robert Nelson. 2005. *Music for Ear Training*, with workbook and CD-Rom, 2nd ed. Belmont, Calif.: Wadsworth.

MacGAMUT 2003 (for Mac and Windows). Columbus, Ohio: MacGAMUT Music Software.
www.macgamut.com

Ottman, Robert. 2001. *Music for Sight Singing*, 5th ed. Upper Saddle River, N.J.: Prentice Hall.

Ottman, Robert W., and Paul E. Dworak. 1991. *Basic Ear Training Skills*. Englewood Cliffs, N.J.: Prentice Hall.

Ricci Adams’ Music Theory Web site: www.musictheory.net

Course Objectives

My goal is that at the conclusion of the AP Music Theory course, students will be able to:

- Define basic musical terms and theoretical concepts
- Understand and construct major, minor, chromatic, whole tone, and modal scales
- Demonstrate the ability to construct and analyze major, minor, augmented, and diminished intervals and triads
- Recognize, audiate, and sing or play scales, intervals, triads, rhythms, and melodies
- Sing simple conjunct and disjunct diatonic melodies at sight
- Construct compositions in four-part texture
- Analyze harmonic structure utilizing Roman numerals and figured bass
- Identify basic form and cadences

Although the curriculum described in the *AP Music Theory Course Description* is followed, students are also introduced to valuable information that is not covered on the AP Music Theory Exam, such as acoustics, overtone series, dodecaphonic music, transposition, composition, and arranging. This information is critical for achieving success in higher education music study, as well as for enhancing students' study of music.

Course Planner

BMMT = *Basic Materials of Music Theory*

HMTM = *Harmonic Materials in Tonal Music*

Other = Other Resources

The following outline is based on a 36-week school year:

<u>Week</u>	<u>Content</u>	<u>Chapter/Activities</u>
1	Time, Sound, Acoustics, and Overtone Series	BMMT chapter 1
2	Notation, Clefs, and Enharmonics	BMMT chapter 2
3	Meter, Divisions, and Subdivisions	BMMT chapter 3
4	Note and Rest Values, Tempo and Expression	BMMT chapter 4
5	Time Classification and Rhythm	BMMT chapter 5
6–7	Harmonic and Melodic Intervals (Quality and Quantity)	BMMT chapter 6
8	Basic Scale Structure	BMMT chapter 7
9	Major Scales and Tetrachords with Accidentals	BMMT chapter 8
10–11	Minor Scales and Diatonic/Chromatic Intervals	BMMT chapter 9
12–13	Key Signatures, Relative and Parallel Keys/ Circle of Fifths	BMMT chapter 10
14–15	Triads and Tertian Sonority	BMMT chapter 11
16	Definition of Tonality and Chord Structure	HMTM chapter 1

Chapter 3

<u>Week</u>	<u>Content</u>	<u>Chapter/Activities</u>
17	Structure of Tonality	HMTM chapter 2
18	Root Position Triads, Doubling, and Spacing	HMTM chapter 3
19	Voice Leading	HMTM chapter 4
20–21	First and Second Inversion Triads	HMTM chapter 5
22	Phrase Structure and Cadences	HMTM chapter 6
23	Harmonic Progression	HMTM chapter 7
24	Modulation	Other
25	Techniques of Harmonization	HMTM chapter 8
26	Form (Binary, Rounded Binary, and Ternary)	Other
27	Nonharmonic Tones	HMTM chapter 9
28–29	Seventh Chords and Inversions	Other
30–31	Secondary Triads and Quadrads	Other
32	Practice AP Exam	Other
33–34	Music Research Paper and Class Presentation	Other
35–36	Original Composition Performance	Other

Approximately 30 minutes of sight-singing is incorporated on a weekly basis and is tested at midterm and at the end of each quarter. Listening activities are also completed each week, appropriate to the unit being studied. Students practice single-line, two-part, and four-part dictation independently, utilizing CDs, and I also give them class practice on the piano. Quizzes are administered at the end of each concept or unit. Exams are given at the end of the quarter and semester.

Each student is required to complete a five-page music research paper, subsequently presenting a 15-minute outline of the research in class. Students are also required to create an original composition that is performed for the class at the end of the second semester, utilizing live soloists and ensembles when possible.

Students are expected to participate actively in classroom discussion and demonstration each week. In addition to completing assigned homework, they are required to keep a comprehensive theory notebook containing all handouts as well as homework, quizzes, and exams that are returned. Students also take turns demonstrating concepts using a whiteboard, overhead projector, the voice, or an instrument.

Teaching Strategies/Student Activities

Chorales

When I teach harmonic analysis, nonharmonic tones, and cadences, I incorporate both visual and aural stimuli to help students with recognition and audiation. The chorales of J.S. Bach are useful for this purpose. I select chorales that are pertinent to the topic being studied. Often, I'll place the music on a transparency and project it on a large screen for the entire class to view. The chorales are played on the piano or by student quartets, or I use a recording. Individual work and class discussion follow. This technique assists students in hearing what they see.

Examples of resources for this type of activity include:

371 Four-Part Chorals, Vol. I (nos. 1–198) by J. S. Bach. Published by Edwin F. Kalmus, New York, in 1985.

Four Part Chorales, Chorales 1-50, by J. S. Bach. Available from www.virtualsheetmusic.com/score/Chorales1.html

This Web site offers MIDI keyboard recordings that may be played from the computer or recorded to other media.

Demonstration of Overtones

Because knowledge of overtones assists in the understanding of tuning and vocal and instrumental timbre, as well as the concept of the tonic triad, I use the following demonstrations:

- a) The small c (one octave below middle c) is depressed silently on a piano while the Great C (two octaves below middle c) is struck. Sympathetic vibration will activate the first overtone without it actually being played. The process is repeated depressing the small g, c', e', g', b♭', and c'. Above the seventh overtone (i.e., eighth partial), it is difficult to hear the pitch. This may be tried above a variety of fundamental pitches.
- b) Two clear, evenly matched male or female voices are asked to simultaneously produce an interval of a fifth (i.e., c and g, or c' and g') which, if sung in tune, will produce an audible combination tone, sometimes referred to by singers as an "overtone."
- c) Student instrumentalists are asked to demonstrate the overtone series on selected instruments. For example, string players will continuously cut a given string in half by partially depressing a finger against the fingerboard to produce overtones. A trumpet or trombone player will over blow pitches without the use of valves or a slide to produce the natural overtone series of the instrument.

Enharmonic Exercise

Selected students are asked to go to the staff-lined whiteboard to construct a series of intervals and/or triads on different pitches, utilizing various accidentals. A second set of students is asked to construct the same pitches on the staff below using enharmonic spelling (sounding the same but spelled differently.) A third set of students is asked to test the enharmonic spellings at the piano.

Major and Minor Scale Drill

Students are positioned at electronic keyboards in pairs. They are asked by the teacher/conductor to start playing, at a tempo of 60 bpm, in unison, or in octaves, beginning with the ascending and descending scale of C major, then A minor, and transitioning through all of the major and minor keys (three forms) in the circle of fifths and fourths, keeping the relative major/minor keys together. Correct fingering is not required. Consequently, one finger alone may be used if necessary. The sequence of scales would begin with C major, played as follows: C-D-E-F-G-A-B-C-B-A-G-F-E-D-C-B-A-B-C, etc. The next scale would be G major, followed by the three forms of E minor, continuing through the entire sequence of scales.

Teaching of Form

A variety of forms are introduced and studied throughout the year. One way to solidify a formal concept is through student composition. An example follows:

Theme and Variation

1. Students are asked to select a simple folk song, hymn, nursery rhyme, or patriotic song.
2. The melody of the main theme is written on staff paper.
3. Students are asked to create variations on the given theme (melody only) by using, among others, the following techniques:

Chapter 3

- a. change of meter (from simple to compound, etc.)
- b. augmentation (stretching out the note values)
- c. diminution (compressing the note values)
- d. change of key (relative or parallel minor)
- e. inversion (mirrored contour)
- f. retrograde (backward theme)
- g. ornamentation (trills, turns, nonharmonic tones)

An example from the literature, which is useful for demonstration, is *Variations on America* by Charles Ives (various recordings are available, including concert band, pipe organ, etc.).

Ear Training

My students are required to sing everything that is learned in terms of scales, modes, intervals, triads, quadrads, etc. This serves to solidify the aural aspects of what they see on paper.

Student Evaluation

The criteria I use to determine students' grades are as follows:

Attendance:	20 percent
Classroom Participation:	20 percent
Homework Assignments:	30 percent
Quizzes:	15 percent
Final Exams:	15 percent

Written assignments are due at the beginning of each class session unless otherwise arranged (in the case of excused absences, illness, etc.). Late work is accepted but receives one letter grade lower for each day it is delinquent. Arrangements may be made at my discretion to resubmit assignments for the purpose of improving a grade. Extra credit is not awarded.

Short quizzes are given following each unit, or group of units, throughout the term and a comprehensive exam is administered at the end of each quarter.

Assessment Strategies

One strategy I use for assessment is to compile a student-generated test—each class member constructs questions or problems based on the material from the unit being studied.

A somewhat different approach recognizes that the study of music theory encourages cross-hemispherical brain activity and thought processes similar to those used in math and logic disciplines. Therefore, I might include word problems that require solving pieces of a puzzle, one at a time, in order to “proof out the formula” and arrive at the correct answer. Simpler word problems are posed early in the term, with more complex problems introduced as the students' level of knowledge and skill improves. At first, problems may be done on paper; with mastery, students can come up with the answers without written assistance.

These are examples of assessment questions I give my students:

1. F# is the leading tone in a harmonic minor scale. Spell the dominant triad of the parallel minor to the relative major key.

2. E is the submediant of a major scale. Spell the mediant triad of its parallel, natural minor.
3. If A \flat is the subdominant of a major scale, what is the third of the supertonic triad in the relative minor?
4. If G is the fifth of a tonic triad in a major key, what is the first inversion of the tonic triad in the relative minor?
5. G \times is the leading tone in a harmonic minor scale. Spell the supertonic triad in the relative major key written for three horns in F.

Sample Listening Assignment: Aesthetic Scanning in Music

Selected Composition: Claude Debussy's *Prelude to the Afternoon of a Faun*
(St. Louis Symphony Orchestra, Leonard Slatkin, conductor, Telarc CD 80071)

Music possesses several properties and dimensions that resemble those of visual art and therefore might be broadly analyzed in the same way we would analyze a piece of two-or three-dimensional art. When listening to a live or recorded musical selection, the following aspects (though not exhaustive) might be considered.

- Sensory qualities (i.e., line, shape, texture, timbre, and length)
- Formal qualities (i.e., arrangement of material and the use of specific compositional devices such as repetition, balance, rhythm)
- Expressive qualities (i.e., volume, contrast, phrasing, and mood)
- Technical qualities (i.e., forces used, tempo, articulation, and facility)
- Judgmental qualities (i.e., listener's sense of value of the composition, prediction of compositional period and composer based upon knowledge and previous experience)

Listen to the assigned composition and respond with a minimum of two comments for each of the five elements listed above. In addition, please respond to the following items with a sentence or brief paragraph.

1. What other works have I heard that resemble this composition?
2. What was the composer's intent in writing the piece?
3. Describe a feeling or emotion that was experienced while listening.

Sample Syllabus 5

Todd Clearwater
Klein High School
Spring, Texas

School Profile

Location and Environment: Klein High School is located on the north side of Houston, Texas, in Spring, a suburban community of primarily upper-middle class professionals who commute to work in downtown Houston. Klein High School is part of the Klein Independent School District, which has a total enrollment of over 35,000. Both the school and district have been rated “exemplary” by the Texas Education Agency. Klein High School’s band, choir, and orchestra have received national and/or state recognition for their accomplishments. In 2004 the school received a Grammy Foundation Signature School award.

Grades: 9–12

Type: Public high school in a suburban area

Total Enrollment: 3,400

Ethnic Diversity: The student population includes:

Hispanic/Latino:	12 percent
Asian:	8 percent
African American:	6 percent

College Record: Eighty-nine percent of graduates go on to a two- or four-year college.

Personal Philosophy

I believe that there are three completely valid reasons for students to take an AP Music Theory course. First, at our school this class is the only way that an advanced music student can receive honors/advanced credit for a music class.

Second, and most important, a student may take Music Theory to explore whether or not the academic study of music is something that he or she would like to pursue as a career choice. I find that many students who enjoy singing or playing an instrument imagine that they would like to major in music in college. Some of them find that studying music academically takes a lot of the joy out of it, while others get increasingly turned on to theory as they learn more.

Finally, for those students who are committed to studying music at a college or university, taking AP Music Theory is the best preparation they can have. Even if their AP Exam grade is not high enough for them to place out of the college’s first-year theory course, the opportunity for them to get a head start on learning music theory skills and concepts is invaluable.

Class Profile

Klein High School offers one section of AP Music Theory each year. The class meets daily for 49 minutes during the course of a seven-period day. Class enrollment has consistently been between 18 and 24 students.

Course Overview

Time and emphasis in the Music Theory class is divided roughly as follows:

- 50 percent written theory and composition
- 30 percent ear training
- 20 percent music literature and history

The primary textbook is *Tonal Harmony* by Kostka and Payne, although it is supplemented heavily with original worksheets and readings from other texts. I require the students to purchase Aaron Copland's *What to Listen for in Music* and to use it to study from. I also require students to purchase the *Schirmer Pronouncing Pocket Manual of Musical Terms*.

The music literature and history component of the class is an overview of the timeline of Western music. My goal is to provide students with a sense of how we came to where we are today by exposing them to a chronological stream of examples and discussing the “advances” of each example over the last. We do not spend any more time in one style or period than any other. We do not concentrate on major works or major composers, although they are certainly mentioned. We typically listen to excerpts from two or three works during a class period.

Course Planner

1st six weeks

- Written theory—notation, scales, major and minor keys, modes, intervals, triads, seventh chords, melodic form, melodic cadences, melodic devices, elements of rhythm
- Ear training—beginning interval identification and pre-dictation skills development
- History/appreciation—Early and Renaissance music and composers
- Ear-training quiz every Friday followed by “Listening Day”
- Major test in third and sixth weeks

2nd six weeks

- Written theory—diatonic chords, harmonic cadences, common chord progressions, root position part writing, basic counterpoint
- Composition project
- Ear training—intermediate interval identification
 - o dictation of interval combinations in increasing length
 - o student-centered interval dictation
- History/appreciation—Baroque music and composers

Chapter 3

- Ear-training quiz every Friday followed by “Listening Day”
- Major test in third and sixth weeks

3rd six weeks

- Written theory—figured bass, part writing with inversions
- Composition project
- Ear training—advanced interval identification and melodic dictation
- History/appreciation—classical music and composers
- Ear-training quiz every Friday followed by “Listening Day”
- Major test in third week and semester final in sixth week

4th six weeks

- Written theory—nonchord tones, part writing with seventh chords
- Composition project
- Ear training—intermediate melodic dictation
- History/appreciation—Romantic music and composers
- Ear-training quiz every Friday followed by “Listening Day”
- Major test in third and sixth week
- Composition project due in fifth week

5th six weeks

- Written theory—simple modulations, secondary dominant functions
- Composition project
- Ear training—advanced melodic dictation, beginning harmonic dictation
- History/appreciation—twentieth-century music and composers
- Ear-training quiz every Friday followed by “Listening Day”
- Major test in third and sixth week

- Composition project due in fifth week
- AP practice exams

6th six weeks

- Written theory—Neapolitan chords and Phrygian cadences, beginning orchestration
- Composition project
- Ear training—intermediate harmonic dictation
- History/appreciation—jazz and popular music and composers
- Ear-training quiz every Friday followed by “Listening Day”
- Major test in third week and semester final in sixth week
- Composition project due in fifth week

Teaching Strategies

- I begin every class with aural skills practice. In the beginning of the year the emphasis is on interval identification. In the third six-week period, we move to simple melodic dictation. I do not begin harmonic dictation until the fifth six-week period.
- Since I don’t have a dedicated computer lab to reinforce individualized learning, all aural skills practice is done live. I have devised several competitive games to keep it interesting. We work toward a point where students use their instruments to play intervals for each other. (A student picks an interval and performs it; then another student must identify the interval and perform it as well.)
- When I do get access to a computer lab (about 2 days out of every 10), I have students download *Finale NotePad* software and use it to complete specific assignments. All composition projects are done on *Finale NotePad*.
- Students do a lot of work at the board and often lead the class. The course has a significant amount of lecture but much more hands-on and discovery-type learning.
- After the AP Exam administration, I allow student to make presentations on music of their choice. The goal of each presentation, and the criteria on which it is graded, is to prove the “worthiness” of the selection by using what the presenter has learned about melodic and harmonic content and form.

Student Evaluation

There are three six-week grading periods in each semester. Thus, each six-week grade counts for 28 percent of the semester average, and the semester final exam counts for 16 percent. Grades are numerical on a 100-point scale, with 70 being a passing grade.

Chapter 3

Each six-week grade breaks down this way:

- Fifty percent is determined by major tests, composition projects, and presentations. Major tests are a mixture of multiple-choice, short-answer, and free-response questions. Composition projects are a major component of the grade for each grading period following the first grading period.
- Thirty percent is determined by the notebook students turn in at the end of each grading period. The notebook consists of lecture notes, class worksheets, homework assignments, and test corrections.
- Twenty percent is determined by anything having to do with aural skills but primarily the weekly aural skills' quizzes.

Teacher Resources

Texts used to prepare for class:

Burkhart, Charles. 2004. *Anthology for Musical Analysis*, 6th ed. Belmont, Calif.: Wadsworth.

Copland, Aaron. 2002. *What to Listen for in Music*, rev. ed. with forward and epilogue by Alan Rich and introduction by William Schuman. New York: Signet Classics. (Originally published in 1939 by Whittlesley House, McGraw-Hill, London.)

Kostka, Stefan, and Dorothy Payne. 2004. *Tonal Harmony*, 5th ed. Boston: McGraw-Hill.

Ottman, Robert. 1998. *Elementary Harmony: Theory and Practice*, 5th ed. Upper Saddle River, N.J.: Prentice Hall.

Palisca, Claude V., ed. 2001. *Norton Anthology of Western Music, Vols. 1 and 2*, 4th ed. New York: W. W. Norton.

Student Activities

Once students are able to recognize triads and seventh chords in all their inversions, I take a simplified Bach chorale and have them work in groups to do a survey of the number of the various chord types (tonic, supertonic, etc.), various types of root movement (by fifth, by second, by third), and types of inversions (root, first, second, third). The goal is to impress upon them the relative frequency of tonic and dominant chords, first inversions, and root movement by fifth.

Each Friday, following the weekly ear-training quizzes, the remaining class time is used to address the music history component of the class through listening to recordings of a wide variety of music. We begin the year by listening to selections from the *Norton Concise Recorded Anthology* that accompanies an early edition of the *Norton Anthology of Western Music*. We progress through the year roughly in chronological order. Individual selections are presented, heard, and discussed; we consider the place each piece occupies in the music history timeline, as well as issues of form, instrumentation, advancements in harmonic structure, and technology. As we get into Romantic and twentieth-century music, I supplement the recorded anthology with recordings from my own library. Late in the year there is an emphasis on jazz and other popular forms of music.

Composition projects are assigned beginning in the second grading period:

2nd six weeks—melodic composition

Students are required to compose four melodies that incorporate their understanding of phrases, cadences, and the various melodic devices. The melodies should be distinctly different from one another and yet be compatible in such a way that they might be combined to form the basis for a larger work. There are no limitations as to key, meter, rhythmic simplicity, or complexity. Projects are graded on originality, adherence to a key center, recognizable form, and “performability.”

3rd six weeks—melody with block or arpeggiated chord accompaniment

Students are required to create an original melody with chordal accompaniment that can be performed on piano. The minimum length is 16 measures. Projects are graded on originality, adherence to a key center, recognizable form, and “performability.”

4th six weeks—trio or quartet for like instruments

Students are required to compose a chorale for three or four voices playable by a trio or quartet of like instruments. The minimum length is 16 measures. Projects are graded on acceptable voice leading, adherence to a key center, recognizable form, and “performability.”

5th six weeks—brass quintet, woodwind quintet, string quintet, or vocal quintet

Students are required to compose a polyphonic piece for quintet. The minimum length is 32 measures. The piece must modulate from the original key to a closely related key at least once. Any vocal work must utilize an acceptable text. Projects are graded on originality, adherence to a key center, recognizable form, and “performability.”

6th six weeks—larger work

Students are required to compose a theme and two variations for a minimum of eight players. Choice of instrumentation is flexible but must be approved by the instructor. The theme must be at least two 8-measure periods in length. Any vocal work must utilize an acceptable text. Projects are graded on originality, adherence to a key center, recognizable form, and “performability.”

Sample Syllabus 6

Robert Curry

Highland High School

Salt Lake City, Utah

School Profile

School Location and Environment: Highland High School is located in the southeast portion of Salt Lake City, roughly three miles from the University of Utah. The school is in an urban setting, with approximately 54 percent of the student body qualifying for the federal free or reduced-price lunch program. Thirty-six percent of Highland students are English language learners or have limited English proficiency.

For several years Highland's fine arts programs have been recognized for excellence. In early 2005, the Salt Lake City Board of Education granted Highland permission to develop a school-within-a-school arts academy. About 150 students per year transfer to the school because of its strong academic program.

Grades: 9–12

Type: Public high school

Total Enrollment: 1,810

Ethnic Diversity: The student population includes:

Hispanic/Latino	26 percent
Asian	8 percent
African American	5 percent

College Record: Approximately 60 percent of Highland graduates attend two- or four-year colleges.

Personal Philosophy

I believe that the more a student understands about the building blocks of music used by composers and musicians, the better a musician the student will become. This means studying harmony as well as vocabulary, historical background, and formal structure. The typical music theory student does not intend to be a music major in college but desires a deeper understanding of an art form he or she loves. I spend a great amount of time in ear training on basic skills such as scale, interval, and triad identification, and simple melodies for dictation and sight-singing. I make an effort to ensure that certain basic skills are mastered, whether it is in written or aural work.

Class Profile

Highland High School offers one section of AP Music Theory each year. The section size varies from a few students to 20 or more, depending on interest, scheduling availabilities, etc. Students who wish to study Music Theory are strongly encouraged to be enrolled concurrently in a music ensemble.

For the past seven years Highland has been on an A/B (alternating days) block schedule. Classes are 82 minutes long every other day. During the class period, time is devoted to lecture, discussion, practice drills, and ear training. I often allow students to begin homework assignments in class to ensure they understand concepts before leaving the room.

Course Overview

At Highland High School, AP Music Theory is designed for students who need it for career study as well as those who desire it for enrichment. While the main emphasis is placed on music of the Common Practice period (1600–1750), music of other stylistic periods is also studied.

Course Objectives

At the end of the course, students should be able to:

- a. Notate pitch and rhythm in accordance with standard notation practices
- b. Read melodies in treble, bass, and movable C clefs
- c. Write, sing, and play major scales and all three forms of minor scales
- d. Recognize by ear and by sight all intervals within an octave
- e. Use the basic rules that govern music composition
- f. Harmonize a melody with appropriate chords using good voice leading
- g. Analyze the chords of a musical composition by number and letter name
- h. Transpose a composition from one key to another
- i. Express musical ideas by composing and arranging
- j. Understand and recognize basic musical forms: ternary, binary, rondo, etc.
- k. Write simple rhythmic, melodic, and harmonic dictation

Textbooks

Brye, Joseph. 1965. *Basic Principles of Music Theory*. New York: Ronald Press.

Kostka, Stefan, and Dorothy Payne. 2000. *Tonal Harmony with an Introduction to Twentieth-Century Music*. 4th ed. New York: McGraw-Hill.

Ottman, Robert. 1998. *Elementary Harmony: Theory and Practice*. 5th ed. Upper Saddle River, N.J.: Prentice Hall.

Course Planner

This schedule is only approximate, as classes may move slower or faster from one year to another. Written homework and reading assignments are given at each class meeting. Students are also assigned specific exercises on the Horvit/Koozin/Nelson CD (see Teacher Resources below) to drill ear training outside of class. In general, I try to devote about one third of each class meeting to ear training—sometimes more, sometimes less, depending on the amount of new material discussed during class. I have cross-referenced the schedule to three popular texts.

Weeks 1–2 (5 class meetings)

Written skills: notation, key signatures, time signatures, scales and modes; Kostka/Payne chapters 1 and 2; Brye chapter 1; Ottman chapters 1 and 2.

Ear training: melodic dictation, 3–5 note patterns, sing scales.

Chapter 3

Weeks 3–4 (5 class meetings)

Written skills: intervals including inversions, continue to drill scales and key signatures, review Kostka/Payne chapters 1 and 2; Brye chapter 2; Ottman chapter 2.

Ear training: write short stepwise melodies (7–12 notes), introduce intervals following Benward sequence (M-m 2 and M-m 3, then add P4 and P5), sing scales.

Weeks 5–6 (5 class meetings)

Written skills: triads and seventh chords.

Ear training: continue to drill scales and short stepwise melodies, add another set of intervals following the Benward book sequence, recognize triad quality and inversion; Kostka/Payne chapters 3 and 4; Brye chapter 3; Ottman chapter 2.

Weeks 7–9 (7–8 class meetings)

Written skills: triad and chord identification, introduction to part writing and harmonic progression; Kostka/Payne chapters 5 and 6; Brye chapter 4; Ottman chapters 4 and 5.

Ear training: continue to drill scales, triad quality, and intervals (add M-m 6), short stepwise melodies.

End of first grading term

Weeks 10–13 (10 class meetings)

Written skills: writing short progressions with given soprano or bass, concentrating on primary triads in root position. Discuss writing good melodies. (At this point I frequently include a couple of lessons on melody writing using simplified first-species counterpoint rules or soprano-bass counterpoint, as the Kostka/Payne text refers to it. Students learn to recognize harmonic intervals, parallel fifths, and octaves, work some with modes, and, I hope, learn to write melodies that are mostly conjunct with good shape.) Kostka/Payne chapters 6 and 7; Brye chapter 5; Ottman chapters 5 and 6

Ear training: test basic skills on triad and scale identification, identify all intervals, continue to drill short melodies and sing stepwise melodies. (If students are ready, I start to add melodies with small skips.)

Weeks 14–15 (5 class meetings)

Written skills: extend length of progressions, add first inversion triads. (While I still concentrate on primary triads, some secondary triads begin to creep into homework.) Kostka/Payne chapter 8; Brye chapter 6; Ottman chapter 9.

Ear training: by this point (late November or early December), I give a short test on triad, scale, and interval identification nearly every class meeting—mostly to keep skills sharp—while we begin to concentrate on more challenging melodies and harmonic progressions using I and V. Sight-singing is still simple, mostly stepwise melodies.

Weeks 16–18 (7–8 class meetings)

Written skills: introduce second inversion triads; Kostka/Payne chapter 9; Brye chapter 7; Ottman chapter 9.

Ear training: basic skills tests continue. Harmonic progressions add the IV triad. Melodic dictation and sight-singing stay within the same parameters.

End of second grading term

Weeks 19–21 (7–8 class meetings)

Written skills: introduce V^7 and inversions. Homework assignments are simplified somewhat so students can concentrate on V^7 and correct resolution. Kostka/Payne chapter 13; Brye chapter 8; Ottman chapter 13.

Ear training: basic skills tests continue. Harmonic dictation continues to concentrate on primary triads and V⁷, but inversions are added. Melodic dictation and sight-singing begin to include melodies with small skips.

Weeks 22–23 (5 class meetings)

Written skills: introduce secondary triads and their inversions. Homework exercises become longer. I may give students an 8- or 12-measure hymn melody to harmonize. Kostka/Payne review chapter 7; Brye chapter 9; Ottman chapters 10 and 14.

Ear training: harmonic dictation adds the ii triad. Melodic dictation and sight-singing remain the same.

Special project: short composition assigned. There should be enough harmonic vocabulary and creativity to write a composition by now. I establish parameters only. The composition will be due at the end of the term.

Week 24 (2–3 class meetings)

Written skills: introduce nonharmonic tones. Homework includes figured-bass exercises with limited nonharmonic tones. Kostka/Payne chapters 11 and 12; Ottman chapters 11 and 12.

Ear training: introduce identification of nonharmonic tones. Other dictation continues with the same skills.

Weeks 25–26 (5 class meetings)

Written skills: homework includes all triads and nonharmonic tones and may include a given melody, a given bass line with figured bass, a mix of partial melody and partial bass line, and drills of part-writing skills. Kostka/Payne review chapters 7–13; Brye review chapters 5–9; Ottman review chapters 9–14.

Ear training: harmonic dictation starts to add other triads. Other dictation continues with the same skills.

Week 27 (2–3 class meetings)

I administer the first practice AP Exam.

Composition projects are due and performed in class.

End of third grading term

Weeks 28–29 (5 class meetings)

Written skills: introduce secondary functions (secondary dominant and secondary leading tone chords) and phrase structure; Kostka/Payne chapter 17; Brye chapters 11 and 12; Ottman chapter 18.

Ear training: harmonic dictation includes all triads. Melodic dictation and sight-singing become more complex. Start to add phrase structure and small form identification in the manner of the Benward text (see Teacher Resources below).

Week 30 (2–3 class meetings)

Written skills: introduce modulation to closely related keys, introduce contrapuntal devices, and review melody writing. Homework is longer and more complex. Add a Bach chorale analysis project. Kostka/Payne chapter 18; Brye chapter 10; Ottman chapter 18.

Ear training: more of the same; play melodies on different instruments to expose students to something other than piano sounds.

Week 31 (2–3 class meetings)

I administer the second practice AP Exam.

Weeks 32–33 (5 class meetings)

During the weeks of AP Exams, because I have students who take several exams, class meetings typically consist of AP style free-response problems, vocabulary review, or something similar.

Chapter 3

Weeks 34–36 (5–8 class meetings, depending on school calendar)

After the AP Exam we decide as a group what to tackle next. In the past, classes have chosen composition projects or written arrangements. We have analyzed a Haydn or Mozart symphony for general harmonic context and form. Students may want a style period overview. I am open to almost any suggestion that keeps the class involved in learning about music.

Teaching Strategies

I believe in teaching to mastery. Up to one third of each class may be spent in drill work on a white board. We work problems together; I might write what students suggest; students may write solutions on the board individually or in groups. Students are encouraged to drill key signatures, intervals, and triad construction until it becomes automatic for them. Timed quizzes are given periodically to help them reach this level. For example, I might ask students to build 10 triads with accidentals in three minutes or identify 20 key signatures in two minutes. I gradually increase the amount of work and decrease the amount of time.

I find aural skills challenging to teach as well as challenging for students to develop and master. Students may possess a good sense of relative pitch for their instrument or voice but be unable to relate it to written work or transfer it to piano dictation. Since I try to make ensemble rehearsal an extension of Music Theory class for those students in both, I will stop rehearsal for a short time and point out problems or concepts we have discussed in Music Theory. To help transfer and aid cohesion during theory class and during ensemble rehearsal, I teach sight-singing using numbers rather than solfège. I use Stephen Melillo's *Function Chorales* as warm-up material in my instrumental ensemble classes. *The Function Chorales* are simple progressions written by number charts rather than standard notation. Melillo's idea is that any chorale can be played in any key. Ideally, students in an ensemble are learning to tune triads and chords, to hear that the third of the major triad needs to be lowered slightly to be in tune, that scale degrees have different characteristics, and that they need to listen to balance the ensemble. When those students come into Music Theory class, they have a basic understanding that 1, 3, and 5 of the scale is the tonic triad, and so on. When we sight-sing using numbers, they begin to see a larger picture and put things together. In the years since I began taking this approach, my ensembles have performed with better intonation as student musicians develop the aural skills that relate to performance. These students realize that developing aural skills helps them become better performers.

With the recent implementation of a piano lab in our school, we are developing a keyboard component for the AP Music Theory course. Students will utilize the keyboards for a variety of exercises, including developing the skills necessary to play some homework assignments, harmonic progressions, and melodies.

In preparation for the AP Music Theory Exam, we take two Released Exams in their entirety. During several days in April (depending upon vacations), timed quizzes given in class use individual free-response questions from Released Exams or problems I have developed based on AP Exam-type questions. We also discuss the psychology of test-taking and the importance of reading carefully to understand what a multiple-choice question is really asking.

Technology is becoming increasingly important to musicians. I encourage students to download *Finale NotePad* for personal use. Composition assignments are completed using computer-generated notation. I have had students e-mail homework to me after they complete it in *NotePad*. Sometimes I offer work that can be completed for extra credit, and this work must be completed on the computer. I encourage students to use the Web site www.musictheory.net for drill and review. In addition, this year I am assigning sections of the Horvit/Koozin/Nelson *Music for Ear Training* CD-ROM.

Student Evaluation

I rarely give tests. Instead, I rely on daily homework assignments. I offer students the opportunity to correct mistakes for partial credit on early assignments (intervals, triads). During the second and third grading terms, I grade an in-class ear training quiz once per week. The goal is to have students master the material. Special projects, such as short compositions, may be added during the third and/or fourth term(s). Written assignments count for 80 percent of the final grade and ear training assignments, 20 percent.

Teacher Resources

Benward, Bruce, and J. Timothy Kolosick. 2000. *Ear Training: A Technique for Listening*. 6th ed. Boston: McGraw-Hill.

Berkowitz, Sol, Gabriel Fontrier, and Leo Kraft. 1986. *A New Approach to Sight Singing*. 3rd ed. New York: W. W. Norton & Company.

Curry, Vicki. 2006. *Introduction to Music Theory*. CD-ROM. Ann Arbor, Mich.: Copley Custom Textbooks.

Horvit, Michael, Timothy Koozin, and Robert Nelson. 1995. *Music for Ear Training with CD-ROM and Workbook*. 2nd ed. Boston, Wadsworth.

Melillo, Stephen. n.d. *Function Chorales*. CD-ROM. Smithfield, Va.: Stormworks.

Ottman, Robert. 1986. *Music for Sight Singing*. 3rd ed. Englewood Cliffs, N.J.: Prentice Hall.

Student Activities

Attached are some sample homework assignments.



Chapter 3

Composition Project 2

Write a composition for brass quartet (two trumpets, F horn, and trombone or two trumpets and two trombones). The composition should be at least three 8-measure periods long, either parallel or contrasting periods, and be in ABA or ABA' form overall. Use the following guidelines:

1. Your working copy should be in pencil.
2. Your chord vocabulary should be restricted to tonic, subdominant, dominant, and inversions, and simple nonharmonic tones.
3. You may compose in either strict (block) or free style.
4. The final version should be in Flair-type black ink or in computer-generated notation and ready for performance with parts and score.
5. First draft due January 7. Final draft due January 14.
6. Set up your score in this manner for your working copy:

Title

1st Trumpet in B♭							
2nd Trumpet in B♭							
Horn in F							
Trombone							

Name: _____

Triad Worksheet #5

Write the requested triads in four part style. Use quarter notes to show stem direction.
Do not exceed given voice ranges.

F: I⁶ IV vi V B: ii⁶ I⁶₄ IV⁶ viio⁶

G: V⁶ vi⁶ I IV⁶₄ a: v i⁶ iio⁶ III+⁶

e: i VI i⁶₄ V bb: VI⁶ iv⁶ V i

Using the given note as the bass voice, write the remaining notes of the requested triad and analyze.

M R M 3rd m R M d 3rd m 5th M R M R

B^b:

Sample Syllabus 7

Amelia Sharp Farlow

Parkview Arts/Science Magnet High School

Little Rock, Arkansas

School Profile

Location and Environment: Parkview Arts/Science Magnet High School is Arkansas' first and only complete interdistrict magnet high school. Students apply through Little Rock, North Little Rock, and Pulaski County School Districts and are selected through a lottery system. They enroll in dance, drama, band, orchestra, vocal music, visual arts, or science and follow an expanded curriculum in their specialized area. In addition to offering specialized arts and science course sequences, Parkview has a comprehensive high school curriculum that includes 26 AP classes.

Elective courses in the Music Department include six choirs, four orchestras, woodwind methods, brass methods, percussion methods, four band ensembles, and four levels of music theory. Approximately 200 students are regularly enrolled in music theory courses, with 50 students taking either AP Music Theory or a class for students in the pre-AP program.

Parkview has been rated in the top 1 percent of national magnet programs; it was named a "School of Distinction" and received a "School of Merit" award from the Magnet Schools of America association. The U.S. Department of Education designated Parkview as a "Blue Ribbon School" for overall excellence and equity in education for all students.

Grades: 9–12

Type: Public magnet high school

Total Enrollment: 1,148

Ethnic Diversity: The student population includes:

African American:	49 percent
Hispanic/Latino:	4 percent
Asian/Pacific Islander:	2 percent
Other:	3 percent

College Record: Seventy-eight percent of graduates attend four-year colleges, while 14 percent attend two-year colleges or trade schools.

Personal Philosophy

As a college student, I was privileged to have a wonderful instructor, Joseph Wilcox Jenkins, who taught me the importance of music theory in the creation of great music. Every theory concept was taught through a composition assignment that challenged us to create and perform music that demonstrated our understanding of each new discovery. It was enlightening and enriching and created in me a passion for instilling a similar love of music theory in my students.

For the past 19 years, I have been able to work at getting a comparable appreciation and understanding across to my students by teaching music theory at Parkview. I begin each school year by letting my students

know that music theory is designed to make them better performers. Special care is given to the selection of repertoire that will reinforce the concepts we study at each theory level. In the lower-level classes, those pieces are primarily taken from piano literature that students must also perform. At the upper levels, we often use larger works that require in-depth analysis and performance on major instruments.

My instructional goals for AP Music Theory include supplying my students with the skills and knowledge they need to successfully complete a rigorous college curriculum in music theory, not merely pass the AP Exam. At Parkview, the best musicians are enrolled in AP Music Theory. Our music directors demand a full score with parts properly transposed and accurate notation before they will give “student arrangements” to their classes to perform. Virtually all of the student composers and arrangers are in either a pre-AP program or AP Music Theory class.

Finally, even students who do not pass the AP Exam receive an excellent music theory education not otherwise accessible without the AP curriculum. I am glad I can contribute to that enrichment.

Class Profile

The music faculty at Parkview Arts/Science Magnet High School consists of two choir directors, two band directors, an orchestra director, and one full-time music theory specialist. All Music Department magnet students are required to take one year of music theory. Advanced students may begin with the second-year class with the permission of the instructor. We offer four sections of Music Theory I, a course which includes one semester of piano fundamentals and one semester of music history; three sections of Music Theory II; two sections of Music Theory III; and one section of AP Music Theory IV. Frequently, a few students re-enroll in AP Music Theory IV and work from a different textbook while completing numerous special studies. Students are encouraged to take Music Theory III before enrolling in AP Music Theory IV; however, the department chair may make exceptions.

Classes are taught in a piano lab equipped with 24 electronic keyboards and a small computer workstation with *Finale* music notation software and tutorial programs to aid in teaching music fundamentals. We operate on an alternating A/B block schedule of four 90-minute classes each day. After-school tutoring is available in the piano lab, when requested.

Course Overview

Primary Texts

One of my biggest challenges has been to select a text that includes all the skills delineated by the AP Music Theory curriculum. *The Musician's Guide* books have managed to give me those materials with a theory and analysis textbook, an anthology with CDs, a student workbook with plenty of drills, and an aural skills text that includes dictation and sight-singing practice.

Clendinning, Jane Piper, and Elizabeth West Marvin. 2005. *The Musician's Guide to Theory and Analysis*, with *Workbook* and *Anthology*. New York: W. W. Norton.

Kostka, Stefan, and Dorothy Payne. 2004. *Tonal Harmony with an Introduction to Twentieth-Century Music*, 5th ed. New York: McGraw-Hill.

Ottman, Robert. 2004. *Music for Sight Singing*, 6th ed. Upper Saddle River, N.J.: Prentice Hall.

Palisca, Claude V., ed. 1988. *Norton Anthology of Western Music*, Vols. 1 and 2, 2nd ed. New York: W. W. Norton.

Chapter 3

Phillips, Joel, Jane Piper Clendinning, and Elizabeth West Marvin. 2005. *The Musician’s Guide to Aural Skills, Vol. 1*. New York: W. W. Norton.

Course Planner

FIRST NINE WEEKS

PART I: BUILDING A MUSICAL VOCABULARY

(Note: “Parts” in this syllabus refer to corresponding sections of the Musician’s Guide and, in some instances, are presented out of order.)

Week 1 *Overview of AP Music Theory Course Description book*

Although students should be aware of the expectations for this class, a close perusal of the materials produced by the College Board has helped me to clarify the advanced content for the course with them. I administer the sample exam questions found in the Course Description during the second class session. We complete the sample free-response questions as a class, including the sight-singing exercises. I have compiled a checklist of the theory concepts required to answer each item, and we use it as we review our tests and make the appropriate corrections.

Chapters from *The Musician’s Guide to Theory and Analysis*, Textbook and Anthology; *Guide to Aural Skills*, Workbook

Week 1	Chapter 1	Pitch and Pitch Class
Week 2	Chapter 2	Beat, Meter, and Rhythm: Simple Meters
Weeks 3–4	Chapter 3	Pitch Collections, Scales, and Major Keys
Week 5	Chapter 4	Minor Keys and Diatonic Modes
	Chapter 5	Beat, Meter, and Rhythm: Compound Meters
Week 6	Chapter 6	Pitch Intervals
Weeks 7–8	Chapter 7	Triads and Seventh Chords
Week 9	<i>Part 1 Exam</i>	

Sight-Singing

Chapters from *Music for Sight Singing*

Week 1	Chapter 1	Introduction to Solfège/Simple Meter
Week 3	Chapter 2	Scale Line Melodies/Simple Meter
Week 5	Chapter 3	Intervals from the Tonic Triad, Major Keys/Simple Meter
Week 7	Chapter 4	Intervals from the Tonic Triad, Major Keys/Compound Meter

SECOND NINE WEEKS

This nine-week period is riddled with partial weeks because of the state teacher convention (2 days), Thanksgiving break (3 days), December holiday break (10 days), and semester exams (Week 9). Students in this class are also advanced ensemble musicians and are frequently scheduled to perform during the school day. *Individualized pacing is a necessity to teach these theory concepts and to ensure the proficiency of all students.*

PART II: LINKING MUSICAL ELEMENTS IN TIME

Chapters from *The Musician's Guide to Theory and Analysis*, Textbook and Anthology; *Guide to Aural Skills*, Workbook

Weeks 1–2	Chapter 8	Intervals in Action (Two-Voice Counterpoint) Supplement with Chapter 8: Voice Leading in Two Voices (from Bruce Benward's <i>Music in Theory and Practice</i>)
Week 3	Chapter 9	Melodic and Rhythmic Embellishment in Two-Voice Composition
Week 4	Chapter 10	Notation and Scoring
Weeks 4–5	Chapter 11	Voicing Chords in Multiple Parts: Instrumentation Instrumental arranging projects are assigned. Each piece must have at least two transposing instruments (not counting octave displacements). All work must be saved to disk. <i>Finale</i> or <i>NotePad</i> notation software must be used.

Week 5 *Part II Exam*

PART III: THE PHRASE MODEL

Chapters from *The Musician's Guide to Theory and Analysis*, Textbook and Anthology; *Guide to Aural Skills*, Workbook

Week 6	Chapter 12:	The Basic Phrase Model: Tonic and Dominant Voice-Leading
Week 7	Chapter 13:	Embellishing Tones
Week 8	Chapter 14:	Chorale Harmonization and Figured Bass
Week 9	<i>Semester Exams—No Regularly Scheduled Classes</i>	

Sight-Singing

Chapters from *Music for Sight Singing*

Week 1	Chapter 5	Minor Keys: Intervals from the Tonic Triad/Simple and Compound Meters
Week 2	Chapter 6	Intervals from the Dominant Triad: Major and Minor Keys
Week 3	Chapter 8	Further Use of Diatonic Intervals
Week 4	Chapter 9	Intervals from the Dominant Seventh Chord

Chapter 3

PART II—Melody: Diatonic Intervals/Rhythm: Subdivision of the Beat

Week 5	Chapter 10	Rhythm Dictation Practice
Week 6	Chapter 11	Melody: Intervals from the Tonic and Dominant Triads
Week 7	Chapter 12	Further Use of Diatonic Intervals

THIRD NINE WEEKS

Chapters from *The Musician's Guide to Theory and Analysis*, Textbook and Anthology; *Guide to Aural Skills*, Workbook

Week 1	Chapter 14	Chorale Harmonization and Figured Bass
Week 2	Chapter 15	Expanding the Basic Phrase: Leading-Tone, Predominant, and $\frac{6}{4}$ Chords
	Chapter 16	Further Expansions of the Basic Phrase: Tonic Expansions, Root Progressions, and the Mediant Triad
Week 3	Chapter 17	The Interaction of Melody and Harmony: More on Cadence, Phrase, and Melody
Week 4	Chapter 18	Diatonic Sequences
Week 5	Chapter 19	Intensifying the Dominant: Secondary Dominants and Secondary Leading-Tone Chords; New Voice-Leading Chords
	Chapter 20	Phrase Rhythm and Motivic Analysis

PART V: MUSICAL FORM AND INTERPRETATION

Week 6	<i>Part III Exam</i>	
	Chapter 26	Popular Song and Art Song
Week 7	Chapter 27	Variation and Rondo
	Chapter 23	Binary and Ternary Forms (from Part IV)
Week 8	Chapter 28	Sonata-Form Movements
	Chapter 29	Chromaticism
Week 9	<i>Part V Exam</i>	

Sight-Singing

- 8-measure excerpts from choral literature
- Teacher-composed 8-measure phrases
- Student-composed 8-measure phrases

FOURTH NINE WEEKS

PART IV: FURTHER EXPANSION OF THE HARMONIC VOCABULARY

Chapters from *The Musician's Guide to Theory and Analysis*, Textbook and Anthology; *Guide to Aural Skills*, Workbook

Week 1 Chapter 21 Tonicizing Scale Degrees Other Than V

Chapter 22 Modulation to Closely Related Keys

Week 2 Chapter 24 Color and Drama in Composition

Weeks 1–6 Required exams from the *Musician's Guide* Web site

Weeks 1–6 Dictation exercises—melodic and harmonic

Weeks 1–6 Free-response question exercises

Weeks 1–6 Recorded sight-singing exercises

Weeks 1–6 In-depth aural analysis of literature—class work/discussion

Weeks 1–6 Students complete teacher-designed exams based on released AP Exam materials.

Weeks 3–5 Complete released AP Music Theory Exams

All students are administered two recorded sight-singing tests comparable to those used on the AP Exam.

Weeks 7–9 Student arranging assignments

Overview of each chapter summary from *Tonal Harmony*:

Part I—Fundamentals

Part II—Diatonic Triads

Part III—Diatonic Seventh Chords

Part IV—Chromaticism

After-school study sessions are offered to students who desire extra practice sessions.

Teaching Strategies/Student Activities

The following is my favorite set of lessons for my AP Music Theory students. It requires that they take a great deal of responsibility for the success or failure of the outcome. If students don't complete the assignments on time, it is virtually impossible to receive credit for late work.

Session I: Introduction to the Chord Classification System

One of the more challenging concepts to teach advanced music theory students is the importance of establishing a good foundation for chord selection. Many of the students in my AP class have won numerous talent competitions for composition and have had their pieces performed by ensembles at the school. As such, they have a tendency to think of very complicated chord changes, with an emphasis on popular music. I begin by presenting the major premise of the system, to help them make chord choices that are in the Common Practice style covered in the AP Music Theory curriculum.

The tonic class includes only the I chord. It is the most stable and therefore can be approached from any class in the system. The first-class chords include the V (or V⁷) and the vii°. The strength of the root movement of a 5th is immediately apparent, and the class can readily discuss the inclusion of the vii° within the V⁷. Second-class chords include the IV and the ii. The vi is a third-class chord and the system is completed with the iii chord as a fourth-class chord. Care is given to set up the system as follows:

<u>4th</u>	<u>3rd</u>	<u>2nd</u>	<u>1st</u>	<u>Tonic</u>
<u>class</u>	<u>class</u>	<u>class</u>	<u>class</u>	<u>class</u>
		IV	V	
iii	vi	ii	vii°	I

Moving up in class within this system forms a chord progression (for example, vi–V–I). When a class is skipped within a progression, an elision is formed. I then perform several progressions using this system, followed immediately by several progressions of randomly selected chords that don't follow the system.

After providing this introduction, I challenge the class to write a composition with chords selected using the system. We begin with the first student and progress through the class with each student "picking a chord." Students are upset when they follow a student who has selected the V chord, but they readily thank the students who move from the tonic class to a third-class chord and give them numerous choices. When the composition is complete, I perform the piece in block chords. We discuss the strength of the deceptive cadence (I introduce cadences earlier in their syllabus) and some of the reasons for the deception after exploring this system.

We analyze several pieces from our anthology from a variety of stylistic periods to reinforce the dominant use of this system. I frequently perform pieces by Brian McKnight, Chicago, and Kirk Franklin, and provide a chord analysis to add credibility to the system. The class is then given the following assignment:

1. Compose a 16-bar chord progression using the chord classification system in a major key (we will repeat both sessions with minor chords later in the year).
2. Write and label a cadence (authentic, half, plagal, or deceptive) at the eighth and sixteenth measures.
3. Be prepared to perform your piece in block chords at the next class session. You may save it to disk from *Finale* or *NotePad* in general MIDI and use the synthesizer for your performance.

Session II: Using Progression to Write Chord-tone Melodies and Adding Embellishing Tones

The next class session begins with each student either performing his or her piece and/or playing the disk in the classroom synthesizer keyboard. My students begin to get a little bored after the first eight or nine demonstrations and start socializing. At that point I provide a sheet for them to try to write the progressions they hear, with no repetitions. Immediately the behavior is improved and replaced by requests to hear pieces more than once, which I always “reluctantly” provide.

Session II is an expansion on the previous assignment. Students must now write chord-tone melodies based on their personal chord progressions. I demonstrate on the overhead projector where I have taken the **class composition** and already completed the first four measures. We again utilize the class composition procedure, and each student selects a pitch from the chord to be used until the piece is complete. One student performs the piece in block chords as I perform the new class composition at my keyboard.

Now the class discussion is loaded with comments regarding the boring nature of our piece, which has too many skips in the melodic line. I carefully find places to add each of the following embellishing tones to the class composition, noting the appropriate placement, proper approach, and proper resolution of each.

Embellishing tones	Location	Approached	Resolved
Passing tones (P.T.)	Notes 3rd apart	By step toward 2nd pitch	By step toward 2nd pitch
Chromatic passing tones (C.P.T.)	Notes at least a major 2nd apart	By $\frac{1}{2}$ step toward 2nd pitch	By $\frac{1}{2}$ step toward 2nd pitch
Upper neighboring tones (U.N.T.)	Repeated pitches	By step up from 1st pitch	By step down to 2nd pitch
Lower neighboring tones (L.N.T.)	Repeated pitches	By step down from 1st pitch	By step up to 2nd pitch
Escape tones (or échappé) (E.T.)	Notes at least a 3rd apart	By step away from 2nd pitch	By leap toward 2nd pitch
Appoggiatura (APP.)	Notes at least a 3rd apart	By leap a 2nd past the 2nd pitch	By step back to the 2nd pitch

Because I teach in a piano lab, students are then given time to explore possible chord-tone melodies they can write from their progressions. I take this time to check the accuracy of each student's use of the chord classification system and encourage editing, if needed. The most frequent errors are in the use of the cadences and the overabundance of iii chords. The stronger students usually have more cadences than requested, frequently at measures 4 and 12.

The class is then given the following assignment:

1. Compose a chord-tone melody using your chord classification system chord progression (with corrections, if needed).
2. Add a minimum of the following embellishing tones to your piece and label each one.
Do not use a computer program for this assignment!

Chapter 3

- 8 passing tones—any type (P.T. or C.P.T.)
 - 4 neighboring tones—any type (U.N.T. or L.N.T.)
 - 2 escape tones (E.T.)
 - 2 appoggiaturas (APP.)
3. Be prepared to play your block chords as I perform your melody at the next class session.

Session III: Performing Compositions and Introducing Suspensions, Retardations, and Anticipations

This session begins with the performance of the new compositions with three “performance sessions” within the lesson presentation. Suspensions, retardations, and anticipations can be difficult to fully explore, and I have found that students’ enthusiasm about their peers’ compositions can help to maintain their focus on my teaching.

Once again, I use the original class composition to demonstrate the use of the suspension. I add each type of suspension to the piece (9-8, 7-6, 4-3, and 2-3) at measures 4, 8, 12, and 16. I also have each voice perform the suspension to ensure students’ understanding of “reducing intervals” for the analysis. Each suspension is played during the analysis and immediately followed by a second piece with retardations in the same location.

A short performance of the assignments is inserted here to change the pace and to encourage more student participation. The final concept, anticipation, is briefly discussed and shown in a third piece. The anticipations are also completed at measures 4, 8, 12, and 16.

After the last performance of assignments, the class is given a listening pop quiz on suspensions, retardations, and anticipations. This is a challenging dictation exam, but students always seem to perform well. I do not assign another expansion of the chord progression at this juncture. I divide the class into cooperative learning groups to complete the following assignment (Important: I have tried allowing the students to pick their own group members and it was a disaster!):

You have two class sessions to complete this project [This is four calendar days at my school.]

1. Compose a 32-bar progression using the chord classification system.
2. Be sure to provide a cadence at least every eight bars and label each.
3. Demonstrate the use of embellishing tones (and label) with the following minimums:
 - a. Passing tones 16
 - b. Neighboring tones 8
 - c. Escape tones 4
 - d. Appoggiaturas 4
 - e. Suspensions 2
 - f. Retardations 1
 - g. Anticipations 1

4. Use *Finale NotePad* to write each piece. Label your composition after printing. Include a CD or disk with your completed project.
5. Perform the piece on the major instruments (or voices) of your group members.

Post-AP Exam Activities

Seniors enrolled in AP Music Theory complete their class work after they take the AP Exam. All students who have earned a C or higher in the AP Music Theory course and have taken the AP Exam are exempt from the regular semester exam. There are usually a few juniors who have three additional weeks of class after the AP Exam. We volunteer to complete arranging assignments for the ensemble teachers to help them prepare for their band/choir/orchestra performance at commencement. For instance, in the spring of 2005, we notated the Arkansas instrumental music All-Region music sets using *Finale* music software.

Student Evaluation

I use a computerized system called *GradeQuick* for my AP Music Theory IV class. This lets me post all class grades, syllabi, and special announcements to a Web site called Edline where parents and students can access the information. Grades are weighted to ensure the appropriate value is placed on each of the class concepts presented.

First Semester Grade Weighting

Textbook material	Lecture demonstration	20 percent
Workbook material	Homework and workbook	20 percent
Aural skills material		10 percent
Pop quizzes		5 percent
Open book review quizzes		15 percent
Exams		30 percent

Second Semester Grade Weighting

These percentages are altered for the second semester to reflect the increased analysis work, contextual listening, sight-singing, and dictation exams.

Textbook material	Lecture demonstration	15 percent
Workbook material	Homework and workbook	15 percent
Aural skills material		15 percent
Pop quizzes (including sight-singing)		5 percent
Open book review quizzes		15 percent
Exams		35 percent

Textbook Material

Textbook materials are presented through a lecture/demonstration format.

- Students are given guided notes designed to make them active participants in the lesson presentation.
- All notes are collected at the end of each lecture and graded for lecture/demonstration points (25).

Chapter 3

- Students who miss class are required to complete their guided-note sheets with a classmate in order to receive 20 out of the 25 points. Since the students who were present have sheets that are already graded, this is the only fair way to assess this portion of the make-up work. Students who fail to complete this requirement are given 0 points for each lecture/demo lesson missed.

Workbook Material

This material is used for homework assignments. The first few sheets in each section are completed together to ensure that students understand the required work. Worksheets are checked for completeness daily (10 points/homework). They are collected and checked for accuracy every three weeks (100 points/workbook).

Aural Skills Material

This is completed as class work. Pop quizzes are given at least once a week (and are worth 25–40 points). Most of these are taken from the “Try It” exercises in the *Musician’s Guide to Aural Skills* text. Each student’s lowest pop-quiz grade is dropped at the end of the nine weeks. Students who miss pop quizzes are given the “Self Tests” from the Kostka/Payne text to restore their points. All sight-singing pop quizzes must be completed.

Short “announced” quizzes (worth 50–75 points) are given prior to major exams. They are always open book/notebook quizzes. Quizzes and exams are formatted the same to help students learn the directions for the exams. Quizzes are returned at the next class session so that students can use them for study sheets.

Exams are given at the end of each chapter in the textbook. They are worth twice the value of the open-book quizzes that precede them (100–150 points).

This testing policy was developed after many years of working on a fair way to assess students while preparing them for the challenging AP Music Theory Exam. Students who fail the open-book quizzes are offered remediation through online tutoring sites that review key signatures, intervals, and ear training.

Test Formats

Most of my pop quizzes are given as open-response questions. Announced quizzes and exams are also presented in that format for the first nine weeks. After students have mastered the first part of the course (Building a Musical Vocabulary), I design quizzes and exams in the multiple-choice/open response/dictation format to prepare them for the AP Exam. Sight-singing exams are recorded in a private setting.

Teacher Resources

Benward, Bruce, and Marilyn Saker. 2003. *Music in Theory and Practice*, 7th ed. Boston: McGraw-Hill.

Clough, John, Joyce Conley, and Claire Boge. 1999. *Scales, Intervals, Keys, Triads, Rhythm and Meter: A Programmed Course in Elementary Music Theory, with an Introduction to Partwriting*, 3rd ed. New York: W. W. Norton.

Gauldin, Robert. 1997. *Harmonic Practice in Tonal Music*. New York: W. W. Norton.

Harder, Paul O., and Greg A. Steinke. 2003. *Basic Materials in Music Theory: A Programmed Course*. 10th ed. Upper Saddle River, N.J.: Prentice Hall.

Kraft, Leo. 1999. *A New Approach to Ear Training: A Programmed Course in Melodic and Harmonic Dictation*, 2nd ed. New York: W. W. Norton.

Kraft, Leo. 1987. *Gradus I: An Integrated Approach to Harmony, Counterpoint, and Analysis*, 2nd ed. New York: W. W. Norton.

Ottman, Robert W. 1998. *Elementary Harmony: Theory and Practice*, 5th ed. Upper Saddle River, N.J.: Prentice Hall.

Roig-Francolí, Miguel A. 2003. *Harmony in Context*. Boston: McGraw-Hill.

Zorn, Jay, with June August. 2003. *Listening to Music*, 4th ed. Upper Saddle River, N.J.: Prentice Hall.

Technology Aids

- Web site for *Musician's Guide* texts at www.wwnorton.com (each textbook has a log-in code)
- *SmartMusic* subscriptions available for all AP Music Theory students from www.makemusic.com
- Free download of *Finale NotePad* software at www.makemusic.com
- Ricci Adams' interactive tutorials: www.musictheory.net
- *GradeQuick* software and Edline Web site: www.gradequick.com

Sample Syllabus 8

Joy L. Goetz

Lawrence Central High School

Indianapolis, Indiana

School Profile

Location and Environment: Lawrence Central High School is a public school located on the northeast side of Indianapolis, Indiana. The curriculum includes college preparatory courses, AP and IB courses, independent study opportunities, a mentor program, and specialized courses in the performing arts, as well as courses for academically talented students. Lawrence has a richly diverse student population, some 32 percent of whom qualify for free or reduced-price lunches. The Lawrence Central Performing Arts Department has over 700 students involved in drama, choir, orchestra, music theory fundamentals, AP Music Theory, IB Music/Music Appreciation, color guard and marching band, concert band, pep band, and beginning and intermediate piano classes.

Grades: 9–12

Type: Urban public high school

Total Enrollment: 2,200

Ethnic Diversity: The student population includes:

African American 35 percent

Hispanic/Latino 4 percent

Multiracial 2 percent

College Record: In 2006, 74 percent of graduating students went on to four-year colleges and 12 percent to two-year institutions.

Personal Philosophy

I have a passion for teaching the cognitive aspects of music, so the development of the music theory program at Lawrence Central has been, and continues to be, a labor of love. The program was started in 2000 with one student sitting for the AP Exam. Presently we have 25 students taking AP Music Theory. In my opinion, it is the most exciting class in the school! As we come together to discover the magic of music theory, we find that music becomes a thing of both beauty and mathematical perfection. In exploring music, we gain a respect for order and predictability. Through the study of music theory, we glean an appreciation of musical architecture and a better understanding of life itself.

Class Profile

Music Theory Fundamentals and AP Music Theory classes at Lawrence are combined due to budgetary constraints. The class meets during block one (first period) every other day for 90 minutes. AP students receive a weighted grade for the class, provided they take the AP Exam at the end of the year. Class is held in our theory lab, a 25-station, state-of-the-art music computer lab. The class is divided into the following sections:

Section 1: Ear training, sight-singing (30 minutes). This is a whole-class activity, and I grade it using two different grading scales, one for AP Music Theory and one for Music Theory Fundamentals.

Section 2: Group instruction (30 minutes) to introduce new concepts, review previously learned materials, review homework, and review for tests. When AP students are receiving group instruction, Music Fundamentals students have individual work time.

Section 3: Individual work time (30 minutes). During this part of the class, students are encouraged to complete portions of their homework assignment to ensure they understand the concepts presented, or to work on musical compositions. When AP students are given individual work time, Music Fundamentals students receive group instruction.

Course Overview: AP Music Theory and Composition

This rigorous course expands upon the skills learned in the Music Theory Fundamentals course. Musical composition, sequencing, and use of MIDI digital formats are some of the many applications employed to further student understanding of music theory.

Objectives of the Course:

This course is designed to develop musical skills that will lead to a thorough understanding of music composition and music theory. Students are prepared to take the AP Music Theory Exam when they have completed the course. Students planning to major in music in college may be able to enroll in an advanced music theory course, depending on individual colleges' AP policies.

General Course Content:

1. Review of music fundamentals, including: scales, key signatures, circle of fifths, intervals, triads, and inversions
2. Daily ear training, including rhythmic, melodic, and harmonic dictation
3. Weekly sight-singing using numbers for pitches
4. The study of modes
5. The study of figured bass
6. The study of two-part counterpoint
7. The study of four-part harmony
8. The study of seventh chords
9. The study of secondary-dominant functions
10. The study of musical form
11. The study of common compositional techniques

The objectives below have been adapted from the Expanded Course Specifications posted on the AP Music Theory Home Page on AP Central.

Expanded Course Objectives:

1. Identify and notate pitch in four clefs: treble, bass, alto, and tenor.
2. Notate, hear, and identify simple and compound meters.
3. Notate and identify all major and minor key signatures.
4. Notate, hear, and identify the following scales: chromatic, major, and the three minor forms.
5. Name and recognize scale degree terms, for example: tonic, supertonic, mediant, subdominant, dominant, submediant, subtonic, leading tone.

Chapter 3

6. Notate, hear, and transpose the following modes: Dorian, Phrygian, Lydian, and Mixolydian.
7. Notate, hear, and identify whole-tone and pentatonic scales.
8. Notate, hear, and identify all major, minor, diminished, and augmented intervals inclusive of an octave.
9. Transpose a melodic line to or from concert pitch for any common band or orchestral instrument.
10. Notate, hear, and identify triads, including inversions.
11. Notate, hear, and identify authentic, plagal, half, and deceptive cadences in major and minor keys.
12. Detect pitch and rhythm errors in written music from given aural excerpts.
13. Notate a melody from dictation, 6 to 12 bars, in a major key, mostly diatonic pitches, simple or compound time, three to four repetitions.
14. Notate melody from dictation, 6 to 12 bars, in a minor key, chromatic alteration from harmonic/ melodic scales, simple or compound time, three to four repetitions.
15. Sight-sing a melody, 4 to 8 bars long, major or minor key, duple or triple meter, simple or compound time, using solfège, numbers, or any comfortable vocal syllable(s).
16. Notate and analyze simple 2-bar counterpoint in sixteenth- and/or eighteenth-century styles.
17. Realize a figured bass according to the rules of eighteenth-century chorale style, major or minor key, using any or all of the following devices: diatonic triads, seventh chords, inversions, nonharmonic tones, and secondary-dominant and dominant seventh chords.
18. Analyze a four-part chorale-style piece using Roman and Arabic numerals to represent chords and their inversions.
19. Notate, hear, and identify the following nonharmonic tones: passing tone (accented and unaccented), neighboring tone, anticipation, suspension, retardation, appoggiatura, escape tone, changing tone (cambiata), pedal tone.
20. Notate the soprano and bass pitches and the Roman and Arabic numeral analysis of a harmonic dictation, eighteenth-century chorale style, seventh chords, secondary dominants, 4 to 8 bars in length, major or minor key, three to four repetitions.
21. Compose a melody or expand a motive with or without text, 6 to 12 bars long, given specific directions about key, mode, phrasing, rhythm, and harmonic language.
22. Harmonize a 4 to 12 bar melody by writing a bass line, chords and/or chord symbols, given specific directions about key, mode, phrasing, rhythmic and harmonic language.
23. Define and identify common tempo and expression markings.
24. Identify aurally and/or visually the following: modulation, transposition, melodic and harmonic rhythm, sequence, imitation, ostinato, augmentation, diminution, inversion, retrograde, and fragmentation.
25. Recognize standard musical idioms (i.e., standard melodic, rhythmic, and harmonic idioms) that occur in music.

Expectations of Students:

1. Students will participate in all classroom discussions and activities.
2. Students will complete all assigned exercises and readings.
3. Students will keep and maintain a Music Theory notebook, which will include class notes, handouts, assignments, and listening logs.
4. Students will study the released AP Exams and take practice tests to prepare for the exam.
5. Students will listen to approximately two hours of music each week outside of class and maintain a music listening log, which will consist of written analysis/evaluations of each listening selection. These written logs should include observations and evaluations regarding the following items:
 - a) melodic characteristics (conjunct/disjunct)
 - b) harmonic characteristics (harmonic idioms present)
 - c) rhythm (straight/syncopated)

- d) texture (homophonic, monophonic, polyphonic, heterophonic)
 - e) timbre (instrumentation, tone color)
 - f) dynamics (dynamic contrasts)
 - g) tempo (tempo changes)
 - h) meter (duple/triple, simple/compound, regular/irregular)
 - i) mode (major, minor, modal, atonal)
 - j) form (binary, ternary, sonata, rondo, etc.)
 - k) articulation (legato, staccato, etc.)
6. Students will attend one concert each nine weeks and submit a paper about the concert, using an appropriate musical vocabulary. This paper should contain general information about the concert, the student's evaluation of it, and specific analysis of three individual selections from the concert. This analysis should include the following:
- a) melodic characteristics (conjunct/disjunct)
 - b) harmonic characteristics (harmonic idioms present)
 - c) rhythm (straight/syncopated)
 - d) texture (homophonic, monophonic, polyphonic, heterophonic)
 - e) timbre (instrumentation, tone color)
 - f) dynamics (dynamic contrasts)
 - g) tempo (tempo changes)
 - h) meter (duple/triple, simple/compound, regular/irregular)
 - i) mode (major, minor, modal, atonal)
 - j) form (binary, ternary, sonata, rondo, etc.)
 - k) articulation (legato, staccato, etc.)
7. Students will submit two major compositions each nine weeks, based on assigned form and content. Other minor compositions will be required to demonstrate understanding and synthesis of concepts presented. These compositions include:
- a) A song in binary form
 - b) A song in ternary form
 - c) A song in sonata form
 - d) A song based on a major mode
 - e) A song based on a minor mode
 - f) A song using two-part counterpoint
 - g) A song using three-part counterpoint
 - h) A four-part fugue with subject, countersubject, and free improvisation
 - i) A song that modulates from one tonal center to another through the use of a pivot chord
 - j) A song based on the whole-tone scale
 - k) A song based on the chromatic scale
 - l) A song based on a tone row or serialism
 - m) A song based on a church mode

Chapter 3

An orchestration or arrangement with correct notation, range, and transpositions is the final composition project for the year.

Textbook

Turek, Ralph. 1996. *The Elements of Music: Concepts and Applications, Vol. I*, 2nd ed. New York: McGraw-Hill. Includes workbook.

AP Music Theory Course Planner

Note: Chapter references are to the Turek textbook.

First Nine Weeks

Week 1:

Review of basic pitch notation: the staff and its evolution, clefs, ledger lines, grand staff, octave designation, half steps and whole steps, intervals, chromatic alterations, enharmonic equivalents, accidentals

Chapter 1

Melodic Dictation/Sight-singing: Level One—major key, diatonic pitches, conjunct melodies using scale degrees 1 to 6

Harmonic Dictation: bass voice

Week 2:

Review of meter and rhythm: the proportional system, beat and tempo, accent, meter and measure, meter signatures, simple meters, compound meters, asymmetric meter, conflict of rhythm and meter, borrowed divisions, syncopation, cross rhythms, hemiola, dots, ties, rests, dynamic and articulation markings

Chapter 2

Melodic Dictation/Sight-singing: Level One—major key, diatonic pitches, conjunct melodies using scale degrees 1 to 6

Harmonic Dictation: bass voice

Week 3:

Review of major scales/circle of fifths/key signatures: the chromatic scale, the whole-tone scale, the major scale, transposition, tonality, key signatures, the placements of sharps and flats, the outer circle of fifths

Chapter 3, part 1a

Melodic Dictation/Sight-singing: Level Two—major key, diatonic pitches, conjunct melodies using scale degrees 1 to 6, add movement from scale degree 7 to 1

Harmonic Dictation: outer voices

Week 4:

Review of minor scales/circle of fifths/key signatures: the inner circle of fifths, relative major and minor scales, the natural minor scale, the harmonic minor scale, the melodic minor scale, the parallel minor keys

Chapter 3, part 1b

Melodic Dictation/Sight-singing: Level Two—major key, diatonic pitches, conjunct melodies using scale degrees 1 to 6, add movement from scale degree 7 to 1

Harmonic Dictation: outer voices

Week 5:

Review of intervals: numeric values of intervals, quality of intervals (major, minor, diminished, augmented), the intervals of the major scale, alteration of interval quality, enharmonic intervals, inversions of intervals, simple versus compound intervals, diatonic versus chromatic intervals

Chapter 3, part 2

Melodic Dictation/Sight-singing: Level Three—major key, diatonic pitches, melodies with skips using scale degrees 1, 3, and 5

Harmonic Dictation: outer voices

Week 6:

Review of triads/seventh chords: building and identifying triads (major triads, minor triads, diminished triads, augmented triads), building and identifying seventh chords (major seventh chords, minor seventh chords, diminished seventh chords, augmented seventh chords)

Chapter 4, part 1

Melodic Dictation/Sight-singing: Level 3—major key, diatonic pitches, melodies with skips using scale degrees 1, 3, and 5

Harmonic Dictation: outer voices

Week 7:

Chord inversions: identifying and building triadic inversions (root position, first inversion, second inversion), identifying and building inversions of the seventh chord (root position, first inversion, second inversion, third inversion)

Chapter 4, part 2

Melodic Dictation/Sight-singing: Level Four—major key, diatonic pitches, melodies with scale degree 1, 3, 5 skips, add cadential skips from scale degree 5 to 1

Harmonic Dictation: outer voices

Week 8:

Chord symbols and figured bass: using traditional eighteenth-century nomenclature to identify and analyze chords

Chapter 4, part 3

Melodic Dictation/Sight-singing: Level Four—major key, diatonic pitches, melodies with scale degree 1, 3, 5 skips, add cadential skips from scale degree 5 to 1

Harmonic Dictation: outer voices

Week 9:

Diatonic triad functions in major and minor keys: diatonic primary and secondary chords in a major key, diatonic and chromatically altered primary and secondary chords in a minor key (based on form of scale)

Chapter 5, part 1

Melodic Dictation/Sight-singing: Level Four—major key, diatonic pitches, melodies with scale degree 1, 3, 5 skips, add cadential skips from scale degree 5 to 1

Harmonic Dictation: outer voices

Second Nine Weeks

Week 1:

Functional tonal principles: tonality, chordal hierarchy, progression versus regression, harmonic motion, harmonic rhythm, variants in a minor key, idiomatic chord substitutions (vii^o/V, IV/ii)

Chapter 5, part 2

Melodic Dictation/Sight-singing: Level Five—major key, diatonic pitches, melodies with skips, add skips to scale degree 6

Harmonic Dictation: outer voices and authentic cadence

Week 2:

Cadences: authentic and perfect authentic cadence, plagal cadence, half cadence, deceptive cadence

Chapter 3

Chapter 6, part 1

Melodic Dictation/Sight-singing: Level Five—major key, diatonic pitches, melodies with skips, add skips to scale degree 6

Harmonic Dictation: outer voices, add authentic, plagal cadences

Week 3:

Embellishing/nonharmonic tones: passing tone, neighboring tone, changing tone, anticipation, suspension, retardation, simultaneous embellishing tones, pedal point; use of nonharmonic tones in harmonic analysis

Chapter 6, part 2

Melodic Dictation/Sight-singing: Level Five—major key, diatonic pitches, melodies with skips, add skips to scale degree 6

Harmonic Dictation: outer voices, add half and deceptive cadences

Week 4:

Melodic principles in four-part writing/voicing chords: characteristics of the individual line's range, tessitura, spacing, movement, doubling and resolution of tendency tones

Chapter 7, part 1 and part 2

Melodic Dictation/Sight-singing: Level Six—major key, diatonic pitches, melodies with skips, add skips to scale degree 4

Harmonic Dictation: outer voices and primary triads (major and minor)

Week 5:

Principles in chord connection: contrary motion, oblique motion, similar motion, parallel motion

Chapter 7, part 3

Melodic Dictation/Sight-singing: Level Six—major key, diatonic pitches, melodies with skips, add skips to scale degree 4

Harmonic Dictation: outer voices and primary triads (major and minor)

Week 6:

Connecting root position triads: triads in a fifths relationship, triads in a thirds relationship, triads in a seconds relationship

Chapter 7, part 4

Melodic Dictation/Sight-singing: Level Six—major key, diatonic pitches, melodies with skips, add skips to scale degree 4

Harmonic Dictation: outer voices, primary and secondary triads (major and minor)

Week 7:

Voicing triads in first inversion: frequency, spacing, doubling of first inversion chords, connecting root position and first inversion triads, successive first inversion triad

Chapter 8, part 1 and part 2

Melodic Dictation/Sight-singing: Level Seven—major key, diatonic pitches, melodies with skips to any scale degree

Harmonic Dictation: outer voices, primary and secondary triads (major and minor)

Week 8:

Part writing using nonchord tones: voicing suspensions and retardations, stylistic use of nonchord tones

Chapter 8, part 3

Melodic Dictation/Sight-singing: Level Seven—major key, diatonic pitches, melodies with skips to any scale degree

Harmonic Dictation: outer voices, primary and secondary triads (major and minor)

Week 9:

Review for Exam

Melodic Dictation/Sight-singing: Level Seven—major key, diatonic pitches, melodies with skips to any scale degree

Harmonic Dictation: outer voices, primary and secondary triads (major and minor)

Semester One Exam

Third Nine Weeks

Week 1:

Triads in the second inversion: the cadential six-four chord, the passing six-four chord, the pedal six-four chord, the arpeggiated six-four chord

Chapter 9, part 1

Melodic Dictation/Sight-singing: Level Eight—major key, chromatic pitches based on natural minor

Harmonic Dictation: outer voices, primary and secondary triads (major and minor)

Week 2:

Connecting triads in all positions

Chapter 9, part 2

Melodic Dictation/Sight-singing: Level Eight—major key, chromatic pitches based on natural minor

Harmonic Dictation: outer voices, primary and secondary triads (major and minor)

Week 3:

Harmonizing a melody and part writing for SATB voices: writing with inversions, writing with nonchord tones, writing with inner voices

Chapter 9, part 3

Melodic Dictation/Sight-singing: Level Eight—major key, chromatic pitches based on natural minor

Harmonic Dictation: outer voices, primary and secondary triads (major and minor)

Week 4:

The dominant seventh chord: part writing with the V^7 chord, part writing with inversions of the V^7 chord, proper resolutions of tendency tones in the V^7 chord

Chapter 13, part 1

Melodic Dictation/Sight-singing: Level Nine—major key, chromatic pitches based on harmonic minor

Harmonic Dictation: outer voices, primary and secondary triads, seventh chords

Week 5:

The leading-tone seventh chord: part writing with the vii^{o7} chord, part writing with inversions of the vii^{o7} chord, proper resolution of tendency tones in the vii^{o7} chord

Chapter 13, part 2

Melodic Dictation/Sight-singing: Level Nine—major key, chromatic pitches based on harmonic minor

Harmonic Dictation: outer voices, primary and secondary triads, seventh chords

Week 6:

Harmonizing with other seventh chords: common diatonic seventh chords in major keys, common diatonic seventh chords in a minor key (based on scale), voice leading with nondominant seventh chords, predominant seventh chords, sequences using seventh chords, chain suspensions using seventh chords

Chapter 14

Melodic Dictation/Sight-singing: Level Nine—major key, chromatic pitches based on harmonic minor

Harmonic Dictation: outer voices, primary and secondary triads, seventh chords

Chapter 3

Week 7:

Secondary dominant chords: the V/V, V/iii, V/ii, V/vi chords and the V⁷/V, V⁷/iii, V⁷/ii, V⁷/vi chords

Chapter 15, part 1

Melodic Dictation/Sight-singing: Level Ten—major key, chromatic pitches based on melodic minor

Harmonic Dictation: outer voices, all triads, seventh chords, secondary dominants

Week 8:

Secondary leading tone chords: the vii^o/V, vii^o/iii, vii^o/ii, vii^o/vi chords, and the vii^{o7}/V, vii^{o7}/iii, vii^{o7}/ii, vii^{o7}/vi chords

Chapter 15, part 2

Melodic Dictation/Sight-singing: Level Ten—major key, chromatic pitches based on melodic minor

Harmonic Dictation: outer voices, all triads, seventh chords, secondary dominants

Week 9:

Identifying secondary dominants in analysis of music, part writing with secondary dominants, voice leading with secondary dominants

Chapter 15, part 2

Melodic Dictation/Sight-singing: Level Eleven—major key, chromatic pitches out of the key (i.e., secondary dominants)

Harmonic Dictation: outer voices, all triads, seventh chords, secondary dominants

Fourth Nine Weeks

Week 1:

More harmonization and analysis with use of secondary dominant chords

Chapter 15, part 3

Melodic Dictation/Sight-singing: Level Eleven—major key, chromatic pitches out of the key (i.e., secondary dominants)

Harmonic Dictation: outer voices, all triads, seventh chords, secondary dominants

Weeks 2–6:

Review for AP Music Theory Exam

Take practice free-response questions

Week 7:

Work on final projects

Week 8:

Work on final projects

Week 9:

Present final projects

Semester Two Exam

Teaching Strategies

On the first day of class students learn the basic elements of music—melody, harmony, rhythm, texture, and timbre—and how their reoccurrence over time creates form. We discuss the appropriate music vocabulary to use when describing these elements, and I give students examples of standard song forms such as binary, rounded binary, and ternary for listening practice. As part of their homework, students keep a weekly log

in which they describe the music they have listened to, using the proper vocabulary. Then they map out the song on a timeline and indicate where over the course of the song significant musical events occur. Students then color-code similar melodies. If a selection falls into a standard song form, they identify it. As the year gets closer to the AP Exam, we do group listening as a part of our exam prep.

When students are learning about pitch in the beginning of the year, I explain how to write a phrase and then move on to a discussion of combining phrases and how to write phrases that relate to one another. For example, are two phrases exactly alike or slightly varied? Is the second phrase similar to the first in general contour and rhythm but not a repetition? Is the second phrase obviously different from the first in contour, pitch, and rhythm? Does the phrase melody head away from tonic or towards tonic? Students write phrases demonstrating knowledge of this concept. Then we identify the antecedent-consequent relationship and write melodies showing parallel and contrasting periods. When studying cadences and chord progressions, students add chords to the melodies we write and talk about the use of the cadence as a way to support the structure of a song.

Throughout the course students are given composition assignments which must be written in a particular form: binary, rounded binary, ternary, song in a major key, song in a minor key, a song in each of the modes, a song in counterpoint, a song that modulates using a pivot chord, a song based on the whole tone scale, a song based on the 12 tone scale, etc. Many students find music composition to be intimidating, especially since they come to class with varying skills. I have found it helpful to give specific requirements and to grade the compositions with a scoring guideline (rubric). The issue then becomes whether or not students followed the requirements. This allows all students to succeed as long as they meet the assigned criteria, while giving the more advanced composers some latitude to “make it their own.”

Students can benefit from helping each other, so I encourage them to work with a partner and check each other’s work. Sometimes the study of theory can seem monotonous and dry, so it’s important to vary activities and give assignments that let “the creative juices flow.” When a task in theory seems like an overwhelming chore, we face it together with humor, as a challenge to be met. In that regard, I have developed a list of music theory “mantras,” which are framed in my room; we refer to them on a daily basis.

Music Theory Mantras

1. If you learn to do it right, you won’t do it wrong.
2. Never double the leading tone.
3. If you can do it in “C,” you can do it in any key.
4. The circle of fifths is the secret to life!
5. Key signatures are our friends.
6. When in doubt write: ii^6 , I_4^6 , V^7 , I.
7. No “illegal” six-fours allowed.
8. A hemiola is not a malady of the digestive tract.
9. I’m not teaching music theory, I’m teaching you to think.
10. Extrapolate, or ELSE!

Student Evaluation

The final grade breaks down this way:

Daily assignments	20 percent
Homework (listening logs, concert reports)	10 percent
Sight-singing	10 percent
Dictation	10 percent
Listening	10 percent
Unit tests/quizzes	20 percent
Compositions	20 percent

Teacher Resources

Benjamin, Thomas, Michael Horvit, and Robert Nelson. 2001. *Music For Analysis, Examples from the Common Practice Period and the Twentieth Century*, 5th ed. Belmont, Calif.: Wadsworth.

Benward, Bruce, and Gary White. 1997. *Music In Theory and Practice, Vol. I*, 6th ed. Madison, Wis.: Brown and Benchmark.

Clough, John, Joyce Conley, and Claire Boge. 1999. *Scales, Intervals, Keys, Triads, Rhythm and Meter: A Programmed Course in Elementary Music Theory, with an Introduction to Partwriting*, 3rd ed. New York: W. W. Norton.

Harder, Paul O., and Greg A. Steinke. 1994. *Harmonic Materials in Tonal Music: A Programmed Course, Vols. 1 and 2*, 7th ed. Boston: Allyn and Bacon.

Kostka, Stefan, and Dorothy Payne. 2000. *Tonal Harmony with an Introduction to Twentieth-Century Music*. New York: McGraw-Hill.

McIntosh, Edith. 1955. *Theory and Musicianship, Lessons with Worksheets and Supplements*. New York: Fischer.

Merryman, Marjorie. 1997. *The Music Theory Handbook*. Fort Worth, Texas: Harcourt Brace.

Ottman, Robert. 1998. *Elementary Harmony: Theory and Practice*, 5th ed. Upper Saddle River, N.J.: Prentice Hall.

Ottman, Robert. 2001. *Music For Sight Singing*, 5th ed. Upper Saddle River, N.J.: Prentice Hall.

Roig-Francolí, Miguel A. 2003. *Harmony in Context*. Boston: McGraw-Hill.

Turek, Ralph, compiler. 1992. *Analytical Anthology of Music*, 2nd ed. New York: McGraw-Hill.

Student Activities

One of my favorite composition assignments is one I call “Melodic Manipulation.” I introduce embellishing/nonharmonic tones such as the passing tone (accented and unaccented), the neighboring tone (upper and lower), the changing tones, and the escape tone. At the same time, I introduce developmental techniques such

as augmentation, diminution, extension, sequence, fragmentation, expansion, inversion, retrograde inversion, repetition, and octave displacement. Then we take a copy of the school fight song and transform it using these techniques. The end result is a sort of “theme and variation” on the “Lawrence Central Fight Song.”

Another favorite assignment is one where we write a melody for a video game or a cell phone ring. This assignment actually morphed from the practice of having the students write new dictation melodies, using the same prescribed pitches and limited skips that I play for dictation each day. For example, I ask the students to write diatonic melodies with scale degrees 1-6 and using skips to scale degrees 1, 3, 5, with a skip down to scale degree 7, followed by scale degree 1. (Admittedly, this was my way of getting new dictation melodies without writing them all myself.) As we played the melodies for each other, the students commented on how they sounded like video game tunes. So now I assign video game tunes! Some of my students can record their own ring tones on their cell phones, so they bring them to class, and we write the same kinds of melodies for our phones.

Still another favorite assignment involves taking a familiar song, like “Row, Row, Row Your Boat,” or a traditional holiday song such as “Jingle Bells,” and changing the mode from major to minor. This activity can be used when teaching the modes—just take a familiar tune and put it in a different scale. Nursery-rhyme songs work well for this. I have found this exercise to be a good way of reinforcing both the construction and sound of modal scales. Similarly, I ask my students to take well-known tunes and rewrite them in triple meter instead of duple meter, or vice versa. The results can be hilarious, and it’s one more way to make Music Theory class fun.

Sample Syllabus 9

Peter Warsaw
Phillips Academy
Andover, Massachusetts

School Profile

Location and Environment: Founded in 1778, Phillips Academy is located in the town of Andover, Massachusetts, approximately 23 miles northwest of Boston. Best known for housing the Internal Revenue Service, Andover is a relatively affluent suburb, though Phillips Academy draws students from all over the globe and from all socioeconomic strata. Forty percent of the student body receives scholarship aid; approximately 13 percent of students are on full scholarship.

The Music Department consists of 8 full-time instructors and 30 adjunct faculty. Lessons on all instruments are offered for more than 400 students. Ensembles include a symphony (100 students) and three string orchestras: chamber (35), Amadeus (30), Corelli (20); a chorus (90); cantata choir (85); *a cappella* madrigal group (16); band (80); wind ensemble (40); handbell choir (16); gospel choir (20); and several student-run *a cappella* singing groups. Courses offered include Nature of Music (introductory course), AP Music Theory and Composition, Survey of Music History, Jazz, African Drumming, Electronic Music, Words and Music, and Interpretive Analysis of Chamber Music.

Grades: 9–12

Type: College-preparatory boarding school

Total Enrollment: Approximately 1,100

Ethnic Diversity: Twelve percent of the student body is black or Hispanic/Latino.

College Record: Nearly 100 percent of our students continue on to four-year colleges.

Personal Philosophy

Music is a language, and my AP Music Theory and Composition course examines this language: vocabulary patterns (scales, intervals, chords); syntax (harmonic progression, phrasing); punctuation (cadences); and common idioms (I-vi-IV-V [“Heart and Soul”], I-vii⁶-I⁶ [voice exchange], ii⁶-I⁴-V-I [“Of Thee I Sing”]). How do composers develop their ideas? What compositional techniques do they use to create unity and variety? Students experience in-depth study through analysis of existing works, and they use what they learn from analysis to create their own compositions. Hands-on learning is a key component for students: dictations, sight-singing, and analysis all engage students and drive the learning more deeply into their understanding; composition is the ultimate process through which to demonstrate that understanding.

Class Profile

I teach two sections of AP Music Theory, each with 17 or 18 students. Each section meets four days per week: there are three single periods of 45 minutes each and one extended period of 75 minutes. I use the extended periods predominantly for hands-on work: compositions, tests, dictations, analysis, and individual sight-singing evaluations.

The AP course is a three-term, year-long sequence. Students are expected to have had some musical experience prior to entering the course. Instrumental study is the usual prior experience, though we offer a term-long introductory course (Nature of Music) that prepares students with little or no musical background for the beginning of their theory study.

Course Overview

During the year, we cover the first 15 chapters of *Music in Theory and Practice*, volume I, seventh edition, by Bruce Benward and Marilyn Saker. We begin with scales, intervals, and chords, and move to figured bass before the end of the first trimester. We work more slowly and in more depth, intensifying our practice of ear training, for the last two trimesters. During this time we also cover seventh chords, modulation, and secondary dominants.

Course Planner

Fall Term (12 weeks)

- Week 1: Notation, enharmonic equivalents, meter (chapter 1)
One-motive composition
- Week 2: Scales, key signatures, scale degrees, tonal analysis (chapter 2)
- Week 3: Intervals, inversion (chapter 3)
Two-motive composition
- Week 4: Chords (quality, position, function), harmonic analysis (chapter 4)
Pentatonic composition in ABA form using relative minor for B section
- Week 5: Cadences and nonharmonic tones (chapter 5)
Dorian mode composition using tonic and subtonic triads as harmony
- Week 6: Melodic organization (motives, phrases, periods, sequence, Schenker),
formal analysis, texture (chapters 6 and 7)
- Week 7: Counterpoint (chapter 8)
Harmonic ostinato composition.
- Week 8: Figured-bass realization (chapter 9)
- Week 9: Figured-bass realization (chapter 9)
- Week 10: Harmonic progression (chapter 10)
- Weeks 11/12: Summary composition: Classical Menuet

Winter Term (8 weeks)

- Week 1: Harmonic progression (chapter 10)
- Week 2: Dominant seventh chords (chapter 11)
- Week 3: Dominant seventh chords (chapter 11)
- Week 4: Composition: theme and variations

Chapter 3

- Week 5: Leading-tone seventh chords (chapter 12)
- Week 6: Nondominant seventh chords (chapter 13)
- Weeks 7/8: Summary composition: song setting of existing text

Spring Term (8 weeks)

- Week 1: Modulation (chapter 14)
- Week 2: Modulation (chapter 14)
- Week 3: Secondary dominants (chapter 15)
- Week 4: Secondary dominants (chapter 15)
- Week 5: Review released AP Music Theory Exams
- Week 6: AP Exam
- Weeks 7/8: Analysis projects: students present in class
Free composition extending beyond Common Practice

Teaching Strategies

Early in the year, my focus is on the introduction of new material, with most of our time spent going over homework. Even so, I try to include some ear training each day: singing structural patterns; improvising musical questions and answers; identifying intervals and chords played on the piano; taking melodic and harmonic dictations; and sight-singing. As the pacing of new material slows down, we spend increasing amounts of class time with ear training and analysis, and I try to spend some time with each activity in every class. As melodic and harmonic dictations become daily activities, we analyze each one for structural and syntactical patterns that underlie the surface activity. We harmonize each melody and, particularly later in the year, we create bass line counterpoints. By way of strategy for melodic dictation, I emphasize the importance of identifying long-term step relationships and the need to identify the goal notes (cadences) of each phrase before attempting to fill in the internal details. After we have written and analyzed the problem on the board, I ask students to sing it by memory before we move on to the next task.

For harmonic dictations, I emphasize the need to hear in “chunks” (groups of chords that function as modular idioms). We develop a vocabulary of such chunks starting with cadential progressions and moving quickly to various forms of tonic prolongation. Each dictation is a blend of familiar patterns with one or more chords that extend students’ vocabulary. The more talented students are challenged by and interested in the new pattern; the less able students achieve substantial success by recognizing the familiar.

For each original composition students create, we analyze existing models. This provides us with a constant need for analysis; were it not for their subsequent compositional efforts, students might find such analysis irrelevant and fail to give it their full attention. Many days we play through exemplary student compositions and discuss important compositional principles that are in evidence. Occasionally we compose out a motive as a class, beginning with compositional procedures (i.e., varied repetition, sequence, inversion, transposition), creating phrases that lead to cadences, and combining phrases to form periods and sections. Once the melody is written, we harmonize it, analyze the nonharmonic tones, and, of course, sing it. All in all, this exercise develops nearly every area of theory study.

I use a lot of metaphors in an effort to generate relevance for students. For example, modulation is compared to their daily moves between buildings (remember, we are a boarding school). Students wake up in the tonic key of their dormitories (on the tonic chord of their bed, with their head perhaps on

their pillow, the tonic note in the soprano); they visit various rooms (chords) within the building before modulating to the various buildings—each with its individual rooms (chords)—in which they take classes. A sports jacket that I have worn since adolescence serves to illustrate suspensions: it was once consonant with fashion; then the fashion changed, creating a sartorial dissonance that could only be resolved by my moving to a new jacket.

Sample pieces used for analysis

Title	Composer
<i>Sechs Leichte Variationen</i> WoO 77	Beethoven
Menuet in C Major WoO 10	Beethoven
“Come Again”	Dowland
<i>Erlkönig</i>	Schubert
“Der Leiermann” (<i>Winterreise</i>)	Schubert
“Thranenregen” (<i>Die Schöne Mullerin</i>)	Schubert
“Les Berceaux”	Fauré
“Sure on This Shining Night”	Barber

Student Evaluation

The fall term grade is based on four equally weighted parts: tests, daily work (homework that I collect each night, grade, and return the following day), smaller compositions, and summary composition. In the later terms, sight-singing becomes an equal component.

Tests always combine aural skills, construction, and analysis. Early in the year, a typical test might consist of identifying and notating intervals and triads that are played on the piano, constructing intervals and chords, and score analysis. Eventually, tests include melodic and harmonic dictation, creation of a first species counterpoint to a *cantus firmus*, figured-bass realization, harmonization of a melody, creation of a bass line, and score analysis. Test formats for analysis alternate between free response (students fill in harmonic analysis, identify nonharmonic tones, identify cadences) and multiple-choice questions that guide the analysis.

Teacher Resources

Textbook:

Benward, Bruce, and Marilyn Saker. 2003. *Music in Theory and Practice*, vol. I, 7th ed. New York: McGraw-Hill.

Software:

Auralia. Fairfield, Vic., Australia: Rising Software. www.risingsoftware.com

Sibelius. London, U.K.: The Sibelius Group. www.sibelius.com

Student Activities

We occasionally take a simple chord progression in four parts (e.g., I–IV–V–I) and embellish it with nonharmonic tones until it sounds like a Bach chorale. When we then sing it, students usually express delight and amazement that we were able to use such simple materials and our knowledge to create something so beautiful. Following the complete analysis of Beethoven's Menuet in C major, WoO 10 (1795), we recompose it in an attempt to discover what Beethoven might have been thinking at various stages of the compositional process. I occasionally include a composition question on tests—analogueous to English teachers' in-class writing—in which I give the opening motive and students compose it out into phrases, periods, sections, harmonization, (bass line) counterpoint, and expanded texture (secondary melody, parallel supporting melody, harmonic rhythmic support). (See Teaching Strategies above for in-class composition activities.) For melodic dictations, I start with a basic background (e.g., $\hat{1}-\hat{5}-\hat{4}-\hat{3}-\hat{2}-\hat{1}$) and layer increasingly complex melodies on top of that structure. With each successive stage we look back and analyze how we evolved to the more elaborate version. This evolutionary approach also works well with sight-singing. The epiphany comes when students look back and see how far they have come from a simple background to a polished surface.

Chapter 4

Topics in AP Music Theory Pedagogy

Strategies for Improving Skills in Melodic Dictation

by Joel Phillips, Westminster Choir College of Rider University, Princeton, New Jersey

Why do we teach developing musicians to notate what they hear? At a basic level, taking dictation helps us recognize tonal and rhythmic patterns and their embellishments. We also recall the many ways music may be organized. More profoundly, when we take dictation, we connect the sounds of our imagination to what we perceive aurally, visually, and kinesthetically.

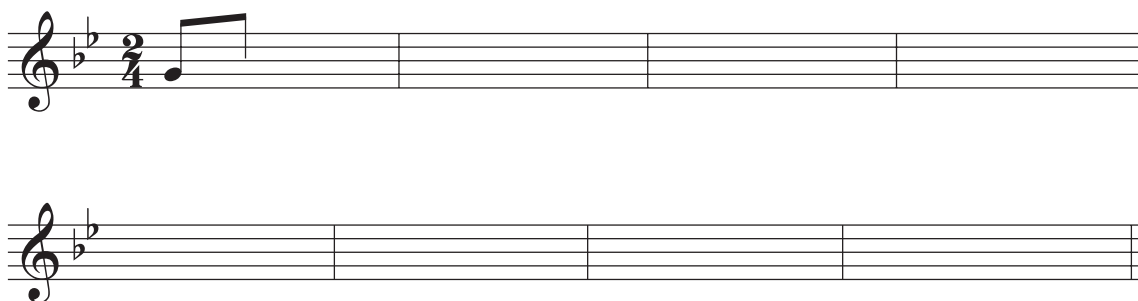
How is this skill used in the real world? To share their ideas, composers listen to the music of their imagination, take dictation, and notate what they “hear.” Conductors and performers look at printed music, imagine its sound, and compare this imagined sound to what they actually hear. If what they hear differs from what they imagine, they rehearse the problem and perfect the performance.

This article begins by summarizing some of the many strategies teachers may employ to improve students’ skills in taking melodic dictation; I then demonstrate their use by working through a sample melody. Finally, I offer some advice on how to stage the development of melodic dictation skills.

Strategies

1. Given what you know, what seems likely?

Before you even hear a melody, you probably have information that can help you notate it. Look at the example below. What possibilities does it suggest? How can this information prepare you to listen?



Chapter 4

The clef and key signature provide us with hints as to the pitch patterns we might hear. First, we see the treble clef. Thus we expect to hear a high-pitched melody—one with a range typical of flutes, oboes, and violins, as well as women’s voices. Next, we see a key signature of two flats. Though we might hear music in either B \flat major or G minor, the initial pitch is G, which means G minor is probably the key. Quickly, we recall pitch patterns from the key, including the three scale forms and the tonic triad and dominant-seventh-chord arpeggios. Because the key is minor, we must remember that the leading tone requires an accidental, that rising passages usually follow the pitches of the ascending melodic minor scale (raised scale degrees 6 and 7), and that falling passages usually follow the pitches of the natural minor scale (the “key-signature” scale).

Observing the meter signature and number of measures lets us anticipate the rhythms and the melodic structure we might hear. First, we see the meter is simple duple. All simple duple meters feature beats that divide into two equal parts (i.e., “simple” beat division) and measures of two beats (i.e., “duple” beat grouping). Before we listen, we prepare to conduct a two-beat pattern or to tap two-beat measures in a “STRONG-weak” pattern. Then we recall rhythmic patterns typical of simple meters. Besides the whole-beat patterns (half and quarter notes), we can think of the seven divided-beat patterns that consist of the eighth- and/or sixteenth-note combinations shown below. Of these possibilities, we expect to hear numbers 5 and 7 less often than the others.



Observing that there are eight measures suggests we might hear one long phrase or perhaps two four-measure phrases. In the case of the latter, we can anticipate hearing a period, which is a two-phrase structure. In a period, phrase one concludes with a half cadence. Thus in measure four the melody is likely to fall to scale degree 2. (Also possible are scale degrees 7 and 5 because 5, 7, and 2 belong to the dominant chord.) In measure eight the melody will almost certainly conclude on scale degree 1, because that implies a perfect authentic cadence. If the period is parallel, phrase two will begin with music like that of phrase one. In this case, prepare to associate the music of measure one with that of measure five and measure two with that of measure six.

It is remarkable to think that all the preceding considerations take place before we hear a single pitch! Now let’s focus on techniques that help us both during and after our listening.

2. Memorize what you hear as quickly as possible.

When we memorize music, we can recall all or any part of it in our mind’s ear. We can slow it down or speed it up. We can deliberately omit some notes or add notes to help us discover familiar patterns, like scales or arpeggios. In class or during an examination, dictation examples are played a limited number of times. By relying on our memory we can exceed these limits and play melodies back repeatedly.

3. Notate what you can when you can.

Many people try to take dictation in the manner they hear or perform music; that is, they begin with measure one and continue uninterrupted until the end. In doing so, they may accurately notate the beginning of the melody but bog down in the middle and run out of time before notating the end. They become so preoccupied with the melody’s challenges that they fail to notate everything they can.

A more successful approach is to notate what we know when we know it. For example, assume we hear a melody four times. After the first hearing, we may notate a few pitches and rhythms at the beginning of the melody, the cadence pitch of phrase one, and the last pitch or two. After the second hearing we might fill in the middle of phrase one and the last two measures of phrase two. After the third hearing we might check phrase one and concentrate on the middle of phrase two. In the last hearing we can take care of any loose ends and check the entire melody. Successful listening often involves this type of “nonlinear” thinking.

4. Listen for familiar patterns and their embellishments.

Most of what we will hear will be embellishments of familiar patterns. The most common patterns are scales and arpeggios. A melody may also feature patterns like sequences. Most embellishments will be skips within a chord (chordal skips, or CS), neighboring tones (N), and passing tones (P). Most rhythms will be related to a small number of patterns that should be memorized.



Taking dictation from melodies played on different instruments can be good practice for the AP Music Theory Exam.

5. Employ shortcuts.

By employing shortcuts we use our time wisely, concentrating on memorizing and analyzing what we hear as quickly as possible. However, will shortcuts produce “sloppy” notation? Because taking dictation is a complex and time-limited task, teachers should stress accuracy, speed, and legibility—in that order. Homework may require perfect notation, but for dictation teachers can be more lenient.


a. Rhythmic shortcuts

Some students notate the rhythm *outside* the staff and then copy it on the staff when they notate the pitches. This doubles their efforts and wastes precious time. To save time, ask students to notate


Chapter 4


rhythm once, writing *in* the staff, near where they think the note heads will go. At any time they can add the note heads. Also, when taking a dictation quiz, students should always notate the rhythm, even if the pitches are difficult, because providing rhythm alone can still earn some credit.

Here are some shortcuts for notating rhythms.

 Quarter note

 Dotted quarter note

 Pair of beamed eighth notes
Draw a single stroke—up, over, and down. (In compound meter, this shortcut can represent a set of three beamed eighth notes.)

 Set of four sixteenth notes
Draw in two strokes—up, over, and down, then across. (In compound meters, this shortcut can represent a set of *six* sixteenth notes.)

 Single eighth note (Draw in one stroke—up, then down.)

b. Pitch shortcuts

The following shortcuts will help students notate pitches more efficiently.

1. Notate more pitches faster by writing “ticks” (i.e., single strokes) for note heads. If necessary, students can make the note heads more readable after the final hearing.
2. Sketch the structural pitches (i.e., the notes that are being embellished), analyze the means by which they are embellished (e.g., neighboring tones, passing tones, or chordal skips), and add the embellishing tones.
3. Listen for simple patterns, like scales and arpeggios. This way you don’t have to “hear” every pitch. Knowing the simple idea and the contour or rhythm may yield one, two, or three measures of music!
4. Remember that chromatic pitches might be: 1) an embellishment of a diatonic pitch (e.g., a chromatic neighbor or a chromatic passing tone); or 2) part of a secondary tonicization (e.g., scale degrees #4-5 may signal that V is tonicized). When we hear music move to a different key, we expect to notate accidentals. For example, raised pitches are often new leading tones (solfège *ti* or scale degree 7).

c. Shortcuts for repetitions

To save time when notating repeated elements, students may employ the following shortcuts.

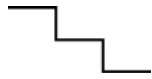
 Repeat the previous measure.

 Repeat the previous two measures.

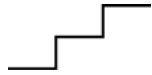
c 1 Copy measure 1 into the measure specified.

||: :|| Repeat the music between the repeat signs.

2X, 3X, etc. Repeat twice, three times, etc.



We hear a descending sequence in three “steps.”

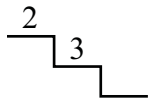


We hear an ascending sequence in three “steps.”

For sequences, think of the picture as a set of stairs.

- Above the first “step,” write a number that represents the duration of the repeated pattern in beats or measures.
- Between the steps, write a number that represents the interval of descent or ascent.

The example below represents a falling thirds sequence. The direction of the stairs indicates the sequence falls. Three “steps” mean that the pattern repeats three times. The “2” above step one means we hear a two-measure (or two-beat) pattern that is repeated. The “3” between steps means that each repetition sounds a third lower than its predecessor.



d. General suggestions

Students can improve their dictation skills by implementing the following suggestions:

1. When taking dictation, *s p r e a d o u t !* More space on the page means more room to think. As a rule, notate no more than four measures per staff line.
2. Conduct (or tap) as you listen. This way you can “feel” the meter and the beat patterns as well as determine the location of important events in a melody.
3. Singing with a pitch system (e.g., solfège syllables or scale-degree numbers) helps us generalize patterns. Recognizing patterns helps speed the process of notating what we hear. We can also improve our facility in related areas, such as in notating music for transposing instruments.
4. Understanding harmony and voice leading helps us make educated guesses regarding pitches. For example, if we hear an authentic cadence, the pitches immediately preceding the cadence are very probably part of or related to the dominant chord.
5. Because harmonic dictation relies so heavily on listeners’ ability to discern the bass line, consider providing students with more bass-clef melodies than those in treble clef.

Chapter 4

6. To conserve staff paper, ask students to reuse the same sheet of staff paper. If they date each dictation, and notate corrections and strategies on their work, students will have created a study guide as well.
7. To score dictation, follow a scoring guideline (rubric) like that used for scoring the AP Music Theory Exam, and teach your students how to score their own work. While teachers might collect work only occasionally, students will have a continuous record of their progress.

6. Practice dictation outside of class.

AP teachers should stress to their students that perhaps the most important strategy of all is to practice dictation outside of class, taking advantage of every listening opportunity. For example, students can listen to a favorite piece and try to play or sing it back by ear. When sitting in a large ensemble rehearsal, they can listen to a section rehearse its part, memorize it, and perform it in their imaginations. When a doorbell rings, students can listen to the interval and identify it.

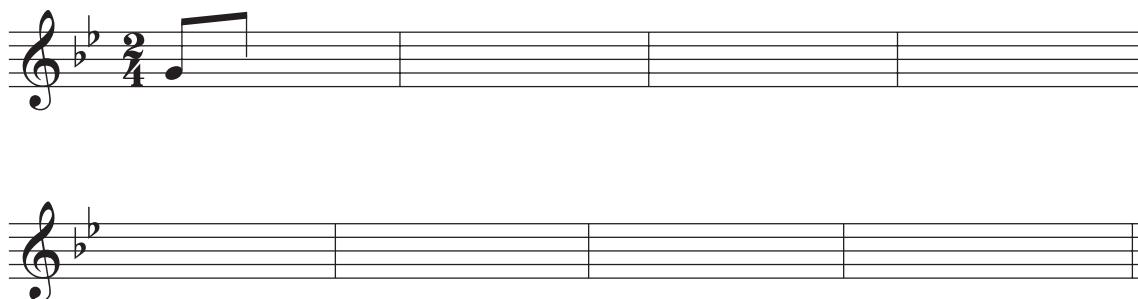
Putting the Strategies to Work: A Sample Melodic Dictation

Let's practice these strategies by taking a sample melodic dictation. Because the melody is comparable to those at the conclusion of the AP Music Theory course, it may be given to your students for additional practice during their final preparations for the exam. In that case, the discussion of the solution will serve as a sample instructional outline that AP teachers can follow to review melodic dictation strategies.

To hear the melody, go online to <http://apcentral.collegeboard.com/phillips>.

Listen to this melody five times with one-minute pauses in between. As you listen, try to employ as many of the strategies as possible.

Starting Notation: Sample Melody



Though no two people would sketch a melody in exactly in the same manner, here are some examples of what might be sketched after each hearing. Some of the words or symbols represent what a listener might think to help recall the patterns but would not appear in an actual sketch.

First Hearing

The first hearing provides the overall shape of the melody and some detail at the beginning and observes some important features, like the sequence, the cadential pitches, and the contour of the conclusion.

think "asc. mel. minor"

think "desc. sequence"

think "tonic arpeggio"

Second Hearing

After the second hearing we might add rhythmic patterns to the beginning and outline the sequence, which begins as a one-beat pattern that falls by step. We also hear that phrase two begins like phrase one and that its conclusion features the natural minor scale.

think "asc. mel. minor"

think "desc. sequence"

think "tonic arpeggio"

think "nat. minor scale"

c 1

c 2

Chapter 4

Third Hearing

During the third hearing we might finish the pitches of phrase one, thinking of the melodic embellishments, neighboring (N) and passing tones (P), to help us notate them. We can also refine our idea of phrase two, adding rhythm patterns and observing the manner in which the natural minor scale has been broken into segments, the last of which is a minor pentachord.

The musical notation for the Third Hearing consists of two staves. The top staff shows a melody in 2/4 time with a key signature of two flats. It includes melodic embellishments labeled 'N' (neighboring tone) and 'P' (passing tone). The bottom staff shows the same melody with labels 'c 1' and 'c 2' indicating specific measures. Arrows point to the final two measures of the melody with the labels 'think "nat. minor scale"' and 'think "minor pentachord"'.

Fourth Hearing

Now we check phrase one but focus on completion of phrase two, filling in the scales and observing that the dominant pitch is embellished with a neighboring tone (N).

The musical notation for the Fourth Hearing consists of two staves. The top staff shows the melody from the previous section. The bottom staff shows the same melody with labels 'c 1' and 'c 2' indicating specific measures. An arrow points to the final measure of the melody with the label 'N' (neighboring tone).

Fifth Hearing

On the final hearing we confirm the chromatic neighboring tone in measure 7 and copy measures 1–2 into measures 5–6. We also listen to check our work throughout the entire melody.

The musical notation for the Fifth Hearing consists of two staves. The top staff shows the melody from the previous section. The bottom staff shows the same melody with the chromatic neighboring tone in measure 7 confirmed and measures 1–2 copied into measures 5–6.

Staging the Development of Melodic Dictation Skills

The sample melody and the techniques described to hear, analyze, and notate it represent the level of skill that is expected at the conclusion of the AP Music Theory course. To achieve this level, teachers must begin with simple tasks that build toward more complexity. Here are but a few of several possible strategies regarding the introduction of skill development.

- a. Begin with small segments.
- b. Segregate pitch and rhythm.

Examples: Perform a two- or three-note pitch pattern or 1–2 beats of rhythm. Ask students to respond by singing, playing, or writing what you performed. Gradually increase the number of pitches or beats. Include patterns from previous lessons so students begin to recognize them from memory. When you are requesting written responses, ask students to do so in various ways: e.g., with notation, letter names, solfège syllables, and/or scale-degree numbers. For rhythm patterns, ask for notation and/or counting syllables (rhythmic solfège), etc.

- c. Perform simple patterns; then embellish them.
- d. Ask students to identify patterns by name before responding in other ways.
- e. Reinforce rudiments at every opportunity.

Example: Perform a major triad. Ask students to identify the pattern (major triad). Give them the root (e.g., D). Ask: If this triad is tonic, what is the key signature? (two sharps) Perform again, this time embellishing each chord member with its lower neighboring tone (D-C#-D; F#-E-F#; A-G-A). Ask students to identify the type of embellishment (lower N tone). Now ask students to respond by playing, singing, or writing what you have performed.

- f. Practice error detection.
- g. Incorporate dictation activities into rehearsals.

Examples: In rehearsal, sing the trumpet part but make a mistake in either pitch or rhythm. Ask students where you made the mistake and which type of error you made. Then ask them to correct your error by playing the correction or by answering aloud. Similarly, when a student reads a melody at sight, ask others to record errors by measure and type.

- h. Assign “real world” dictation projects outside of class.

Example: Ask students to transcribe a favorite song. People who play in bands or make arrangements do this all the time. Start simply, requiring only the pitches of the introduction or just the repeated rhythm of the guitar. Over a period of days, check students’ progress, and require more and more information until they have completed the transcription. Ask a second student to transcribe the same work independently. Then have both students compare their answers in a large-scale exercise in error detection!

Obviously, a brief article cannot cover all aspects of teaching melodic dictation, but I hope that the strategies presented will help teachers approach the task with some new ideas as well as a renewed enthusiasm. I highly recommend that you add your own ideas to these strategies and consider sharing them with other AP teachers on the College Board’s Music Theory Electronic Discussion Group (EDG). Information on how to become a member of the EDG is available on the Music Theory Home Page at AP Central.

Teaching Harmonic Dictation

by Thomas L. Durham, Brigham Young University, Provo, Utah

Introduction

The ability to “hear with the eye and see with the ear” distinguishes trained musicians from those less proficient. Most teachers concentrate on using ear-training exercises that drill rhythm, melody, and harmony. Of the three, many students regard harmony as the most difficult.

What makes harmonic dictation so hard? First, students must grasp multilayered information. Harmony adds the vertical dimension to the horizontal. This makes it harder to master than rhythm or melody. Second, students must label chords with new and often unfamiliar symbols.

Why practice harmonic dictation? We learn about music not just by studying notation but by hearing. Examining scores and listening to music are complementary activities, and harmony is a special, perhaps unique, element of Western music. Indeed, the development of tonal harmony during the Common Practice period represents one of Western civilization’s greatest achievements. There is merit in learning to understand tonal harmony, just as there is in studying our culture’s literature or scientific accomplishments.

You can improve your students’ musicianship and skill at harmonic dictation if you plan ahead and move slowly, concentrating first on the bass, then working on writing the Roman numeral analysis. Next, move to outer voices by adding the soprano; include all four parts later if you wish. Keep your students’ spirits high, and vary your approach with an assortment of drills that will hold their interest. Using your own expertise, teach your students strategies that will increase accuracy.

Plan Ahead

Without a strategic plan, you put your class at a disadvantage. Expecting students to comprehend an arbitrarily chosen harmonic progression will overwhelm them. Instead, design a reasonable, step-by-step outline, beginning with simple concepts that your class can handle. A measured approach allows students to move on to any new concept with confidence.

Teach a sequence of topics that makes sense. You may wish to consult the AP Music Theory section of AP Central for resources dealing with harmonic dictation, or you could pick up a dictation manual (online, at the bookstore, or in a good library) and review its table of contents. Then devise your own plan based on what you know about your students, the text, and your own strengths.

Assuming most school years last 36–40 weeks, you should plan to finish all necessary concepts in time for the AP Music Theory Exam in May. Figure 1 outlines a sequence for teaching harmonic concepts at the college level.

Figure 1

College-Level Sequence

First semester—primary chords

1. Tonic, dominant, root position
2. Tonic, subdominant, root position
3. Primary triads, root position
4. Tonic, dominant, first inversion
5. Tonic, subdominant, first inversion
6. Primary triads, first inversion
7. Dominant sevenths and inversions
8. Tonic six-four
9. Primary triads in second inversion
10. Tonic, subdominant sevenths

Second semester—secondary chords

11. Supertonic
12. Supertonic seventh
13. Mediant
14. Submediant
15. Leading tone
16. Mediant, submediant sevenths
17. Common borrowed chords
18. Less common borrowed chords
19. Fully and half-diminished sevenths
20. Inverted diminished seventh

(This outline omits secondary dominants, commonly found on AP Music Theory Exams, and includes borrowed chords, not found on AP Exams; adjustments would be necessary for an AP class.) In two 20-week semesters, you could cover each topic in two weeks, though you need the flexibility to adjust for “weightier” topics such as dominant sevenths and inverted diminished seventh chords. Discerning teachers instinctively know when to slow down or move ahead.

Begin Slowly

Practice harmonic dictation during every ear-training session, including the first day of class. Do not expect students to wrestle with four-part dictation early on. Start by having them listen for harmonic concepts such as chord quality, root position, harmonic progression, tonic/dominant, consonance, dissonance, and Roman numeral symbols. On the first day, consider using the introductory seven-chord progression below (figure 2), which is made up of tonic and dominant chords only in root position:

Figure 2

C: I V I V I V I

Establish C major by having the class sing the scale or by playing an authentic cadence in the key. Next, play the example and pose these questions:

- *How are these chords similar?* All chords sound major, and each seems “grounded” with the root in the bass, meaning all are in root position.
- *How are they different?* Some chords sound at home, and others sound unsettled.

You might also have students sing *do* as you play each chord. If *do* sounds compatible (consonant) or harmonizes, identify the chord as the tonic. If *do* sounds incompatible (dissonant), the chord must be the dominant. Alternately, have them sing either *ti* or *do* as each chord is played, asking them to discern whether tonic or dominant accommodates those scale degrees.

Next, add three flats to the key signature and play the example through in C minor, making sure to use harmonic minor by raising the leading tone in the dominant triads. The answers to the questions above remain the same—except now only the dominant triads sound major, while the tonic triads have changed to minor. Because of this, identifying tonic or dominant is actually easier in minor.

Don’t hesitate to introduce Roman numeral symbols at this time. Have the students write out seven blanks and then play the example again in major. Ask them to mark each blank tonic (I) or dominant (V) as they hear the progression. Finally, give students the first bass note and have them write out the remainder of the bass line on staff paper. This simple example requires a choice between two notes (the first and fifth scale degrees) placed in the correct octave in the bass clef. *The importance of identifying a bass line cannot be overstated*, because it correlates so closely to Roman and Arabic numeral analysis.

Outer Voices

Midway through the first semester, (see figure 1, first semester, topic 6) students probably have enough melodic sense to begin thinking about the highest voice. Ideally, they have already practiced some melodic dictation. A good exercise concentrating on outer voices might involve progressions such as the one found in figure 3:

Figure 3

Figure 3 shows a musical exercise in B-flat major. The bass line consists of whole notes: B \flat , D \flat , F, G, B \flat , D, F, B \flat . The soprano line consists of whole notes: D, F, A \flat , B \flat , D, F, A \flat , B \flat . The chords are labeled below the bass line: I, I⁶, IV, IV⁶, V, V⁶, I. The first chord is labeled "(given)".

Notice the presence of all primary triads in root position and first inversion. Give your students the spelling and spacing of the first chord, then play the progression through a few times while they complete the bass line. Next, they can determine the Roman numeral analysis, because each bass note matches only one primary triad or its inversion in B-flat major. Once a student correctly determines, for example, that the bass note in the fourth chord is a G-natural, then the corresponding analysis can only be a IV⁶ chord, because other harmonies that share this bass note have not yet been introduced.

After successfully writing the bass line and Roman numerals, students should try writing the soprano. They may choose to treat the soprano as an accompanied melody in whole notes with the advantage that the selected soprano notes must harmonize with the Roman numeral analysis. Have the class sing the melody, or have them fix the soprano in their minds and reconstruct the line from that.

Students should hear the *function* of chords and the common connections those chords describe. Relying on theoretical crutches is a first step in this process, rather like identifying intervals by associating them with tunes. Ideally, your students will learn to identify soprano and bass lines and chord symbols more holistically as they gain experience.

Four-part Dictation

Although four-part harmonic dictation is not included on the AP Music Theory Exam, many college teachers introduce it a few weeks into the second semester when students probably have enough experience to tackle this skill. Such exercises strengthen the aural/visual link and reinforce the rules of part writing and voice leading. Writing four parts sounds daunting, but if students have adequate experience with outer voices, completing the inner parts becomes merely a part-writing exercise. Consider the example in figure 4 for your class:

Figure 4

Figure 4 shows a four-part harmonic dictation exercise in G major. The exercise consists of eight chords: e: (given), i, VI, iv, ii°₆/₅, i₆/₄, V⁷, and i. The chords are written in four-part harmony on a grand staff (treble and bass clefs). The bass line is clearly visible, and the inner voices (alto and tenor) are closely spaced, making the exercise easier to complete. The soprano line is also clearly visible.

As suggested above, encourage your students to concentrate first on the bass line, then the Roman numeral analysis, and finally the soprano. Once students have the outer voices and analysis in place, they may rely on their knowledge of spelling and voice leading to complete the inner voices. The close spacing in this example simplifies the task, because the alto and tenor lines have little wiggle room.

Notice the motion of the inner parts for figures 3 and 4. Out of 24 chord connections, the inner parts stay the same from chord to chord half of the time. Nine connections involve a second, and three utilize a leap of a third. In exercises such as these, train your students with this principle in mind: *Inner voice motion usually changes by step, occasionally by third, and rarely wider than that.*

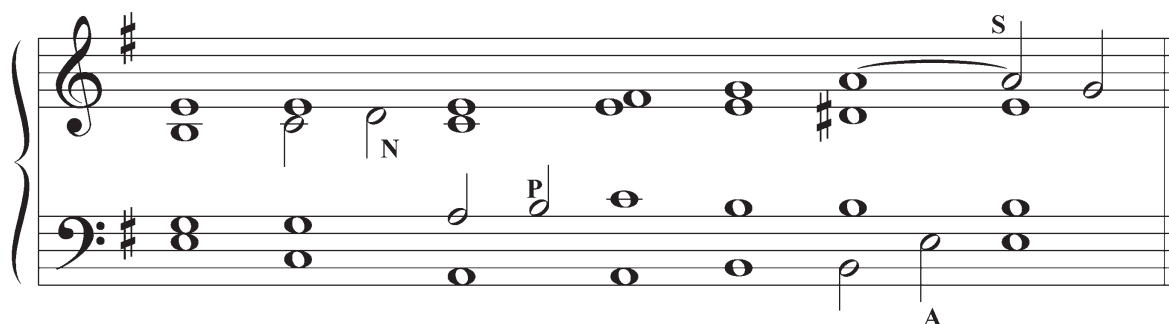
Mix It Up

Harmonic dictation can get tedious, so use some imagination and diversify your approach. Here are three suggestions:

1. Identifying nonharmonic tones (see figure 5)
2. Detecting errors (see figure 6)
3. Unscrambling chords (see figure 7)

For each of these ideas, assume students have figure 4 in front of them. First, examine figure 5.

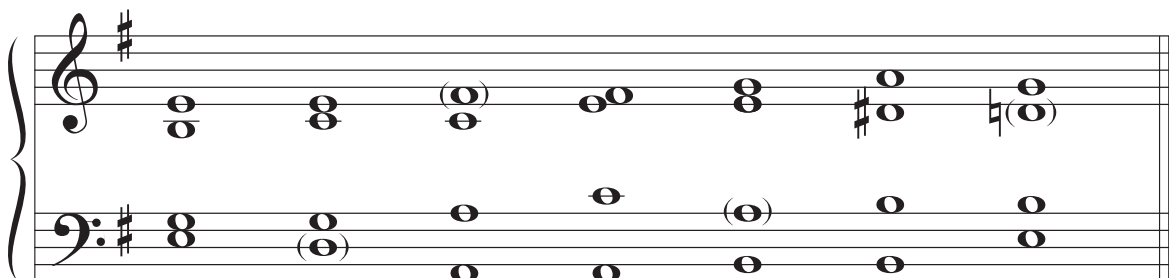
Figure 5—nonharmonic tones



In figure 5 I have taken the progression in figure 4 and added four nonharmonic tones—one for each part. As the students examine figure 4, say, “Listen to the progression, write in the nonharmonic tones that I play, and then analyze them. There will be one nonharmonic tone added in each vocal part.”

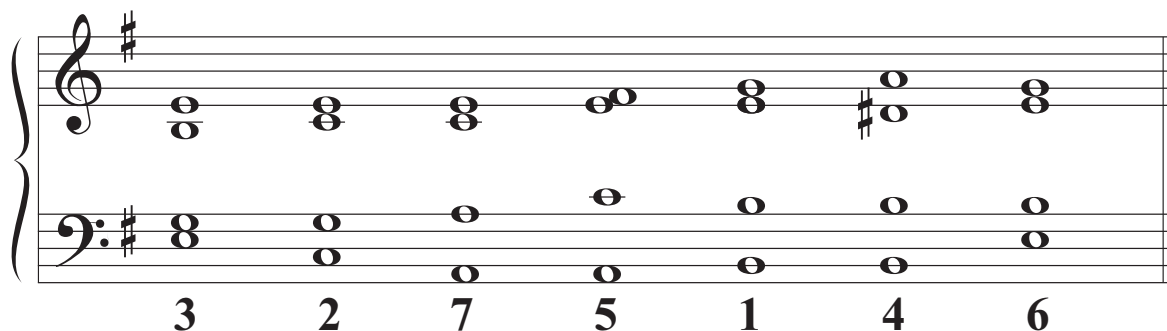
Figure 6 can be used to ask students to find errors:

Figure 6—error detection



In figure 6 I have again used the material from figure 4, but now I have added misspellings by altering one note in four different chords (errors in parentheses) so that each voice contains one error. Have students examine the progression as it is correctly notated, then play the “wrong” version in figure 6, asking them to detect which voice contains the error and what that error is.

Figure 7—harmonic scramble



Next, I have taken the same seven chords but scrambled their order by playing them out of sequence, using the numbered succession shown in figure 7. Have students look at figure 4 while you perform the scrambled order in figure 7 by playing the chord numbered “1” first, the chord numbered “2” second, and so on. Ask students to place the number “1” under the chord they first hear, “2” under the second chord they hear, etc. After hearing the scrambled version, students should have written out seven numbers that read, left to right, the scrambled order you played: 3—2—7—5—1—4—6. Although the results create some odd connections, students will get experience in discriminating four-part structures.

Troubleshooting

Some students do not digest aural skills as fast as others; they need extra help, hints, and recommendations. Here are a few suggestions:

Don’t guess until later. I tell my students, “On the first hearing, write down only answers about which you are positive;” for the second hearing, “Now write things you are fairly sure about;” for the third, “Make some educated guesses;” and finally, for the last hearing, “Fill in all answers even if you have to guess randomly.” This sequence from “positivity” to “guessing” yields better results. One can reconstruct a harmonic progression more accurately by building around correct answers rather than assembling the chord succession from false answers. For example, a student will bungle a soprano line if on the first hearing he or she writes a wrong note and then “anchors” the rest of the soprano contour around that misplaced pitch. Remind students that it’s better not to guess too soon.

Know your theory rudiments. Knowledge of music theory basics improves performance in harmonic dictation. Suppose a student knows a chord’s bass note or Roman numeral but has difficulty deciding between two notes for the soprano. Because it’s likely that only one of those notes comports with the spelling indicated by the bass note or Roman numeral analysis, knowing the chord spelling will clear up the confusion.

Capitalize on part-writing skills. Recognizing how certain scale degrees incline and how melodies must bend will help students with harmonic dictation. For example, knowing how sevenths and leading tones resolve, and the myriad other principles of voice leading, can help to simplify a complex harmonic dictation drill.

Focus on the bass. I urge my students to begin harmonic dictation exercises by concentrating on the bass part. Identifying the bass, more than any other part, can lead to all other answers. Having students sing chorales or hymns can help them develop the ability to hear and analyze chord progressions. I assign

students to sing a different vocal part in their own octave for each verse, giving particular emphasis to the bass line. Any class could do the same when practicing sight-singing. This activity gives students less familiar with bass clef some valuable reading experience and exposes singers to the character and patterns of a bass line.

Profit from individual strengths. Like most teachers of aural skills, I suggest that students focus first on hearing the bass line, but occasionally students may be successful using other approaches. Some do better if they write Roman numerals first, while others prefer to start with the soprano. Many students like to work on melody, bass, and Roman numerals simultaneously. In ear training, wise instructors encourage any method that leads a student to the right answers. Students should discover their own strategies for taking harmonic dictation and use them consistently.

Conclusion

You can use several techniques when teaching harmonic dictation. In my classes we use harmonic progression exercises that comprise seven chords, all in whole notes without a meter, as in the figures shown above. The progressions imitate musical phrasing and cadence structure by beginning on the tonic and ending either on tonic or dominant. I begin each session with simple examples of four chords in a white-key mode, then progress to seven chords and a mixture of key signatures. I eventually ask my students to write out four parts, with analysis, after five hearings. Topics are cumulative—any chord previously studied is fair game after that.

Whatever approach you use, familiarize yourself with the format and typical length of the harmonic dictation exercises as they appear in the AP Music Theory Exam, where students must write out soprano, bass, and Roman numerals after four hearings. Advise your classes of this standard and practice it in preparation for the exam. Try using some of the suggestions in this article and see if they improve your students' performance.

Thinking Horizontally: Learning Part Writing and Figured Bass Through Analysis

by Ron Rodman, Carleton College, Northfield, Minnesota

Introduction

How many of us teaching harmony classes get student part-writing papers that look like this?

Example 1

F: I ii⁶₅ V vi V⁷/V V I

You might consider it pretty good: the student seems to understand the basic structure of chords (except for the secondary dominant) but hasn't quite got the concept of part writing, i.e., producing smooth voice leading within each part.¹ So, you ask the student to try again, encourage him or her to make the voices move in a smoother motion, and even work with the student in one-on-one tutorial sessions. After some blood, sweat, and tears, the student hands in the second version, which may look something like this:

Example 2

F: I ii⁶₅ V vi V⁷/V V I

Ah! Now, the voice leading is much better, although the student has still forgotten the accidental for the V⁷/V chord. But what do we now see in measure 2? Parallel octaves and fifths in measure 2 (the V-vi progression)! Such an infraction cannot go uncontested, so you lower the grade a few points and hand

1. This example is a composite of actual student responses on the 2002 AP Music Theory Exam, free-response question 6.

the paper back. Then consternation follows, when the student complains of the many hours it took to complete the “corrected” assignment. You answer by stating something about part-writing rules that must be followed. Then the student poses a question from between clenched teeth, “Why do we have to follow the *rules* anyway?” And you answer with a platitude such as, “You must know and follow the rules so you can break them later,” or (quite stone-faced), “These rules were good enough for Beethoven, and they are good enough for you!”, or as a last resort (and from behind your own clenched teeth), “Because I said so!”

Many of us who teach tonal harmony have experienced encounters like the imaginary scenario above. Such is the nature of part writing in the traditional theory curriculum. In our teaching we try to emphasize the spelling of chords with correct spacing and doubling in four voices, but then we must get students to understand the principles of composing four voices over a set of Roman numerals, or realizing three voices above a bass line with the anachronistic figured-bass symbols. And then, we must focus their attention on how each individual voice moves through this four-part texture. The perennial problem crops up as we teach our students not to write parallel fifths and octaves, yet they see and hear them in the popular music that is all around us (what’s more, students think that parallel fifths and octaves sound *good!*). Year after year, we get the same question: “Why do we have to follow *rules*?” Often, we teach, or try to teach, the principles of part writing and figured bass without truly understanding the origins of the system from which they came. If we as teachers don’t understand them, how will our students?

Frustration over getting students to understand how to part write or realize figured-bass exercises is as old as theory instruction itself. Joel Lester (1992) writes about one frustrated pedagogue in the eighteenth century who tried to teach his students how to realize a figured bass and, by extension, write four parts with smooth voice leading. That the teacher was frustrated is revealed by documents showing multiple corrections of a student’s work after four, five, and even six errant attempts. The teacher’s name was Wolfgang Amadeus Mozart, and the rest, as they say, is history. Based on the slow (or lack of) progress by some of his students, Lester concludes that Mozart, for all his compositional genius, also had difficulties as a theory teacher. He writes:

Mozart could compose a beautiful bass line, but he most likely could explain his choices only in terms of a smooth bass line and avoiding problematic resolutions and progressions ... For him, attending to point-to-point harmonic thinking in this manner while keeping the large-scale linear and structural aspects of the music in mind was not a problem. But he seems to have had no way to communicate this. (185)

When we look back at our student’s response in examples 1 and 2, Mozart’s pedagogical dilemma resonates with us. We wonder how we might more effectively teach how to part write and realize figured-bass exercises, given the complexity of these exercises. Beyond that, how do we get our students to “buy into the rules” in order to become good part writers?

Time is valuable in the AP Music Theory classroom. Much material must be covered in order for students to be successful when taking the AP Music Theory Exam. For part writing and figured bass, no activity is more valuable than actually *doing* the exercises—that is, composing four parts to Roman numerals and realizing figured-bass examples. However, is this the only pedagogical tack we might take in order for our students to learn these skills? While composing these exercises is important, and even fun and interesting to some students, the actual goal of these activities is for students to understand the system of tonal harmony. We are not trying to produce eighteenth-century style composers; rather, we want students to observe how composers like J. S. Bach, Handel, Mozart, or Johann Heinichen (how’d *he* get in there?) approached composition. Even more important, through part writing and figured bass we

can see what the musical language of Bach, Handel, Mozart, Heinichen (there he is again!) and others have in common. To elucidate this pedagogical outcome, we might take some time out of our regular activities and explain to our students exactly where this system comes from. Then, having studied the ontology of this system, we can ask them to role-play and critique the music of *this* time. In other words, we ask students to think analytically.

The “Rules”

Before addressing some of the pedagogical strategies for part writing and figured bass, let’s first approach the problem of rules by discussing the rules themselves. In numerous music theory textbooks, each chapter introduces a particular chord, shows it in a musical context, and discusses its usage in Common Practice music. In some books, for each chord introduced, a series of rules on how to use the chord is then generated: how to write it in all its inversions, any special usages of the chord, etc. Most of these texts are helpful because of their thoroughness, and they serve as effective points of reference for student and teacher alike. However, the thoroughness by which chords are presented in such texts is often misinterpreted as a set of prescriptive rules that composers slavishly followed in the “Common Practice period.” (I use this term to represent the period of tonal harmony covered in most theory courses. This period encompasses music that was composed during the seventeenth and eighteenth centuries and continued to develop through the nineteenth century.)

Where did these rules come from? And who followed them? In fact, there are no “rules” per se. In his theory book, Leo Kraft (1987) writes: “Composers do not follow rules, the rules are abstractions of what composers have already written” (168). The materials presented in theory textbooks are not rules, but rather a synthesis of compositional practices used by composers in a certain period of time in a certain place—in this case the seventeenth and eighteenth centuries in Europe, particularly Western Europe. Instead of rules, it may be more beneficial to talk about a series of protocols, preferences, or stylistic constraints (or other more polite terms) for composing that was used by numerous composers in a particular time and a particular place; that is, Western Europe during the time from the late-eighteenth to the late-nineteenth centuries.

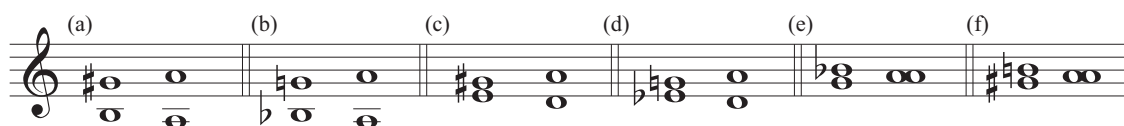
Why this time and place? Theory curricula have chosen this era because it represents a unique moment in time where three disparate musical disciplines emerged from history and came together to produce a truly outstanding musical product—what we call “tonal harmony” in our AP theory classes. These practices were: 1) species counterpoint, which measured how two or more voices move through musical time by alternating consonance and dissonance; 2) an emerging theory of harmony (led by Rameau) that identified vertical entities of chords and how they move through musical time; and 3) figured- (thorough-) bass theory and practice, which was a means of measuring vertical intervals from a bass line in performance practice. How these three practices came together in the seventeenth and eighteenth centuries is a fascinating study in itself, but for our purposes it is sufficient just to say that they *did* come together. As disparate as these practices were, they were used by teachers in that time because they all dealt with a common subject: how to compose beautiful, elegant music.

In time, what was a composition course became a pedagogical method that we know as “theory” today; rather than learning how to compose contemporary music, we now emphasize analysis of a particular (and elegant) style of music. In fact, the musical examples like the ones above that we insist our students emulate are idealized examples of Common Practice-period harmonic writing. However, the term “part writing” or “harmony” doesn’t really do justice to the elegant, complex system that was produced from the synthesis of counterpoint, harmony, and figured-bass performance practice.

A (Very) Brief History of Theory Lesson

To be understood from a historical point of view, tonal harmony can be seen as beginning in the fifteenth and sixteenth centuries, as a compositional technique founded first on the opposition between imperfect and perfect consonances; second on the principle of the semitone (the leading tone) as a means of connecting consonance with consonance; and third on the treatment of dissonances between two or more voices. In his essay “Harmony,” Dahlhaus described the purpose of harmony at the beginning of the eighteenth century as the way to explain the progression from an imperfect to a perfect consonance, e.g., from a sixth to an octave, or from a third to a fifth or unison (see example 3 below). Intervallic progressions that contain movement by a semitone in one of the voices were reckoned especially compelling. Such motions were illustrated by Dahlhaus as follows²:

Example 3



Today we impose our own harmonic thinking upon such figures. Example 3a is an incomplete $V\frac{3}{4}$ -I (or i) in A minor/major; 3b is iv^6 -V in D minor; 3c would be a rather peculiar progression of an incomplete V/V going to I (or i) in D major/minor; 3d is VI-V in G minor; 3e is iv -V in D minor; and 3f is $V\frac{6}{5}$ -i (or I) in A minor/major.³ But assigning Roman numerals willy-nilly to these examples misses the point. What Dahlhaus is pointing out is that tonal harmony is more about the linear motion of voices than identifying the chords themselves. (The fact that he uses intervals instead of full chords is telling in this regard.)

Dahlhaus shows that chord progressions, especially “smooth” chord progressions of the Common Practice period, really have their origins in counterpoint. We can see how the idea progressed throughout the centuries by looking at counterpoint treatises. The *Institutioni harmoniche* (1558) of Gioseffo Zarlino (1517-90) is often used as a starting point to find the origins of harmony. Zarlino’s treatise on counterpoint, which was written to describe the compositional practices of sacred music of his time, laid out some voice-leading principles that have been followed ever since. His foremost concern is to provide a pleasing variety in music, one in which there is an alternation of consonance and dissonance, with the dissonances being treated in prescribed ways. He prohibited consecutive parallel consonances (including parallel octaves and fifths) because these violate the “law of variety,” and because he believed that there should be a semitone (literally, or contained within a skip) somewhere in any interval-to-interval connection. Zarlino was one of the first to recognize the bass, or lowest voice, as the foundation of any multivoiced piece, where previously it was the tenor voice that was in control. He was also aware that intervals are invertible, laying the groundwork for the invertibility of chords.

The other important figure in the study of harmony is the French composer and theorist Jean-Philippe Rameau (1683–1764). In addition to his many compositions, Rameau wrote a series of treatises that effectively brought attention to the vertical aspect of music, that is, the notion of chords (two types, the perfect chord and the seventh chord) and harmony. His *Traite de l’harmonie* of 1722 popularized the idea of the chord, the invertibility of chords, and the notion of octave equivalence. It also

2. Carl Dahlhaus, “Harmony,” *The New Grove Dictionary of Music and Musicians* (London: Macmillan, 1980): 179. Also available online at www.grovemusic.com.

3. Rameau would call a progression like 3.c an *ellipsis*, as it omits the V chord in the middle of the progression.

Chapter 4

discussed chord progressions at length through what he called the fundamental bass. Rameau attempted to demonstrate that all chord progressions (i.e., fundamental bass progressions) were by fifth or third, but he admitted that some move by second. Rameau also described two types of cadence, the perfect cadence and the irregular cadence. It was Rameau who, in 1722, codified the concept of “chord” as a harmonic entity. Prior to that, the concept of harmony either did not exist or was considered a by-product of the harmonious combination of separate voices through counterpoint.

Although Rameau advocated harmony over counterpoint, by 1774-75 counterpoint treatises began to incorporate at least some of his harmonic ideas. In *Esemplare o sia saggio fondamentale practicaio di contrappunto sopra il cant fermo*, Giovanni Battista Martini (1706-84) recast Zarlino’s counterpoint rules about consonant and dissonant intervals, writing about them in terms of chords. For example, taking Zarlino’s rule that beginnings and endings of pieces and sections should be perfect consonances, Martini stated that beginnings and endings should form “the perfect harmony,” footnoting that the perfect harmony is the major triad, the source of all consonances, including the $\frac{5}{3}$ and $\frac{4}{3}$ chords (Lester 178).

Without digressing further and providing a complete history of the development of harmony, it is sufficient to quote Lester (1992) when he pointed out:

... the dichotomy that some twentieth-century scholars propose in order to separate the eighteenth-century harmonic theory from linear aspects of tonal music is mostly irrelevant to the eighteenth century. By and large after the middle of the century, almost all theorists explicitly used at least some portions of Rameauian harmonic theory. But this did not prevent them from discussing in a meaningful manner many of the linear aspects of the music of their time. (191)

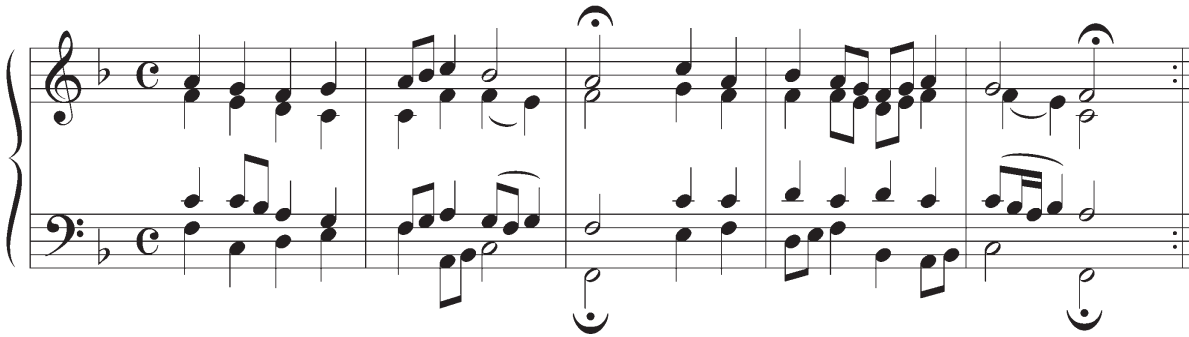
Thinking Analytically

History shows that tonal harmony is not just about chords but about chords and how they move through musical time as an aggregate of individual voices. Tonal harmony weds counterpoint, harmony, and figured bass theory into a complex whole that has both a vertical and a linear dimension. When viewed in this way, we see part-writing and figured-bass problems such as those on the AP Music Theory Exam as a rich tapestry woven with the “warp” of four melodic voices intertwining with the “woof” of the vertical chords. More contemporary analogies for this type of musical texture may be a matrix (London and Rodman 2000), a crossword puzzle, or even a Sudoku,⁴ where every element must be in place to achieve the right answer. Many would argue that it is this fusion of the vertical with the linear into a complex, unified whole that has made part-writing and figured-bass theory such a compelling study in theory classes for over 200 years.

But rather than argue incessantly with students about rules, much can be gained by showing actual musical examples from the period that reinforce the concepts of voice leading. Examples abound, but I provide two to stimulate some thinking about how analysis can be used to assist part writing. The first example is from a chorale by J. S. Bach—long the paramount example of composition in the strict four-part style. After studying examples such as that below, teachers can point out the features to students. Such activities will eventually lead to the students themselves pointing out the various features. This reciprocal activity can be helpful to students’ learning and understanding of the principles of voice leading.

4. A Sudoku is a numerical crossword puzzle consisting of 81 squares arranged in rows, columns, and nine 3 x 3 blocks, where every column, row, and block must contain the numerals 1 through 9 with no duplications.

Example 4. J. S. Bach: *Schmücke dich, O liebe Seele*⁵



In measure 1 of the example, some of the things to note include the good doubling of roots in the first three chords; the contrary motion between the bass and upper three voices in the V-vi motion in beats 2–3; and the good resolution of scale degrees 4–3 in the tenor, as the B \flat is the chordal seventh of the V⁷ chord on beat 2. On the V⁶ chord on beat 4, it is interesting to note that Bach is less interested in doubling the root of the chord than in maintaining a smooth, stepwise line in the tenor (C-B \flat -A-G-F).⁶ Measure 2 becomes even more interesting, as we might wonder why Bach doubles the third of the I⁶ chord on beat 2. The bass motion (A-B \flat -C) echoes the chorale melody of the soprano the beat before, thus forming a brief canon. The bass motion also completes the motion (F-G-A-B \flat -C) begun in the tenor, driving to $\hat{5}$, which then resolves to $\hat{1}$ at the cadence in the next measure. The second measure also features a good example of a 4–3 suspension in the alto voice, properly prepared and resolved.



Studying Bach chorales can reinforce the rules of part writing and voice leading.

5. Charles Burkhart, ed., *Anthology for Musical Analysis*, 5th ed. (Fort Worth, Texas: Harcourt Brace, 1994).

6. Some theory texts state that doubling the soprano is preferable for triads in first inversion. Undoubtedly, such principles came from observations of music like this.

Chapter 4

There are many other interesting voice-leading aspects to comment upon in the Bach chorale. One overarching principle is that Bach's thinking seemed to be heavily influenced by the linear. He often sacrificed "proper" doubling of chords in order to maintain smooth motion in all four voices. At the same time, we should note that roots of chords are doubled in all prominent places: at the beginning, at the end, and at all cadences.

While studying chorales and other examples in the strict four-part style is useful, we may want to branch out and find principles of good voice leading in music other than this style. We may, for example, consider the opening to this work by Beethoven:

Example 5. Beethoven: Piano Sonata, Op. 7, 2nd movement⁷

Largo, con gran espressione.

The musical score shows the opening of the second movement of Beethoven's Piano Sonata, Op. 7. It is in 3/4 time and consists of two staves. The first staff is the treble clef and the second is the bass clef. The tempo is 'Largo, con gran espressione.' The first measure is marked 'p' (piano) and the second measure is marked 'sf' (sforzando). The music features a series of chords and single notes, with a chromatic alteration in the bass in measures 3-4.

Here, it is important to point out that because this is a piano piece, Beethoven violated many "rules" of spacing and, particularly, doubling. However, the linear principles of voice leading are the same as with the Bach example. Leading tones in measures 2 and 8 resolve to $\hat{1}$. The chromatic alteration of the bass in measures 3–4 resolves itself in the bass, thus avoiding any possibility of a false relation. And, in spite of the parallel octaves for pianistic effect, there are NO parallel fifths—note the contrary motion in nearly every bar. You may find additional interesting voice-leading issues to discuss here.

The "Rules" Redux

The problem we all face in the theory classroom is how to get students to understand the vertical and horizontal features of Common Practice music, given the time constraints that AP teachers have. Consequently, because of the complex nature of part-writing exercises, many theory instructors have found it is best to keep rules simple and to a minimum. Context will always dictate exceptions, but for the most part, a few standard concepts will carry students a long way to success in part writing. We can separate these rules into two major categories—vertical and linear—and then synthesize some general concepts to follow in each category.

The Vertical

Theory teachers tend to spend a lot of class time on the vertical aspect of part writing. Did the student spell the chord correctly? Does each chord have four voices? Is the appropriate chord tone doubled? In fact, the vertical aspects of part writing are the least troublesome for many students and really don't require a great deal of pedagogical attention. From a vertical point of view, after spelling the triad correctly, the student only has to worry about the spacing of the triad and doublings.

7. Charles Burkhart, ed., *Anthology for Musical Analysis*, 5th ed. (Fort Worth, Texas: Harcourt Brace, 1994).

Here are some concepts to keep in mind:

- Emphasize spacing when you ask students to write in open (choral) spacing. Many problems can be overcome by having voices in their own “space.” In open spacing, every voice is based on its own basic vocal range; the soprano’s space is the upper treble clef, the alto voice uses the lower treble clef, the tenor voice uses the upper bass clef, and the bass voice uses the lower bass clef. Some teachers follow the guideline below. If C4 is considered middle C, then the ranges of voices are as follows:

○	Soprano:	E4–E5
○	Alto:	B3–B4
○	Tenor:	E3–E4
○	Bass:	G2–G3

When voices get out of these spaces, problems are more likely to occur, such as a too-high tenor or too-low soprano.

- In open spacing, the range of the four voices from bass to soprano will often exceed an octave, but the range between any two contiguous voices must be an octave or less. Indeed, students’ most common spacing error is violation of the “consecutive upper voice rule,” where the distance between any of the contiguous upper voices must not exceed an octave. Often this occurs between the alto and tenor voices, where the error is not as apparent to the student due to the split clefs.
- In close spacing, tradition has it that the right hand contains the upper three voices and the left hand the bass, thus creating a sort of SSAB texture. This is more like “keyboard” spacing (as some teachers call it), and spacing problems usually do not occur as often.
- Doubling—Aldwell and Schachter (2003) state it best: “ ‘Rules’ for doubling are formulated on the basis of an ideal vertical sonority. In practice, however, doublings are very much influenced by the way voices move. Therefore most doublings can be applied flexibly.” (65) They go on to state that one unacceptable doubling is the leading tone, because of its tendency to resolve to tonic. This is one of many examples where a vertical rule intersects with a linear rule.

Basically, Aldwell and Schachter are correct. However, we may think of doubling in a more specific way. Yes, chords with doubled roots are great, but when there is a doubt about doubling, we may also consider the scale degrees. It is preferable to double some of the more stable scale degrees ($\hat{1}$, $\hat{5}$, $\hat{4}$, even $\hat{3}$) over less stable ones ($\hat{2}$, $\hat{6}$, $\hat{7}$) when there is a choice. A cautionary note for doubling $\hat{4}$ —it is an ambiguous degree, sometimes consonant (such as in the root of IV), but sometimes dissonant (as in the seventh of V), so some consideration is necessary. For example, it is a good idea to double $\hat{4}$ in a ii^6 chord but not such a good idea to double it in a V^7 or vii° chord, that is, whenever $\hat{4}$ forms a dissonance with another chord tone.

The Linear

Teaching the “horizontal” is as important as teaching the vertical. It’s a good idea to remind ourselves once again that we want our students to learn part writing in the Common Practice style. We are really not teaching musical composition or creative composition here (although some teachers might want to include some free composition exercises in their curricula). For the most part, a “good melody” in strict four-part style means that the upper parts (and bass line, too) move in as small a motion as possible.

Chapter 4

To recap some general principles of linear writing:

- Remember that in part writing, “smooth” voice leading means that voices move in as small a motion as possible. Not moving at all is often good, meaning the student has found a common tone between two chords. Stepwise motion is very good, and half-step motion is even better, when necessary.
- If a voice must skip, try to follow the skip with a common tone (no motion) or stepwise motion in the opposite direction.
- Scale degrees should be considered in two camps: active and stable. This concept is a holdover from nineteenth-century *Stufentheorie* of Schenker, Schoenberg, and their predecessors like Simon Sechter. In this theory, active scale degrees “want” to go to the stable degrees. So, $\hat{7}$ wants to go up to $\hat{1}$, and $\hat{4}$ wants to go down to $\hat{3}$, $\hat{6}$ to $\hat{5}$, and $\hat{2}$ to $\hat{1}$. Remember this, and many problems will be avoided.
- Any chromatic motion should occur in a single voice to avoid false (cross) relations. In other words, the half steps created by an accidental need to play out in a single voice, not between two (or more) voices.

The Payoff: Checking the Linear with the Vertical

Two principles seem to emerge from the various rules invoked by many teachers. In his 1728 treatise on figured bass, Heinichen established two principles at the very beginning of the book: 1) two voice parts never should move in parallel fifths or octaves; 2) to avoid these faults as well as others, one never makes unnecessary leaps with the right hand but seeks, as much as possible, the smoothest connection of parts between chords (quoted in Buelow 1986, 76).

Because part writing is part of the rich tapestry of Common Practice music, merely following vertical or linear aspects of an exercise may not be sufficient. It is then that students must double-check their part writing in both linear and vertical aspects.

- *Always* have your students double-check for parallel perfect consonances. Parallel unisons, fifths, and octaves are always no-nos and are considered egregious when detected. This motion destroys any sense of independence in individual voices—a quality, as we have seen above, that was valued by many composers and theorists of the Common Practice era. Always check for parallels, between all voices. It is interesting that many theorists throughout history (such as Heinichen) have pointed to this very rule as the most important. We should also note that motion from the diminished fifth to perfect fifth in parallel motion is also frowned upon by many, as it implies an irregular and, to many, an erroneous resolution of the diminished fifth (which should contract to a third). The scoring guidelines for free-response questions used in the AP Music Theory Exam describe movement from d5 to P5 intervals between voices as an egregious error.
- To avoid parallelism, use contrary and oblique motion whenever possible. There are times when parallel motion is nice (parallel thirds/sixths between voices are very good if not used excessively), but for short part-writing examples such as those found in the AP Exam, contrary motion is better.
- Discuss chords in terms of root movements. There are only three basic motions in tonal harmony: motion by step (up or down), motion by third (up or down) and motion by fifth (up or down). When chords move by step (IV-V, V-vi, I-ii, vi-V, etc.) the upper three voices should usually move in contrary motion to the bass. When chords move by third (VI-iv, I-vi, etc.), keep two of the upper three voices in common while another voice moves in stepwise motion. When chords move by

fifths, keep one tone of the upper three voices in common while the others move in stepwise motion. Successive inverted chords will alter this model a bit, but you can still follow the spirit, if not the letter, of the rule.

Figured Bass

Figured bass is a notational shorthand that was developed in the early seventeenth century for ensemble music. Figured-bass notation can be thought of as a proto-score notation. The notation consists of a bass part (played by one or more bass instruments, such as viol, bassoon, or cello) together with “figures” (numbers) indicating the intervals that the other parts make with the bass. This shorthand was enough to allow players of harmonic instruments (such as harpsichord, lute, organ, and so on) to create multi-voice parts that would harmonize with the ensemble as a whole (Zbikowski 2004).

Figured bass, or thoroughbass, began as an altogether separate entity from instruction in counterpoint or harmony. Treatises by Viadana (1602), Praetorius (1619), Gasparini (1708), Mattheson (1739), Kirnberger (1781), and others were intended as instruction manuals, or how-to books, on the execution of performing a keyboard continuo part. However, the practicality of these manuals did not exclude smooth voice leading. In fact, Praetorius wrote in his *Syntagma Musicum* that an organist “must understand counterpoint or, at the very least, be able to sing perfectly” (quoted in Keller 1965). By the eighteenth century, treatises became even more concerned with smooth voice leading and proper harmonies. Johann Heinichen’s treatise *Der General-Bass in der Composition* (1728) advocated figured-bass study as a means of learning composition, not just accompanying on keyboard, and stressed that even beginners should study it (Buelow 1986, 75). By the time of Mozart (and his infamous pupils), figured bass as a performance practice was out of style but continued as a pedagogical device for composing. So while the emphasis of figured bass seems to be on constructing vertical sonorities upon a bass, writers throughout the figured-bass era *assumed* that smooth voice leading would occur as well.

Though its origins come from a third and different pedagogical practice entirely (as distinct from harmony and counterpoint), figured bass has become an extension of part-writing exercises in the theory course of the twenty-first century. However, while similar to writing from Roman numerals, it adds a layer of complexity to the task at hand. This layer is the decoding of Arabic figures under the bass to determine the chord required. After this initial decoding, the exercise becomes one of part writing similar to those described above.

Including figured bass in your class is a great opportunity to introduce another system of musical composition as well as an opportunity for students to think analytically about that system. It is important to keep students aware that the Arabic numerals of a figured bass are not the same as a Roman numeral analysis. It is also important to stress that figured bass in its pure, historical form is a system designed *only* to show the intervals above a given bass pitch. By itself, it does not indicate the root of the chord, the inversion of the chord, or the position of the voices within a chord. For that information, the student must decode what the numerals mean in terms of chord structure and function and then recreate the position of voices as a continuo performer might have done in the eighteenth century. This process is yet another type of analysis or puzzle solving that can be interesting, and even fun, for AP Music Theory students.

The first step in solving the figured-bass puzzles in an AP Music Theory class is to get the students familiar and comfortable with the figures themselves. Although most of this can be done with rote memorization, teaching the rationale of the intervals themselves will prove valuable in helping students understand the system. Most often, figures are introduced early in an AP curriculum, especially with chord inversion, often without any explanation of where these Arabic numerals come from. An alternative may be to introduce some figured bass *before* discussing chord inversion, then having students discover what these figures can mean in terms of chord structure.

Chapter 4

Vertical:

$\begin{smallmatrix} 8 \\ 3 \end{smallmatrix}$ or $\begin{smallmatrix} 5 \\ 3 \end{smallmatrix}$ or no figure at all means a chord in root position

$\begin{smallmatrix} 8 \\ 6 \\ 3 \end{smallmatrix}$ or $\begin{smallmatrix} 6 \\ 3 \end{smallmatrix}$ or $\begin{smallmatrix} 6 \end{smallmatrix}$ means a triad in first inversion

$\begin{smallmatrix} 8 \\ 4 \\ 4 \end{smallmatrix}$ or $\begin{smallmatrix} 6 \\ 4 \end{smallmatrix}$ means a triad in second inversion

$\begin{smallmatrix} 7 \\ 3 \end{smallmatrix}$ or $\begin{smallmatrix} 7 \end{smallmatrix}$ means a seventh chord in root position

$\begin{smallmatrix} 6 \\ 3 \\ 3 \end{smallmatrix}$ or $\begin{smallmatrix} 6 \\ 3 \end{smallmatrix}$ means a seventh chord in first inversion

$\begin{smallmatrix} 6 \\ 4 \\ 3 \end{smallmatrix}$ or $\begin{smallmatrix} 4 \\ 3 \end{smallmatrix}$ means a seventh chord in second inversion

$\begin{smallmatrix} 6 \\ 4 \\ 2 \end{smallmatrix}$ or $\begin{smallmatrix} 4 \\ 2 \end{smallmatrix}$ means a seventh chord in third inversion

The numerals (figures) refer to intervals above the bass. The type of interval is designated by the diatonic degree of the scale. So, for example, a $\begin{smallmatrix} 6 \\ 3 \end{smallmatrix}$ chord above the bass note C in A minor would consist of an A and an E (a major sixth and a major third); a $\begin{smallmatrix} 6 \\ 3 \end{smallmatrix}$ chord above the bass note G# in A minor would consist of an E and a B (a minor sixth and a minor third), and so forth.

Numerals with sharps, flats, naturals, or slashes through the numerals refer to altered scale degrees. The nuances of figured-bass practice varied over time and from region to region. During the Common Practice period, countless treatises attempted to clarify the practice; modern books explicating the different practices run to many pages and multiple volumes, and even so the authors cannot always give a clear interpretation of a given figured bass. When all is said and done, performers of the time relied on their knowledge of the style to interpret a figured bass, and we must do the same when we encounter this notation. In an AP class, it is best to introduce a few standard figures as a shorthand for common inversions and voice-leading strategies. These are best memorized; eventually, they will provide a highly reliable guide, independent of key and texture, to the harmonic texture of a composition (Zbikowski 2004).

To summarize the reminders for figured bass:

- Remember that figures represent the interval above the bass note. Do not confuse figures with chord roots or with intervals above chord roots—they are intervals above the bass. Have your students memorize the common chord figures— $\begin{smallmatrix} 6 \\ 4 \end{smallmatrix}$, $\begin{smallmatrix} 6 \\ 3 \end{smallmatrix}$, $\begin{smallmatrix} 6 \\ 4 \end{smallmatrix}$, and $\begin{smallmatrix} 4 \\ 2 \end{smallmatrix}$ —in terms of chords and their inversions.
- Intervals above the bass represented by figures are diatonic (scale degrees within the given key) unless the figure is modified by an accidental (sharp, flat, or natural) sign.
- Related to the point above, for AP Music Theory classes the accidentals in the figured bass are those that are actually used (a # in the bass means that the note above the bass will have a sharp; a natural means a natural, etc.). In practice, there has been no standard way to indicate this—sometimes a sharp would mean “raise the pitch a half step” (a flat would become a natural). Another system was to put a slash through a figure to indicate raising it a half step. This figure is used occasionally in

the AP Exam. While it is a good idea to show students various figured bass styles, it is an even better idea to simplify and choose one to teach consistently.

- An accidental hanging alone beneath the staff with no figure is an abbreviation for altering the third above the bass.
- Figures connected with horizontal lines or dashes indicate a linear or melodic motion in one or more voices at the intervals above a specified bass note. If these motions are suspensions, make sure students know how to write suspensions, with preparation, suspension, and resolution all within a single voice.

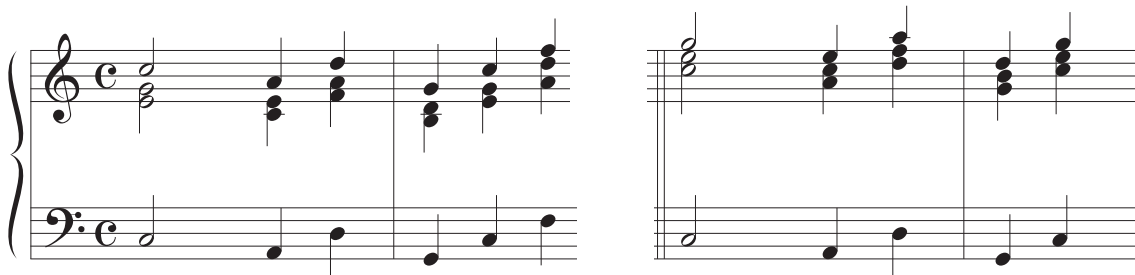
Some Supplementary Activities

The primary activity for learning part writing and figured bass is just to *do it*, so provide students with many bass lines with Roman numerals and figured-bass examples to realize. Most theory textbooks have good examples to work on. In time, you may even want to invent your own examples. With these activities, be ready to provide lots of feedback and to have students revise—much in the manner of Mozart and his pupils!

Just as in the part-writing curriculum, students may also think analytically when it comes to figured bass. Here are some ideas to modify your lessons:

- Instead of providing a bass line with figures, give students a full score of a Baroque piece and have *them* reduce it down to a bass line with figures.
- Give your students help with part writing and figured bass by inserting some voices occasionally in the texture, having them realize a figured bass with both bass line and melody (thus filling in the middle voices). You can use examples from the literature including chorales by Bach (though these tend to be difficult, even with two voices given).
- Without putting any students on the spot, invent your own part-writing example with errors and have students analyze it and identify the errors. This will show that they understand the “rules.” As an extension of this activity, have students rewrite the error-ridden example with smooth voice leading. Heinichen did just that in his counterpoint treatise to identify what he (and we) considered the most egregious errors of realizing a figured bass. Example 6a shows instances of parallel octaves and parallel fifths in the outer voices; example 6b shows instances of disjointed voice leading.⁸

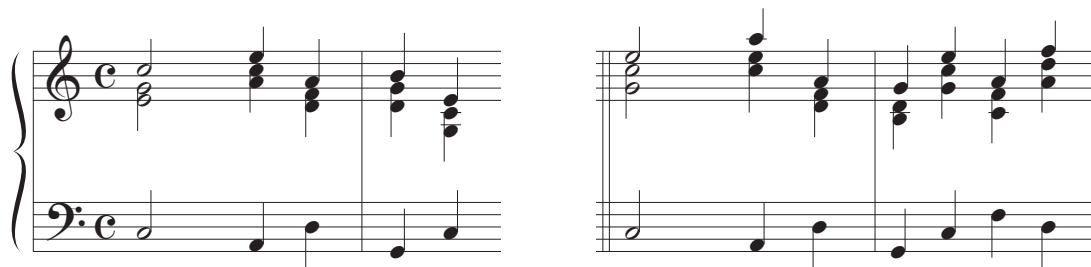
Example 6a



8. George Buelow, *Thorough-bass Accompaniment according to Johann David Heinichen*, rev. ed. (Ann Arbor, Mich.: UMI Research Press, 1986): 77.

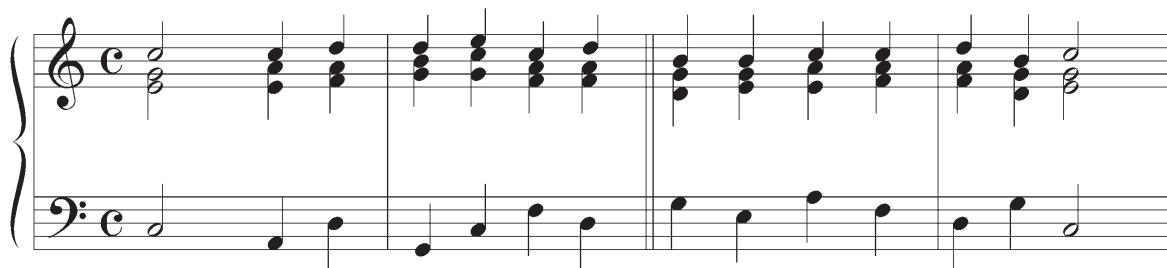
Chapter 4

Example 6b



Heinichen then provides an illustration of the solution for these problems with the correct joining of the voices, shown in example 6c.

Example 6c



Conclusion

In order to part write and write figured-bass examples effectively, students must buy into the system of Common Practice tonal harmony. It is important that they understand where the system came from and look at it analytically. AP teachers, and all teachers who teach tonal harmony, must emphasize that this type of music theory class is *not* a creative composition class (though creative composition may be a tangential and fun part of any theory class) but one in which students learn a particular system of musical composition from a particular moment in time. In this regard, tonal harmony and AP Music Theory classes are more like a language course, where students learn to read, write, and “speak” tonal music. Having students analyze the system they are studying, as well as do the exercises, will lead to a nicely balanced course, one that will help them learn the principles of tonal harmony in an efficient and enjoyable way.

References

- Aldwell, Edward, and Carl Schachter. 2003. *Harmony and Voice Leading*, 3rd ed. Belmont, Calif.: Wadsworth.
- Buelow, George J. 1986. *Thorough-bass Accompaniment according to Johann David Heinichen*, rev. ed. Ann Arbor, Mich.: UMI Research Press.
- Burkhart, Charles. 1994. *Anthology for Musical Analysis*, 5th ed. Fort Worth, Texas: Harcourt Brace.
- Dahlhaus, Carl. 1980. "Harmony" in *New Grove Dictionary of Music and Musicians*, Stanley Sadie, ed. London: Macmillan. Also on Grove Music Online (www.grovemusic.com).
- Keller, Hermann. 1965. *Thoroughbass Method*. Translated and edited by Carl Parrish. New York: W. W. Norton. (Originally published in Kassel, Germany, in 1950 by Bärenreiter-Verlag.)
- Kraft, Leo. 1987. *Gradus I: An Integrated Approach to Harmony, Counterpoint, and Analysis*, 2nd ed. New York: W. W. Norton.
- Lester, Joel. 1992. *Compositional Theory in the Eighteenth Century*. Cambridge: Harvard University Press.
- London, Justin, and Ronald Rodman. 2000. "Foundations of Harmony: Structure, Function and Progression." Unpublished.
- Rameau, Jean-Philippe. 1971. *Treatise on Harmony*. Translated with an introduction by Philip Gossett. New York: Dover. (Originally published in France in 1722 as *Traité de l'harmonie*.)
- Zbikowski, Lawrence. 2004. "Resources for Music 15100." http://humanities.uchicago.edu/classes/zbikowski/151_resources.html.

Teaching Tonal Sight-singing

by Nancy Rogers, Florida State University, Tallahassee

Introduction

In many ways, sight-singing may be the most rewarding component of the AP Music Theory course. Beginning students often progress quite rapidly and are keenly aware of their own improvement, which helps to keep their motivation high. Also, sight-singing is an unmistakably musical activity, so for this portion of the class you need not fear that your lesson plans are becoming overly abstract or that your students are treating the exercises merely as intellectual puzzles. Most important, you are helping your students—including those with no professional aspirations in music—to develop skills they can use and enjoy throughout their lives (for example, when singing in a church choir or a community chorus).

If you have the time and inclination, you can find or compose suitable melodies for your students to practice as your course progresses. Students can even be assigned to write some melodies for the class within specified parameters. Most teachers, however, prefer to use a sight-singing textbook, both because it saves time and because the melodies are ordered appropriately so that students will be consistently challenged but not overwhelmed. Fortunately, several effective textbooks are widely available; a list of sight-singing texts is at the end of this article as well as in the bibliography in chapter 6 of this Teacher's Guide.

Long before your first class meeting, you will want to consider various solmization systems. There are three basic options for pitch:

- Fixed system, such as letter names (C, D, E, etc.), where pitches retain the same names regardless of key
- Moveable system, such as moveable-*do* solfège (*do, re, mi*, etc.) or scale-degree numbers ($\hat{1}$, $\hat{2}$, $\hat{3}$, etc.), where pitches change their names according to the prevailing key
- Single neutral syllable (such as *la* or *du*)—in other words, no system

Although fixed systems tend to promote more fluent clef reading, and a single neutral syllable takes no effort to teach or learn, most music theorists recommend using a moveable system when approaching tonal sight-singing.¹

Figure 1 shows parallel major and melodic minor scales with their corresponding solmization in three moveable systems: row 1) moveable-*do* solfège with *do*-based minor, row 2) moveable-*do* solfège with *la*-based minor (not recommended), and row 3) scale-degree numbers.



1. Obviously, using a moveable system for singing does not preclude using the familiar letter names (probably spoken rather than sung) to practice music reading skills.

Figure 1



Associating the tonic of any key with one specific syllable and the dominant with a different syllable (for example) helps students locate notes within the scale and eventually leads them to internalize the tonal hierarchy. For this reason, most music theorists who use moveable solfège advocate beginning both major and minor scales with *do* (shifting *mi*, *la*, and *ti* down a half step to *me*, *le*, and *te* in the minor mode). Champions of *la*-based minor believe that this system better reflects the interval structure of the diatonic collection through fewer distinct syllables, but most music theorists believe that it is far more beneficial to identify scale steps with consistent names.

You may also wish to employ a solmization system for rhythm. Although rhythm syllables are less standardized, they tend to fall into five basic categories:

- Systems that give each subdivision of the beat a different syllable, thus emphasizing its serial location within the beat (such as *1-ee-and-a*)
- Systems that emphasize the metrical hierarchy (for instance, any note that falls on a beat is *du*, a note that evenly divides the beat in simple meters is *de*, and notes falling on the next faster subdivision are all *ta*)
- Syllables that reflect a note's duration (such as *ta ti ti* for )
- Speech cues that suggest a particular rhythmic pattern (such as *pelican* for )—this approach is typically used intermittently, so that familiar patterns are performed on a neutral syllable and new patterns are given a speech cue
- A single neutral syllable (such as *ta* or *du*)—in other words, no system

Duration-based systems seem to work well for young children, and speech cues can be excellent for introducing difficult rhythmic patterns, but teenage and older students are generally better served with either of the first two categories. Figure 2 shows a rhythm with its corresponding solmization in two popular systems. The first emphasizes every note's serial position within the beat or measure, while the second emphasizes every note's level within the metrical hierarchy.

Figure 2



Even if you decide to stick with a neutral syllable, you will find many advantages in having your students speak a rhythm rather than clap it. A vocal performance leaves the hands free for conducting (or simply clapping on the beat) and differentiates long notes from notes followed by rests. Reading tied and dotted notes is slightly easier when the student is able to “lean” subtly on the underlying beat. The voice is better able to produce controlled dynamics, including smooth crescendos and decrescendos (consider the impossibility of performing a crescendo with a single clap!), and most people find that clapping becomes physically difficult at fast tempos (sometimes even at moderate tempos, if the beat is subdivided into relatively small units). In short, vocally performed rhythms are inherently more musical and often more accurate than clapped rhythms.

One of the most important things to realize is that your chosen solmization system will be effective *if you commit to it from the outset*. Don't introduce a system *after* your students begin to study sight-singing; don't change systems mid-year; and don't apologize for requiring your students to learn a system (you don't apologize for writing in bass clef, do you?). If you believe in your approach, and if you and your students use it consistently, your efforts will be rewarded.

Solmization allows students who do not read music fluently to work on aural skills right away. For instance, they can sing as you point to solfège syllables on the board (which is only a small step removed from typical sight-singing), or they can sing back a short melody in scale-degree numbers after you sing it on a neutral syllable (which is only a small step removed from dictation). They can also engage in simple improvisation exercises, which are not only fun and musically valuable but have the additional benefit of helping students to internalize a solmization system without the distraction of visual input. By the way, don't overlook the possibility of rhythmic improvisation, which may be less intimidating to students who seldom sing in public. Such early exercises will make traditional sight-singing easier in the long run and can provide some welcome variety to classes early in the semester.

Sympathizing with their shy students, some instructors avoid calling on individuals for several weeks or more, instead having the entire class sing in a group. Their motives are good, and naturally we all want our students to feel comfortable in class. However, by delaying individual performance, we unintentionally signal that sight-singing is difficult and thus make it even more intimidating. I therefore advocate calling on students as early as possible, but I keep the first tasks very simple to improve the odds of success. For instance, on the first day of class I establish a key by playing a progression on the piano and then ask individual students to sing the “home note.” Later in the week, I sing three-note stepwise patterns in solfège and ask specific students simply to repeat whatever I sing. Ideally, I like to have every student perform individually at least once a week. By calling on students early and often, we can acclimate them to public performance so that it becomes routine rather than nerve-wracking. Maintaining a positive classroom environment is critical so that students don’t develop a crippling fear of making mistakes.



Students should be encouraged to develop individual sight-singing skills as early as possible.

We all encounter students who initially seem unable to sight-sing. The biggest challenge is diagnosing the true source of their difficulty (which, it is important to note, is not necessarily a deficiency in aural skills). Here are some questions and strategies to consider.

- Does the student read music fluently enough to sight-sing? Could there be a clef problem? Can the student say the note names at a reasonable speed (or play the notes on an instrument)? Also check if he can perform the rhythm by itself. If he is able to sing pitches accurately when reading scale-degree numbers or solfège syllables but not when reading standard musical notation, then the problem is primarily written skills, not aural skills.
- Is the student able to retain the tonic? Until a student has a firm sense of the tonic, she cannot reliably produce other notes. If she can't remember the tonic, try having her develop a particular "home key" that suits her voice range and let her use this key exclusively for a week or two. Once the tonic settles in, other scale degrees will follow, and after that she will probably be able to branch out to different keys.
- Can the student detect errors when someone else is singing? If so, then vocal control may be at least a contributing factor, preventing the student from accurately reproducing her mental image of the melody. Vocal control problems range from fairly mild (e.g., poor intonation causes the student to drift into the next scale step) to quite severe (e.g., the student cannot match a single given pitch). Minor problems sometimes seem to cure themselves once a student is made aware of them; extreme problems, of course, require considerable effort and patience.

Chapter 4

- If a student is unable to match a given pitch, try reversing the relationship: match his pitch so that he gets used to the feeling. Then try moving your pitch a half step up or down and see if he can glide into your new pitch. Increase the interval size when the student masters these half-step motions. If the student appears to struggle fundamentally with the act of singing, and if you are not a trained vocalist, it might be wise to consult with a colleague who has experience correcting poor singing habits.²

A significant practical problem routinely arises in the sight-singing classroom. When we call on an individual, other class members may disengage, but if the whole class sings together, weaker students often just follow their stronger peers. The key to solving this quandary and keeping students attentive while someone else sings is fostering very active—but largely silent—audiation.

- Before one student begins a melody, indicate that someone else will be called upon to enter after a phrase or two and, without interrupting the musical flow, complete the melody. To keep the other students on their toes, don't select the next singer until the last moment!
- Incorporate “silent singing”—based on your key and tempo (it is especially important to conduct for an exercise like this), have the entire class imagine the beginning of a melody and then switch to singing aloud on cue. Alternatively, the class could sing only the melody's downbeats, or only notes with the duration of a quarter note, or only notes from the tonic triad, etc.
- Assign a “backup” singer who enters only when the original singer makes a mistake, then stops singing when the original singer gets back on track.
- Ask all of the nonsinging students to make a list of any errors they notice. You might then collect these lists and grade them, or you could call on a student to identify a trouble spot and perhaps coach the singer through this passage.
- At the very least, have other students conduct while their classmates are performing.

Sight-singing skills, of course, develop best with regular practice, and devoting 15 minutes every day is decidedly better than allotting a single 2-hour block once a week. Analogies with athletic training are apt, since “cramming” for a sight-singing exam is about as sensible and effective as preparing for a race in a single day. The odds of success are infinitely greater when we have a long-term plan that challenges us incrementally, targeting specific skills and eventually providing some realistic simulations of the race itself. As a sight-singing “coach,” your role is to develop a beneficial training schedule and instill good habits while avoiding bad ones (such as marking solfège syllables on melodies or using a piano to find the right notes).

One very helpful habit is an established presinging ritual. I ask my students to establish keys for themselves, because I find that when they actively situate themselves within a key the results are better than when they more passively accept a key that I establish for them. First, my students scan the melody and determine whether the tonic is at (or near) the bottom of the melody's range or whether it falls roughly in the middle of the melody's range. Based on this decision, they sing the appropriate warmup pattern:

2. Whistling may be considered as an alternative to singing, but only as a last resort. Very few people whistle with the necessary accuracy and range, and whistling precludes solmization.

Tonic near bottom of range:



Tonic near middle of range:



Next, students scan the melody for its fastest notes and choose an appropriate tempo, conducting the beat while quietly saying the fastest subdivision (e.g., conducting a two-beat pattern for $\frac{6}{8}$ while saying *du-ta-da-ta-di-ta* or *ti-ki-ti-ki-ti-ki* if sixteenth notes are included). Once the key and meter are established, students identify familiar harmonic outlines (for instance, arpeggiations of the tonic and dominant chords) and locate large and potentially difficult leaps. After spending a few seconds planning how they will negotiate these leaps (perhaps thinking “it’s just a little higher than *do*,” or “it’s the same low note I reached by step in the previous measure”), they are ready to begin singing.

Obviously it is important to provide students with plenty of melodies to sight-sing as well as an incentive to practice every day. Beyond this, however, it is useful to spend some class time drilling common melodic and/or rhythmic patterns in a variety of keys and meters so that they will be sung effortlessly. For instance, four melodic fragments (shown below) might be written on the board and performed in succession—without pause—as the teacher (or perhaps one of the students) points to them in a variety of orderings.

Four fragments:



One realization:



The point of such an exercise is to focus on instant recognition of typical patterns so that sight-singing feels like encountering old friends. It is, of course, especially helpful to target patterns that are included in an upcoming assignment.

The melodies used in the AP Music Theory Exam are designed to assess the types of singing challenges that students should master in the first-year college curriculum. Therefore, melodies found in the exam reflect the harmonic norms of Common Practice music and tend to emphasize leaps within the tonic and dominant chords. With this in mind, a harmony-based approach is likely to be particularly effective. Focus first on leaps between members of the tonic triad, later on leaps between members of the dominant triad (or dominant seventh chord). Only branch out to other diatonic leaps and then to chromaticism once these topics have been mastered.³ Approaches based purely on intervals are less likely to be successful, and—more important—they are less musically satisfying because they do not convey a musical context or important elements of style.

3. See the sight-singing texts by Ottman and Rogers, Benjamin et al., and Berkowitz et al. referenced at the end of this article. These texts employ a harmony-based approach that is quite compatible with the AP Music Theory course and the types of melodies used in the AP Exam.

Chapter 4

In the weeks before the AP Music Theory Exam (and, ideally, throughout the year), you should re-create the sight-singing exam conditions as nearly as possible so that the entire experience will be less mysterious and intimidating. First, of course, have students sight-sing frequently so that the activity itself becomes routine. Recording your students is an excellent idea; not only does this enable them to hear themselves and (with your guidance) assess their own weakness, but this also helps them become accustomed to singing into a microphone. If you have access to the room where the sight-singing portion of the AP Exam will occur, it would be prudent to practice in this setting, using the same procedure and time limits as the exam itself. The basic goal, of course, is that the only unfamiliar aspect of the sight-singing part of the exam should be the melodies themselves—and, frankly, even those melodies should seem rather familiar, as they will contain precisely the same musical elements and types of challenges students have been practicing for months.

Finally, don't forget that sight-singing can be integrated with other skills. Try, for instance, to have the class sing every progression that you collectively part write. Although we tend to think that sight-singing will lag behind written work, this is not invariably true. Indeed, sight-singing can be used to establish and/or reinforce common patterns that your students will not be writing for several months. For example, I like to have students sing a small set of common cadential bass formulas (like those shown below) from flashcards before we even begin four-part writing.



Not only does this drill work help my students sing the leaps associated with bass lines more accurately, but some very important harmonic patterns will already sound conveniently familiar when eventually addressed in our written work. In addition, students who can sing these patterns automatically have no trouble recognizing them by ear when we begin harmonic dictation.

Don't be surprised if sight-singing soon becomes a favorite component of your curriculum, both for you and for your students. Plan for success, enjoy the feeling of accomplishment, and try to extend your students' new skills in a variety of directions. The whole will be greater than the sum of the parts.

Some Dedicated Sight-singing Books

Benjamin, Thomas, Michael Horvit, and Robert Nelson. 2005. *Music for Sight Singing*, 4th ed. Belmont, Calif.: Wadsworth.

Includes preliminary pitch and rhythm exercises in addition to more typical melodies and duets. Some music literature is included, although most melodies are composed by the authors.

Berkowitz, Sol, Gabriel Fontrier, and Leo Kraft. 1997. *A New Approach to Sight Singing*, 4th ed. New York: W. W. Norton.

Includes single-line melodies and a significant number of duets and sing-and-play exercises. Rhythm is not addressed separately from pitch. Some music literature is included, although most music is composed by the authors.

Ottman, Robert W., and Nancy Rogers. 2007. *Music for Sight Singing*, 7th ed. Upper Saddle River, N.J.: Prentice Hall.

Includes separate rhythmic exercises (both single-line and two-part), single-line melodies, a significant number of duets and canons, and improvisation exercises. The music is almost entirely drawn from a variety of sources, from traditional melodies to concert literature.

Some Dedicated Rhythm Books

Hall, Anne Carothers. 2005. *Studying Rhythm*, 3rd ed. Upper Saddle River, N.J.: Prentice Hall.

Includes preliminary rhythm exercises, single-line rhythms, and two-part rhythms. There are also a small number of exercises intended for ensemble performance. Some of the material is quite challenging.

Kazee, Daniel. 1997. *Rhythm Reading: Elementary through Advanced Training*, 2nd ed. New York: W. W. Norton.

Includes single-line rhythms, two-part rhythms, and some exercises intended for ensemble performance. Most material is composed by the author, but some music literature is included and various chapters provide suggested listening lists. There are also regular self-tests on written concepts related to rhythm, meter, and notational conventions.

Other Helpful Resources for Sight-singing Instructors

Karpinski, Gary S. 2000. *Aural Skills Acquisition: The Development of Listening, Reading, and Performing Skills in College-Level Musicians*. New York: Oxford University Press.

Rogers, Michael R. 2004. *Teaching Approaches in Music Theory: An Overview of Pedagogical Philosophies*, 2nd ed. Carbondale: Southern Illinois University Press.

Teaching Score Analysis

by Anne Marie de Zeeuw, School of Music, University of Louisville, Kentucky

A Guided Study of the Third Movement (Menuetto) of Beethoven's String Trio in E-flat Major, Op. 3

Introduction

Why do we teach, study, and engage in musical analysis? Because analysis helps us to learn important and useful things about the music that we hear and perform. In analyzing music, we seek to discover what a composer is trying to express in a work, and by what means. Several broad questions help us organize this process of discovery:

- What information about the work's historical background, circumstances of composition, or general compositional type will help us to understand it more fully?
- What makes the composition hang together? What elements create coherence?
- What factors create a sense of musical motion or direction, propelling the composition through time?

These three topics correspond roughly to the three meanings of musical form that Douglass Green identifies:

- **Genre** is the general category of composition, such as symphony, blues, oratorio, piano rag, string quartet, and so on.
- **Form**, its strict sense, refers to the organizational plan of a composition. This comprises two facets:
 - **structure**, or the harmonic and tonal framework of the piece; and
 - **design**, or the pattern created by elements such as melody, cadences, rhythm, tempo, texture, and timbre.
- **Shape** refers to the work's profile of musical tension and relaxation.¹

As we examine the third movement of Beethoven's String Trio in E-flat Major, Op. 3, we will consider these topics one by one, although, as we will see, they are not so tidily independent in real life as they appear when considered in the abstract.

1. Douglass M. Green, *Form in Tonal Music: An Introduction to Analysis*, 2nd ed. (New York: Holt, Rinehart and Winston, 1979): 1–4.

MENUETTO.
Allegretto. 2

1 2 3 4 5 6 7 8 9 10 11

12 13 14 15 16 17 18 19 20 21 22 23 24 25

26 **Trio.** 27 28 29 30 31 32 33 34

35 36 37 38 39 40 41 42

44 45 46 47 48 49 50 51 52

53 54 55 56 57 58 59 60 61

sempre dolce
sempre dolce
pizz.

decresc.
decresc.
decresc.

Ludwig von Beethoven, from Trio in E-flat Major, Op. 3, in *Beethoven: The String Trios* (New York: Lea Pocket Scores, 1959).

Because music is an auditory art form, we could choose to begin our analysis by listening to the movement without a score: first, locating events such as beginnings, endings (cadences), and musical climaxes as the recording is played, and then locating these events in the score. This is the procedure that I recommend as the primary approach to musical analysis.

On the other hand, an approach that begins with the score is also useful upon occasion; inspection of the score can exercise our auditory imagination (the skills that we use in sight-singing, for instance), and it can make our first actual hearing of the piece more meaningful. Moreover, there may be circumstances when we have access to a composition first or only through the medium of the score, such as the score-analysis questions presented in the AP Music Theory Exam.

The approach taken here begins with the written score, with suggestions for listening and performance activities provided as the study proceeds.

Genre and Historical Background

The example chosen for study is the first of Beethoven's three trios for violin, viola, and cello. Beethoven's string trios, composed in the 1790s, are early works that antedate his string quartets. The Trio in E-flat Major, Op. 3, consists of six movements; the one that we will study is the third movement of the trio and the first of two Menuettos.

The string trio genre presents an immediate practical challenge: it employs an open score format that incorporates the alto clef. The AP Music Theory course covers the alto and tenor as well as the treble and bass clefs, and a reading knowledge of all these clefs is expected on the AP Exam. Furthermore, examples presented for analysis on the exam may be in open score format, so students will benefit from practice with these elements. When working with an open score for the first time, it is often helpful to have students name the notes of each chord or beat aloud, working systematically upward from the bass.

The string trio, as an ensemble, also presents a compositional challenge. The nature of this challenge will not be apparent to students immediately, but the following thought experiment will help guide them to understand it:²

- You have been commissioned to write two pieces, a piccolo duet and a tuba quartet. What challenge does each ensemble present?

The answer, of course, is that the piccolo duet limits the harmonic texture, since only two notes can be played at any given moment, and the range of the ensemble is limited, having no real bass. The tuba quartet affords a fuller harmonic texture, with four-note chords possible, but the range is bottom-heavy.

- In what way does the string trio share this problem?

The string trio, at first glance, seems to cover a wide range in a far more balanced way than either of the other ensembles mentioned. However, since it consists of three instruments that are more easily suited to single lines than to chords, it shares some of the textural limitations of the piccolo duo. Like the tuba ensemble, it tends to be bass heavy, with the viola and cello overbalancing the sole treble instrument, the violin.

- How does Beethoven compensate?

He writes double stops for the violin and viola in the Menuetto; in the Trio, he creates a viola part that consists primarily of arpeggio figures that span a rather broad range.³

The movement in itself represents a genre within the larger genre of the string trio, in this case a Menuetto or minuet. This triple-meter dance was a popular genre of instrumental composition in the Baroque and classical periods. As a dance, it was characterized by regular phrasing. The steps of the dance created a hemiola (3:2) relationship with the written musical meter. In instrumental composition, this feature is frequently reflected in the form of hemiola rhythms (i.e., the equivalent of three half notes over the span of two $\frac{3}{4}$ measures) and accented second beats. Minuets were frequently paired, with the first minuet returning, without repeats, after the second. The practice of scoring the second minuet for just three instruments out of a larger group led to the term “trio” as a synonym for the second minuet.⁴

2. Students will often not be able to answer every study question fully at the point in this discussion where it is first posed. Although it is convenient to present a model analysis as though it were a completely linear procedure, it is important to remember that a spiral is often a better analogy than a straight line for the learning process. Reinforce and deepen your students' understanding by returning to previously discussed questions as new information casts new light on them.

3. This commentary and exercise were suggested by Denis Matthews' remarks in his liner notes for Beethoven, *Die Streichtrios*, Deutsche Grammophon 427 687-2, 1989: 10.

4. Bruce Gustafson, s.v. Minuet, and Eugene K. Wolf, Trio, in *The New Harvard Dictionary of Music* (Cambridge, Mass.: Belknap Press of Harvard University Press, 1986).

Chapter 4

- Does Beethoven reflect the hemiola aspect of the dance steps in the rhythm of the Menuetto or Trio? If so, how?

Several passages suggest the hemiola relationship between the steps and the musical meter: (1) the downbeat rests of mm. 5–7, 9, and 23–24 (especially in conjunction with the downbeat attack in m. 25); and (2) the sforzandi of mm. 9–10, 19–20, 38, and 58–60.

- Does anything about the Trio section suggest a lighter texture?

Although Beethoven keeps all three instruments fully occupied during the Trio section, its melody-and-accompaniment texture, with the violin melody floating in longer values above the viola arpeggio figuration and the pizzicato cello bass line, does seem less dense than that of the Menuetto.

- Is the dance origin of the minuet genre reflected in the phrasing of this movement?

This question will require the careful examination of phrases and cadences that will be undertaken in the next section of this discussion, so have students defer their answers; when the time comes to examine phrases and cadences, however, direct the students' attention once again to this question. Students will discover that the phrasing is based, for the most part, on regular four-bar groups.

Form

Let us begin our study of the form of the Menuetto and Trio by expanding briefly on two of the general concepts outlined in the introduction.

Structure—the harmonic and tonal plan of the work—represents the skeletal framework of the piece; as such, it has to do with coherence, or how the piece fits together. Under this topic, we will examine such matters as key areas and their relationships to the central tonic and each other. But structure also has to do with beginnings and endings, with departures from the returns to the tonic; thus, it relates to deep-level issues of tension and repose. The issue of structure thus intertwines with that of musical shape.

Design deals with determinations of identity, similarity, and difference. As we consider events that are similar, but not identical, we will also deal with defining musical relationships and procedures. The patterns created by contrast, return, and variation of musical materials make up the design aspect of form. Design, like structure, relates primarily to coherence, but we will examine this not only in a static sense but also in a dynamic sense. Musical events engage in an ongoing dance of relationships: passages that contrast outwardly reveal underlying similarities, and events that appear to be the same reveal a fresh character as they appear in new contexts.

Turning to the score of the Beethoven Menuetto, let us start with a quick scan—an initial top-down approach—to get an idea of the basic plan of the movement. Then we will refine our analysis by examining details of melody, harmony, and rhythm. This will lead us to an analysis that outlines small as well as large formal units and that takes into account the features that create tension, repose, and direction.

- What visual cues to the large-scale formal plan does the score offer?

The score presents a number of obvious cues to the large-scale form. The printed titles attached to the various portions of the movement, the Da Capo indication, the changes of key signature, and the double bars and repeat signs all suggest points of formal demarcation. Of these, the first three generally delineate units at or near the top of the formal hierarchy, while double bars and repeats may

also delineate subsections of larger units. Our first scan of the score, then, suggests the following outline:

A Large Three-Part of Ternary Form Plus a Coda			
Menuetto	Trio (different key signature)	Return of Menuetto (D.C.)	Coda
Or: A	B	A	Coda

- What are the principal keys of the Menuetto, Trio, and coda? What kinds of cadence end the large sections?

The tonal plan of the movement and the cadences confirm the above outline. The Menuetto, mm. 1–25, is in E-flat major; the Trio, with a new key signature, in the subdominant key, A-flat major; the return of the Menuetto in E-flat; and the coda, after a brief digression to c minor, once again in E-flat major. All of these large sections end with perfect authentic cadences (V^7-I in root position, with scale degree 1 in the soprano of the tonic triad).

A slightly more detailed outline emerges when we take the double bars and repeat signs into account (noting that when the Menuetto returns after the Trio, it is customary to omit the repeats):

A		B		A		Coda	
:	: :	: :	: :	:			

The double bars and repeat sign suggest that each large section of the movement is divided into two parts. However, repeats may prove to be false friends: the immediate repetition of a portion of music does not affect the formal structure of a composition, whereas a return after a contrasting section is a form-defining event. Thus, ||: A :||: B A :|| represents a ternary (three-part) rather than a binary (two-part) plan. At this point, then, it is crucial to examine the music in greater detail.

A closer inspection of the Menuetto should now be supported by listening, some form of student performance, or both. (Rhythmic reading can be very helpful even where full-fledged sight-singing is not a realistic expectation.) This investigation will reveal the following:

- There are cadences in mm. 8, 12, and 21, as well as 25. The cadence in m. 8 sounds like a perfect authentic cadence, on a local scale, but here B-flat rather than E-flat is treated as tonic—A-natural has consistently replaced A-flat since m. 5. Measure 12 also presents a cadence on B-flat, but A-flat has been present since m. 10, so here B-flat sounds once again like V ; this is a half cadence. Measure 21 closes harmonically on an E-flat major triad, but the impact of the viola's downbeat E-flat is weakened not only by its being in the wrong register to conclude the descending melodic line begun by the violin but also by the violin arpeggio that overlaps it on the second half of the downbeat. With this arpeggio, the violin quickly reclaims the soprano role as it initiates a cadential extension based on the reiteration of the last portion of the phrase. Measures 22–25 restate the harmonic progression of mm. 18–21, with the soprano an octave lower, but this time there is complete melodic as well as harmonic closure as the violin's downbeat E-flat concludes the descending line from the A-flat of m. 22 in the same register.
- The material following the first double bar is different from that presented in the first section. In mm. 13–16, however, we hear a return of the first four measures, largely transposed up an octave.

Chapter 4

The conclusion of this phrase, which leads to an authentic cadence in the tonic, differs from that of the first phrase, which leads to the dominant key, so we represent mm. 13–25 as A' rather than simply A. The change of the symbol to “A-prime” indicates that the harmonic goal differs. Measures 9–12, the contrasting material, are symbolized as B. The formal plan of mm. 1–25, then, is ABA'. Is the form a simple ternary with repeats rather than binary?

The question of binary or ternary form is not an either/or issue. In this example, we observe both binary and ternary features: the ABA' design is three-part in nature, but the double bars and repeat scheme that initially suggested a binary plan reflect the strongest cadences, namely the PAC (perfect authentic cadence) in the dominant at m. 8 and the PAC in the tonic at m. 25. The harmonic organization indeed divides the Menuetto into two sections. The B section, moreover, comprises only a single phrase; although it offers a momentary contrast to the A material, it establishes no independent life of its own. This, too, is typical of binary plan. This hybrid of binary and ternary schemes is known as rounded binary form. Rounded binary shares the idea of return after contrast (ABA') with ternary form, but typically, the B section of rounded binary displays less autonomy than that of a ternary form. Often, too, the closing A' section of a rounded binary plan is shorter than the first A section, although this is not the case here. The \parallel : A \parallel : B A' \parallel repeat scheme does not rule out ternary form but is nevertheless a typical feature of rounded binary.

- Where are the principal cadences in the Trio? What is the key scheme? Make a diagram of the form, and indicate the name of the form.

Further study of the Trio reveals a plan similar to that of the Menuetto:

\parallel :	A	\parallel :	B	A'	\parallel :
(mm. 26–41)		(mm. 42–53)		(mm. 54–69)	

- The strongest cadences occur at mm. 40, 52, and 68.
- The Trio begins in A-flat major. The phrasing slurs suggest that it begins with two four-bar phrases; the cadences of mm. 29 and 33—a half cadence on E-flat, V of A-flat, in the first case, and a half cadence on F as V of B-flat minor in the second case—confirm this reading. The cadence that we have now probably come to expect in m. 38, however, never occurs; instead, mm. 34–41 comprise a single long phrase that culminates in a C major triad—V of F minor, another half cadence.
- What factors make us suspect, even upon a very quick inspection of the score, that the C major triad has a dominant rather than a tonic function?

Given the context of the numerous flats, the C major triad is a strong indication of a half cadence—cadential chords with fewer flats or more sharps than the context normally calls for often turn out, when considered more thoroughly, to be dominants.

- The chord that precedes the C triad is a German augmented sixth chord, an element of the harmonic vocabulary that is normally beyond the scope of AP Music Theory or a typical first-year college music theory course (knowledge of it is not expected on the AP Exam). However, students will readily understand the essential voice leading of the chord if you have them close the score, play the cello part of mm. 34–39, stop on the D-flat, and ask them to sing and identify the tone that should follow, then play the violin part of mm. 34–39, stop on B-natural, and ask them to sing and identify the continuation.

The majority of students will confidently continue to C in both cases; having heard this, they will be ready to understand a simple explanation of the voice leading of the augmented sixth interval, and perhaps even ready for the idea that the augmented sixth often leads into a dominant-function chord.

- How do mm. 38–40 relate to the beginning of the Trio?

This passage incorporates a very beautiful structural detail: the C–D \flat –C neighboring motion. When we hear it in the bass at the cadence, it is at once familiar and fresh. It is familiar because this is exactly the gesture with which the violin opens the Trio. It is fresh because of the new context in which it appears: (1) it has been transferred to the bass in a kind of textural inversion, and (2) in mm. 26–28, C–D \flat –C represents scale degrees 3–4–3 in A-flat major, but at the cadence these same tones represent 5–6–5 in F minor.

We note that the final V harmony extends over two measures. This idea of an extended final harmony carries into the following portion of the Trio, with a significant modification.

- What key is suggested in mm. 44–53? What techniques of melodic development does Beethoven employ in this passage?

Continuing past the double bar at the end of m. 41, we encounter an expanded phrase of 12 measures; the pervasive D-naturals signal the tonicization of E-flat (major). The techniques of phrase development are of interest here: what might have been a short phrase becomes a long one by means of (1) a modified sequence in mm. 42–45; (2) reiteration of a single harmony, a B-flat Mm7 chord (V 7 of E-flat), in different inversions, in mm. 46–49; and (3) extension of the cadential harmony over two measures, this time embellished with a multiple suspension in the upper voices in m. 52.

In m. 53, the downbeat root-position E-flat triad (the local tonic) continues via passing (stepwise) motion in the bass through its first inversion to the A-flat harmony on the downbeat of m. 54. Meanwhile, the soprano line, in a complementary passing motion, reintroduced D-flat, turning the E-flat chord once again into the dominant of A-flat for the return of the initial key and melodic idea at m. 54.

As in the Menuetto, the returning material is altered, leading to a new cadential point, a PAC in A-flat major, in mm. 67–69. (Here too the final chord is extended by means of upper-voice suspensions.) Also as in the Menuetto, the B section comprises a single phrase, albeit an enlarged one. Although this B section cadences more conclusively than that of the Menuetto, the finality of this cadence is weakened by the quick conversion of the E-flat harmony to V 6 of A-flat by the addition of the soprano D-flat. For these reasons, the ||: A :||: B A' :|| design once again is best interpreted as a rounded binary rather than as a simple ternary form.

The return of the Menuetto, as mentioned above, gives the movement a large-scale ternary organization. Now that we have examined the component parts of this large form, however, it is necessary to refine our original formal designation. Because each section (that is, the Menuetto and the Trio) of the large form comprises a self-contained form with sectional divisions of its own, the large plan is a compound ternary rather than a simple ternary form.

- After the return of the Menuetto, a coda follows, literally a “tail.” The coda occurs after the harmonic closure of the movement on the tonic at the end of the Menuetto. What then is its purpose?

Codas characteristically summarize movements by recalling previously presented ideas. We find a number of such elements of summation here.

1. The quarter-eighth **rhythmic motive**, featured throughout the Menuetto, reappears.
2. The melodic line of mm. 70–73 (violin) is a transposition of mm. 1–4.
3. This transposition is to the key of C minor, and the C–B-natural **melodic motive** recalls mm. 39–40, particularly as it occurs in the same register, although its tonal context has shifted from F minor in the Trio to C minor at this point.
4. The running eighth-note figures of mm. 75–83 recall the eighth-note arpeggiations that permeate the Trio.
5. The E-flat–D motive in the cello, mm. 77–81, replicates the first motive of the melodic line of the Menuetto.
6. The chromatic passing motion of m. 83 recalls both the tonicization of F minor in the Trio (by virtue of the E-natural) and other chromatic passing motions in the Menuetto (m. 8, first ending) and Trio (m. 53).

Shape

It would be possible to say a great deal about motion, tension, and repose in this movement, but in the interest of brevity we will focus on just one aspect of musical shape. It is one that the coda spotlights, for this coda serves not only to sum up the movement but also to conclude its unfinished business.

The opening motive of the movement, the E-flat–D quarter-eighth, moves from the stable tonic pitch to the unstable leading tone, *do–ti*, an unmistakable questioning gesture that can only be fully answered by the complementary gesture *ti–do*. The Menuetto achieves melodic and harmonic closure with a perfect authentic cadence supporting the soprano motion F–E-flat, *re–do*; although this is final sounding on a local level, the *do–ti*? question has never been answered. The coda poses the question again, first in the “wrong” key of the relative minor as C–B-natural (mm. 70–72). (It is at this point that we realize that Beethoven has told us what the answer is supposed to be: in mm. 39–40, we have already heard B-natural–C as the concluding gesture of a section.⁵ Still, the answer provided in mm. 39–40 is really no answer at all, for the B–C in those measures is #4–5 rather than a true *ti–do*.) We hear the question again in the tonic key as the cello restates the E-flat–D motive in mm. 77–81. Finally, in m. 85, the violin presents the reciprocal motive D–E-flat in the opening rhythm; this, however, is not in the sounding soprano voice, for the viola is in a higher register than the violin at the moment. A rhythmic expansion of the *ti–do* gesture in the final two measures answers, at long last, the persistent question from the opening of the movement.

Conclusion

This introduction to score analysis proceeds from a consideration of the broad fundamental issues of musical coherence and direction to the application of those ideas in an increasingly detailed study of the third movement of Beethoven’s E-flat Major String Trio, Op. 3. Still, this study is far from exhaustive, and it has undoubtedly prompted many more questions about the composition than it has answered. If so, it has accomplished its purpose, for it is not a system of harmonic labels and formal classifications but rather a probing curiosity about musical structures, shapes, relationships, and processes that lies at the heart of analysis.

5. Furthermore, reading the Trio backward from m. 40, we understand that the C–B-natural motive stated in the coda illuminates the relationship between the Trio and the Menuetto, that material that initially seems foreign is in fact closely connected: mm. 36–39 develop the descending step of the opening motive as a suspension figure. This grows out of the upper neighboring tone (G-flat) of m. 35, which, in turn, is part of the variant of the sequential melody of mm. 26–29 and 30–33.

A Practical Guide to Using Popular Music in the Theory Curriculum

by Ken Stephenson, University of Oklahoma, Norman

Why Teach Popular Music?

The range of music included in theory classes has grown astonishingly in the last few decades. While just 60 years ago it was easy for students to get the impression that theory was about analyzing harmonies in Bach chorales, basic textbooks now regularly include excerpts of classical European literature covering a period from about 1720 to 1950, and some stretch that period quite a bit more. More recently this expansive trend has seen the beginnings of the incorporation of music from outside the European classical tradition, especially popular music. The inclusion of popular music in theory curricula stems partly from the recognition that popular music is interesting in its own right. Academia has finally discovered this huge body of entertaining, challenging, and inspiring literature right under its nose.

But most of us music teachers also sense two psychological advantages to including popular music in our classes. First, by connecting a theoretical concept with music familiar to most students, we can simplify complex problems. Eighteenth-century classical music sounds totally foreign to many of today's students, for good reason: it was written three centuries ago on a different continent. Students might have difficulty understanding general principles of form or rhythm simply because they can't relate well with the examples we provide them. By taking out the unfamiliar element (Handel or Mozart, for instance), we might be able to clarify the issue for them. Think back to your music history class in college. Do you remember how difficult it was to learn about Perotin, Petrus de Cruce, Landini, and Binchois, simply because their music sounded so strange to you? Well, when you bring in that great Corelli example you're hoping will get the class excited about suspensions (and Corelli's music has a lot of great suspensions), keep in mind that Corelli may sound as weird to them as Landini did (or still does) to you. Of course, we want them to appreciate Corelli, too, but we might teach suspensions through more familiar repertoire and then introduce Corelli in a separate lesson.

A second psychological advantage to using popular music in the theory class comes from the teacher's interest in this music. A teacher's enthusiasm is infectious. One class that I've taught many times includes, over the course of several weeks, an example of dance music by Rameau and an example by the Beach Boys. Although someone could legitimately argue the other way, let's just say for the sake of argument that Rameau was a more talented composer than Brian Wilson. Nevertheless, I love "Help Me, Rhonda" more deeply than I could ever love the Rameau dance, and my students notice it. Year after year they pay more attention to me during the Beach Boys example; they smile, they interact with me and with others, and they ask questions afterwards about how to apply the lesson to other songs. Never has anyone asked me about the Rameau dance except to clarify confusion about the assignment. There's no doubt that the different reactions result partly from the students' greater familiarity with the Beach Boys, but surely some of the cause must be attributed to my inability to fake greater excitement about Rameau.

John, Paul, George, Ringo, and You

We should not jump to any conclusions about what's included under the rubric of "popular music"; in addition to rock, it might include nineteenth-century cowboy songs, Sousa marches, Tin Pan Alley classics, Broadway tunes, and TV themes—even commercial jingles. Students can respond well to lessons on period form using "Home on the Range," on chromatic embellishments using "The Stars and Stripes Forever," on motivic transposition using "Over the Rainbow," on tonic and dominant arpeggios using "Seventy-Six Trombones," and on Aeolian mode using "The Ballad of Gilligan's Island." Many more suggestions on

Chapter 4

using a wide variety of popular music, as well as a more philosophical discussion on the use of popular music in theory class, can be found on the AP Music Theory Home Page on AP Central. Here we'll look at some possible uses of the songs of just one rock band. (OK, so maybe a phenomenon as legendary as the Beatles shouldn't be called "just" a rock band.) The point is that by concentrating on this one group, you can equip yourself with a legion of useful examples by artists that are still known, respected, and loved by teenagers, all with the purchase of just a few CDs or inexpensive downloads.

The songs may also be approached as exercises in score analysis, using some of the commercially available transcriptions. Be aware when taking this approach, though, that the transcriptions in books of popular music are almost never checked or even authorized by the composers and are subject to error. On the other hand, these scores can simplify your lesson by providing hard-to-hear details and by smoothing out nuances of rhythm and intonation in vocal lines.

A list of great Beatles songs is provided below, along with some of the musical features employed in each song.

"From Me to You": brief modulation to subdominant (beginning of the bridge), augmented triad (end of the bridge)
"Please Please Me": parallel fifths (in the guitar after the first vocal phrase—they're a good thing here!)
"Twist and Shout": ostinato, ninth chord (when they sing the ascending AHs), quarter-note triplet (in the Coda)
"I Want to Hold Your Hand": modulation to subdominant (for the B section), parallel fifths (at the end of the B section—yes, they're a good thing here, too!)
"All My Loving": parallel thirds (vocals in the last verse)
"Here, There and Everywhere": suspension (at the end of the introduction)
"The Night Before": call and response
"You've Got to Hide Your Love Away": compound meter, hemiola (on the refrain, the voice groups the eighth notes in three groups of two, while most of the song is in compound meter with the eighths in two groups of three)
"You're Going to Lose That Girl": phrase development (listen to the way in which the section with the title line gradually gets longer as the song progresses)
"Ticket to Ride": Rounded Binary Form (the B passage is not a stand-alone section because it ends on V and must lead back to the return of A)
"I've Just Seen a Face": Simple Binary Form (both A and B sections end on tonic harmony.)
"Yesterday": odd phrase length (the main section is seven measures long)
"Eleanor Rigby": Dorian scale (at the beginning of each verse), Aeolian scale (at other times during the song), syncopation, tonal sequence (a three-note motive transposed down a step each time: "rice in the church . . .")
"Norwegian Wood": Mixolydian scale (in the A section), change to parallel minor (for the B section)
"We Can Work It Out": syncopation ("very short"), quarter-note triplets (during the B section)

“Day Tripper” : ostinato
“Strawberry Fields Forever” : quarter-note triplets (in the vocal line at the beginning of each verse), changing meter (two isolated measures of $\frac{3}{4}$ within a chorus in $\frac{4}{4}$)
“Penny Lane” : tonal sequence (a short, four-note segment transposed down a step each time, in the first line of the verse)
“Lucy in the Sky with Diamonds” : triple meter (in the verses) changing to quadruple meter (in the chorus)
“She’s Leaving Home” : triple meter
“When I’m Sixty-Four” : syncopation (on the title line, and several other places), secondary dominants, chromatic passing tones (“will you still be sending . . . ?”)
“Hello Goodbye” : countermelody (during the choruses), major scale (at the beginning of the countermelody)
“All You Need Is Love” : asymmetrical meter ($\frac{7}{4}$ several times in the verses. You might also call it “mixed meter” if you hear this changing back and forth from $\frac{4}{4}$ to $\frac{3}{4}$.)
“Fool on the Hill” : parallel keys (major on the verse, minor on the chorus)
“While My Guitar Gently Weeps” : parallel keys (minor on the A section, major on the B section)
“Maxwell’s Silver Hammer” : secondary dominant, syncopation (on the chorus)
“Oh! Darling” : pentatonic scale (clearest on the A section), compound meter, augmented triad (leading into each verse)
“Here Comes the Sun” : asymmetrical meter
“Come Together” : ostinato, parallel keys (tricky!—the major mode comes in for the refrain with a progression of vi-IV-V but never gets to the major tonic harmony, resolving instead back into minor)
“Mean Mr. Mustard” : changing meter ($\frac{4}{4}$ giving way to $\frac{3}{8}$ at the end of each verse)
“Two of Us” : changing meter ($\frac{4}{4}$ giving way to $\frac{3}{4}$ for the refrain)

A word of warning is in order here. Neither the AP Music Theory course nor any other typical first-year theory curriculum can be taught using rock music alone. Rock music is not Common Practice music, and it does not follow the same rules. Melody and harmony don’t interact the same way: “I Saw Her Standing There” includes an unresolved lowered seventh scale degree against a major V chord. Period form is usually absent: “Twist and Shout” includes so many successive cadences on V that the term *half cadence* becomes meaningless. Secondary dominants don’t often lead where they did in Mozart’s day: the V/V goes to IV in “Eight Days a Week.” But a passing tone is a passing tone and an ostinato is an ostinato, no matter where you find them. And if you find them in a piece of popular music, you just might make a connection with some students that you wouldn’t be able to make any other way.

Listening to the Planet: Including the World Element in the AP Music Theory Curriculum

by Kathleen Joyce-Grendahl, Christopher Newport University, Newport News, Virginia

What is music? There are numerous definitions in existence, from scholars and laypersons alike. I once read an account of a traditional Chinese musician who heard a symphony orchestra play for the very first time. The concert contained works by the great Classical and Romantic composers. When it was over, his hosts asked whether he had liked the concert. He replied that he had very much enjoyed it. His hosts then asked which part he had liked best, and the Chinese musician said he had liked the beginning the best. So, his hosts declared, their international guest liked the first movement of the first symphony played that evening. The Chinese musician shook his head in confusion and said, “No, I liked the very beginning the best. It was very beautiful.” What he was trying to convey was that he liked hearing the orchestra warming up and tuning—he considered that to be the most beautiful part of the performance. Is he wrong in that assertion? After all, when an orchestra is tuning, it does not have all of the elements of music, does it? It lacks rhythm and beat, and it is not formally organized into an A-B-A structure or a sonata form. Then it must not be music after all!¹

Over the years, I have heard academics and musicians speak disparagingly of music from other cultures (such as Asian, African, Native American, hip-hop) that does not fit their idea of what music should be. This is not a new phenomenon, for if I recall from my research as an ethnomusicologist, early European visitors to North America viewed Native American flute playing as chaos and cacophony—noise rather than a form of music. So, who determines the definition and value of music?

It has been said that “music is an international language,” but I consider that statement a misguided mantra. The concept of language requires the implicit communication of thoughts and ideas; more specifically, language is the cognitive processes involved in producing and understanding linguistic communication. All musics are imbued with a terminology, inflection, and various other subtleties necessary for communication *within their boundaries*. If you heard a musical snippet of Tuvan *khoomei* (throat singing), would you understand the importance, program, or context of the song? Unless one is a scholar in that field or just really interested in the musics of the world, it is unlikely that that understanding would manifest. How the musical example makes you *feel*, and the images that it creates in your mind, are not the same as a language, since the intention and context of the song can be completely different from your perception as a listener.

It would be more accurate to say that music is a universal phenomenon or behavior, as most cultures have a form of expression that they would label as *musical* expression, whether or not other cultures view it as such. Everyone’s definition of music is different, depending upon one’s culture and life experiences. The one basic component that must be present to be called music is that of sound—some would say that music is “humanly organized sound.”² Furthermore, one person’s view of melody, harmony, phrasing, intonation, etc., can be completely different than someone else’s perception, all of which is dependent upon experiences and culture. One is not better than another; it is just different. Music is an expression of a culture, and every culture or subculture develops the music that it needs, based upon social structure, religious ritual, and personal creativity.

1. Jeff Todd Titan, ed., *Worlds of Music: An Introduction to the Music of the World’s Peoples*, 2nd ed. (New York: Schirmer, 1992): 1.

2. John Blacking, *How Musical Is Man?* (Seattle: University of Washington Press, 1973): 10.

Whether we want to or not, we will always use personal experiences when we react to something new. For example, in analyzing a culture's music and dance, I use Western terminology like "harmony," "melody," "form," "timbre," "meter," and "rhythm." I use this terminology because it is my personal foundation based upon my life experience and education. I may internally compare the new music I hear to what I know, using the language that I know, but I should not place value judgments on the comparison. A culture's music is not dependent upon another culture's definitions or parameters to be called music or to have value. Asian music is pentatonic; European art music is tertian, meaning it is based on the interval of a third. These are facts based upon analysis, not opinion or feelings.

Why should world music be included in the AP Music Theory curriculum? The primary reason is because we live in a multicultural society. We go to work and school with people from a variety of backgrounds. Although music from the standard Western tonal repertoire forms the core of the AP Music Theory curriculum, delving into world musics is also crucial, because it leads to enlightenment and understanding. Most racial and ethnic conflicts arise out of fear and ignorance. Only through education can we dispel myths and gain true knowledge and appreciation of other cultures. What better way to explore and understand the planet than through the medium of music?

In addition, I have learned more about the intricacies and subtleties of music as an entity by listening and playing various world musics. My conception of a melody line and its rendering was perfected by playing the Native American flute, complete with all of its built-in imperfect interval relationships, its skewed octave, its narrow range. Studying world musics and cultures, accepting them at face value, took me from being a musical technician to a true musician.

Finally, through world music performance and analysis, I have gained a greater understanding of the human condition and humankind's creative ability. In addition to musical sensitivity, I have gained cultural awareness. I have become a better, more well-rounded human being because of my study of the world's musics and cultures.

What Does the Planet Have to Offer, Theoretically Speaking?

Rhythmic Ideas

The natural world is governed by rhythm. Our heartbeats are rhythmic, as well as our breathing, the cycle of night and day, the ebb and flow of the tides, the cycles of the seasons, and life and death itself. Rhythm springs from the need for order inherent in the human mind. Without the idea of order and categorization, the mind would be in chaos.

In music-speak, rhythm refers to the temporal aspect of music, the organization of phenomena in time. It is the element in music that is most closely allied to body movement, to physical action. Rhythm is often referred to as the "heartbeat of music." It is the most primitive element of music and, unlike other elements, it can exist independently.

An important term associated with rhythm is *beat*. The regular pulse in a composition is called a beat. However, not all music has an audible beat. A composition that exhibits a definitive, demonstrative beat is said to have a *direct* beat. Marches, rock and roll, disco, reggae, and Irish step-dancing tunes are all examples of music that exhibit a direct beat.

Music that has a beat that is felt rather than heard is said to have an *indirect* beat. The beat is internalized by both performer and listener. Solo Native American flute music often exhibits an indirect beat, with flowing melodic movement marked by a push and pull of the internalized beat. The introductory section, the *alap*, of North Indian classical music exhibits a free rhythm without a direct beat.

Chapter 4

Initially, it is a challenge for the beginning music theory student to notate rhythms. Through repetition and much practice, the ability to write down metrical, rhythmic examples slowly emerges. Very often, the concept of rhythmic notation is taught by banging out a rhythm using a single piano note or clapping hands—a practice that treats rhythm as a separate entity, rather than as a vital part of music. I encourage the instructor to break out of this pattern as soon as possible. Have students attach meaning and comprehension to rhythm by listening to musical examples. Listening introduces the idea of rhythmic layers in music, and teaching the student to pick out the rhythmic layers in a composition hones the ear and teaches a more comprehensive idea about rhythm as it appears in music. It is a practical approach and will be made more interesting through the use of music that is not necessarily a part of the student's musical experience. Using world music examples allows students to experience non-mainstream rhythmic ideas and to explore different cultures' perceptions of music-making rather than just the Western idea.

The challenge comes in notating music with an indirect beat regardless of music type, but this is a skill that will truly hone a student's sense of time. It will force the student to define the inner beat and utilize it in deciphering the indirect beat, often using minute, strange rhythmic values to indicate what is being heard. Can such an example be put into a meter? It is my opinion that an aural example does not have to fit into a meter, and it simply may not fit into any meter. Do not hesitate to explore nonmetrical music examples. This will help students to start "thinking outside the box" with regard to music and its form.



Including world music examples can broaden students' listening skills.

For musical exercises with an indirect beat, I suggest commencing with a short excerpt. Examples of music to use are "The Time" by Coyote Oldman from *Rainbird*; "Gentle Tibetan Angel Dance" by Nawang Khechog from *World Flutes 1*; and "Honshirabe" by Kohachiro Miyata from *Shakuhachi—The Japanese Flute*. Students should spend time listening to the example without being asked to commit anything to paper. The focus should be on internalizing the indirect beat. Shutting the eyes when listening helps, as

well as dimming the lights or turning them off completely. While the melodic aspect of these examples is compelling, encourage students to stay focused on the indirect beat. Have students notate the internalized beat freely, without the restriction of meter. This should yield innovative results, because people hear things differently. Then have students try to put the results into a meter.

Examples of direct beat compositions that would be suitable for cultural exploration of beat and its organization include “Jer the Rigger” by Dirk Freymuth from *Festival Celtic Dance*; “Fire” by Peter Phippen from *Echoes of the Past*; “Walkabout” by Ash Dargan from *Territory*; “Taina” by Dinho Nascimento from *The Rough Guide to the Music of Brazil*; and “Tribute to Elegua” by Capetown from *Waka Waka*. All of these selections are heavily influenced by beat and rhythmic layers. Again, save the notation on paper for later. It is more engaging if you have students listen and identify the existing layers as a group activity. How many rhythmic layers are there? Organize students into small groups and charge each group with a specific rhythmic layer. Have each group figure out the rhythm of its respective line as an aural exercise, using hand clapping. When secure and comfortable, students can notate the rhythm on paper. The idea is to get students off the page and actively listening. Often, the problem with rhythmic dictation is that students try to take down every beat as it happens, rather than taking the time to listen, internalize, remember the rhythm, and then notate. In my experience, this latter procedure leads to a true understanding of rhythm, is much less stressful, and provides an exciting opportunity to delve into another culture’s musical approach.

The concept of cyclical organization is an advanced rhythmic idea. Western music is very much governed by the concept of rhythmic linearity, which is emphasized by the placement of note values and their metrical groupings on horizontal lines that are read from left to right. This is not the case in many global cultures. For example, North and South Indian classical music is rooted in a repetitive, cyclical rhythmic concept called a *tala*. There are approximately 350 talas of varying duration utilized in North Indian classical music; roughly 10 talas are in routine use. Within each tala, there are distinctive degrees of accentuation ensconced within the beat cycle. These rhythmic distinctions are marked with a scheme of hand claps and hand waves. The most significant point of rhythmic stress is the *sam*, because it is the initial beat of the tala and the juncture to which all variations ultimately resolve. The *khali*, meaning the *empty beat*, is the unaccented beat of the tala. The absence of accentuation is highlighted by a wave of the hand rather than a clap, making the khali a very substantial rhythmic focal point. There are other accentuations within the tala labeled as *tali*, which are also indicated by hand claps. However, they do not receive the same emphasis as the sam; rather, the tali serve to apportion the tala into smaller divisions, in the same manner as the sam and the khali.

In Indian classical music, there are two sections to a composition. The first section is called the *alap*, which is performed in a rhythmically free manner. This melodic exhibition is performed by a vocalist or an instrumentalist. The second section to an Indian classical composition, called the *gat*, is marked by the inclusion of a percussive element. The rhythmic, percussive support that delineates the cyclical pattern is provided by the *tabla* performer. The tabla is a set of two drums, a small, tunable drum called tabla and a larger, nontunable drum called the *bayan*.

Within the previously-described tala system, the tabla performer, who is often delegated to an accompanying role, plays a basic repeating pattern called the *theka*. The theka in the tala is a repeated, fundamental pattern that has a series of syllables, or *bols*, attached to it. Each bol expresses a stroke or assemblage of strokes on the tabla. One of the most frequently used theka patterns is called *teental* or *tintal*, as it is also spelled. The framework of teental is so overtly proportional that it provides an unassailable rhythmic structure, against which an instrumental or vocal performance can be confidently executed.

Chapter 4

It is comprised of four *vibhags*, somewhat analogous to the Western concept of the measure or bar, of four *matras* each. Matra is the *beat* in Indian classical music. These vibhags are represented by a clap, clap, wave, and a clap. In teental, the clapping/waving sequence is as follows:

clap, 2, 3, 4, clap, 2, 3, 4, wave, 2, 3, 4, clap, 2, 3, 4

The number of beats or matras in teental is 16. The theka of teental is arranged as follows:

Clap (sam)

♪ ♪ ♪ ♪
Dhaa Dhin Dhin Dhaa

Clap

♪ ♪ ♪ ♪
Dhaa Dhin Dhin Dhaa

Wave (khali)

♪ ♪ ♪ ♪
Dhaa Tin Tin Naa

Clap

♪ ♪ ♪ ♪
Naa Dhin Dhin Dhaa

Clap (sam)

♪
Dhaa

The tabla performer executes the pattern clearly, thus providing rhythmic indicators that inform the instrumentalist or vocalist as to the appropriate performance within the tala. However, the tabla does not simply play the pattern over and over in the same way. The tabla performer fills in the theka with unobtrusive ornamentation, while striving to keep the pattern clear and discernible to the melodic performer.

There are myriad ways in which the above description can be included in the AP Music Theory classroom. A truly awe-inspiring example of the tabla and its patterns combined with instruments other than those of the classical Indian tradition may be viewed in the video *Béla Fleck and the Flecktones: Live at the Quick*. This is a great way to introduce students most familiar with the Western classical tradition to Indian rhythmical, cyclical conception. The video introduces students to the idea of world fusion, a musical phenomenon that is becoming more and more prevalent due to the global approach that many professional and amateur musicians in all musical genres are embracing. Béla Fleck, named after the composer Béla Bartók, is a well-known banjo player who is innovative in his approach to music, crossing over into a variety of cultures. He plays bluegrass, classical, blues, world fusion, etc. This video will motivate students to learn more about the tabla and Indian classical music.

An important aspect of learning rhythm is experiencing it in a musical context. Simply notating rhythms on a piece of paper may not be enough, but introducing students to global rhythmic traditions, and having them participate in their creation rather than just notate them on a page, will help make the

connection to the importance of rhythm in the world of music. I have found that this approach generates enthusiasm and encourages students to explore the concept of rhythm, what its real meaning is, and how it is used globally.

With regard to the Indian tala, there are several learning tools that can be utilized in the classroom. *Tabla Groove* tapes and CDs by Ashwin Batish provide 10 of the most commonly used rhythmic cycles of North India. There are 10 CDs in the package, one for each tala. Each CD contains the theka in varying tempos—slow, medium, and fast. Students learn the cyclical patterns by listening and participating in the clap/wave arrangement, followed by notation of the pattern with the ornamentation. In addition, a student may take his or her instrument and learn to correctly improvise within the various tala, over the tabla track. This approach covers a variety of learning techniques—paper notation, kinesthetic participation, and improvisation. The student is learning the concept, but most importantly, he or she is incorporating it into the music-making process.

Other learning tools are *Tabla Tutor #1—Introduction to Tabla* (VHS); *Tabla Tutor #2—Production of Tabla Bols* (sounds) (VHS); and *Tabla Vol. 1: A Journey into Eastern Percussion* (interactive CD-ROM).

Melodic Ideas

Melody is the element in music that has the widest and most direct appeal. It is referred to as the “soul of music.” It is what we remember, whistle, and hum. Technically, melody is a succession of single tones perceived by the mind as a unity— a progression of musical tones arranged in a pattern. In many theory courses, melody is discussed and examined in the context of Western classical music or American folk music, placing emphasis upon the major scales and the three forms of the minor scales. In ear training, often these types of tunes are played for the students to notate in dictation class. It is not until very late in the process that the student begins to hear different ways outside of the Western major–minor tradition. By then, students may be so trapped in the major–minor confines that they find it difficult to break out of that thought process into something new. The classical repertoire’s major and minor tonalities are crucial for students to master, but those tonalities are used in only a small portion of the world’s music. There are numerous scale types and tuning systems and a myriad of ways in which various cultures utilize these concepts, as well as major and minor scales.

When students begin to study melodic analysis and practice dictation, there are folk tunes from around the world that provide an avenue for discussion of new cultures and their ideas about melody and the music-making process. Folk music is music by and of the people. Typically, it is experienced and performed by the entire community and transmitted by word of mouth, rather than by a distinctive group of professional performers. Since much of folk music is an oral tradition and not notated, complexity is at a minimum for the most part, although not exclusively so. Introducing students to folk songs from various parts of the world opens up new aural doors concerning the ways in which melodies are created.

Exploring and comparing other cultures’ folk melodies, scale types, rhythmic idiosyncrasies, form, and harmonic implications can provoke enthusiastic discussion in class, leading some students to a deeper study of those works. There are many books of folk melodies from which to draw inspiration, such as Francis James Child’s *The English and Scottish Popular Ballads*. Other resources include *A Folk Musician’s Working Guide to Chords, Keys, Scales and More* by Ryan Thomson (described by the author as “music theory in a nutshell to make music-making more fun by answering common questions about musical principles, with examples relevant to folk musicians”); *Russian Folk Songs: Musical Genres and History* by Vadim Prokhorov; and *Songs of West Africa: A Collection of over 80 Traditional West African Folk Songs and Chants in 6 Languages with Translations, Annotations, and Performance Notes* by Dan Gorlin.

Chapter 4

Folk songs can be played on the piano for music dictation purposes, but I also suggest that teachers require students to notate music from actual recordings. The experience is completely different, and in my experience it leads to more careful listening by the student. Further along the melodic dictation experience, have students attempt a true ethnomusicological transcription, meaning that they would notate all of the pitches, words, and vocal and rhythmic nuances from a performance. Students will need to listen repeatedly and very closely to ascertain the musical details. This is especially effective with instrumental music that exhibits an indirect beat, as well as vocal genres. It is an important technique to employ, as the detail and discipline that it takes to accomplish this type of transcription often transfer to students' performances on their respective instruments or voice. Many interesting and important musical concepts are heard between pitches—concepts that are learned and ultimately incorporated in an individual's own music-making.

Harmonic Ideas

Harmony is the relationship of tones, considered as they sound simultaneously. Two or more tones sounded together produce harmony. Harmony can be labeled as consonant or dissonant, although these concepts are dependent upon many criteria such as cultural background, level of exposure to dissonant music, and general perspective.

Although harmony is central to classical music, it is often difficult for the theory student to notate. Many students are horizontal players, meaning that they play melodic instruments. For those individuals, hearing and notating the vertical aspect of music can be a challenge. I suggest getting off the page with regard to dictation. Let the students hear the harmony of various musical genres from different cultures and learn to sing along. Then, after creating a comfort zone rooted in music production, have the students notate on paper. They will have heard the music, produced it, and have it in their musical memory.

Have you ever noticed the humming that goes on in the classroom during harmonic and melodic dictation? That is because students want to put the music into a performance context in order to better understand it. Yet, educators tend to frown on group humming, reasoning that students must hear the music internally. Try taking harmonic examples from other cultures, not just familiar ones, and let the students sing. Play the recording and sing the example through, having students switch parts. Let them try to hear the various parts and produce them in a musical context. Students will listen more closely when actually trying to create music. This is not cheating the process; it is teaching students to listen through participation. Use this time to discuss form, harmonic and melodic/scalar innovations, and analysis of the example, as it applies to the culture under study. I guarantee you will hear fewer moans and groans during ear-training sessions!

Start with the basics of harmonic texture, discussing the various harmonic types: monophony, heterophony, homophony, and polyphony. Try using world music examples. Monophony means music with a single part, typically meaning a single vocal or instrumental melody. When sung by multiple voices in unison (i.e., the same pitch), this music is still deemed monophonic. The primary Western example of monophony is plainchant, with its single unaccompanied vocal melody. World examples of monophony include "Shaman's Call" by R. Carlos Nakai from *Spirit Horses* (solo Native American flute); "Gaelic Mouth Music: Puirt-a-Beul" by Mairi MacInnes from *A Beginners Guide to Traditional Scottish Music* (nice rhythmic changes); "Bansull" by Kirsten Bråten Berg from *Nordisk Sang: Music of Norway* (brief vocal excerpt); and "O Death" by Dr. Ralph Stanley from the film *O Brother, Where Art Thou?* The instructor will need to determine the difficulty level of the world examples, as many of them are complex. Some of the more challenging examples could be take-home projects or group efforts. Many of the texts of excerpts from other countries can be found on the Internet, complete with translations. If translations and texts are not available, simply focus upon the pitches.

Heterophony means that numerous parts use the same melody but at somewhat disparate times. In other words, it is like doubling, but not at the same time. Generally speaking, in heterophony, any vertical alignment of intervals is coincidental and not of great significance. More specifically, heterophony means that there is a melody line played by all of the participating instruments in the group, yet each is performed slightly differently due largely in part to the instrumental playing technique, the character of the instrument's construction and historical development, and how and where the performer learned the music, as well as the culture's perception of musical expression. This type of texture is characteristic of music from Ireland, Indonesia, Japan, and China. Notating heterophonic music can be challenging, although it is a great exercise for discerning various parts and their respective roles within the music context. An example of a heterophonic texture is “Flowers on Brocade” by Professor Liang Tsai-Ping and his Group from *China's Instrumental Heritage*, which features two instruments—the *zheng* and the *xiao*.

Homophony is the most common texture in Western music. It can be described as music with multiple parts but having one part that dominates—in other words, one melody sung or played by one instrument or voice with a supportive harmonic accompaniment. Homophony appears in popular music, folk music, religious hymns, and Western classical music; the dominant line is strongly melodic in character and accompanied by countermelodies, chords, and various percussion instruments. World examples include “Sweet ’n Breezy” by Steel Drums of Trinidad from *Steel Drums of Trinidad*; “Shady Grove” by Ricky Skaggs from *Essential Bluegrass*; and “One Step at a Time” by Clifton Chenier from *The Rough Guide to Cajun and Zydeco*.

Polyphony translates as “many voices,” meaning that two or more different parts are played at the same time. Polyphony can be rhythmic or melodic, or a melding of the two. Within polyphony, textural density can fluctuate, as can the appearance of the various harmonic textures within a composition. Imitative polyphony is found in Western classical music. Globally, nonimitative polyphony is more common. It can be found in the elaborate textures of the Javanese gamelan orchestras, West African kora and balafon music, and traditional Thai ensembles.

Approach each texture individually with the class. Play the recording several times and discuss what is being heard. Have students identify the texture, supporting the answer with facts they have heard. Talk about the form of the example. Then, examine the harmonic progressions that are present or are hinted at. Have students outline the form and harmonic structure on a piece of paper; create a road map in which they can work. Next, have students sing the example. If it is in multiple parts, break the class into groups, assigning each group a part on which to focus. Be sure to rotate the assigned parts, so that all of the students have an opportunity to focus upon each part. Have the students sing with the recording and then without the recording. Finally, play the example and have them notate an excerpt on paper.

Initially, this process can take a long time. However, as time progresses, students will get faster at it. They may even begin to do it at home, trying to figure out favorite songs. The point is that you are training the ear to *hear* music cognitively and musically. Students are learning to make the connection from performance to paper, and they are doing it through participation. This technique is also an invaluable approach in the score analysis of a piece of music, when examining form, melodic and harmonic structure, etc. Get the students involved!

Conclusion

The student body in the American school system is a true melting pot, to reiterate a well-known metaphor. Our students embody a multitude of cultures. Why not embrace the global approach to music theory to engage those students and their multiethnicities, and, in the process, have the students learn about each others' heritages? This is not only an engaging approach which will lead to great classroom discussions,

but it will foster curiosity about and understanding of other peoples. By including world music in the theory curriculum as often as possible, teachers are helping clear up misconceptions and generating an enthusiasm that will provide a real boost for the music theory curriculum.

Resources

World Music Reference Works

- Alves, William. 2006. *Music of the Peoples of the World*. Belmont, Calif.: Wadsworth. (CDs included)
- Bohlman, Philip V. 2002. *World Music: A Very Short Introduction*. New York: Oxford University Press.
- Campbell, Patricia Shehan. 2004. *Teaching Music Globally: Experiencing Music, Expressing Culture*. New York: Oxford University Press.
- Miller, Terry, and Andrew Shahriari. 2005. *World Music: A Global Journey*. New York: Routledge, Taylor and Francis Group. (CDs included)
- Nidel, Richards O. 2004. *World Music: The Basics*. New York: Routledge, Taylor and Francis Group.
- Shelemay, Kay Kaufman. 2006. *Soundscapes: Exploring Music in a Changing World*, 2nd ed. New York: W.W. Norton and Company. (CDs included) (First edition published in 2001.)
- Titon, Jeff Todd, ed. 1992. *Worlds of Music: An Introduction to the Music of the World's Peoples*, 2nd ed. New York: Schirmer. (First edition published in 1984.)
- Titon, Jeff Todd, ed. 2005. *Worlds of Music: An Introduction to the Music of the World's People (with CD-Rom), Shorter Version*, 2nd ed. Belmont, Calif.: Wadsworth.
- Volk, Terese M. 1997. *Music, Education, and Multiculturalism: Foundations and Principles*. New York: Oxford University Press.
- Wade, Bonnie C. 2004. *Thinking Musically: Experiencing Music, Expressing Culture*. New York: Oxford University Press. (CD included)

Specialized Reference Works

- Child, Francis James. Corrected edition prepared by Mark Heiman and Laura Saxton Heiman. 2002. *The English and Scottish Popular Ballads, Vol. III*. Northfield, Minn.: Loomis House Press. (Vols. I and II of Child's work also available from Loomis; vols. IV and V forthcoming. Original work published in 1882-98.)
- Gorlin, Dan. 2000. *Songs of West Africa*. Forest Knolls, Calif.: Alokli Press.
- McLean, Mervyn, and Margaret Orbell. 2004. *Traditional Songs of the Maori*. Auckland, Aotearoa, N.Z.: Auckland University Press.
- Prokhorov, Vadim. 2002. *Russian Folk Songs: Musical Genres and History*. Lenham, Md.: Scarecrow Press.
- Thomson, Ryan J. 1991. *A Folk Musician's Working Guide to Chords, Keys, Scales, and More*. Newmarket, N.H.: Captain Fiddle Publications.

Visual Materials

(Times shown when available)

African Drumming. Babatunde Olatunji. 2005. Wea Corp. 90 minutes. (DVD)

Béla Fleck and the Flecktones: Live at the Quick. 2002. Sony. (DVD)

JVC Video Anthology of Music and Dance of the Americas. 1995. Smithsonian Folkways. (6 videos and 6 books)

JVC Video Anthology of World Music and Dance. 1990. Smithsonian Folkways. (30 videos and 9 books)

Tabla Tutor #1—Introduction to Tabla. Ashwin Batish. Buckingham Music. 1994. 65 minutes. (VHS)

Tabla Tutor #2—Production of Tabla Bols (sounds). Ashwin Batish. Buckingham Music. 1995. 60 minutes. (VHS)

Tabla Volume 1: A Journey into Eastern Percussion. 2003. Aimrec Enterprises. (Interactive CD-ROM)

Audio Materials

(CDs and/or cassette tapes; catalogue numbers shown if available. Many are available on Web sites such as Amazon.)

Batish, Ashwin. *Tabla Groove* tapes and CDs. Buckingham Music.

Capetown. *Waka Waka*. 2003. Kalimba Studio.

Coyote Oldman. 2004. *Rainbird* (2 CDs). Coyote Oldman Music.

Dargan, Ash. *Territory*. 2003. Soundsource Productions.

Nakai, R. Carlos. *Canyon Trilogy—Native American Flute Music*. 1989. Canyon Records, CR-610.

Nakai, R. Carlos. *Spirit Horses*. 1993. Canyon Records, CR-7014.

Phippen, Peter. *Echoes of the Past*. 1999. Canyon Records, CR-7032.

Steel Drums of Trinidad. *Steel Drums of Trinidad*. 1993. Legacy.

Tsai-Ping, Professor Liang and his Group. *China's Instrumental Heritage*. 1993. Lyrichord Discs, LYRCD-792.

The recordings below are compilations of music performed by various artists:

A Beginner's Guide to Traditional Scottish Music. 1994. Lismor, LCOM5227.

Essential Bluegrass Collection, vols. 1–4. 2002. CMH Records, CMH-1798.

Gaelic Roots. 1997. Allegro Corp.

Festival Celtic Dance. N.d. Compass Lifescapes.

Chapter 4

Masters of Turkish Music, vols. 1–3. 1992–2003. Rounder Records.

Nordisk Sang: Music of Norway. 1987. New Albion Records, NA031.

O Brother, Where Art Thou? (movie soundtrack). 2000. Lost Highway Records.

The Rough Guide to Bluegrass. 2001. World Music Network, RGNET 1059CD.

The Rough Guide to Cajun and Zydeco. 2000. World Music Network, RGNET 1028CD.

The Rough Guide to the Music of Brazil. 1998. World Music Network.

The Rough Guide to the Music of Hawaii. 2000. World Music Network, RGNET1049CD.

The Rough Guide to the Music of the Andes. 1996. World Music Network, RGNET1147CD.

The Rough Guide to the Music of Wales: Harps, Bards, and Gwerin Sounds. 2000. World Music Network.

The Rough Guide to Reggae. 1997. World Music Network.

Shakuhachi—The Japanese Flute. 1977. Nonesuch Records, 72076.

Tuva, Voices from the Center of Asia. 1990. Smithsonian Folkways, SFW40017.

Venu: The World (Mickey Hart Series). 1990. Rykodisc.

World Flutes 1. 1999. Earthsea Records.

AP Vertical Teams in Music Theory

by Blaise Ferrandino, Texas Christian University, Fort Worth

AP Vertical Teams involve a unified and coordinated effort to structure a curriculum through multiple grade levels. The Vertical Team in music is responsible for the development and implementation of a program that teaches and reinforces skills and concepts from one grade level to the next. This is best achieved through a planning process involving teachers and administrators who construct sequentially based goals and objectives mindful of state and national standards. Such planning results in a curriculum that prepares students for eventual enrollment in an AP Music Theory course.

Why Use a Vertical Team?

The Vertical Teams' approach provides the opportunity to form a coherent yet flexible curriculum that articulates the concepts of music literacy in a sequential way. This curriculum should be seen as both vertical and horizontal: vertical, because it includes both middle and high school levels (and potentially K–12), and horizontal, because it should include the diverse activities of band, choir, orchestra, general music classes, and, potentially, material from other disciplines as well. Using AP Music Theory as the capstone event “trickles down” to raise standards at all levels. This is important in that districts are charged with delivering quality music education to all students, including those who might complete their formal musical education in grade 6 or 7.

The College Board Pre-AP publication *The AP Vertical Teams® Guide for Music Theory*¹ offers a description of the Vertical Teams' philosophy, provides a rationale for starting a Vertical Team, and gives useful suggestions for implementing a Vertical Team strategy in a curricular area. The information in the section titled *An Overview of AP Vertical Teams®* will be of special interest to those wishing to start such an initiative in their district. The Vertical Teams Guide also offers sample lessons and activities to develop musical skills and concepts needed to prepare students to enter an AP curriculum by using repertoire appropriate for middle school and high school students.

Many music departments already have informal teams in place through their choral and instrumental ensembles. Directors of these groups generally discuss and coordinate student performance repertoire and outcomes from middle schools to high schools. A more broad-based approach to comprehensive music literacy can grow from these existing associations. In fact, some districts have already adopted this approach and used College Board–recommended methodologies to articulate a complete K–12 curriculum.

By way of example, the Vertical Teams' approach can be used to help bridge the curricular chasm between elementary school and middle or junior high school. In many situations teachers at these levels do not coordinate curricula. It is difficult to coordinate goals when outcomes are so divergent. In general, teachers from seventh grade onward become increasingly concerned with the ensemble performance aspects of music, while teachers of students at earlier grade levels are somewhat more concerned with broad-based experiential learning. While these are by no means mutually exclusive goals, they do not align organically. Unless one instructor teaches at multiple levels, it is very rare that one teacher is aware of the musical selections used by the other. It comes as no surprise, therefore, that any alignment in outcomes and materials is usually accidental. A clearly articulated curriculum using the Vertical Teams' approach addresses these issues.

1. College Board, *The AP Vertical Teams® Guide for Music Theory* (New York: College Board, 2002).

How Do Vertical Teams Work?

In the Vertical Teams' environment, teachers at various levels are aware of the outcomes, activities, and repertoire used at all points in the program. The seventh grade instrumental teacher faced with a class full of beginning clarinet players knows the music that has been sung, played, listened to, and otherwise experienced in sixth grade. Often this repertoire is the same as that used in beginning instrumental method books. If teachers are aware of this carryover, they are better able to choose pedagogical methods which make use of this familiarity.

For example: If *Lightly Row* was experienced in two-part harmony in a sixth-grade general music class, the seventh-grade instrumental teacher could recall that experience (singing, reading, listening, etc.) and use it as an introduction to the lesson at hand. The instructor might have the group sing or, once everyone is proficient at playing the tune on clarinet, play the harmony part previously experienced. This might also be an opportunity to reconcile issues of transposition associated with the clarinet with the score previously seen. The sixth-grade teacher, knowing of the upcoming seventh-grade experience, might show the instrumental version to his or her class, or even have the seventh-grade group visit, or use a recording. Perhaps the sixth graders might sing one part while the clarinet plays the other. As an added bonus, potential clarinet recruits would be significantly engaged and more likely to remember this lesson. The potential activities are numerous but possible only if each teacher knows what the other is doing. Even if the two teachers merely have scores for the two versions at their disposal, both sequential and aligned learning would be facilitated.

This same example might be further applied to specific outcomes. If the sixth-grade outcome associated with *Lightly Row* was in the area of understanding the expansion of the short-short-long rhythmic motive, the seventh-grade teacher might build on this to help players understand techniques involved in executing such rhythms on their instrument. It must be noted that while it is true that every sixth grader will not take clarinet, a Vertical Teams' approach assures that each seventh-grade clarinetist will have experienced *Lightly Row*, or a similar piece. This repertoire is chosen as a teaching tool to achieve a certain outcome or outcomes—in this case, the aforementioned rhythm.

In a broad sense, the four aspects of music literacy might be understood as:

- Understanding written information even if removed from the actual sound event (reading)
- Transmitting information to others through symbolic, representative language (writing/notating)
- Expressing ideas to others (speaking/performing)
- Making sense of external aural stimuli directly associated with music (understanding/hearing)

Developing Music Literacy

Process-oriented skill acquisition is central to the development of music literacy. Skills may be acquired in the context of the artistic process. This is the case when the music student has to ascertain, for example, the meaning of a specific symbol found in a piece. Some cast this method of skill acquisition as being on a “need to know” basis; it is an approach commonly used in rehearsal/performance classes. Skill acquisition might also take place outside the context of a directed artistic process. Such learning takes place through exercises, drills, studies, analysis, etc., and is often applied in private lessons and classroom music.

The following table, adapted from *The AP Vertical Teams Guide for Music Theory*, illustrates processes and skills necessary to the development of music literacy.

Topics in AP Music Theory Pedagogy

Listening to Music	Performing Music	Creating Music	Reading/Writing Music	Analyzing Music
Recognizing, describing, understanding, and reproducing musical elements experienced as sound	Reproducing, manipulating, and interpreting musical elements through singing and/or playing	Producing music through manipulating the interaction of musical elements	Becoming fluent in the vocabulary and symbols used to notate musical elements and their interaction	Using visual stimuli to identify and describe musical elements and their interaction

Elements learned ...

scales and pitch organization, melody, harmony, duration and rhythm, form, meter, texture, timbre, dynamics, articulation, tonality and key centers, musical notation and terminology

through activities presented ...

listening exercises, performance exercises, creative exercises, analytical exercises, notation exercises, singing exercises

result in skills acquired.

listening skills, performance skills, reading skills, writing skills, compositional skills, analytical skills, notation skills, sight-singing skills

Development of such literacy appropriate to the discipline is a primary goal in the teaching of music theory. Activities such as structured listening, notational drills, and analysis, as well as performance, lead to a better understanding of the music studied and develop critical thinking and listening skills that are transferable. Ultimately this facilitates the development of literate, well-rounded student musicians who are able to read, to write/notate, to speak/perform, and to understand/hear in ways appropriate to the discipline.

At the heart of music literacy is music literature. School districts are encouraged to develop a list of the musical selections studied in their district. This repertoire should be an integral part of a process-driven and outcome/skills-oriented curriculum. When students are more familiar with the music presented by the teacher, they can gradually come to a more profound understanding of it. This approach leads to the development of musically literate students and encourages a learning environment in which students better experience the aesthetic and affective aspects of the art.

It is essential that the curriculum incorporates music familiar to and already used by teachers. This is especially important considering the large number of ensemble directors who will be involved in the Vertical Team. These teachers have as their primary responsibility the preparation of material for rehearsal, contests, and public performance. Vertical Teams provide the opportunity for music theory and general music teachers to work cooperatively with ensemble directors who can incorporate music theory concepts, exercises, and activities into pieces performed during the course of the year. In turn, the “classroom” teachers can use school performance repertoire to illustrate the numerous links between music literacy and performance.

Repertoire should be seen in this instance as a teaching tool. Whether it is looked at, listened to, performed, or created anew, the objectives attendant to specific grade level and cognate area within music can and should form the basis of pedagogical choices. The music itself is the key, along with keeping the students involved in a hands-on way with the sight of music notation with which to describe, identify, perform, and listen. Musical works, which derive their sense and intelligibility contextually, should be approached as a whole, not just in three-measure snippets.

To paraphrase the famous baseball player Yogi Berra: A lot can be seen by just looking.² The Vertical Teams' approach encourages perusal of real scores on a constant basis. Concepts heard are better fixed in the ear and mind if the student sees the corresponding musical notation. Notation is so much more than a vehicle for performance. It represents the distilled thoughts of the composer or arranger. The performer reconstitutes these ideas for the benefit of the listener. Examining these thoughts on paper, however, is richly rewarding in its own right and a necessary part of any sequential curriculum leading to AP readiness. In addition, if students are asked to respond to written prompts, whether in instructional or evaluative exercises, it is best that they experience music in its written form on a consistent basis.

Using Vertical Teams' Lessons

The lessons section of *The AP Vertical Teams' Guide for Music Theory* provides many examples of how repertoire might be used in a sequential, recursive fashion. Scores are provided with lessons, each of which is divided into four parts: Introduction, Exploration, Focus, and Similar Works for Study. In the Explorations section, activities appropriate to students at varying levels of experience are provided. Three components of Exploration (discovery, application, and understanding) indicate points upon a spiral curriculum. The specific grade level at which such activities are appropriate depends on the situation. The authors of the Vertical Teams' Guide felt that students might engage in discovery activities as early as sixth grade, application activities as early as eighth or ninth grade, and understanding activities from tenth grade through the AP Music Theory course. Basic activities are always appropriate at more advanced levels. Although the lessons in the guide are oriented toward students from middle school age on, the concepts and approaches can be extrapolated backward so as to be useful with students in grades K–5 or 6.

Consider the lesson on *Simple Gifts*, found on pages 69–72 of the Vertical Teams Guide, in which there is an exploration of “Melody/Text.” The prompts are as follows:

Discovery: *How does the text reflect the virtues of Shaker Society? Circle the words that are part of the instructions for dancing.*

Application: *This is a step-wise melody in G major. Circle or highlight all the tonic pitches (G). Circle all the occurrences of the highest pitch (D) and the lowest pitch (also D). D can function in the tonic or dominant chord. Decide which it is at each occurrence. There will be only two measures without circles. What do these two measures have in common?*

Understanding: *This melody is oriented around three-note melodic patterns. Using call and response have the students sing: do-re-mi; re-ti-do; mi-fa-sol; mi-re-do; sol-do. Have students find examples of each pattern in the melody and highlight them. Then have the students sing the melody using solfège syllables or scale degree numbers. Is there an underlying sense to the pattern usage?*

2. Berra, who is famous for his fractured syntax, actually said, “You can observe a lot just by watching.”

Note: An earlier discovery activity, appropriate to K–5, would be to have the students actually dance to this piece. Certain gestures could be used in association with certain words such as “gift” and the aforementioned movement prompts. Eventually pitches such as tonic and dominant, which are used with the first two occurrences of “gift,” might serve as prompts for kinesthetic reaction. This activity is not only fun but highlights moments that are structurally significant to the piece.

In **Discovery** the students are given prompts that involve social studies and dance, an important topic at this point in the overall K–12 curriculum. This type of question allows for horizontal teaming with instructors outside of music. There are specific musical implications at work here as well. Such questioning gives rise to discussions of what devices are used to make the music “dance-like.” Focusing on words associated with movement allows the student to understand important points in composition and performance. “Bow,” “bend,” “turn,” and “turning” are all placed on strong beats. Then, at the end, the final movement instruction “come round right” is placed on successive eighth notes and a final quarter note. The increase in intensity has implications for how the dance was and should be executed—moving increasingly faster, thus “shaking” the devil away.

The discovery part of this process can lead to a more contextual understanding of the place of specific melodic pitches in the context of the key and the harmony. We sometimes assume that students should not be exposed to such topics until AP Music Theory reveals the full harmonic palette. This is a mistaken notion that makes things more difficult than necessary. The idea of tonic and dominant is introduced, in most cases, as early as third grade—even if these terms are not used.

In the **Application** prompt, students are asked to explore the occurrences of these most important of pitches. They also are made aware of how range can be used to create emphasis. After locating these pitches they are asked to place the pitches in harmonic context. The G–B–D (tonic) and D–F#–A (dominant) information can be provided by the teacher, as the goal here is to understand the changing contexts in which we find these two principle pitches. If a Vertical Teams’ curriculum is in place, the instructor might refer back to the discovery section to see how many times the pitches G and D are used with words associated with movement, which other pitches are used, and which harmonies are used at these points (everything is tonic or dominant).

In **Understanding**, the students explore the motivic nature of the melody and then, as befits an AP or pre-AP approach, seek to understand the logic behind the succession of motives used. Such study provides an invaluable preparation for AP skills such as sight-singing, melodic dictation, and critical listening. There is a sequential continuation of the study of melody as sensible, text-related, and oriented around *sol* and *do*. In addition, there are horizontal connections with the type of pattern recognition used in junior high and high school math classes.

'Tis the Gift to Be Simple

(Simple Gifts)

Shaker song
Union
D

Harm. by Richard D. Wetzel, 1972

Shaker song
Union
D

'Tis the gift to be sim - ple, 'tis the gift to be free, 'Tis the

gift to come down where we ought to be, And

when we find our - selves in the place just right, 'Twill

be in the val - ley of love and de - light.

'Tis the Gift to Be Simple (cont.)

When true sim - plic - i - ty is gained, To

bow and to bend we shan't be a - shamed, To

turn, turn will be our de - light Till by

turn - ing, turn - ing we come round right.

From *The Worshipbook*. © 1972 The Westminster Press. Used by permission of Westminster John Knox Press.

Horizontal Connections

Horizontal connections with other musical experiences are implicit and numerous. *Simple Gifts* is often learned in elementary school and performed in a variety of arrangements by middle school choirs. It is the basis for numerous instrumental arrangements including *Chorale and Shaker Dance* (by John Zdechlik) for wind ensemble and *Appalachian Spring* (by Aaron Copland) for orchestra. A Vertical Team would make teachers aware of where and how these various incarnations of the tune were used so that they may now reinforce and build further upon what came before.

A specific example of horizontal teaming might be gleaned from the same *Simple Gifts* lesson. It is an exploration of the use of flags and beams in different ensemble contexts (see Rhythm/Notation on page 70 of the Vertical Teams Guide, as well as the Focus section on page 71). The student learns that beams are used to group durations within the beat. This is an issue of great importance to the performer in sight-reading and in the understanding of rhythm/meter in general. When notation is unconventional, both classroom and performance teachers work with students to better understand these rhythms. In an AP class this might mean rebeaming a passage, while in an ensemble it might mean placing marks over the beats. The goal in each case is to understand rhythm in terms of the prevailing meter.

Because the tune *Simple Gifts* is so well-known, it allows elementary school teachers, middle school general music teachers, Music Theory I teachers, or AP Music Theory teachers to explore associations between performance and literacy. The instrumental/ensemble teacher, if aware of outcomes attendant to the study of this piece at various levels, can carry this knowledge to the rehearsal for review, reinforcement, and continued learning.

Focus Activities

Directed activities are important in a Vertical Teams' environment, as they allow students of all ages to be active learners. While the Exploration section seeks to use material inherent in the piece to learn more within specific cognate areas, the Focus section of each lesson takes one especially significant cognate area and delves more deeply by providing activities and projects. These allow the student to take concepts learned beyond what might be found, or typically examined, in the printed music.

There are six suggested activities and other related activities provided in the Focus section of *Simple Gifts*. The sixth numbered activity reads as follows:

Divide the class into two parts. Have half the class clap the melodic rhythm while the other half claps the rhythm found in the bass line. Note when the parts move in unison versus in different rhythms. Is there any sense to where the different rhythmic textures occur?

Such a prompt asks the teacher and student to consider rhythmic counterpoint as structurally important in and of itself. In listening to or performing *Simple Gifts*, one would not tend to focus on this aspect, and yet it turns out to be a very important component of the work. Performing, as indicated by the prompt, is a fun and engaging activity. Students of many different levels can participate in this activity. With younger students the rhythms might be rewritten by the teacher or by the class to make them easier to read and execute. This, of course, would provide a notation exercise to those at the appropriate level. Another option is to have one part played or sung by the teacher while the other is played or sung by the students.

After performing and listening, students are asked to recognize moments where parts are in rhythmic unison versus moments where the rhythms differ. In addition to sensitizing students to the sight, sound, and performance “feel” of such moments, this is an ideal opportunity to observe rhythmic counterpoint as a salient element of musical progression.

Chapter 4

For instance: in measures 1 and 2, half of each measure displays complete rhythmic agreement between the soprano and bass. More specifically, in measure 1 there are an eighth and two sixteenths in each part followed by four sixteenths in the melody versus an eighth and two sixteenths in the bass. In measures 3 and 4, there is no such agreement for any complete beat. Measures 5 and 6, like measures 1 and 2, show one beat of agreement in each measure, while measures 7 and 8, like 3 and 4, do not agree. Therefore a pattern is set up which could be summarized as two measures in some agreement followed by two with less or none. This pattern is repeated.

A special moment in the rhythmic counterpoint arrives in measure 9. Here, for the first time, there is rhythmic agreement between the two parts for the entire measure. The two parts emphatically underscore the importance of true simplicity and, incidentally, the second main section of the song. Such agreement is reinforced in measure 11 and then, significantly, at the end of the song.

Although the written discussion of such concepts can be cumbersome, rhythmic counterpoint does represent a simple, powerful aspect of this and many works. The control of the interrelation between parts is a tool used by composers and one that speaks to analyst, performer, and listener alike. What begins as a fun activity can, with the teacher's guidance, become an exciting journey into the study of the nature of counterpoint and its use in articulating the form and structure of a piece. Ensemble directors should note that this exercise has the added bonus of helping student performers become more aware of what is going on around them as they learn to evaluate musical structures as being the same, similar, or different. Such recognition is essential to quality interpretation and performance.

Putting It Together

A Vertical Team initiative in curriculum building might start by indexing and annotating materials already available and used within the district music program. Once desired outcomes for the various grade levels and cognate areas are articulated, activities that utilize this repertoire can be developed to achieve these outcomes. Districts might even consider writing their own Vertical Team Guide-style lessons. Assessment mechanisms, if desired, can be put in place at this time. The repertoire functions as a unifying text that, through a recursive, outcome-based approach to curriculum, can be used throughout the students' formal music education within the district.

Music teachers understand the basic components and elements of music. The AP Vertical Team, along with a clearly articulated curriculum based on AP principles, can connect these through repertoire as well as vertically and horizontally integrated activities and exercises. These help develop and reinforce specific knowledge and skills from grade level to grade level. Using actual music to learn about music allows students to make connections between the academic and applied sides of the art in context. Ideally, as they develop into literate musicians, students come to realize that these seemingly disparate approaches are equally important and necessarily unified if the music is to be better understood. Such understanding is an overarching goal of all music study but especially important to a course in AP Music Theory.

Chapter 5

The AP Exam in Music Theory

by David Lockart

When preparing to teach AP Music Theory, it's good to begin by acquainting yourself with the expected course outcomes as reflected in the Music Theory Exam. The exam covers the knowledge and skills typically taught in first-year college theory and ear-training programs. You will find that preparing students for the exam requires teaching a wide-ranging course that combines written and aural skills.

In this chapter, I will review various aspects of the exam, including its format and content, methods that can be used to prepare students, working with the AP Coordinator and exam proctor prior to the administration, the exam experience, and activities for classroom use after the exam. Information about exam scoring, the AP Grade Report and AP Instructional Planning Report, and college policies regarding the use of AP grades is also included.

Exam Format and Content

There are two sections in the exam, with the entire evaluation lasting approximately 2¾–3 hours. The first section consists of about 75 multiple-choice questions; the second section contains 7 free-response questions and 2 sight-singing exercises that assess music-reading skills. Both the multiple-choice and free-response sections include aural skills questions and analytical or written skills questions. The CD accompanying the exam has performances of excerpts from music literature and other aural stimuli (for Section IA) and dictation exercises (for Section IIA).

Multiple-Choice (45 percent of the total score)

The first half of the multiple-choice section consists of questions based on aural stimuli; the second half covers nonaural score-reading and analytical skills.

Questions Based on an Aural Stimulus

These questions include both individual items and question sets that refer to aural examples taken from music literature and other performed musical material. Repertoire examples are mainly from Western art music but include music selected from a broad spectrum of genres, including jazz, popular, and world music performances. The discrete aural questions assess skills in identifying rhythmic and pitch patterns. For the aural sets, students listen to excerpts from music literature and, through aural analysis, make determinations on a variety of topics, including:

- Melodic organization (scales, modes, melodic devices, intervallic relationships, contour)
- Harmonic organization (chord function and progression, chord quality, inversion)
- Tonal organization (cadence types, key organization, modulation)

Chapter 5

- Meter and rhythmic patterns
- Instrumentation
- Texture (e.g., homophony, polyphony, monophony, heterophony)
- Formal procedures (phrase structures, small forms, repetition)

An error-detection exercise is also included. In this exercise, students compare a printed score with a performance of a two-part keyboard piece. Mistakes are made in the performance (incorrect pitches and rhythms); students are asked to identify the differences between the musical score and the performance.

Samples of multiple-choice questions can be found in the *AP Music Theory Course Description*, which can be purchased from the College Board Store or downloaded for free on AP Central, as well as in AP Music Theory Released Exams, which are for sale in the College Board Store.

Questions Not Based on an Aural Stimulus

Some of the nonaural multiple-choice questions are discrete questions that assess understanding of concepts such as terms, intervals, triads, seventh chords, scales, modes, melodic construction, rhythm, meter, key signatures, texture, harmonic function, and cadences. Most of the nonaural questions are organized in sets that involve analysis of excerpts of printed musical scores. In these sets, students can be asked to identify:

- Harmonic procedures (cadence types, Roman numeral and figured-bass analysis, nonharmonic tones, triads and seventh chords, secondary-dominant function, key centers, key relationships, modulation)
- Melodic procedures (scales, modes, motivic relationships)
- Rhythmic/metric organization (meter type, beat subdivision, rhythmic devices and procedures, hemiola)
- Texture (e.g., homophony, polyphony, monophony, heterophony)
- Formal devices and procedures (phrase structure, small forms)

One set of questions will focus on error detection, assessing a student's ability to determine voice-leading errors in a four-part homophonic texture.

Free-Response Questions (45 percent of the total score)

The Music Theory Development Committee values music reading fluency in all clefs, modalities, and meter types, so free-response (FR) questions 1–4 are designed to assess dictation skills, sampling both treble and bass clefs, major and minor modes, and simple and compound meters.

FRs 1 and 2 are melodic dictation exercises. The melodies are performed by an instrumentalist or singer and are repeated several times. Each exercise is approximately four measures in length (in $\frac{4}{4}$ or $\frac{6}{8}$ meter) or eight measures in length (in $\frac{3}{4}$ or $\frac{3}{8}$ meter). FR 1 is designed to be less difficult than FR 2.

Generally, one melody is in a major key and the other in a minor key; one melody is in a simple meter and the other in a compound meter. Usually, one melody is notated in treble clef and the other in bass clef.

FRs 3 and 4 are harmonic dictation exercises. Each harmonic progression is played four times. Students notate only the soprano and bass pitches and write the appropriate Roman and Arabic numerals to designate chord functions and inversions. FR 3 is designed to be less difficult than FR 4. Progressions are usually 8 to 11 chords in length. Generally, one example is in a major key and the other is in a minor key. Rhythms are not a factor in harmonic dictations. Secondary dominant chords are included.

FRs 5–7 assess students' written skills. FR 5 is a figured bass part-writing question. The bass line, with figured bass symbols, and first chord are given. Students complete the soprano, alto, and tenor voices, following traditional eighteenth-century voice-leading procedures. Students also supply Roman numerals in the spaces provided below each chord. Suspensions, secondary dominant chords, secondary leading tone chords, and the linear figure 8-7 may be included.

FR 6 is a part-writing question using Roman numerals. Roman numerals with inversions and the first chord are given. Students complete the soprano, alto, tenor, and bass voices following traditional eighteenth-century voice-leading procedures. Suspensions, secondary dominant chords, secondary leading tone chords, and the linear figure 8-7 may be included.

FR 7 is a melody harmonization. This question is usually in common time and is typically comprised of four two-measure phrases totaling eight measures. A melody is given, and a bass line and corresponding Roman numerals are provided through the first three measures as an example for students. Students complete the bass line for the remaining five measures. Students must also include Roman numerals and inversion symbols to indicate the harmonic progression implied by their bass line. Students will need to apply their understanding of secondary function chords and/or modulation to successfully complete this exercise.

Sight-singing Questions (10 percent of the total score)

Students record their sight-singing performance of two melodies. The melodies are comparable in character (meter, mode, length, difficulty) to the melodic dictation melodies. In schools where all students are tested in one room, students are ushered to another area, either before or after the multiple-choice and free-response portions of the exam; they are then individually invited into a separate room with a sight-singing proctor. Students are given the starting pitch and have 75 seconds to practice each melody; they then have 30 seconds to perform and record it. AP Music Theory teachers are encouraged to review the procedures for proctoring the sight-singing portion of the exam with the AP Coordinator and proctor(s) well in advance of the exam date (see John Hahola's comments in the Exam Administration section of this chapter).

Preparing Students

Familiarize Yourself with the Exam

Preparation begins before you begin teaching the course! If you are a new Music Theory teacher, you are strongly advised to take a sample AP Released Exam while preparing to teach the class, either in an AP Summer Institute (preferable) or individually. You will then understand the timing of the exam and the kind of experience for which you will be preparing your students. Learn the method the exam uses to present the stimuli in the aural section of the free-response portion. During the melodic dictations, for example, metronome clicks used to establish the meter and tempo are given prior to the first hearing of the melody only. Then students are given 30 seconds after the first hearing and 1 minute after the subsequent hearings to write notation. It is important as your course progresses that you begin to replicate the conditions

and methods of the exam as closely as possible. Students are best prepared if they are familiar with the exam format and know what to expect.

Encourage Students to Register

Students will register for the AP Exam in late winter using the procedure established by your school. Some students may choose not to register for the exam, for a variety of factors. As you want your students to progress with motivation throughout the year, it is in your best interest, and theirs, if all of them take the exam. Develop a rationale to encourage students to sign up. I explain to students the value of learning where they rank among all AP Music Theory students; remind them that although they may not be planning to major in music in college, there is always a chance they might change their major later and want those credits; tell them that it is valuable to me, the teacher, to see how the entire class scored, so that I can improve instruction next year; and emphasize the integrity of completing a goal that was defined at the beginning of the year. Some financial assistance toward exam registration fees is available from the College Board for students demonstrating need, and your school or state may also have a financial aid policy.

Specific Strategies

Although the work you do all year should be preparing your students for the AP Exam, the focus of your classroom activities should definitely be on exam preparation beginning a month or so before the administration. Visit the Music Theory Home Page on AP Central and read all of the updated articles for suggestions. Many discuss teaching strategies and provide tips on preparing students for the multiple-choice, free-response, and sight-singing portions of the exam.

Knowing the kinds of multiple-choice and free-response questions that are on the exam, you can craft lessons that incorporate these question types. For example, one day you might devote to rapid-fire fundamentals questions focusing on key signatures, scales, chord spelling, intervals, and other mental gymnastics. Other days can be spent on in-depth score analysis, discovering harmonic, melodic, and formal surprises in the context of the score. Press students to work quickly and carefully and to be accurate in their analysis. Give sample dictation exercises from AP Music Theory Released Exams. One note of caution: If student work contributes to the course grade, you must be sure your grading scale generally corresponds to the AP scoring scale. In general, AP Exam questions are designed to elicit student responses in a bell-shaped curve between 0 and 100 percent correct. Therefore, a 50 is a midrange C, or equivalent to a 75 in the common 60–100 grading scale. Be sure that you make that conversion when applying student responses to a grade in your course.

When students are practicing sight-singing, melodic dictation, and harmonic dictation exercises, take time to carefully review the cadential formulas that are used in Released Exams. Students will learn what to expect and will have an anchor at the end of the exercise. While melodic dictation exercises typically end with an authentic cadence, harmonic dictation exercises are likely to employ half cadences and deceptive cadences as well.

Review Fundamentals

Knowledge of fundamentals is tested thoroughly on the AP Exam. The key to success on these questions centers on students' ability to quickly analyze the information and apply their knowledge. The best-prepared students are those who need little time to work out an answer. For example, if asked to hear a chord quality that is played on the CD and choose from a selection of four notated chords of different qualities, the best-prepared student will be able to look at each notated chord and immediately determine its quality. Students who must take time to analyze each interval will have less "brain time" to listen to and analyze the played

chord. Speed is crucial, so in addition to teaching the material, teachers are wise to develop speed goals when students are analyzing chords, key signatures, intervals, inversions, and Roman numerals. Games such as relay races or a timed *Jeopardy!* event provide enjoyable practice. Timed quizzes are helpful. Give a “5-second pass/fail oral quiz”—in which students must list in order the sharps or flats within the time limit to pass—when teaching key signatures.

On the exam, fundamentals are primarily addressed by aural and nonaural discrete questions, which are individual questions focusing on specific topics. In addition to the chord quality question mentioned above, students might be asked to analyze chords in a key context, identify intervals, scales, modes, and key signatures, and determine performed rhythmic and melodic differences from printed stimuli. For example, a melody might be notated on the staff, using the accidentals E \flat , B \flat , and F \sharp ; the task would be to select from four key signatures listed the one that would be the best choice for the notated melody. A thorough understanding of key signatures and the circle of fifths is fundamental to speedy and accurate analysis and the correct choice of the key signature for G minor.

Study Cadence Patterns

Study of idiomatic cadential melodic patterns can be very helpful in completing all exercises but especially harmonic dictations. A *mi-re-do* melody will most likely be accompanied by a cadential $\frac{4}{4}$ harmony, and the bass line is similarly implied. Understanding of cadential idioms can be very helpful and comforting, as pressured students can apply previous knowledge to an aural skills question. Also, be aware that sight-singing and melodic and harmonic dictation exercises generally end with easier patterns or normal cadence types. More difficult material will occur in the middle and late-middle portion of the exercise. Encourage students to keep working through to the end of the exercise and not get bogged down on any single part. For dictation questions, advise them to fill in any parts of the exercises that they can and then return to more difficult passages. If students become frustrated during the first playing of the dictation, or first viewing of the sight-singing melody, they will perform more poorly than if they enter each experience knowing what to expect and having an established strategy.

The aural error-detection exercise (described in the Questions Based on an Aural Stimulus section earlier in this chapter) typically contains four errors, i.e., discrepancies between the written score and the performed piece. This exercise is usually in two-voice counterpoint; students must determine if errors in the performance are pitch or rhythm errors and identify the location (bass or treble clef) of the error. A good way to prepare students for this exercise is to persistently drill sight-singing skills. Have students apply these skills first to the treble voice, then the bass voice; give them three or four repetitions to identify each error. Simple Bach pieces, such as those from the *Anna Magdalena Notebook* (or similar), provide ideal models for practice. (Be sure that when you alter your performance from the written score, your changes make musical sense.)

Review by Transcribing Bach Chorales

An effective and interesting review strategy for AP Music Theory students within six weeks of the AP Exam is the transcription of Bach chorales from the original clefs. Students transcribe all parts from a modern edition of the original four-part open score with the original clefs used by Bach (three different C clefs and a bass clef),* by reducing the score to a traditional two-line treble and bass clef choral score. They then complete a thorough analysis of the chorale, including identifying chord function (Roman numerals), nonchord tones, cadences, modulations, imitative elements, and any other relevant compositional features. Students also identify the conventional part-writing procedures employed between chords, as well as the exceptions to the rules. Additionally, chord progressions can be examined to see if they conform to standard functional harmonic principles.

This activity serves as review and practice for many concepts and skills, including understanding C clefs, transcribing pitches from one clef to another, open-score reading, harmonic analysis, part-writing procedures (including doubling and voice leading), nonchord tone identification, and understanding the logical and traditional chord sequences in Western tonal music.

One extension of this activity is to have students sing the soprano and bass line and look at the relative movement between soprano and bass through the lens of contrapuntal technique. It is also possible to begin with a harmonic dictation exercise. After correcting the harmonic dictation, students are given the four-part open score to complete the alto and tenor lines and then proceed as described above. Of course, in this variation the chord analysis is already complete.

The benefits of this activity can also be gained by transcribing string quartet scores to piano scores and proceeding with analysis of the transcription as described above.

* I use *Chorales 1–91, Open Score*, selected and arranged by Charles Boyd and Albert Riemenscheider. This is G. Schirmer's edition no. 1628 currently available from Hal Leonard: no. 50327410.

—Richard Zweier, *Vernon Township High School*,
Vernon, New Jersey

Simulate Sight-singing

Include some time (perhaps out of class) to simulate the sight-singing section of the exam for each student. Ideally, this can be achieved with the help of those who will be proctoring on exam day. Sight-singing in front of another individual, such as an administrator or guidance counselor, can be a source of anxiety for many students. Providing real-time practice sessions puts students in touch with their nerves, and though you won't be able to completely eliminate their anxiety, students will know how they will react and what to expect when taking the exam. Nerves may impact their thinking, their practice time, and their performance. Students should also learn that they should sing in full voice during the 75-second practice time, something that they may be disinclined to do when in the company of another person. Nerves can affect the voice and the breath.



Make sure students have practiced taking a mock sight-singing test using the school's recording equipment before they take the actual AP Exam.

Test-Taking and Dictation Strategies

Various test-taking strategies can be discussed with students. In Section I, Part A, the aural multiple-choice section, students should read and analyze each question during the reading time provided, prior to listening to the stimulus. Students need to understand that there is a deduction of one third of a point for each incorrect multiple-choice answer, but if they are able to eliminate at least one possible response, they should make an informed guess.

Throughout the year, students can be counseled in dictation strategies. Provide enough practice so that students know what to expect from the melodies in terms of mode, meter, range, tempo, and cadence patterns. Try hosting an exam-eve gathering for students who want last-minute dictation practice. With regard to sight-singing, work with students on how to best use their voice and how to most effectively use the 75-second practice time for each melody. Teach students to support their voice and to project, so that their pitch doesn't falter from lack of air.

Although it is preferable for students to have a mental picture of a piano keyboard and an internalized understanding of the circle of fifths, some students may find it helpful to quickly sketch a visual reminder, as long as it doesn't take up too much of their response time.

Practice Exams

Students should take a complete AP Released Exam for practice. Exams and answer sheets can be purchased from the College Board Store (store.collegeboard.com). Aural portions of the exam (Section IA and Section IIA, Questions 1–4) should be taken in class; nonaural sections can be assigned for homework to save class time. Free-response questions from several past administrations are also on AP Central and can be assigned for extra homework. Sound files can be downloaded and played to demonstrate the dictation questions, or you can play the samples yourself.

Teachers and students should spend time discussing each completed section of the Released Exam, going over the answers and discussing the knowledge and skills necessary to answer the questions. Excellent discussions often grow out of analysis of student responses. Teachers should learn and apply the AP Scoring Guidelines, available on AP Central or in the Released Exam books, to the scoring of students' free-response sections. When I begin giving my students part-writing or dictation exercises, I teach them my method of grading their work, generally adhering to the AP Scoring Guidelines. Before long I let students grade their own papers first, as it is important that they understand the methods used to score their work. This knowledge may be useful when taking the exam, if students find they need to make decisions about what to write if they don't have time to complete an entire exercise. In scoring their own work, students also learn the importance of case-sensitive Roman numerals and correctly indicated inversions. Additionally, students are often surprised to encounter the eye-opening fact that they are not awarded points for voice leading both in, and out of, a misspelled chord when they forget to place an accidental on a note when it is indicated in the figured-bass symbols.

Exam Administration

In the box below, John Hahola, the assistant principal and AP Coordinator at my school, discusses the setup needed to administer the AP Music Theory Exam.

The AP Coordinator's Role in Exam Arrangements

A school's AP Coordinator is the vital link between the program, teachers, administrators, parents, and students. As my school's Coordinator, my responsibilities specific to the administration of the AP Music Theory Exam include selecting a room for exam administration, procuring a sound system to play the recorded portions of the exam, and locating staff and rooms to administer the sight-singing portion of the exam.

There may be a few students who are scheduled to take two AP exams at the same time. Because of the relative difficulty in the administration of the Music Theory Exam, I counsel students to take that exam at the original time and take the alternate exam scheduled for the other subject.

Students need a quiet location, one preferably not compromised by noise from the hallway, the bell schedule, or adjacent classrooms, especially music rooms. The media center or an off-site location is ideal. A high-quality stereo system is necessary to play the CD. All students must be able to clearly hear the CD at a relatively high (but comfortable) volume level. The exam proctor should check levels with the AP Music Theory teacher prior to students entering the room.

AP Coordinators should fully and carefully acquaint themselves with the administration of the sight-singing portion of the exam. Discuss the process with the Music Theory teacher and set aside a time to properly train the proctors and, ideally, to have "mock" sight-singing tests with students. There is a lot that can go wrong, so care must be taken to get it right the first time, without impacting the performance of nervous students.

—John Hahola, North Hunterdon High School,
Annandale, New Jersey

As John Hahola says, proctors should know what to expect during the sight-singing portion of the exam. Not all students sing well. Some may even be awful, or make odd noises, or become very upset. Proctors should turn away from students while they sing and be prepared to suppress any reaction they might have to a student's performance. Proctors can use a mock session to learn how the CD provides instruction and how to manipulate their recording equipment. It is important for schools and proctors to follow the established procedures for recording student responses to ensure that students' opportunities to perform well will not be jeopardized and Exam Readers will have clearly recorded performances to evaluate. Mock sight-singing experiences should be fundamental in exam preparation.

AP teachers are not to be in the location of the exam administration for any purpose. Teachers may, however, help the proctor select the correct volume level on the sound system prior to students entering the room. Teachers are also prohibited from discussing the free-response questions on the exam with students for 48 hours following the administration; for security purposes the multiple-choice questions must never be discussed.

Classroom Activities After the Exam

If your school calendar continues for several weeks after the AP Exam, you are faced with a decision about how to continue to engage students in the learning process, especially at a time of year when motivations tend to wane. Some ideas include:

- **Musical composition:** Students use skills they have learned to create a stand-alone composition for keyboard or a variety of instruments, exploring phrasing, form, and melodic and harmonic expression. Parts for singers may be employed, with the caution that text-setting is another skill altogether. If your school has notation software, such as *Finale*, *Sibelius*, or *Noteworthy Composer*, students can hear immediate feedback while they create. Some students might enjoy writing a piece that they can perform for the class. You might also consider, instead of working with Common Practice techniques, allowing students to compose an aleatoric piece, working with experimental notation and exploring the nature of sound with a variety of instruments of various timbres.
- **Analysis:** Students learn about a form you have not yet covered, such as sonata form, fugue, rondo, etc. After researching and listening to representative pieces, they complete a form analysis of a score from a composition by one of the masters.
- **Projects in performance/music history:** Although most teachers will touch on composers and style periods in the study of music theory, time considerations don't generally allow for in-depth study of historical topics. Some students may enjoy a research project on a composer, style period, or some other aspect of music history.
- **Music notation/software programs:** Depending on the time you have available, one option is to teach students *Finale*, *Sibelius*, or other notation software. This knowledge will be very useful if students plan to study music in college or want to compose their own works.

These are several ideas among many used by experienced AP teachers. Post-exam days provide an opportunity for students, as well as teachers, to be creative and try something new.



Class time after the AP Exam can be used for student projects in performance or composition.

Exam Scoring

Experienced high school AP Music Theory teachers and music theory instructors from colleges and universities throughout the country gather each June and spend a week scoring the free-response portion of the exam. Readers apply established rubrics (scoring guidelines) developed by the AP Music Theory Chief Reader and reviewed by the Development Committee. General scoring criteria for each free-response question are used from previous years and amended based on the particular problems the current year's questions present. When developing questions, committee members consider the types of musical challenges that each proposed melody, progression, or exercise will provide students, and they write each question to elicit a broad and even range of responses. Rubrics are designed so that Readers can efficiently and objectively award points for each correct response.

Readers undergo intense training in applying established rubrics to student responses to ensure synchronization in scoring. First, Readers answer the question they will be scoring, so that they become familiar with the question content and also understand what students experienced when taking the exam. Table Leaders and Question Leaders, who help the Chief Reader manage the scoring, select a broad range of representative student samples, as well as papers that illustrate fine points of the scoring criteria, for use in training Readers. (Many of these samples, with scoring explanations, are made available to AP teachers on AP Central.) The Chief Reader and scoring staff make frequent checks of Reader scoring to ensure accurate application of the rubrics throughout the scoring process.

Processes have been developed to assure complete personal and school confidentiality. Response booklets are distributed to Readers using procedures that ensure that no single Reader scores more than two questions from an individual student's booklet. When Readers are scoring a student's responses, they do not know the name of the student or which high school the student attends.

After each question has been scored, Table and Question leaders “debrief” the Readers, who offer opinions on the effectiveness of each question and its scoring guidelines. The Chief Reader puts these opinions in a report to the Development Committee, which considers the feedback when developing future exam questions.

Multiple-choice sections of the exam are scored electronically. Scores from the free-response questions are combined with the multiple-choice scores to come up with a final composite grade for each student. (More information on how this is accomplished is included in the Released Exam books and can also be found on AP Central.) The Chief Reader then meets with statisticians and, after careful analysis, sets the divisions between AP grades 5, 4, 3, 2, and 1.

AP Grade Report

In July, an AP Grade Report is mailed to each individual student, the high school that the student attends, and the colleges the student designated on the AP Answer Sheet. Each college determines its own credit and placement policy for AP Exam grades. Information on these policies is available on AP Central.

High schools also receive:

- An AP cumulative roster for all students
- An AP Scholar roster identifying qualifying students
- The AP Instructional Planning Report

Students taking the AP Music Theory Exam receive an aural subscore, a nonaural subscore, and a composite score. Since approximately half of the exam assesses aural skills, and half of the exam assesses written skills, these scores demonstrate to students and prospective colleges a student’s ability in each area.

Using the AP Instructional Planning Report

Schools receive the AP Instructional Planning Report for each of their AP classes in September. The report compares students’ performance on specific topics or skills in the AP Exam to the performance of students worldwide on those same topics or skills, helping teachers target areas for increased attention and focus in the curriculum. To get the most out of the report, please read the interpretive information on the document. It explains how the data, when used correctly, can provide valuable information for instructional and curricular assessment as well as for planning and development.

For example, perhaps your students’ aural skill results are fairly constant across question types, except for a marked dip in harmonic dictation. This information will help you reassess how much time is given to harmonic dictation, how it is approached throughout the year, and how you might improve your methods of instruction.

Some administrators use exam results as a measure of the quality of instruction. This policy can have many detrimental effects on a school’s AP program. It may discourage teachers from teaching an AP class or encourage teachers to manipulate their class’s average score by dissuading some students from taking the exam, or even taking the class in the first place. This practice leads to prohibitive enrollment policies and procedures. A sound philosophy supports the inclusion of all interested students in the program, despite the scores they may receive on the exam. Students, and your music program, are infinitely better off if all students are supported and encouraged to study AP Music Theory. Administrators should be discouraged from adopting any exclusionary philosophy, and no one should use AP grades as a tool for measuring teacher quality.

It should be noted, however, that no teacher wants to set up a student for failure. Some students may lack the fundamental abilities necessary to succeed in the course. If you are concerned about a potential member of your class, it's wise to meet with the student prior to enrollment and discuss the best program available to meet the student's educational goals. Perhaps a fundamentals course, an online course, or a self-administered course (such as *Basic Materials in Music Theory: A Programmed Course* by Paul Harder and Greg Steinke) may be better advised prior to, or instead of, enrolling in AP Music Theory.

College AP Policies

College-bound students who study AP Music Theory can be divided into two groups: those who wish to major in music, and those who are choosing another career path. For the latter group, colleges award credit for AP Music Theory according to established institutional AP policies. Students may choose to have their scores automatically sent to schools to which they are applying, or they have the option of waiting until after they see their AP Exam grades. As an AP teacher, you should be aware of the AP policies of the colleges and universities to which most of your students apply.

Some colleges automatically award elective credit for a grade of 3 or above; others for a 4 and above. AP policies may be found online or by contacting a college's undergraduate admissions department. If the college does not have an explicit written policy posted online, contact the appropriate officials and request that a policy be developed and posted.

A different situation exists for students entering college as music majors. Some colleges automatically provide credits and placement based on AP grades. Other colleges require incoming students to take departmental placement exams to determine a student's standing in the college's music theory curriculum.

The College Board recommends that credits and advanced standing for AP Music Theory be awarded as follows:

Composite AP Grade	Up to Six Semester Hours: General Humanities/ Arts Credits	Placement into Second Semester (with Credit for First Semester)	Placement into Second Year (with Credit for First Year)
5	Extremely Well Qualified	Extremely Well Qualified	Well Qualified
4	Well Qualified	Well Qualified	Qualified
3	Qualified	Qualified	Possibly Qualified
2	Possibly Qualified	Possibly Qualified	No Recommendation
1	No Recommendation	No Recommendation	No Recommendation

Colleges can use aural and nonaural subscores to determine student placement in respective classes. Aural subscores should be considered for courses that cover primarily listening, dictation, and sight-singing skills. For courses that cover written skills such as score analysis and part writing, colleges should rely primarily on the nonaural subscore in making placement and credit decisions. For courses that cover both aural and nonaural skills, the composite score should be considered.

Although subscores have been reported for several years, some colleges and universities may not be aware of them and may not have specific policies on how to use them for student placement. If you know college faculty members, encourage them to obtain information from the College Board to help with the interpretation and application of subscores to matriculating students.

Each year, many colleges revisit their credit and placement policies to accommodate students who have taken AP Music Theory, because they prefer new students to have a solid music theory foundation upon entering. You should become aware of the curricula, textbooks, methods, and course organization of area colleges and universities enrolling your AP students. Encourage your graduating seniors to share their AP Music Theory Exam information with their college advisers.

Consider sending a survey to your graduates in January or February of their first year of college. You can find out how prepared they felt in relation to their college peers, how they were placed in their college's theory and aural skills programs, and what parts of your course you could improve in order to best prepare students for the matriculation process.

Some students might not receive any credit or advanced placement from their college. In this case, in addition to appealing to the college to adopt a more considerate position with regard to AP grades, you can learn from your former students what other benefits they experienced for having taken AP Music Theory. This information can be invaluable in providing current students with a convincing rationale as to why they should take the AP Exam, including being favorably considered in the admissions process by colleges and universities, and understanding how they stack up against their peers who take the exam.

Occasionally, a student will learn that the college music department to which he or she has been accepted requires all incoming students to take a music theory placement exam, so the student decides NOT to take the AP Music Theory Exam. As I want all of my students to take the exam, I use as many arguments as I can to encourage them: see the Encourage Students to Register section earlier in this chapter for some suggestions.

Chapter 6

Resources for Teachers

Useful Information Sources

Bibliography

compiled by Jane Piper Clendinning, Florida State University, Tallahassee

This listing is not comprehensive; it cannot be, as new materials are published each year, books may appear in new editions, and others go out of print. All books listed below were available for purchase when this bibliography was compiled. Dates both of current editions and first editions have been provided when available. (Unless otherwise noted, the same company has published all editions.) Note: The AP Music Theory Exam is continuously updated to represent music theory as it is being taught today at leading colleges and universities; some older books may not reflect current directions in music theory pedagogy.

In selecting textbooks and instructional materials for the AP Music Theory classroom, teachers should consider the background that their students typically bring to the class, as well as the desired level of proficiency at the end of the course. Some schools offer an introductory music theory course, for which books in the “Fundamentals” list may be appropriate; other schools encourage students to study fundamentals the summer before they take AP Music Theory; and still other schools begin the AP course with an intensive study of fundamentals. For more experienced students in the AP course, consider books listed below under “Written Theory,” “Anthologies,” and “Aural Skills.” As an important goal of the AP Music Theory program is to prepare students for the college experience, knowledge of the books and materials used at the universities, colleges, and conservatories your students typically attend will be helpful in selecting materials.

Ideally, teachers should review as many of these references/materials as possible, not only to become familiar with possible texts for their classes but also to acquire resources for information and reference on specific topics and as a source of ideas for assignments, class materials, and presentation approaches. Reviews of selected textbooks are published in the *Journal of Music Theory Pedagogy*, the *Journal of Music Theory* (published by Yale University), and *Music Theory Spectrum* (published by the University of California Press for the Society for Music Theory).

Fundamentals

Most of these resources introduce basic elements of Common Practice Western tonal music, including pitch, rhythm, intervals, major and minor scales, and triads and seventh chords; some include other topics as indicated below. These books are at a suitable level for teaching students in an introductory theory class to read music notation. Some are also appropriate for self-instruction or individual review by students prior to beginning an AP Music Theory course. However, these resources do not cover many of the topics in the AP Music Theory curriculum; they are not normally used at colleges for basic theory core courses for music majors, although they may be used for a precore theory fundamentals course or music theory for nonmajors.

Benward, Bruce, Barbara Seagrave Jackson, and Bruce R. Jackson. 2000. *Practical Beginning Theory: A Fundamentals Worktext*, 8th ed. Boston: McGraw-Hill. (1st ed. published 1963 by W. C. Brown, Dubuque, Iowa.)

Includes basic melody harmonization, instructor's resource manual, CD, and Internet software package.

Clough, John, Joyce Conley, and Claire Boge. 1999. *Scales, Intervals, Keys, Triads, Rhythm and Meter: A Programmed Course in Elementary Music Theory, with an Introduction to Partwriting*, 3rd ed. with CD. New York: W. W. Norton. (1st ed. published 1983.)

Programmed format, with each item covered separately. The third edition includes music literature examples and an anthology with 10 complete pieces; the CD has aural examples cued to each instructional element.

D'Amante, Elvo S. 1994. *Music Fundamentals through Pitch Structures and Rhythmic Design*, 1st ed. New York: Ardsley House.

Fundamentals are approached through parallel study of pitch and rhythm.

Damschroder, David. 2006. *Foundations of Music and Musicianship*, 3rd ed. Belmont, Calif.: Wadsworth. (1st ed. published 1992 by Schirmer, New York.)

This book comes with CD and foldout keyboard; it covers cadences and basic harmonization, as well as listening exercises.

Dorr, Joyce. 1995. *Introductory Music Theory*, 1st ed. Belmont, Calif.: Wadsworth.

Includes audio CD, workbook with scores, and instructor's manual.

Duckworth, William. 2007. *A Creative Approach to Music Fundamentals*, 9th ed. Belmont, Calif.: Wadsworth. (1st ed. published 1981.)

Includes CD and instructor's manual. Covers triads, cadence types, and basic harmony, with exercises for ear training and sight-singing.

Harder, Paul O., and Greg A. Steinke. 2005. *Basic Materials in Music Theory: A Programmed Course*, 11th ed. Upper Saddle River, N.J.: Prentice Hall. (1st ed. published 1965 by Allyn and Bacon, Boston; Paul Harder, author.)

Programmed format with brief, abstract examples for basic rhythmic and pitch materials; also includes triads. Optional audio CD is sold separately.

Henry, Earl. 2004. *Fundamentals of Music*, 4th ed. Upper Saddle River, N.J.: Prentice Hall. (1st ed. published 1988.)

Includes audio CD, harmonic materials, and aural skills basics.

Herrold, Rebecca M. 1997. *Mastering the Fundamentals of Music*, 1st ed. Upper Saddle River, N.J.: Prentice Hall.

Covers singing, listening, writing, keyboard exercises using Western art music, world music, folk music, and musicals.

Chapter 6

Hill, Frank W., Roland Searight, Dorothy Searight Hendrickson, and Steven Estrella. 2005. *Study Outline and Workbook in the Fundamentals of Music*, 11th ed. New York: McGraw-Hill. (Date of 1st ed. unknown; 2nd ed. published 1946 by W. C. Brown, Dubuque, Iowa; title was *Study Outline and Workbook in the Elements of Music*; author, Frank W. Hill.)

Kinny, Michael. 2005. *Mastering Music Fundamentals: A Guided Step by Step Approach*, 1st ed., with CD. Belmont, Calif.: Wadsworth.

Kolosick, J. Timothy, and Allen H. Simon. 1998. *Explorations: A New Approach to Music Fundamentals*, 2nd ed. Mountain View, Calif.: Mayfield Publishing. (1st ed. published 1991, with Brian H. Bynes additional author.)

Text and Macintosh software package puts the emphasis on discovery-based learning.

Lynn, Theodore A. 2006. *Introductory Musicianship: A Workbook*, 7th ed. Belmont, Calif.: Wadsworth. (1st ed. published 1979 by Harcourt Brace Jovanovich, New York.)

Latest edition includes CD and keyboard booklet.

Manoff, Tom. 2001. *The Music Kit*, 4th ed. New York: W. W. Norton. (1st ed. published 1976.)

Kit includes workbook, rhythm reader and scorebook, and audio CD with 12 of 85 anthology pieces and rhythmic exercises, as well as a CAI version for Macintosh and PC by John Miller and Peter Hesterman. Covers lead-sheet notation, basic voice leading and cadences, diatonic modes and blues scales, and accompaniment patterns.

Nelson, Robert, and Carl J. Christensen. 2006. *Foundations of Music: A Computer-Assisted Introduction*, 6th ed. Belmont, Calif.: Wadsworth. (1st ed. published 1987.)

Includes CD and instructor's manual; has many examples from music literature.

Ottman, Robert W., and Frank D. Mainous. 2004. *Rudiments of Music*, 4th ed. Upper Saddle River, N.J.: Prentice Hall. (1st ed. published 1970.)

Basic explanations and short exercises; see also the programmed version, 2nd ed., published in 1994.

Soskin, Eileen. 2005. *Rudiments of Music for Music Majors*, 1st ed. Belmont, Calif.: Wadsworth.

Offers brief explanations and atomistic exercises; no music literature.

Spencer, Peter. 2005. *Music Theory for Non-Music Majors*, 3rd ed. Upper Saddle River, N.J.: Prentice Hall. (1st ed. published 1996.)

Cursory presentation of basic information, short examples, and worksheets.

Straus, Joseph N. 2003. *Elements of Music*, 1st ed. Upper Saddle River, N.J. Prentice Hall.

Includes an anthology of works in diverse styles and a CD with the anthology pieces and interactive versions of the written exercises.

White, Gary C. 2006. *Music First!*, 5th ed. Boston: McGraw-Hill. (Date of 1st ed. unknown; 2nd ed. published 1993 by Brown and Benchmark, Madison, Wisconsin.)

Includes anthology, audio CD, and keyboard foldout.

Zinn, Michael, and Robert Hogenson. 1994. *Basics of Music—Opus 1*, 2nd ed. New York: Schirmer. (1st ed. published 1987.)

Brief explanations but mostly exercises; includes cadences and melody harmonization.

Written Theory: Harmony and Comprehensive Texts

These are textbooks normally used for college or university first and second-year core music theory courses. Unless otherwise indicated, the texts include diatonic and chromatic harmony, part writing, analysis, and some coverage of tonal forms and twentieth-century repertoire. Books in this classification are appropriate for AP Music Theory courses, although any individual book may not cover all topics taught within a specific university's curriculum or those tested on the AP Music Theory Exam.

Aldwell, Edward, and Carl Schachter. 2003. *Harmony and Voice Leading*, 3rd ed. Belmont, Calif.: Wadsworth. (1st ed. published 1979 by Harcourt Brace Jovanovich, New York.)

Workbook in two volumes with instructor's manual. Diatonic and chromatic harmony at an advanced level, presented with emphasis on voice leading based on Schenkerian analytical approaches. This is an excellent book for teacher reference but difficult reading for students, and it does not discuss musical forms or twentieth-century music.

Benjamin, Thomas, Michael Horvit, and Robert Nelson. 2003. *Techniques and Materials of Tonal Music: from the Common Practice Period to the Twentieth Century*, 6th ed. Belmont, Calif.: Wadsworth. (1st ed. published 1975 by Houghton Mifflin, Boston; original title was *Techniques and Materials of Tonal Music: with an Introduction to Twentieth-Century Techniques*.)

Covers diatonic and chromatic harmony and some twentieth-century music but has no treatment of musical forms. Offers brief explanations, with most textbook examples composed by the authors.

Benward, Bruce, and Marilyn Saker. 2003. *Music in Theory and Practice*, vols. 1 and 2, 7th ed. New York: McGraw-Hill. (Date of 1st ed. unknown; 2nd ed. published 1982 by W. C. Brown, Dubuque, Iowa.)

Includes aural CDs; workbooks are also available, with *Finale* software as an optional add-on. Covers diatonic and chromatic harmony.

Clendinning, Jane Piper, and Elizabeth West Marvin. 2005. *The Musician's Guide to Theory and Analysis*, 1st ed. New York: W. W. Norton.

Package includes a workbook, anthology with three audio CDs, instructor's version of workbook, and access to a Web site with supporting materials for students and teachers. Includes diatonic and chromatic harmony, counterpoint, form, and twentieth-century materials.

Clough, John, and Joyce Conley. 1984. *Basic Harmonic Progressions: A Self-Instruction Program*, 1st ed. New York: W. W. Norton.

Programmed format offers abstract examples only. Diatonic harmony is presented by functional category. Contents do not include all AP Music Theory topics.

Gauldin, Robert. 2004. *Harmonic Practice in Tonal Music*, 2nd ed. New York: W. W. Norton. (1st ed. published 1997.)

Includes workbook and audio CDs. Covers diatonic and chromatic harmony, linear analysis, form, and counterpoint, but no twentieth-century music. Excellent reference book for teachers.

Chapter 6

Henry, Earl, and Michael Rogers. 2005. *Tonality and Design in Music Theory*, 1st ed. Upper Saddle River, N.J.: Prentice Hall.

Includes a workbook/anthology in two volumes, CDs, and access to Web site.

Kostka, Stefan, and Dorothy Payne. 2004. *Tonal Harmony, with an Introduction to Twentieth-Century Music*. 5th ed. New York: McGraw-Hill. (1st ed. published 1984 by Knopf, New York.)

Comprehensive, accessible text for diatonic and chromatic harmony; includes study of form and some coverage of twentieth-century music. Comes with instructor's manual, workbook, CDs, and *Finale* workbook software.

Laitz, Steven G. 2003. *The Complete Musician: An Integrated Approach to Tonal Theory, Analysis, and Listening*, 1st ed. New York: Oxford University Press.

Covers diatonic and chromatic harmony, musical form; includes written, keyboard, and aural skills in an integrated approach. Most examples are from music literature; no twentieth-century music is included. A workbook in two volumes with CDs is packaged with the text, and an optional eight-CD set is available.

Mayfield, Connie. 2003. *Theory Essentials: An Integrated Approach to Harmony, Ear Training, and Keyboard Skills*, vols. I and II, 1st ed. Belmont, Calif.: Wadsworth.

Diatonic and chromatic harmony and brief introduction to twentieth-century music in an integrated format including aural skills and keyboard exercises. No coverage of musical form. Comes with workbook, audio CD, and instructor's manual.

Merryman, Marjorie. 1997. *The Music Theory Handbook*, 1st ed. Fort Worth, Texas: Harcourt Brace.

Very brief summaries of topics in music theory, including fundamentals, form, species counterpoint, harmony, tonal counterpoint, and instrumentation.

Ottman, Robert. 2000. *Advanced Harmony: Theory and Practice*, 5th ed. Upper Saddle River, N.J.: Prentice Hall. (1st ed. published 1961.)

Book includes a CD, and a workbook is available. Focuses on chromatic harmony with a very brief introduction to tonal forms and twentieth-century music.

Ottman, Robert. 1998. *Elementary Harmony: Theory and Practice*, 5th ed. Upper Saddle River, N.J.: Prentice Hall. (1st ed. published 1961.)

Book comes with a CD; workbook and instructor's manual are also available. Focuses on diatonic harmony with a vertical approach.

Roig-Francolí, Miguel. 2003. *Harmony in Context*, 1st ed. Boston: McGraw-Hill.

Comes with instructor's manual, workbook/anthology, and audio CDs; no discussion of twentieth-century music.

Russell, Armand, and Allen Trubitt. 1992. *The Shaping of Musical Elements*, two vols., 1st ed. New York: Schirmer.

Volume 1 includes diatonic and chromatic harmony and basic forms treated with an attention to musical "tension" shown using an author-created labeling system. Volume 2 is ordered

chronologically, covering more advanced harmony, larger forms, and a brief treatment of twentieth-century music. Workbooks are included.

Spencer, Peter. 2004. *The Practice of Harmony*, 5th ed. Upper Saddle River, N.J.: Prentice Hall. (1st ed. published 1983.)

Concise explanations, mostly exercises. Includes a brief section on posttonal practices.

Steinke, Greg A. (based on work by Paul O. Harder). 2002. *Harmonic Materials in Tonal Music: A Programmed Course*, parts I and II, 9th ed. Upper Saddle River, N.J.: Prentice Hall. (1st ed. published 1968 by Allyn and Bacon, Boston.)

Programmed approach to diatonic and chromatic harmony consisting mostly of exercises with the answers shown on the left of the page; includes short musical examples and brief text explanations. No form or twentieth-century topics.

Turek, Ralph. 1996. *The Elements of Music: Concepts and Applications*, two vols., 2nd ed. New York: McGraw-Hill. (1st ed. published 1988 by Knopf, New York.)

Includes instructor's manual, CDs, and workbook. Covers tonal harmony, with a brief introduction to twentieth-century music.

Anthologies for Music Analysis and Study

The anthologies included here are commonly used for music theory and analysis classes at colleges and universities.

Arlin, Mary I., Charles H. Lord, Arthur E. Ostrander, and Marjorie S. Porterfield. 1989. *Music Sources: A Collection of Excerpts and Complete Movements*, 2nd ed. Englewood Cliffs, N.J.: Prentice Hall. (1st ed. published 1979.)

Musical excerpts and complete movements arranged by harmonic materials or formal design, including Common Practice and twentieth-century examples.

Benjamin, Thomas, Michael Horvit, and Robert Nelson, compilers. 2001. *Music for Analysis: Examples from the Common Practice Period and the Twentieth Century*, 5th ed. Belmont, Calif.: Wadsworth. (1st ed. published 1978 by Houghton Mifflin, Boston.)

Music examples arranged by harmonic materials, including Common Practice and twentieth-century examples.

Briscoe, James, ed. 2004. *New Historical Anthology of Music by Women*, 2nd ed. Bloomington: Indiana University Press. (1st ed. published 1987.)

Complete pieces by women composers, with biographical and analytical commentary on each composer, her style, and the work included. An audio CD is also available.

Burkhart, Charles, compiler. 2004. *Anthology for Musical Analysis*, 6th ed. Belmont, Calif.: Wadsworth. (1st ed. published 1964 by Holt, Rinehart and Winston, New York.)

This commonly used anthology has complete pieces from the Middle Ages to the twentieth century arranged chronologically. Excellent indexes help teachers and students locate pieces with specific harmonic or formal features. The emphasis is on piano music.

Chapter 6

Clendinning, Jane Piper, and Elizabeth West Marvin. 2005. *Anthology to Accompany the Musician's Guide to Theory and Analysis*, 1st ed. New York: W. W. Norton.

This anthology has complete pieces for analysis and a few extended excerpts appropriate for study of diatonic and chromatic harmony, counterpoint, and form; twentieth-century materials are included. All works in the anthology have been recorded on three CDs .

Kostka, Stefan, and Roger Graybill. 2004. *Anthology of Music for Analysis*, 1st ed. Upper Saddle River, N.J.: Prentice Hall.

Includes 150 complete pieces, Baroque to twentieth century, and a CD with recordings of many of them.

Melcher, Robert A., Willard F. Warch, and Paul B. Mast. 1988. *Music for Study, a Source Book of Excerpts*, 3rd ed. Englewood Cliffs, N.J.: Prentice Hall. (1st ed. published 1965.)

Short excerpts arranged by harmonic content.

Turek, Ralph, compiler. 1992. *Analytical Anthology of Music*, 2nd ed. New York: McGraw-Hill. (1st ed. published 1984 by Knopf, New York.)

Includes 150 complete compositions from the Middle Ages to the twentieth century, arranged chronologically.

Aural Skills: Sight-Singing, Ear Training, Keyboard, and Rhythmic Reading Texts

The textbooks included here are used in college and university aural skills programs and are suitable for use in AP Music Theory curricula. Some texts concentrate on specific skills—for example, rhythm or sight-singing—and could be used in combination with other materials to cover the melodic and harmonic dictation and contextual listening (listening to music literature) elements of the AP Music Theory Exam.

Benjamin, Thomas, Michael Horvit, and Robert Nelson. 2005. *Music for Sightsinging*, 4th ed. Belmont, Calif.: Wadsworth. (1st ed. published 1984 by Houghton Mifflin, Boston.)

Covers rhythmic, melodic, and harmonic dictation—use with authors' harmony textbook and anthology.

Benward, Bruce, and Maureen A. Carr. 1998. *Sightsinging Complete*, 6th ed. New York: McGraw-Hill. (1st ed. published 1965 by W. C. Brown, Dubuque, Iowa.)

This is a sight-singing manual for first and second year college music theory. It includes some author-composed exercises, but most melodies are from music literature.

Benward, Bruce, and J. Timothy Kolosick. 2005. *Ear Training: A Technique for Listening*, 7th ed. Boston: McGraw-Hill. (1st ed. published 1961; publisher not known.)

Melodic, harmonic, and rhythmic dictation exercises—mostly short examples, using a vertical approach. Set includes a manual, CDs, and software.

Berkowitz, Sol, Gabriel Fontrier, and Leo Kraft. 1997. *A New Approach to Sight Singing*, 4th ed. New York: W. W. Norton. (1st ed. (by Sol Berkowitz only) published 1960.)

Author-composed examples are arranged from simple to complex.

Damschroder, David A. 1995. *Listen and Sing: Lessons in Ear-Training and Sight-singing*, 1st ed. New York: Schirmer.

This comprehensive aural skills program covers rhythmic, melodic, and harmonic dictation, and sight-singing, with examples from music literature. Four cassette tapes are available separately.

Dembska, Anna, and Joan Harkness. 2002. *You've Got Rhythm: Read Music Better by Feeling the Beat*, 1st ed. Brooklyn, N.Y.: Flying Leap Music.

Rhythm only: students recite humorous rhythmic texts while they slap, clap, and tap. It's idiosyncratic but fun—a good supplement to other types of rhythm exercises.

Durham, Thomas L. 2004. *Beginning Tonal Dictation*, 2nd ed. Prospect Heights, Ill.: Waveland Press. (1st ed. published 1994.)

Hall, Anne Carothers. 2005. *Studying Rhythm*, 3rd ed. Upper Saddle River: Prentice Hall. (1st ed. published 1989.)

The focus is on rhythmic exercises exclusively, arranged from easy to complex.

Karpinski, Gary, and Richard Kram. 2006. *Anthology for Ear Training and Sight Singing*, 1st ed., with CD. New York: W. W. Norton.

Karpinski, Gary. 2006. *Manual for Ear Training and Sight Singing*, 1st ed. New York: W. W. Norton.

The manual explains essential elements of aural skills for tonal music. The anthology includes 1,200 graded sight-singing excerpts from music literature.

Kazet, Daniel. 1997. *Rhythm Reading: Elementary Through Advanced Training*, 2nd ed. 1997. New York: W. W. Norton. (1st ed. published 1989 by Mayfield Publishing, Mountain View, California.)

Rhythmic exercises only.

Kraft, Leo, ed., with Allen Brings, et al. 1979. *A New Approach to Keyboard Harmony*, 1st ed. New York: W. W. Norton.

Melody harmonization, chord progressions, modulation, figured bass, improvisation, and score reading.

Krueger, Carol. 2006. *Progressive Sight Singing*, 1st ed. New York: Oxford University Press.

Krueger offers an incremental approach to rhythmic reading and melody singing, with items ordered in progressive difficulty. Summaries and charts of pitch and rhythmic syllable systems are included.

Ottman, Robert, and Nancy Rogers. 2007. *Music for Sight Singing*, 7th ed. Upper Saddle River, N.J.: Prentice Hall. (1st edition published 1956)

Rhythmic exercises, folk melodies, and examples from the literature are arranged by rhythmic difficulty and implied harmonies. A CD is available.

Ottman, Robert, and Paul E. Dworak. 1991. *Basic Ear Training Skills*, 1st ed. Englewood Cliffs, NJ: Prentice Hall.

This book covers melodic, rhythmic, and harmonic dictation; it has short examples with brief explanations.

Chapter 6

Phillips, Joel, Jane Piper Clendinning, and Elizabeth West Marvin. 2005. *The Musician's Guide to Aural Skills*, vols. I and II, 1st ed. New York: W. W. Norton.

This complete aural skills curriculum includes dictation examples, call and response, improvisation, keyboard exercises, and contextual listening examples from music literature on included CDs. The manual has extensive teaching tips.

Yasui, Byron K., and Allen R. Trubitt. 1989. *Basic Sight Singing*, 1st ed. Mountain View, Calif.: Mayfield Publishing.

This is a very basic introduction to sight-singing and rhythmic reading. It has short examples (4–10 measures), treble and bass clefs, and rhythmic patterns limited to simple subdivisions. There are lots of easy, carefully graded melodies, similar to the easier sight-singing examples on the AP Music Theory Exam; however, this book does not cover all skills tested in the second sight-singing example on the exam.

Books Recommended for Teacher Reference

Textbooks on counterpoint, musical form, and twentieth-century music, which are often used for undergraduate upper-division or graduate courses, are useful for teachers to have on their reference shelf. These topics are engaged in an introductory level in many university and college basic theory curricula, and in the AP Music Theory exam, but are not typically covered in the depth presented in the books below. While world music, popular music, and jazz are not usually discussed in college and university introductory music theory courses, some basic resources are also listed. AP Music Theory teachers may wish to include these topics, which may meet high school curricular requirements for improvisation and engaging world cultures or interface with other parts of the high school music curriculum, such as jazz band; in addition, these repertoires are sometimes included for contextual listening in the AP Music Theory Exam. (In addition, while they are not included here, music appreciation texts with accompanying CDs contain material that may be useful for classroom contextual listening lessons.) This section concludes with selected texts relevant to music theory pedagogy.

Counterpoint

Benjamin, Thomas. 2005. *The Craft of Modal Counterpoint: A Practical Approach*, 2nd ed. New York: Routledge. (1st ed. published 1979 by Schirmer, New York.)

Benjamin, Thomas. 2003. *The Craft of Tonal Counterpoint: A Practical Approach*, 2nd ed. New York: Routledge. (1st ed. published 1986 by Schirmer, New York, under title *Counterpoint in the Style of J. S. Bach*.)

These books cover sixteenth- and eighteenth-century stylistic composition; the eighteenth-century book includes a 100-page anthology, mostly works by J. S. Bach.

Gauldin, Robert. 1988. *A Practical Approach to Eighteenth-Century Counterpoint*, 1st ed. Englewood Cliffs, N.J.: Prentice Hall. (Reissued in 1995 by Waveland Press, Long Grove, Ill.)

Gauldin, Robert. 1985. *A Practical Approach to Sixteenth-Century Counterpoint*, 1st ed. Englewood Cliffs, N.J.: Prentice Hall. (Reissued in 1995 by Waveland Press, Long Grove, Ill.)

These are standard texts for upper-division and graduate classes in eighteenth-century and sixteenth-century counterpoint. Both include species methods and stylistic composition in two, three, and more parts.

Kennan, Kent Wheeler. 1999. *Counterpoint: Based on Eighteenth-Century Practice*, 4th ed. Englewood Cliffs, N.J.: Prentice Hall. (1st ed. published 1958.)

This is a traditional text for eighteenth-century counterpoint. A workbook is available.

Owen, Harold. 1992. *Modal and Tonal Counterpoint: from Josquin to Stravinsky*, 1st ed. New York: Schirmer.

Modal, tonal, and twentieth-century counterpoint are taught here through analysis and model composition.

Schubert, Peter. 1999. *Modal Counterpoint, Renaissance Style*, 1st ed. New York: Oxford University Press.

Schubert, Peter, and Christoph Neidhöfer. 2005. *Baroque Counterpoint*, 1st ed. Upper Saddle River, N.J.: Prentice Hall.

These books offer instruction in writing and analyzing sixteenth- and eighteenth-century music, drawing on period treatises and compositions in a variety of musical styles.

Form

Berry, Wallace. 1986. *Form in Music*. Englewood Cliffs, N.J.: Prentice Hall. (1st ed. published 1966.)

This is a standard text for upper-division and graduate classes in musical forms, with reference to musical examples for each formal design.

Caplin, William E. 1998. *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven*, 1st ed. New York: Oxford University Press.

This text reflects current research in theories of musical form. Many musical examples are cited.

Green, Douglass. 1979. *Form in Tonal Music: An Introduction to Analysis*, 2nd ed. New York: Holt, Rinehart and Winston. (1st ed. published 1965.)

A standard text for upper-division and graduate classes in musical forms, this book refers to musical examples for each formal design.

Spencer, Peter, and Peter M. Temko. 1988. *A Practical Approach to the Study of Form in Music*. Englewood Cliffs, N.J.: Prentice Hall. (Reissued in 1994 by Waveland Press, Long Grove, Ill.)

This study of form emphasizes the types of musical activity in various parts of the musical structure.

Twentieth-Century Music

Kostka, Stefan. 2006. *Materials and Techniques of Twentieth-Century Music*, 3rd ed. Upper Saddle River, N.J.: Prentice Hall. (1st ed. published 1990.)

Survey of analytical techniques for twentieth-century music.

Lester, Joel. 1989. *Analytic Approaches to Twentieth-Century Music*, 1st ed. New York: W. W. Norton.

Straus, Joseph N. 2005. *Introduction to Post-Tonal Theory*, 3rd ed. Upper Saddle River, N.J.: Prentice Hall. (1st ed. published 1990.)

This is an introduction to basic elements of early twentieth-century atonal, serial, and centric music. It is used for upper-division and graduate college courses and is also an excellent reference for teachers.

Chapter 6

Williams, J. Kent. 1997. *Theories and Analyses of Twentieth-Century Music*, 1st ed. Fort Worth, Texas.: Harcourt Brace.

This survey of analytical techniques for twentieth-century music places more emphasis than most on recent music.

World Music, Popular Music, and Jazz

Campbell, Patricia Shehan. 1991. *Lessons from the World: A Cross-Cultural Guide to Music Teaching and Learning*, 1st ed. New York: Schirmer.

Survey of music teaching and learning techniques in Western and world music traditions, with an emphasis on aural skills and creative improvisation.

Wade, Bonnie C., and Patricia Shehan Campbell, general editors. *Experiencing Music, Expressing Culture*, Global Music Series of books on specific cultures by various authors, with publication dates beginning 2004. New York: Oxford University Press.

The general volumes are Wade's *Thinking Musically* and Campbell's *Teaching Music Globally*. Sixteen individual volumes consider music cultures ranging from East Africa, Bali, and Japan, to the Americas. Each book includes a CD and listening exercises and has accessible explanations.

Haerle, Dan. 1992. *The Jazz Language: A Theory Text for Jazz Composition and Improvisation*, 1st ed. New Albany, Ind.: Jamey Abersold Jazz.

Brief but thorough introduction to jazz chords, scales, voicings, and progressions.

Shelemay, Kay Kaufman. 2006. *Soundscapes: Exploring Music in a Changing World*, 2nd ed. New York: W. W. Norton. (1st ed. published 2001.)

Shelemay offers a survey of world music with topics organized by the music's function in society. This is a cultural study, not music theoretical.

Starr, Larry, and Christopher Waterman. 2003. *American Popular Music: from Minstrelsy to MTV*, 1st ed. New York: Oxford University Press.

This book is not specifically music theoretical, but it is a good general source on popular music. Information is arranged chronologically; two audio CDs are included.

Titon, Jeff Todd, ed. 2002. *Worlds of Music: An Introduction to the Music of the World's Peoples*, 4th ed. Belmont, Calif.: Wadsworth. (1st ed. published 1984 by Schirmer, New York.)

Although this book is not specifically music theoretical, it is a good general introduction to world music. Information arranged by culture includes specific pieces, instruments, methods of performance, and meaning of music in a culture.

Music Theory Pedagogy

Butler, David. 1992. *The Musician's Guide to Perception and Cognition*, 1st ed. New York: Schirmer.

Butler reviews and explains psychophysical and cognitive literature relevant to listening to music. A CD is included. (This book is out of print but still available in libraries.)

Chosky, Lois et al. 2001. *Teaching Music in the 21st Century*, 2nd ed. Upper Saddle River, N.J.: Prentice-Hall. (1st ed. published 1986 with title *Teaching Music in the 20th Century*.)

This general book on teaching music (not specifically music theory) to precollege students has information on Dalcroze, Kodály, Orff, and Comprehensive Musicianship approaches.

Journal of Music Theory Pedagogy. School of Music, University of Oklahoma, Norman, OK 73109.
<http://music.ou.edu/publications/jmtp/index.html>

This is the only professional journal dealing exclusively with teaching music theory. Most articles address teaching of basic music theory—the content of AP courses. It also has reviews of textbooks and other teaching materials.

Karpinski, Gary. 2000. *Aural Skills Acquisition: The Development of Listening, Reading, and Performing Skills in College-Level Musicians*, 1st ed. New York: Oxford University Press.

This book is a discussion of pedagogical and cognitive aspects of the aural skills classroom; it includes a review of relevant research and consideration of ways to incorporate what has been learned through research to the classroom.

Rogers, Michael R. 2004. *Teaching Approaches in Music Theory: An Overview of Pedagogical Philosophies*, 2nd ed. Carbondale: Southern Illinois University Press. (1st ed. published 1984.)

Rogers reviews standard pedagogical approaches to both written and aural skills pedagogy, offering practical advice that teachers can apply in their classrooms. An extensive bibliography relevant to music theory pedagogy is included.

Technology in the AP Music Theory Classroom

by Eric J. Isaacson, Jacobs School of Music, Indiana University, Bloomington

Introduction

It is common to hear technology touted as the ultimate solution to nearly every problem, and this is as true in education as in other fields. Despite decades of progress, however, you may rest assured (or be dismayed, depending on your perspective) that technology is not poised to replace you in the music theory classroom. Computers lack most of the skills essential to the effective teaching of music: a musical ear, the ability to diagnose the problem a particular student is having with a skill, the wisdom to provide just the right feedback that will inspire deeper understanding, and the ability to provide genuine encouragement when a student makes a strong effort. It is crucial, therefore, to think carefully about which aspects of teaching and learning you want to cede to technology and to be aware of what tools are available and their limitations. Above all, I begin with this advice: do not use technology for technology's sake!

It is possible to teach a very effective AP Music Theory course without the help of technology. Nevertheless, there are ways in which technology can enhance or supplement what you do in the classroom. My goal is not to suggest whether or how you should use technology in your own teaching. Rather, I will try to outline the things you should bear in mind when making those decisions.

During the lifespan of this Teacher's Guide, current software titles and related technologies will undergo substantial changes; some will disappear, and new ones will emerge. Because of this, I will avoid providing detailed reviews of current software but instead focus on more general considerations. Useful reviews of a wide range of technology resources applicable to the AP Music Theory curriculum can be found in the Teacher Resources' section of AP Central. Many programs have demonstration versions that you can download and try for yourself. I encourage you to do this whenever possible, for only you can best determine how suitable a program will be for your students and your school.

This chapter is organized in three parts. First, I will review instructional software in three categories: standalone computer-assisted instruction, Web-based textbook supplements, and free Web sites. Second, I will discuss the use of general purpose music software, including programs for music notation, sequencing, and performance. I will conclude with an overview of hardware, focusing on setting up a computer lab but also touching on other technologies.

Computer-based Learning

Though computer applications for music have existed since the 1960s, it was the emergence of microcomputers in the early 1980s that prompted an explosion in the development of computer-assisted instruction (CAI, sometimes also called computer-based learning, or CBL) for music. Many of these programs were designed to drill basic musical skills, especially those involving music fundamentals (scales, intervals, key signatures). Rudimentary sound cards allowed for aural skills to be tested along with more visually oriented skills. In the intervening quarter century, developments in technology have greatly enhanced the potential for CAI in music instruction.

Much of what is taught in the AP Music Theory classroom is not just knowledge-based but skill-based. For instance, it is not sufficient for students to learn *how* intervals are constructed. They must also learn to accurately and quickly construct and identify those intervals, both visually and aurally, in a variety of musical settings. Accuracy and speed are especially important for simple tasks related to the basics of music that are called upon frequently when doing more complex tasks. Voice leading, for example, requires students to do things such as spell chords, recognize chord membership (e.g., root, seventh) and scale

function (e.g., leading tone), identify harmonic and melodic intervals, and so on, many times over the course of an exercise. Improving the speed with which students can perform these fundamental tasks will allow them to get through the “mundane” aspects of the task (getting the notes right) more quickly and give them time to craft more musically creative solutions.

The learning process for music theory—as for anything else—involves at least two stages: concept acquisition, after which the student can be said to understand the subject, and mastery, after which the student can demonstrate that understanding with a high degree of accuracy and fluency. I am, of course, very much oversimplifying the field of learning theory, but I am doing so for a purpose.

Students generally learn concepts by engaging with an “expert” of some kind—traditionally some combination of a textbook and an instructor. Through practice, students develop and refine their skills at using and applying the concepts. Individual practice provides students with the chance to work on specific challenges unique to their needs, to critique themselves, and to let methods the teacher has suggested in class sink in. Traditionally such practice is provided through in-class drill or in written form, using worksheets, written assignments, or timed quizzes. Learning takes place through repetition, guided by appropriate feedback.

Computer-assisted instruction can be divided into broad categories that parallel these two stages of learning—concept acquisition and practice/feedback/refinement. The first type of CAI is designed to present and illustrate concepts. It can be found more often on Web sites than in self-contained, installable software. The second type is designed to reinforce concepts or skills a student has already learned. This drill-and-practice CAI, by far the more common of the two, allows students to practice things they have learned in class or from a textbook and to get immediate feedback on their mastery or understanding of the skill or concept. Two primary sources of supplemental exercises include the Web sites of publishers, who are increasingly providing online resources to enhance their textbooks, and standalone drill-and-practice software.

Evaluating Software

In the following sections I will consider these specific types of software individually. Before doing so, however, it will be useful to outline the many factors that should be considered when evaluating software of either type for possible use in your classroom.

- Does the software focus on developing skills in proportion to their value in your curriculum? For instance, the AP Music Theory curriculum does not include jazz scales or chords. There is little point to using software for which this is the primary or major focus, unless the rest of the package is sufficiently valuable, or the pacing of your curriculum allows you to enrich the content in ways like this.
- Is the structure and pacing compatible with your curriculum? If not, can it be customized to be so? Some software, particularly aural skills software, provides built-in levels of difficulty. If those levels do not conform to how your curriculum structures the content, you may need to make adjustments, either in the structure of the curriculum, or how you assign students to use the software. If substantial customization is needed, it may not be worth the effort.
- Is it pedagogically sound? Are the methods used, and the explanations and feedback given, musically sensible and appropriate for your students’ age level and abilities?
- Does the software use vocabulary that is compatible with your approach and with what students should expect on the AP Music Theory Exam? Software that discusses “quavers and crotchets”

rather than “eighth and quarter notes,” or “full and imperfect cadences” instead of “perfect and half cadences,” will be confusing to your students. They have enough to learn in the course without having to master two sets of terms for musical concepts.

- If the software makes use of solfège in some way, does it use your system for the minor mode (*do*- versus *la*-based)?
- Is the design sufficiently compelling that students will be drawn to it? A poor interface can be a major factor in student frustration. Cute graphics and attention-grabbing sound effects in student feedback are charming for about two minutes but quickly become annoying. The more often feedback is provided, the more normal it should sound.
- Is the user interface effective? This element is easy to overlook when reviewing the features that software companies include in their products. Many music software programs have been developed by individuals who are not professional software designers. As a result, the labeling and placement of buttons, means of navigating between different lessons, and procedures required to change program levels or settings can be confusing. Well-designed software is easy to use because the interface elements are intuitive and facilitate, rather than thwart, a student’s use of the program.
- What is the quality of the sound stimuli? Most software makes use of the native sound capabilities of the computer, though some will also use an attached MIDI keyboard. If a program produces sounds that are computer-generated, this is not necessarily a problem, but if the timbres used make it hard to discern the pitch, or if the stimuli are too short or played too quickly to comprehend readily, or simply don’t sound “musical,” such drawbacks will interfere with the program’s effectiveness.
- Do your computers meet the system requirements for the software? Some software may not run on older versions of operating systems or may not run properly on the newest version of an operating system. Some Web-based materials use *Flash*, *Shockwave*, or other browser plug-ins that must be installed before the materials can be used, or you may need additional software, such as *Finale* or *Acrobat Reader*.
- How is the software installed? Do you need a copy for each computer in your lab? Can it be run from a file server? Does each student need a copy? Is the progress tracking that is provided with the software compatible with your lab setting—can you store student results in a secure way?
- How much does the software cost? If you have multiple computers, you will need to check with the software vendor to see how it licenses multiple copies. Some vendors charge by the computer, some issue a site license, and some require that each student buy a disk.

Once you have identified software that you would like to use, there are some additional considerations for determining how to use it as part of your teaching.

- If the resource has an informational focus, does it provide any kind of testing or tools for student formative assessment?
- If the resource provides practice or testing, does it also provide scoring?
- If it provides scoring, is the feedback “intelligent,” in the sense that it leads students toward the right answer? If it simply tells students that they are right or wrong, then you may need to provide more detailed feedback for skills they are struggling with.

- Does the program track student progress and time spent using the software? How is this reported to you—by a printout?—by e-mail? Does it store student work so students can pick up where they left off during a previous session? If so, you may be able to require students to use software to demonstrate mastery on certain skills.

Whatever computer-based resources you are using, be sure that they supplement what is done in class and that your students understand their purpose and know how to use them. Technology can be susceptible to glitches, so regular monitoring will help ward off problems before they become frustrating for students.

Resources that Teach Musical Concepts

With a simple search, you can find dozens of Web sites that present musical concepts. Most such sites focus on the rudiments of music—basic pitch and rhythm notation, scales and key signatures, chord types, and so on. Unfortunately, many of these sites are not pedagogically appropriate. Unlike textbooks, Web sites are unlikely to have been through any sort of editorial or professional review process, which increases the likelihood of inaccuracies. They tend not to be effectively sequenced. Few are sufficiently comprehensive to be useful across the curriculum and are therefore likely to be difficult to integrate into a course. Almost none provide the kind of skill-building exercises needed for students to achieve mastery.

Supplemental and Practice Materials

An essential component of mastering skills is practice. The amount of repetition needed for students to comfortably master the many skills covered in the AP Music Theory course really exceeds the amount of time available in the typical class schedule. Computer-based learning of the drill-and-practice variety can provide this kind of practice very effectively, allowing the teacher to make more effective use of classroom time. During such periods of unsupervised learning, students have the opportunity to develop personal strategies for success.

It is possible to find Web sites that drill some of the skills covered in the AP Music Theory course. They have the advantage of being free, but they tend not to be sufficiently comprehensive, thus forcing the teacher to knit together a collection of different sources. In addition, these sites are often rather poorly designed, and they are generally weaker pedagogically than professionally produced products. This is not to suggest that they cannot be used at all, but I question whether it is productive to do so. However, if you would like to explore some music theory Web sites, your best source of information is the Teachers' Resources section of AP Central, which has reviews about, and links to, some of the more helpful sites for teaching and learning music theory.

Textbook Tie-ins

An increasing number of publishers are adding online content to supplement their textbooks and printed ancillaries. As of this writing, many of these resources are in their first generation; publishers are still working out the types of exercises and the arrangement of the materials that will be most useful and effective for students. The quality and quantity of the online content is quite varied. As illustration, I will discuss the online materials available for two texts commonly used in AP Music Theory courses, plus some multimedia products accompanying a popular music appreciation text.

McGraw-Hill, publisher of *Tonal Harmony* by Stephen Kostka and Dorothy Payne, provides an Online Learning Center to supplement the text. (The URL is provided to those adopting the text.) The site provides four kinds of resources:

Chapter 6

- 1) There are templates for all notation-based assignments contained in the workbook that accompany the text. These templates, in *Finale* format, allow a student to complete assignments on the computer rather than in pencil. (The pros and cons of using a music notation program for music theory assignments are discussed later in this article.)
- 2) Brief definitions of terms (sometimes too brief) are introduced in each chapter of the book.
- 3) For many topics that can be judged fairly objectively, such as the spelling or analysis of chords, the site has interactive “self-tests,” which allow the student to practice the tasks and get immediate feedback. These self-tests are implemented in *Shockwave* and use an idiosyncratic but easy-to-learn interface to provide input.
- 4) “Variation essays” for some chapters provide content enrichment for students interested in learning more about a topic.

The student Web site for *The Musician’s Guide* series by Jane Piper Clendinning, Elizabeth West Marvin, and Joel Phillips (W. W. Norton) includes the following resources, which are available only to those who have registered using a code included in the textbook (visitors to the Web site can sample the materials for one of the book’s chapters):

- 1) There are electronic versions of musical examples used in the textbook and workbook but not in the accompanying anthology (for which there is a separate CD). These are in the *Scorch* format, which requires a browser plug-in from *Sibelius* to view. The *Scorch* plug-in allows students to listen to the examples, which is an important aid to understanding the concepts being illustrated.
- 2) “Flashcards” contain definitions from the book’s glossary.
- 3) A collection of nicely written “WebFacts” provides a primarily historical background on concepts, styles, works, and composers discussed in the text.

Some teachers have found the multiple-CD sets that accompany music appreciation textbooks to be useful sources of pieces in a variety of styles and genres around which to build discussions of music literature, particularly in preparing for the aural section of the multiple-choice portion of the AP Music Theory Exam. Some of these texts are also accompanied by rich multimedia resources that may prove useful in teaching. *The Enjoyment of Music*, by Kristine Forney and Joseph Machlis (W. W. Norton), is a representative example that provides three different kinds of resources that may be useful.

- 1) First, the recordings that accompany the shorter version of the book come in the form of multimedia CDs, which provide interactive listening guides (developed by Irene Montefiore Girton) for the 46 works discussed in the text. General information about the composer, genre, form, texture, and medium is provided for each work, as well as information about the era in which it was composed. In addition, the CDs offer a description of the unique compositional elements of each piece, listening guides with narration-style text, musical cues, excerpts from the score, and a glossary of terms.
- 2) The Norton CD-ROM *Masterworks* (developed by Daniel Jacobson and Timothy Koozin) allows students to explore in more detail 12 of the works discussed in the book. Some of the content overlaps with the multimedia CDs, but the coverage is a bit richer. This CD is available for Macintosh computers only.

- 3) Finally, an online WebBOOK—which, conveniently, is publicly available, not just for the textbook purchasers—provides a wealth of supplemental materials. While much of this content is focused on the music history portion of the text, there are also resources devoted to the materials of music, including a detailed glossary of terms, and online quizzes on topics ranging from melody and rhythm to form to instrumentation. Quiz results can be sent to the instructor via e-mail.

Standalone Drill Software

Another category of instructional software is that which is installed on individual computers to provide drill and practice on various skills. Some of this software focuses on aural skills, such as identifying intervals, scales, chords, and chord progressions; some provides drill on music fundamentals concepts like the spelling and visual identification of intervals, chords, scales, and the like; a few provide both. Almost all of the programs allow for some instructor customization and provide between-session record tracking (a mechanism to report scores to an instructor). Most of the programs discussed here have demonstration versions that can be downloaded from the Web. Previewing the software before buying is highly recommended, because programs differ from one another in many ways and may have quirks that are not apparent from their descriptions. Except where noted, all the programs can be purchased as individual copies or with some kind of lab pack or site license. See the respective Web sites for pricing details.



Instructional software can provide additional drill and practice of music theory concepts.

Auralia (www.risingsoftware.com; version 3.0 for Windows, 2.1 for Macintosh) covers aural skills only. The program includes 41 drills in five broad categories: intervals and scales, rhythm, pitch and melody, chords, and harmony and form; it also has some jazz idioms and some sight-singing tasks (although be warned that judging sight-singing is an extremely complex task, and no software I have seen has the appropriate level of tolerance for variations in voice quality, intonation, etc.) The program interface is attractive, and the annoying feedback sound effects can be disabled. It can be customized to adapt to

Chapter 6

different curricula. Because *Aurelia* originated in Australia, earlier editions used terminology that differed from what is used in North America, but a startup screen now allows the user to select which type of terminology to use.

Musition (www.risingsoftware.com; version 2.0 for Windows; no Macintosh version) covers 25 primarily written (nonaural) topics in note reading (including clefs, chords, rhythm and meter), terms and symbols, key centers (which includes intervals, scales, scale degrees, and key signatures), and instruments (including ranges and transposition, guitar notation, and drum rudiments and styles). The interface is similar to an earlier version of *Auralia*, as it is made by the same company.

MacGamut (www.macgamut.com; for Windows and Macintosh OS X). This program provides aural drills in intervals, scales, chords, rhythmic dictation, melodic dictation, and harmonic dictation, as well as written and keyboard drills for intervals, scales, and chords. It uses a mastery approach in which students continue working on a level until they attain a certain percentage correct. Each student must purchase an individual disk. Applications on the instructor disk enable the teacher to customize lessons and then transfer the customization settings to the students' disks. The Web site provides detailed instructions for different lab settings.

Practica Musica (Ars Nova; www.ars-nova.com; version 4.5 for Windows and Macintosh OS X). This is the most comprehensive of the programs listed here. It has over 80 theory and aural skills activities on topics ranging from pitch reading and intervals, to rhythmic dictation, to tools for doing four-part writing. An accompanying textbook is available. A demonstration movie illustrating the interface and features can be downloaded from the site.

MiBAC (www.mibac.com; both Windows and Macintosh). The acronym stands for "Music instruction By A Computer." This software offers both aural and written topics. There are two separate programs. *Music Lessons 1: Fundamentals* includes 12 lessons beginning with note reading and ending with aural interval recognition; there is also some jazz. *Music Lessons 2: Chords and Harmony* covers chord basics, triads, seventh chords, and Roman numeral identification. Activities include naming, writing, and playing chords, plus aural recognition. The company also makes a *MiBAC Jazz* program.

Interactive Musician (www.alfred.com; Windows or Macintosh) offers activities in three areas: pitch training, sight-reading, and rhythm. A video demonstration and downloadable demonstration version are available online.

Alfred's Essentials of Music Theory (www.alfred.com; Windows or Macintosh) covers primarily fundamentals. It is coordinated with printed materials. The interface is more "game" oriented than other programs. A video demonstration is available online, and a demonstration disk can be requested.

Music Editing Software

A great deal of software exists for musicians beyond that intended for instruction. Music sequencing software is useful for composition projects, and performance software can provide accompaniment or help students practice improvisation. For the most part, however, this type of software will not play a major role in an AP Music Theory course. Music notation software, however, has more direct relevance and merits discussion. Knowing how to use a music notation program is for musicians what learning to use a word processor is for students generally. AP Music Theory students should know at least the basics of a music notation program.

Two common uses for a music notation program are (1) to do regular homework assignments, and (2) to do major composition or arranging projects. As noted earlier, some textbook publishers provide templates that allow students to use music notation programs to complete workbook exercises. The benefits

of using a music notation program are that it produces neat copy, it provides for playback (which is good for complex music or for students who lack keyboard skills), and it will automatically generate parts for individual instruments. In addition, revisions can be made to a score without having to recopy the entire project.

There are downsides, however. The most important of these in a music theory classroom is that over-reliance on the software discourages physical engagement with the keyboard. Many teachers report that when students work at the piano rather than relying on the playback feature of a music notation program, their work is generally more musical and contains fewer errors. Presumably this is because playing through a chord progression requires a level of tactile attention to voices and the relationships between them—something that is easy to overlook when listening to an example being played. It is also valuable for students to have the experience of writing out music longhand, since it encourages them to engage more directly with the music they are notating.

A number of music notation programs are available, but currently, the most used and best supported are *Finale* (www.finalemusic.com) and *Sibelius* (www.sibelius.com). The full versions of these programs have comparable educational pricing. *Finale* is the older of the two and has a larger base of users. Much of its original basic interface remains. It is generally considered the harder of the two programs for new users to pick up quickly, although it has improved considerably in the most recent versions. On the other hand, it is also considered the more powerful of the two.

Finale comes in several versions with varying capabilities and different price levels. Compared to the full version, *Finale Allegro* provides fewer engraving options. *PrintMusic* has fewer input options and provides less control over the resulting notation. *Finale NotePad* is a free product, but it is very limited. *Sibelius* comes in a single version.

Components of a Computer Lab

A computer lab for music can be quite simple, or it can be fairly complex. If your plan is to simply use instructional software, it is entirely possible to get by with just a computer and no additional peripheral devices. The decision of whether to buy a Mac or a Windows-compatible PC depends on which is best able to support the software you plan to use, your school's policy, and your personal preference. It is generally safest to buy a mid-level model, as entry-level computers tend to be underpowered, and those at the high end come at a premium price. Additional RAM (minimum 1 gigabyte) is a more useful upgrade than processor speed. If you are using a PC, it is a good idea to upgrade the sound card from the manufacturer's default hardware. You may or may not need a CD- or DVD-burner, depending on your plans for the lab.

If students will be working with music printing or sequencing software, you will be happy with a larger monitor. A 17" monitor with a maximum resolution of no less than 1280 x 1024 (1440 x 990 on a Mac) should be considered the minimum, but it would not be extravagant to get a 19–20" monitor with a top resolution of 1600 x 1200 (1680 x 1050 on a Mac). A computer will likely cost \$1,000–1,500, depending on the configuration. (Note: all prices given here were current at the time this Teacher's Guide was published. When creating a budget, you will need to verify prices before making decisions about purchases of equipment or software.)

Some instructional software is enhanced if you have a MIDI keyboard, and music printing and sequencing software is much easier to use with one. The most economical option is a MIDI keyboard controller, which does not produce sounds on its own but is used in conjunction with your software to generate sound using the computer's sound card. Basic models (such as the M-Audio Keystation 61es) can be purchased for under \$200. If you want the keyboard to double as a stand-alone device, you can get more expensive synthesizers (such as the Yamaha S03 or Roland Juno-D), with prices beginning around \$500. These synthesizers can also be used to control the computer's built-in sound capabilities, or you can use the synthesizer's (generally) larger palette of available sounds. A synthesizer should at a minimum

Chapter 6

support the General MIDI standard; it should have at least 61 keys, including velocity-sensitive keys. Avoid the consumer-grade keyboards with built-in speakers, song databases, rhythm patterns, and so on. Though some keyboards come with USB interfaces, more often you will need to purchase a separate MIDI interface, which costs under \$50. Your keyboard vendor may be able to help you with this, but if your local music store lacks the expertise (or inventory) to answer your questions, there are a number of reputable stores with useful Web sites, including Sweetwater Sound (www.sweetwater.com), Lentine's (www.lentine.com), and Sam Ash (www.samash.com).

You will also need a good set of speakers, headphones, or both, depending on your setting (budget \$50–100). If you use a synthesizer, you will need a separate mixer to combine the audio outputs from the computer and keyboard. A small portable mixer (such as the ARTcessories PowerMIX II) should cost less than \$50.

Give careful consideration to the lab furniture, particularly if you add a MIDI keyboard to your setup. Both the computer keyboard and MIDI keyboard need to be directly in front of the student, and the monitor should not be placed too high (optimally the eyes are level with a point a couple inches below the top of the monitor). The Wenger Corporation (www.wengercorp.com) specializes in furniture for musicians. Its well-designed Music Lab Workstation starts at \$725, with adjustable height models adding about \$250.

Finally, if you expect to be teaching while students are working in the lab, be sure the workstations are arranged in a way that students can see you easily and vice versa. If you use the computer as a teaching aid, you will need a high-resolution projector (around \$1,000) and screen. If you expect students to do high-volume printing, a low-cost laser printer (\$300) will generally be more economical and reliable than an inkjet printer.

A useful resource for teachers who want more information on the use of computer technology in teaching is the excellent book *Experiencing Music Technology*, 3rd ed. with DVD-ROM, by David Brian Williams and Peter Richard Webster (Belmont, Calif.: Thomson Schirmer, 2005). The accompanying Web site (www.emtbook.net) also includes a number of useful features (including a regularly updated list of music software in various categories).

Closing Thoughts

Just as music teachers should regularly review new editions of textbooks and other pedagogical materials that come on the market, they should periodically review the technological resources that are available to them and their students studying AP Music Theory. As noted earlier, it is possible to teach an excellent AP Music Theory course without involving technology—but used appropriately, music technology can help students sharpen their skills, increase their confidence, and do better on the AP Exam.

How to Address Limited Resources

by David Lockart

Financial pressures may affect a school's ability to adequately staff the AP Music Theory course and provide textbooks and support resources, such as keyboards, computers, sound systems, workbooks, musical scores, and recordings. Although limited resources may present obstacles, creative teachers can still teach an effective class and prepare their students for the AP Exam.

If staffing is an issue, some schools choose to offer AP Music Theory every other year. During the off year, students take a music fundamentals theory course to prepare for the increased academic rigors of the AP course. Other schools combine two levels of music theory within the same class period. This is not an ideal arrangement, but with careful preparation, it can be successful. Use of a computer lab is especially helpful, so that the AP students can work independently on aural skills while lower-level students work directly with the classroom teacher.

The Internet is a useful resource for schools with limited resources. In addition to materials on AP Central, teachers can find recordings, scores in the public domain, and Web sites offering theory instruction or classroom activities. (See the Technology section above for examples.)

All AP Music Theory students need to have access to an appropriate college-level textbook or equivalent instructor-created materials that meet the criteria of the AP Course Audit. Although many textbook series offer convenient correlated sets of recordings, workbook exercises, and online content, some teachers prefer the freedom of selecting their own materials for the course. It is important to list and sequence all of the information and skill development to be taught when developing lectures, worksheets, and activities. Some schools have asked local churches for old hymnals, which can be used for sight-singing, Roman numeral analysis, dictation material, voice-leading examples, and an introduction to the study of form.

The College Board's Pre-AP initiative helps schools to prepare students for AP courses early in their school career. Teams of teachers explore curricular avenues to address fundamental skills with students throughout the elementary, middle, and high school years. By encouraging the establishment of a Pre-AP program in your school district, you will be giving all students the opportunity to perform at the highest academic levels and gaining support for your course with students, teachers, and parents across the grades.

Professional Development

In this section, the College Board outlines its professional development opportunities in support of AP educators.

The teachers, administrators, and AP Coordinators involved in the AP and Pre-AP Programs compose a dedicated, engaged, vibrant community of educational professionals. Welcome!

We invite you to become an active participant in the community. The College Board offers a variety of professional development opportunities designed to educate, support, and invigorate both new and experienced AP teachers and educational professionals. These year-round offerings range from half-day workshops to intensive weeklong summer institutes, from the AP Annual Conference to AP Central, and from participation in an AP Reading to Development Committee membership.

Workshops and Summer Institutes

At the heart of the College Board's professional development offerings are workshops and summer institutes. Participating in an AP workshop is generally one of the first steps to becoming a successful AP teacher. Workshops range in length from half-day to weeklong events and are focused on all 37 AP courses and a range of supplemental topics. Workshop consultants are innovative, successful, and experienced AP teachers; teachers trained in Pre-AP skills and strategies; college faculty members; and other qualified educational professionals who have been trained and endorsed by the College Board. For new and experienced teachers, these course-specific training opportunities encompass all aspects of AP course content, organization, evaluation, and methodology. For administrators, counselors, and AP Coordinators, workshops address critical issues faced in introducing, developing, supporting, and expanding Pre-AP and AP programs in secondary schools. They also serve as a forum for exchanging ideas about AP.

While the AP Program does not have a set of formal requirements that teachers must satisfy prior to teaching an AP course, the College Board suggests that AP teachers have considerable experience and an advanced degree in the discipline before undertaking an AP course.

AP Summer Institutes provide teachers with in-depth training in AP courses and teaching strategies. Participants engage in at least 30 hours of training led by College Board–endorsed consultants and receive printed materials, including excerpts from AP Course Descriptions, AP Exam information, and other course-specific teaching resources. Many locations offer guest speakers, field trips, and other hands-on activities. Each institute is managed individually by staff at the sponsoring institution under the guidelines provided by the College Board.

Participants in College Board professional development workshops and summer institutes are eligible for continuing education units (CEUs). The College Board is authorized by the International Association for Continuing Education and Training (IACET) to offer CEUs. IACET is an internationally recognized organization that provides standards and authorization for continuing education and training.

Workshop and institute offerings for the AP Music Theory teacher (or potential teacher) range from introductory to topic-specific events and include offerings tailored to teachers in the pre-AP years. To learn more about scheduled workshops and summer institutes near you, visit the Institutes & Workshops area on AP Central: apcentral.collegeboard.com/events.

Online Events

The College Board offers a wide variety of online events, which are presented by College Board–endorsed consultants and recognized subject-matter experts to participants via a Web-based, real-time interface. Online events range from one hour to several days and are interactive, allowing for exchanges between the presenter and participants and between participants. Like face-to-face workshops, online events vary in focus from introductory themes to specific topics, and many offer CEUs for participants. For a complete list of upcoming and archived online events, visit apcentral.collegeboard.com/onlineevents/schedule.

Archives of many past online events are available for free or for a small fee. Archived events can be viewed on your computer at your convenience.

AP Central

AP Central is the College Board’s online home for AP professionals and Pre-AP. The site offers a wealth of resources, including Course Descriptions, sample syllabi, exam questions, a vast database of teaching resource reviews, lesson plans, course-specific feature articles, and much more. Bookmark the AP Music Theory Home Page on AP Central to gain quick access to updated resources and information about AP Music Theory: apcentral.collegeboard.com/musictheory.

AP Program information is also available on the site, including exam calendars, fee and fee-reduction policies, student performance data, participation forms, research reports, college and university AP grade acceptance policies, and more.

AP professionals are encouraged to contribute to the resources on AP Central by submitting articles, adding comments to Teachers’ Resources reviews, and serving as an AP Central content advisor.

Electronic Discussion Groups

The AP electronic discussion groups (EDGs) were created to provide a moderated forum for the exchange of ideas, insights, and practices among AP teachers, AP Coordinators, consultants, AP Exam Readers, administrators, and college faculty. EDGs are Web-based threaded discussion groups focused on specific AP courses or roles, giving participants the ability to ask and answer questions online for viewing by other members of the EDG. To join an EDG, visit apcentral.collegeboard.com/community/edg.

AP Annual Conference

The AP Annual Conference (APAC) is a gathering of the AP and Pre-AP communities, including teachers, secondary school administrators, and college faculty. The APAC is the only national conference that focuses on providing complete strategies for middle and high school teachers and administrators involved in the AP Program. Conference events include presentations by each course’s Development Committee, course- and topic-specific sessions, guest speakers, and pre- and postconference workshops for new and experienced teachers. To learn more about the event, please visit www.collegeboard.com/apac/.

AP professionals are encouraged to lead workshops and presentations at the conference. Proposals are due in the fall of each year prior to the event (visit AP Central for specific deadlines and requirements).

Professional Opportunities

College Board Consultants and Contributors

Experienced AP teachers and educational professionals share their techniques, best practices, materials, and expertise with other educators by serving as College Board consultants and contributors. They may lead workshops and summer institutes, sharing their proven techniques and best practices with new and experienced AP teachers, AP Coordinators, and administrators. They may also contribute to AP course and exam development (writing exam questions or serving on a Development Committee) or evaluate AP Exams at the annual AP Reading. Consultants and contributors may be teachers, postsecondary faculty, counselors, administrators, and retired educators. They receive an honorarium for their work and are reimbursed for expenses.

To learn more about becoming a workshop consultant, visit apcentral.collegeboard.com/consultant.

AP Exam Readers

High school and college faculty members from around the world gather in the United States each June to evaluate and score the free-response sections of the AP Exams at the annual AP Reading. AP Exam Readers are led by a Chief Reader, a college professor who has the responsibility of ensuring that students receive grades that accurately reflect college-level achievement. Readers describe the experience as providing unparalleled insight into the exam evaluation process and as an opportunity for intensive collegial exchange between high school and college faculty. (More than 8,500 Readers participated in the 2006 Reading.) High school Readers receive certificates awarding professional development hours and CEUs for their participation in the AP Reading. To apply to become an AP Reader, go to apcentral.collegeboard.com/readers.

Development Committee Members

The dedicated members of each course's Development Committee play a critical role in the preparation of the Course Description and exam. They represent a diverse spectrum of knowledge and points of view in their fields and, as a group, are the authority when it comes to making subject-matter decisions in the exam-construction process. The AP Development Committees represent a unique collaboration between high school and college educators.

AP Grants

The College Board offers a suite of competitive grants that provide financial and technical assistance to schools and teachers interested in expanding access to AP. The suite consists of three grant programs: College Board AP Fellows, College Board Pre-AP Fellows, and the AP Start-Up Grant, totaling over \$600,000 in annual support for professional development and classroom resources. The programs provide stipends for teachers and schools that want to start an AP program or expand their current program. Schools and teachers that serve minority and/or low-income students who have been traditionally underrepresented in AP courses are given preference. To learn more, visit apcentral.collegeboard.com/apgrants.

Our Commitment to Professional Development

The College Board is committed to supporting and educating AP teachers, AP Coordinators, and administrators. We encourage you to attend professional development events and workshops to expand your knowledge of and familiarity with the AP course(s) you teach or that your school offers, and then to share that knowledge with other members of the AP community. In addition, we recommend that you join professional associations, attend meetings, and read journals to help support your involvement in the community of educational professionals in your discipline. By working with other educational professionals, you will strengthen that community and increase the variety of teaching resources you use.

Your work in the classroom and your contributions to professional development help the AP Program continue to grow, providing students worldwide with the opportunity to engage in college-level learning while still in high school.

Chapter 7

Terms and Symbols Used on the AP Music Theory Exam

by David Lockart

The terms and symbols in the list below may appear in the directions or questions on the AP Music Theory Exam, as well as in course instructional materials. As such, the list will be an invaluable guide in the development of an AP Music Theory course, but it is not intended to limit course content—some teachers may choose to include topics not shown here.

It is important to note that the list does not include extremely basic musical vocabulary, even though such widely used terms may be used on the exam—for example, “quarter note” is not listed. Nor is every term of equal importance—for example, “strophic” and “rubato” may not appear on every exam, but “melody,” “phrase,” and “texture” certainly will.

Definitions and illustrations of the terms and concepts listed here can be found in music theory textbooks and standard reference works, such as *The New Harvard Dictionary of Music*.

Form

Symbols

Lowercase letters indicate musical phrases or subsections: for example, **a b** indicates a contrasting period; **a b a** indicates a phrase, contrasting phrase, and return to the original phrase. A prime (as in **a a'**) denotes a phrase and a varied restatement. Capital letters are used to indicate larger sections of compositions.

Terms

Cadence

Cadential extension

Coda

Codetta

Contour

Counter melody

Elision (phrase elision)

Fragment (fragmented motive)

Introduction

Jazz and pop terms

bridge

chorus

song form (AABA)

turnaround

twelve-bar blues

Melodic procedures

augmentation

conjunct

diminution

disjunct	Phrase group
extended version	Refrain
fragmentation	Small forms
internal expansion	binary
inversion, melodic inversion	rounded binary
literal repetition	ternary
motivic transformation	Solo, soli
octave displacement	Stanza
retrograde	Strophic
rhythmic transformation	Theme
sequence	thematic transformation
sequential repetition	Through-composed
shortened version	Tutti
transposition	Variation
truncation	Verse
Motive	
Period	
antecedent	
consequent	
contrasting period	
double period	
parallel period	

Harmony

Symbols

Roman and Arabic numerals

Capital Roman numerals denote major triads.

Lowercase Roman numerals denote minor triads.

A capital Roman numeral with a “+” indicates an augmented triad.

A lowercase Roman numeral with a “°” indicates a diminished triad.

Arabic numerals or figured-bass symbols denote intervals above the bass and hence indirectly indicate chord inversion. Arabic numerals may indicate voice leading and/or nonharmonic tones.

Chapter 7

Triads

- $\overset{6}{}$ indicates a first inversion triad
- $\overset{6}{\underset{4}{}}$ indicates a second inversion triad

Seventh chords

- $\overset{7}{}$ indicates a root-position seventh chord
- $\overset{o7}{}$ indicates a diminished (fully diminished) seventh chord
- $\overset{\flat 7}{}$ indicates a half-diminished seventh chord
- $\overset{6}{\underset{5}{}}$ indicates first inversion
- $\overset{4}{\underset{3}{}}$ indicates second inversion
- $\overset{4}{\underset{2}{}}$ indicates third inversion

Other figures

8–7 indicates melodic movement from an octave to a seventh above the bass.

9–8, 7–6, 4–3 indicate a suspension and melodic resolution.

An accidental before an Arabic numeral indicates alteration of the interval involved.

A figure with a slash (e.g., \flat) or a plus (e.g., 4+) indicates that the note creating the interval in question is raised a half step.

Cadence Types

Authentic

- imperfect authentic
- perfect authentic

Conclusive cadence

Deceptive

Half

- Phrygian half

Inconclusive cadence

Plagal

Chord Quality

Triads

augmented or $^+$

diminished or $^\circ$

major or M

minor or m

Seventh chords

major seventh (MM; M7) (“major-major”)

dominant seventh (Mm7) (used for major-minor seventh chords exercising a dominant function)

major-minor seventh (Mm7) (same quality as dominant seventh without denoting function)

minor seventh (m7; mm) (“minor-minor”)

half-diminished seventh ($^{\circ 7}$; dm) (“diminished-minor”)

fully-diminished seventh ($^{\circ 7}$; dd) (“diminished-diminished”)

Functions and Progressions

Scale degrees/diatonic chord names

tonic

supertonic

mediant

subdominant

dominant

submediant

subtonic

leading tone

Functions

tonic function

dominant function

predominant function

Circle of fifths

Deceptive progression

Harmonic rhythm

Modulation

common tone modulation

phrase modulation

pivot chord modulation

Neighboring chord

Rate of harmonic change

Realize, realization of a figured bass,
realization of a four-part Roman numeral
progression

Retrogression

Secondary dominant

Secondary leading tone chord

Tonicization

Chapter 7

Treatment of second inversion ($\frac{6}{4}$) triads

Arpeggiating $\frac{6}{4}$ —a $\frac{6}{4}$ created by arpeggiation of the triad in the bass (example, 1a).

Cadential $\frac{6}{4}$ —a $I\frac{6}{4}$ preceding the dominant, often at a cadence. Although it contains the notes of the tonic triad, it does not exercise a tonic function but rather serves as an embellishment of the dominant. It occurs in a metrically stronger position than the dominant, and the upper voices most often move by step to the tones of the dominant. May also be written as $V\frac{6}{4}=\frac{5}{3}$, including the resolution of the cadential $\frac{6}{4}$ to the dominant (example, 1b).

Neighboring or pedal $\frac{6}{4}$ (embellishing $\frac{6}{4}$, auxiliary $\frac{6}{4}$)—occurs when the third and fifth of a root position triad are embellished by their respective upper neighboring tones, while the bass is stationary, usually occurring on a weak beat (example, 1c).

Passing $\frac{6}{4}$ —harmonizes the second note of a three-note ascending or descending scale fragment in the bass; that is, it harmonizes a bass passing tone. The usual metric placement is on an unaccented beat and the motion of the upper voices is ordinarily by step (example, 1d).

1a. Arpeggiating $\frac{6}{4}$ 1b. Cadential $\frac{6}{4}$ 1c. Neighboring or pedal $\frac{6}{4}$ 1d. Passing $\frac{6}{4}$

C: I $I\frac{6}{4}$ I ii^6 $I\frac{6}{4}$ V I I $IV\frac{6}{4}$ I I^6 $V\frac{6}{4}$ I

or $V\frac{6}{4}=\frac{5}{3}$ I I

Nonharmonic Tones

Anticipation

Appoggiatura

Embellishment

Escape tone (échappée)

Neighboring tone (auxiliary tone, embellishing tone, neighbor note)

double neighbor

lower neighbor

upper neighbor

neighbor group (cambiata, changing tones, changing notes)

Ornament

Passing tone (accented, unaccented)

Pedal point

Preparation

Resolution

Retardation

Suspension

rearticulated suspension

suspension chain

Spacing/Voicing/Position

Alto	Root
Bass	Root position
Close position	Second inversion
Doubling	Soprano
First inversion	Tenor
Inversion, inversion of chords	Third inversion
Open position	

Voice Leading

Common tone	Parallel intervals
Contrary motion	objectionable parallels
Cross relation (false relation)	parallel fifths
Crossed voices (voice crossing)	parallel octaves
Direct fifths (hidden fifths)	Similar motion
Direct octaves (hidden octaves)	Tendency tone
Oblique motion	Unresolved leading tone
Overlapping voices	Unresolved seventh
Parallel motion	Voice exchange

Miscellaneous Harmonic Terms

Arpeggio, arpeggiation	Figured bass
Chromatic	Flatted fifth
Common Practice Style	Lead sheet
Consonance	Picardy third
Diatonic	Resolution
Dissonance	

Intervals

Compound interval
Half step (semitone)
Interval
Inversion, inversion of an interval
Numerical names (i.e., third, fifth, octave)
Quality or type (e.g., perfect, major, minor, diminished, augmented)
Tritone
Unison (prime)
Whole step (whole tone)

Performance Terms

Antiphonal

Articulation

arco

legato

marcato

pizzicato

slur

staccato

tenuto

Call and response

Dynamics

crescendo

diminuendo

terrace dynamics

pianissimo *pp*

piano *p*

mezzo piano *mp*

mezzo forte *mf*

forte *f*

fortissimo *ff*

Improvisation, improvisatory

Phrasing

Tempo

adagio

allegro

andante

andantino

grave

largo

lento

moderato

presto

vivace

accelerando

ritardando

ritenuto

rubato

Rhythm/Meter/Temporal Organization

Accent

agogic accent

dynamic accent

metrical accent

Anacrusis (pickup; upbeat)

Asymmetrical meter

Augmentation

Bar line

Beat

Beat type

compound

simple

Changing meter (multimeter)

Cross rhythm

Diminution

Dot, double dot

Dotted rhythm

Duplet

Duration

Hemiola

Irregular meter

Meter

duple

quadruple

triple

Note value

Polyrhythm

Pulse

Rhythm
Swing rhythm
Syncopation
Tempo

Tie
Time signature (meter signature)
Triplet

Scales/Keys/Modes

Accidental
Chromatic, chromaticism
Diatonic
Key signature
Major
Minor
 harmonic minor
 melodic minor, ascending/descending
 natural minor (Aeolian)
Mode
 Ionian
 Dorian
 Phrygian
 Lydian
 Mixolydian
 Aeolian
 Locrian

Modality
Parallel key, parallel major or minor
Pentatonic
Relative key, relative major or minor
Scale degree
 tonic $\hat{1}$
 supertonic $\hat{2}$
 mediant $\hat{3}$
 subdominant $\hat{4}$
 dominant $\hat{5}$
 submediant $\hat{6}$
 leading tone $\hat{7}$
Tetrachord
Tonal
Tonality
Tonic
Whole-tone scale

Text/Music Relations

Lyrics
Melismatic
Stanza
Syllabic

Texture

Alberti bass

Canon

Canonic

Chordal accompaniment

Contrapuntal

Counterpoint

imitation

imitative polyphony

nonimitative polyphony

countermelody

fugal imitation

Heterophony, heterophonic

Homophony, homophonic

chordal homophony

chordal texture (homorhythmic)

melody with accompaniment

Instrumentation

brass

continuo

percussion

rhythm section

strings

timbre

woodwinds

Melody

Monophony, monophonic

Obbligato

Ostinato

Polyphony, polyphonic

Register

Solo, soli

Tessitura

Tutti

Walking bass

Other terms that may be used on the AP Music Theory Exam

Aria

Art Song

Concerto

Fugue

Genre(s)

Interlude

Opera

Prelude

Postlude

Sonata

Song

String quartet

Symphony

