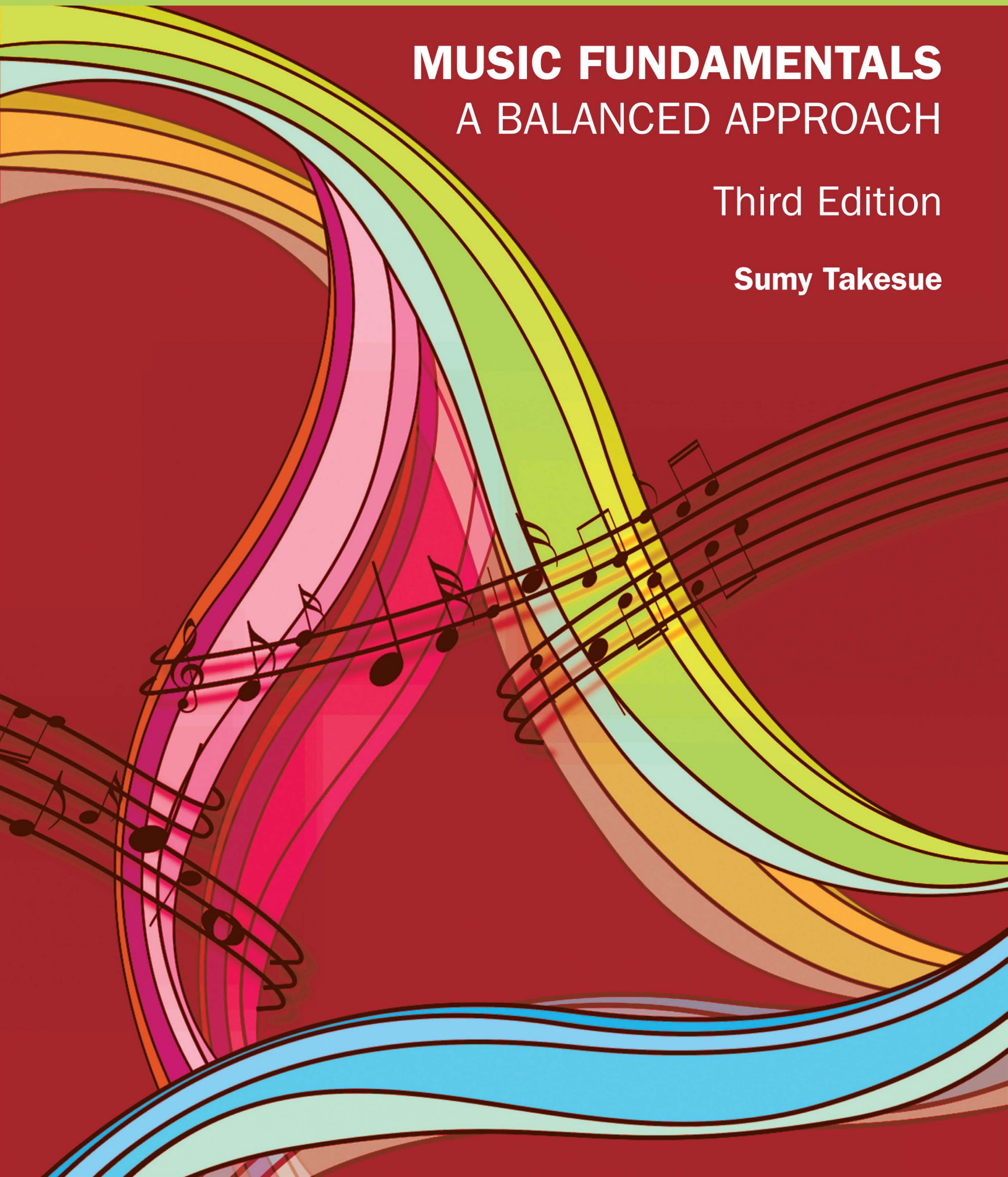


MUSIC FUNDAMENTALS

A BALANCED APPROACH

Third Edition

Sumy Takesue



Music Fundamentals

Third Edition

Music Fundamentals: A Balanced Approach, Third Edition combines a textbook and integrated workbook with an interactive website for those who want to learn the basics of reading music. Intended for students with little or no prior knowledge of music theory, it offers a patient approach to understanding and mastering the building blocks of musical practice and structure. Musical examples range from Elvis Presley songs to Filipino ballads to Beethoven symphonies, offering a balanced mixture of global, classical, and popular music.

The new edition includes:

- Additional vocabulary features and review exercises
- Additional musical selections and 1-, 2-, or 3-hand rhythmic exercises
- The addition of guitar tablature
- A revised text design that more clearly designates the different types of exercises and makes the Workbook pages easier to write on
- An improved companion website with added mobile functionality

The author's balanced approach to beginning music theory engages student interest while demonstrating how music theory concepts apply not only to the Western classical canon but also to popular and world music. With the beginner student in mind, *Music Fundamentals: A Balanced Approach*, Third Edition is a comprehensive text for understanding the foundations of music theory.

Sumy Takesue is an Instructor at Santa Monica College, teaching theory and class piano. She has taught at the University of Hawai'i (Hilo) and the University of Southern California.



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Music Fundamentals

A Balanced Approach

Third Edition

Sumy Takesue

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A VISUAL TOUR OF MUSIC FUNDAMENTALS: A BALANCED APPROACH

Pedagogical Features

Music Fundamentals: A Balanced Approach, Third Edition offers a number of features to help students in this introductory course in music theory.

CULTURAL AND HISTORICAL NOTES

Historical note: English “rownde”

The title of this piece is written in old English. Here, the “rownde” is not a musical “round” as known today (for example, songs like “Sumer Is Icumen In” or “Are You Sleeping?”). Instead, the rownde is a multi-sectional piece where the first section repeats after the second section is played; that is, the piece “goeth rownde.”

This keyboard piece is part of the earliest known collection of English Renaissance music (1450–1600), and like a few other pieces in the group, is attributed to Hugh Aston, a composer known for his progressive keyboard writing.

Throughout the text you will find shaded boxes indicating a note of cultural or historical information. These are intended to provide cultural and historical context to the theory, giving a more rounded and engaging approach for those encountering music learning for the first time.

VOCABULARY NOTES AND IN-TEXT EMBOLDENED TERMS

Vocabulary note

PENTATONIC

A pentatonic melody only uses five different pitches. Many melodies from around the world are pentatonic, including folk melodies from Japan, China, Korea, Hungary, Indonesia, Greece, and African countries. Many American folk songs, blues melodies, and spirituals are also pentatonic.

Boxed vocabulary notes explain common music terms and directions. Terms emboldened in the text indicate where further explanatory notes can be found at the back of the book.

IN-TEXT EXERCISES

Exercise 10

Name the notes below.

1. Write the letter names below the staff.
2. Then cover your answers and say the note names out loud. Work for speed and accuracy.
3. Starting with the given note, name the two additional ascending notes, skipping every other letter. For example, beginning on C, the names of the two notes skipping up will be C E G.

Exercises illustrate and reinforce topics as students progress through the book.

WORKBOOK SECTION

WORKBOOK – MODULE 1

Name _____

Exercise 1.1

On the staff below, draw a **treble clef** and all the **ascending** notes on the staff from the **ledger line middle C**, up to the **fifth line F**. Then **descend**, returning to middle C. Use whole notes (♩). Label the letter names below each note.

At the end of each module is a Workbook of exercises reviewing the material presented in the module. These sections are available to tear out and hand in for assessment if required. There are several exercises per worksheet and between 7 and 19 exercises per module.

FOLD-OUT KEYBOARD

Piano Keyboard

Useful for identifying notes on the keyboard, and understanding scales, the keyboard can be used to simulate actual playing.

Companion Website



www.routledge.com/cw/takesue

Throughout the text this logo indicates where pertinent exercises can be found on the website to consolidate what has been learned in the book.



Audio excerpts to accompany the exercises are also available where this logo is found in the margin.

Visit the companion website at www.routledge.com/cw/takesue for a whole host of additional resources for students and instructors.



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PREFACE

A “Balanced Approach”

Welcome to the study of music fundamentals! This book is designed for the semester or quarter-long course in the college curriculum that concentrates on learning how to read and write music. All introductory music theory books begin with the study of two basic rudiments: rhythm and pitch. They proceed through the study of the major and minor scales, intervals, triads and seventh chords, and conclude with the study of musical form and harmonizing melodies. However, there are many differences in emphasis in the available books, with one veering toward drill work with very little explanatory text, another toward a reliance on outside sources with few exercises in the textbook, and another emphasizing keyboard, singing, and ear training drills to help explain concepts.

How does *Music Fundamentals* provide a *balanced approach*? This book *balances* textbook with drills, and provides media tools that are integral to the process. It is *balanced* as a combination textbook, workbook and interactive instructional website in order to address the needs of different kinds of learners. Written for the non-music major wanting to “learn about music,” and the fledging music major, *Music Fundamentals* serves the student with little or no prior knowledge of music, as well as the music student needing review. By reinforcing musical concepts with numerous written examples, offering a more balanced mixture of global, classical, and popular music, and providing a comprehensive, interactive website, *Music Fundamentals: A Balanced Approach, Third Edition* is a great fit for today’s more diverse, technology-savvy students.

I am a teacher “in the trenches.” As a piano and music theory instructor for over 20 years, I have taught preparatory students, serious music majors at the university level, and retired senior citizens stretching their intellectual horizons. My current college classes include a diverse ethnic and cultural mix of students. Finding an engaging textbook for all these students—with the appropriate presentation and manner of delivering content—has been challenging. My background puts me in a unique position to draw from a global perspective. I am a Japanese-American, born and raised in Hawaii, schooled in Boston, and teach in a Los Angeles community college. As in many American colleges, my students come from a variety of backgrounds: they are young and old, immigrants, working parents, and those intending to transfer to a four-year university. It is not only possible, but also critical, to connect with students by presenting music in a new and different way, drawing from as many types of music as possible, and providing ample music examples. I chose to create this textbook to address the changing needs of my students. Not infrequently I hear beginning theory students exclaim: “Oh, *that’s* how it’s supposed to be played (or sung)!” It is for these students that I wrote this book.

Features of *Music Fundamentals*

Music Fundamentals features a combination of modular text with drills, supplemented by a pull-out keyboard, an interactive website, and access to audio examples that relate directly to the text. It includes:

- *Explanations of musical concepts and definitions*, followed by a *variety of exercises* which help students transform knowledge into practice.
- An understanding of pitch, scales, intervals, and chords, whereby students also *listen and sing* to train their ears.
- *Keyboard drills*, constructed to be played on an electronic keyboard, or a piano, or if neither is available, on a “true” sized 50-key paper keyboard, provided in the inside cover. References to the keyboard give students a better visual understanding of what can be the “dry” theoretical basis of music.
- *Numerous clapping and counting exercises* so that students not only have a cerebral understanding, but also a visceral feeling for pulse and rhythm.
- *Workbook exercises* are given at the end of each module to facilitate progress to the next module. The review also includes exercises from previous modules, reinforcing the idea that repeated review reinforces learning.
- *Vocabulary words* are interspersed throughout the text to assist students in the study of music examples. For example, in Module 1 (Pitch), “pentatonic” is introduced to identify songs that students hear. In Module 2 (Rhythm), students learn about “motives.” Later, various repeat signs and articulation signs are discussed. New words are integrated into the text to give students a richer understanding of musical concepts.
- *A good mix of music examples*: approximately 45% classical music, 20% American pop, rock and jazz, and 35% global music. They range from Stevie Wonder songs to Beethoven symphonies, from rhythmically challenging African and syncopated Brazilian *choro* songs, to humorous Filipino ballads and Schubert lieder.

Organization

This book is constructed in modules, each with discrete units that allow the instructor flexibility to organize the course. The modules alternate between pitch and rhythm studies. The book may be taught in a variety of ways. For example, in a 16-week course, the book could be divided into four sections:

1. Modules 1–4
2. Modules 5–8
3. Modules 9–12
4. Modules 13–16

In a ten-week course, the book could be divided into units of three to four modules. Module 16 is included to round out a student’s understanding of how music is “put together” and also may be introduced earlier at the instructor’s discretion.

An instructor may wish to complete one module in its entirety before going on to the next. I integrate the modules so that pitch or scale material is studied in tandem with rhythmic material, or concepts from earlier modules are postponed and discussed later, and vice versa. For example, I postpone the introduction of the double sharp and double flat (Module 4) until those accidentals are used in minor scales (Module 9) or augmented and diminished triads (Module 11). Likewise, I introduce perfect and major intervals (Module 10) and major triads (Module 11) earlier during the second quarter of the course. The modular nature of the book allows for this flexibility.

Pedagogy

All sets of exercises begin from the relatively easy to those requiring more thought. For example, beginning exercises for note reading in Module 1 include alphabet drills; those for counting in Module 2 include drawing stems. By the end of Module 2, students are composing their own rhythms, as well as singing and clapping Western music, such as that of J.S. Bach, and global music, such as music from the Philippines. Drills are included throughout the modules and on the website to ensure that students are given sufficient repetitive practice.

The book provides three other kinds of notes, as shown in the “Visual Tour” section:

1. *Cultural notes* discuss musical genres or place musical examples in a cultural context;
2. *Historical notes* place material in a historical context (for example, the development of the natural);
3. *Vocabulary notes* discuss musical signs or terms. These notes provide contextual background and give students a richer appreciation and understanding of what may otherwise be “dry” information.

Appendices

These can be found in two places. At the end of the textbook, you will find an appendix of Musical Terms that includes additional musical concepts and exercises, as well as appendices on Acoustics, C Clefs, Modes, Other Seventh Chords, and Basic Guitar Chords. Other appendices—which include Keyboard Exercises and several musical analyses of short, *complete* examples of music from the eighteenth to twentieth centuries, and an African piece that uses 8/8 meter—are placed on the companion website. Questions on scales, intervals, triads, form, and rhythm are provided. Instructors may choose to use these as discussion topics, or ask students to submit their answers as homework assignments or quizzes.

Ancillaries



The companion website to *Music Fundamentals* is a wonderful tool for students. We worked hard to create a dynamic, interactive site. The web address is:

www.routledge.com/cw/takesue

The Routledge Music Theory Trainer has been redeveloped to be compatible with modern web browsers and accessible on mobile devices. It includes:

1. *Exercises of progressive difficulty*
2. *Customized drills* where students work on one or more parameters; for example, students may select to be quizzed on diminished triads, or on up to all four triad qualities. New exercises include notating compound intervals, and exercises utilizing the grand staff
3. *Rhythm exercises for one or two hands* allowing students to listen to a correct playback and have their tapping graded. Students may select their own tempo
4. *Listening drills* test scales, rhythms, and triads. Interval exercises begin by quizzing ascending and descending “steps” and “skips” (corresponding to Module 1); later exercises examine all qualities of intervals (Modules 10)
5. *Keyboard quizzes* to reinforce students’ knowledge of the grand staff, accidentals, whole and half steps, scales, and triads
6. *Email submission of scores* directly from student to instructor, with the option to print them out

7. *Audio excerpts of music examples*—classical, pop, and global music is streamed to the companion website. Other audio files reinforce singing and tapping exercises presented in the book
 8. *Additional appendices*, as noted in the above section describing the appendices. An instructor's access code to audio files and information on the website is available through the sales office.
 9. The site content is *available in the major Virtual Learning Environments (VLEs)*, such as Blackboard or Moodle, upon request to the sales office.
- An *Instructor's Manual* is available on the website. Sample tests and accompanying answers are now provided for every module.

New to this Edition

- New vocabulary exercises and review exercises have been added to every module.
- To expand the student's musical experience, additional selections have been added and changed from the earlier editions' mix of standard Classical repertoire, pop, and global music examples.
- A new appendix on Basic Guitar Chords has been added, including chord diagrams (fretboard charts) and exercises with examples of popular songs.
- On the companion website, the Music Theory Trainer has been redeveloped to run on HTML5 instead of Flash, ensuring that it is compatible with modern web browsers and accessible on mobile devices.
- An expanded interactive web site provides additional exercises for tapping, listening, and writing, including exercises quizzing alto and tenor clefs, modes, and seventh chords other than the dominant seventh. A progress bar now shows the student's place in the drill.
- Sample tests with answers are provided for every module in the Instructor's Manual found online.
- Now available on Blackboard or Moodle and other VLEs.

To the Instructor

Music Fundamentals is written as a fresh approach to America's changing student demographics. Many students are recent immigrants or the children of immigrant parents, and some are older students returning to school. Younger students have been raised with laptops, smart phones and MP3 players. Because of the varied population, students have a wide range of math, reading and writing backgrounds. Fewer have had music instruction in the lower grades or heard American folk songs or classical music.

With this diverse student body in mind, this book presents concepts using simple, clear and concise language. Using a wide range of music examples, students are challenged to count, clap, sing, and compose. Review exercises are given at the end of every module. These may be used to measure students' knowledge, prepare them to move onto the next module, or assigned as additional exercises to augment those given earlier in the module. The accompanying audio files offer audio samples of classical, pop and global music that students may listen to or sing along with, and this can be done at home or in class. The Routledge Music Theory Trainer on the companion website is interactive so that students are drilled and immediately corrected. If you wish to track their progress, they may print out their scores or email them to you. The *Instructor's Manual* offers suggestions for classroom exercises.

Not all concepts in the book need be covered. For example, one reviewer felt that dominant seventh chords should be taught at the next theory level, while another wanted more discussion of all seventh chords. One reviewer felt that singing should not be included at this level; several were pleased that it was. But should one teach solfège? Numbers? Or sing "La"? I have tried to balance the numerous musical concepts with the demands placed on the student, and to provide a variety of material to give the instructor more options and greater flexibility.

A word on rhythm: this may be the most difficult component of music for students to grasp, especially for those who haven't worked sufficiently with simple math functions. I help students with rhythm in three ways.

1. When first discussing rhythm, students are asked to write the note value *above* each note, dot, or rest (for example: "1" for quarter note in 3/4 time). They are instructed to write the consecutive counts *below* the notes (such as "1 2 3"). Some students may not need to "show their work" above the music, while others find it helpful to write the note values. I have found that this process is especially helpful to students when the pulse note changes or when students begin to work with syncopated rhythms.
2. When dealing with compound meter, I give two methods of counting (neither of which is "1 la le 2 la le").
3. In the instructor's manual, suggested classroom exercises may incorporate rhythm instruments. One reviewer stated it was a grade school exercise to use percussion instruments. If you find this to be the case, you may want to use any "found" instrument: tapping with pens or on different parts of the body, clapping, and foot stamping. In my own classroom, I have noticed that students are intrigued by the sounds created by percussion instruments, particularly finger cymbals, guiros, drums and maracas, and are especially attentive when a fellow student conducts the ensemble. (Be prepared for disaster as well, which is also part of the fun of creating music.)

A note about the choice of music examples: I had hoped to include more music from around the world, but the rhythms did not always work to illustrate basic "Western" concepts. Additionally, I wished to include more contemporary jazz, pop/rock and classical selections, but permissions were sometimes denied, or the fees were outside our budget; the publisher and I had vowed to price the book as low as possible, lower than other major books on the market.

To the Student

As Edgard Varèse said, "Music is organized sound." Music is everywhere: it comes to you blaring out of open car windows, or piped from loudspeakers in supermarkets and elevators. As you walk around campus you're plugged into your devices that are smaller than a deck of cards; as you do your homework you listen to music streaming from your laptop. You listen (and perhaps sing along with) your favorite pop singers: you ask yourself, how did they get started? You may also want to compose your own music but ask yourself: how do I get started?

Music Fundamentals: A Balanced Approach, Third Edition is written for you. It is a "hands on" book that includes music examples from all genres: pop, spirituals, classical, songs from around the world, many of which may be familiar to you. You will learn to read and perform music and begin to compose your own music. Every musical concept, whether it's reading, writing, counting or singing, is followed by exercises that begin with easy drills and progress to more challenging ones. Additionally, you can go online to the website at www.routledge.com/cw/takesue and listen to or sing with the tracks that are provided, or complete the interactive exercises. The book is designed for you to play exercises such as scales or triads on your own keyboard or on the 50-key pullout paper keyboard. As in learning any new language, the more you involve yourself in these activities, the better you will master the language of music.

By the end of the book, you will have the tools to read, write, and perform music. With a better understanding of music theory, I hope you will have a better appreciation and understanding of music when you hear it, perform it, or compose it yourselves.

Acknowledgments

This book would not have been possible without the help of Cody Fisher and Louise Savage who painstakingly pored over my manuscript, red pen in hand; Sally Perry who helped me “connect the dots;” the support and encouragement of my colleagues at Santa Monica College, particularly David Goodman and James Martin; and the many anonymous reviewers who read and refined my work through this process.

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*Sumy Takesue
March 2017*

MODULE 1

BASICS OF PITCH

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The Musical Alphabet

Music is a language consisting of sounds and silences. When learning a new language, one must learn grammar, pronunciation, vocabulary, and sometimes a different alphabet. Music is written with an alphabet consisting of the letters A through G. Each letter represents a different sound or **pitch**. Just as words consist of letters, musical melodies consist of **pitches**.

- When melodies *ascend* to higher pitches, the alphabet moves forward from A to G.

A B C D E F G

Listen to the track or your instructor playing these pitches for you. Then sing the pitches, using the first seven letters of the alphabet. Notice that the pitches are ascending consecutively; we call this singing “ascending by **steps**.”

TRACK 1

1. *Ascending pitches by steps: A B C D E F G*

Melodies may ascend, sometimes by steps or larger leaps. Listen, then sing the beginning of the melody “Oh When the Saints” and notice how the first four words (and the pitches) ascend; only the last three pitches move by step. Also sing the opening of the Hawaiian melody “Aloha Oe;” the pitches of the first four syllables also ascend but only the first two pitches move by step.

 TRACKS 2–3

2. "When the Saints Go Marching In"
3. "Aloha Oe" (Queen Liliuokalani)

- When melodies *descend* to lower pitches, the musical alphabet moves backward through the first seven letters of the alphabet.

G F E D C B A

Listen to the track or your instructor playing these pitches for you. Then sing the pitches, using the first seven letters of the alphabet backward from G to A. Notice that the pitches are descending consecutively; we call this singing "descending by **steps**." We are comfortable saying our alphabet forward from beginning to end, but we rarely say it in the opposite direction.

 TRACK 4

4. *Descending pitches by steps: G F E D C B A*

Listen, then sing the beginning of the melody "Joy to the World." Notice how the pitch of the first eight words descends, all by steps. In the Mexican folk song "La Bamba," after the repeated "La's," the pitch descends, but only the first two pitches descend by step.

 TRACKS 5–6

5. "Joy to the World"
6. "La Bamba"

Listen, then sing the first line of "Deck the Halls with Boughs of Holly." After first descending by steps, the music ascends. Because music ascends and descends, it is important to know and say the alphabet in both directions with ease.

 TRACK 7

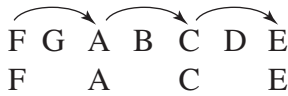
7. "Deck the Halls with Boughs of Holly"

Exercise 1 Class Exercise

Say the musical alphabet *backwards* as quickly as you can, by memory.

It is useful to be able to skip every other letter. (See the section on the names of lines and spaces on the staff later in this module, and triads in Module 11.)

To skip every other letter beginning from F, you will skip over the G when going from F to A, skip B when going from A to C, and skip D when going from C to E.

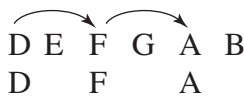


These letters together, which spell “FACE,” will be useful later in this module.
 We can also skip down every other letter.



Exercise 2 Class Exercise

Going up from the given letter, skip every other letter of the alphabet two times. Repeat this exercise several times so that your answers flow easily and quickly, and are memorized. For example, to skip every other letter from D, you will say “D F A.”

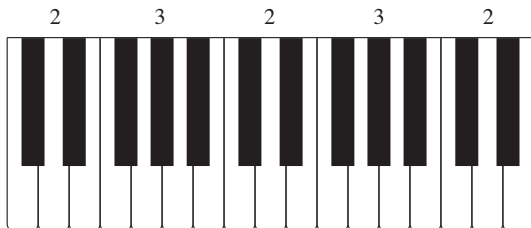


1. D F A 2. C _____ 3. B _____ 4. G _____ 5. F _____ 6. E _____ 7. B _____ 8. A _____
9. D _____ 10. C _____ 11. G _____ 12. A _____ 13. E _____ 14. B _____ 15. F _____

The Keyboard

Knowledge of the keyboard is very helpful for the study of music theory. It is not necessary to be able to perform on the keyboard, but access to a keyboard can assist in the study of note names because it has a wide range and is capable of sounding notes simultaneously. Using a keyboard also helps one to hear and visualize many musical concepts since all notes and their relationship to each other are exposed. Exercises utilizing the keyboard will be given throughout this book to assist in your study. (The guitar is also a helpful instrument because it is capable of producing several notes at the same time.)

- The keyboard consists of white and black keys.
- The black keys are grouped alternately by twos and threes.
- This arrangement of black keys can assist in identifying the white keys.



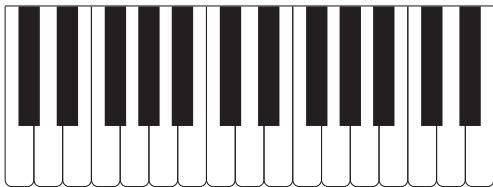
White Keys

The **groups of two black keys** make it easy to find the note C. The white keys immediately to the left of the group of two black keys are named C. The white keys to the right of the two blacks are named E; the white keys in the middle are D. (The names of the black keys will be discussed in Module 4.)



Exercise 3

1. On the keyboard below, locate and label the keys C D E in relationship to any group of two black keys.
2. On a keyboard or the paper keyboard provided with this book, play these white keys. When ascending, play C D E. When descending, play the notes in the opposite direction: E D C.

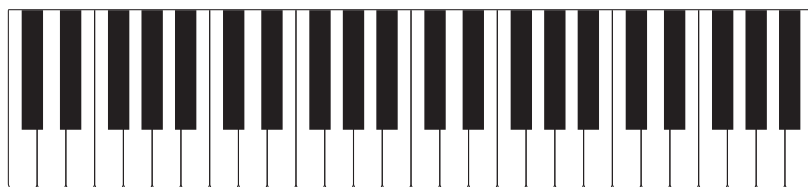


The **groups of three black keys** make it easy to find F. The white keys immediately to the left of each group of three black keys are named F. The white keys to the right of each group are named B. The white keys G and A are in the middle.



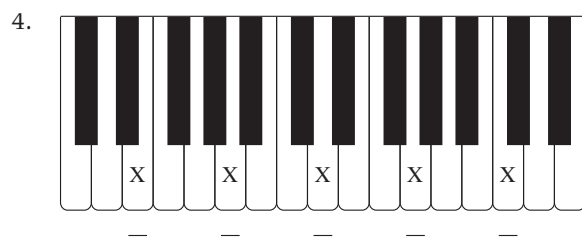
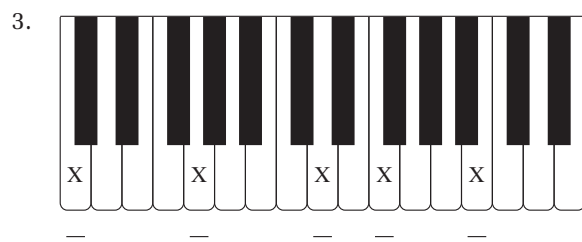
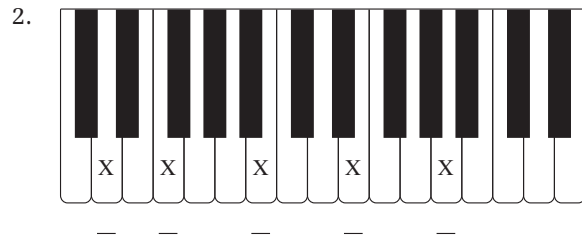
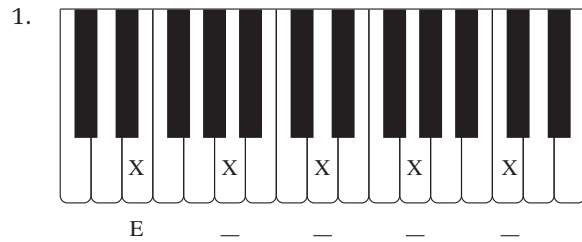
Exercise 4

1. On the keyboard below, locate and label the keys F, G, A, and B in relationship to any group of three black keys.
2. On a keyboard, play these notes. When ascending, play F G A B. When descending, play the notes in the opposite direction: B A G F.



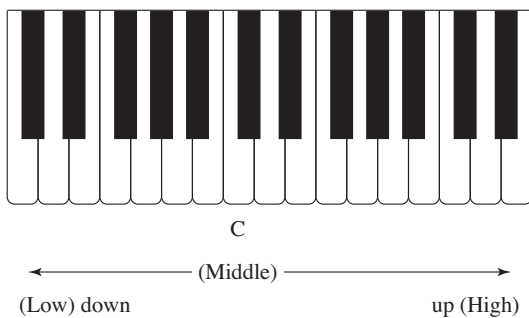
Exercise 5

On the keyboards below, label the keys marked with an X.



Exercise 6

On a keyboard, pitches to the right are higher; pitches to the left are lower. The manufacturer's name of the piano or keyboard is written near the middle of the keyboard just above a group of two black keys. The C to the left of this group is **middle C**. On a full-sized keyboard, this is the fourth C from the bottom.



• Do the following keyboard exercises. (If you do not have a keyboard, use your paper keyboard.)

1. Beginning with the lowest note on the left, play **up** the keyboard (to the **right**).
 - Point to or play each white note and name it, saying the alphabet **forward**.
 - If you are playing a full-sized piano, begin at the left end of the keyboard with the letter A.
 - Find and play **middle C**.
 - Repeat the exercise. **Work for speed and accuracy.**

2. Beginning with the highest note on the right, play **down** the keyboard (to the **left**).
 - Point to or play each white note and name it, saying the alphabet **backward**.
 - If you are playing a full-sized piano, begin at the top with the letter **C**.
 - Find and play **middle C**.
 - Repeat the exercise. **Work for speed and accuracy**.
3. Point to or play up the keyboard skipping every other white key. Name the keys. Repeat the exercise, always working for speed and accuracy.

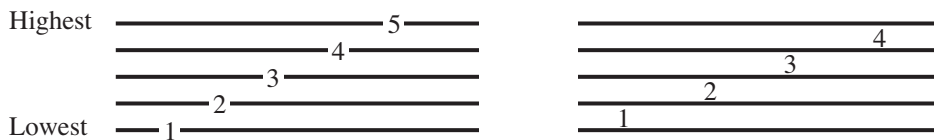
The Staff

A system for notating **pitch** developed in the West during the Middle Ages (sixth century CE–1450). The development of a precise system of notation enables a person to read and perform music without hearing it first.

Historical note on notation

The use of notation in Western Classical music contrasts with the absence of precise musical notation in genres like jazz, blues, and global music, which frequently are not notated. If the music is written down, the notation may specify only the contour of the melody, previously known by the performer.

In modern notation, **pitch** is written as notes on a **staff**. Initially (around the ninth century), only one line was used and higher pitches were placed above this line, and lower pitches were placed below the line. By the eleventh century, four lines were utilized with one line designated F or C. The staff today (plural: staves) consists of five lines and four spaces numbered from the bottom to the top.



The seven letters of the musical alphabet represent pitches in ascending order from lowest to highest. The staff lines and spaces may represent any letter as determined by the **clef**, but the letters must always be in their consecutive order.

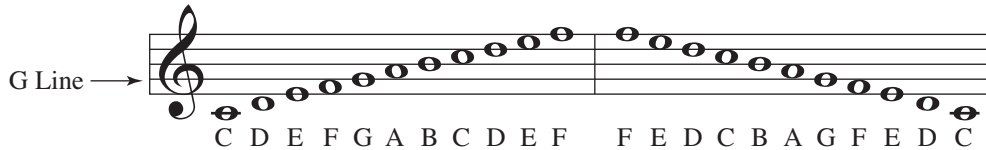
Clefs

A **clef** sign drawn at the beginning of each staff indicates the letter name of each line and space. These clef signs represent the pitches F and G. An additional clef sign, less frequently used, will be discussed in Appendix 3.

The G Clef (Treble Clef) (♩)

When the **G clef** (usually called the **treble clef**) is placed at the beginning of the staff, the second line from the bottom of the staff represents the pitch G. All other pitches follow in alphabetical order, ascending (forward) or descending (backward) from G. The G clef is usually used to indicate higher sounding pitches.

The following is an example of pitches written on the staff as whole notes (♩). Whole notes are discussed in Module 2.



Exercise 7

Draw **G clefs** on the staff below. Notice how the G clef circles around the second line, therefore indicating that the second line represents the pitch G.



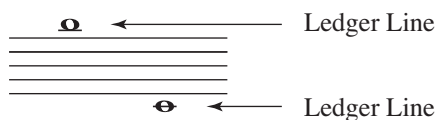
The Octave

The octave (**octa** = eight) spans eight notes, beginning and ending with the same letter name. (See Appendix 2 for a detailed discussion of frequency and pitch, including octaves.)



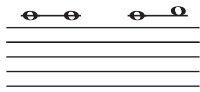
Ledger Lines

The five lines and four spaces of one staff can represent only nine letter names. In order to extend the range of the staff, notes above and below the staff are written using ledger lines.



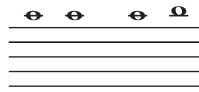
MODULE 1

- Ledger lines are short. The ledger line for one note does not connect to the ledger line of another note.



Incorrect

Ledger lines too long



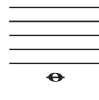
Correct

- The distance between the lines and spaces of ledger lines is the same as those of the staff.



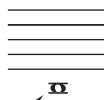
Incorrect

Ledger line too low



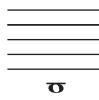
Correct

- Ledger lines are used only when needed. For example, notes written above the staff only use the ledger lines that pass through or **below** the note; conversely, notes written below the staff only use ledger lines that pass through or **above** the note.



Incorrect

Unnecessary ledger line



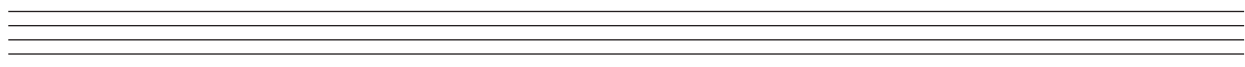
Correct

- The note C written on a ledger line below the treble clef is “middle C.”



Exercise 8 Class Exercise

On the staff below, draw a **treble clef** and all the **ascending** notes on the staff from **the ledger line middle C**, up to **the fifth line F**. Use whole notes (♩). Write the letter names below each note.



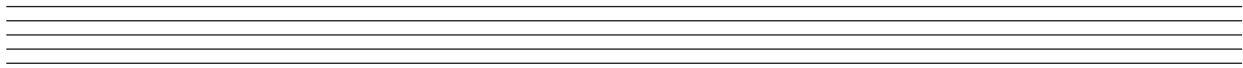
Notice that:

- The letters of the alphabet are written below, beginning with middle C. All letters must be consecutive.
C D E F G A B C D E F
- The G clef gives the second line its name: G.
- All letter names are capitalized.

Using your own staff paper, repeat this exercise.

Exercise 9

On the staff below, draw a **treble clef** and all the **descending** notes on the staff from the **fifth line F to middle C**. Use whole notes (○). Write the letter names below each note.



When using the treble clef, notice:

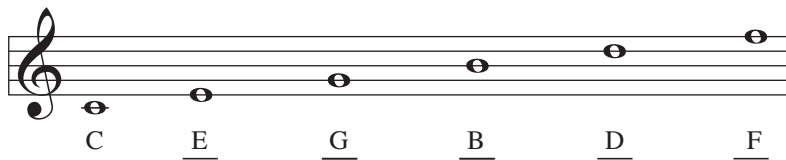
- The letters of the alphabet are written backward beginning with F. All letters must be consecutive.
F E D C B A G F E D C
- The G clef gives the second line its name: G.
- All letter names are capitalized.

Using your own staff paper, repeat this exercise.

Note Reading in the G Clef

Study the names of the lines and spaces in the G clef (treble clef).

*Letter names of the **lines**:*



The ledger line below the staff is **middle C**. The names of the five lines of the treble clef can be remembered by the mnemonic “**E**very **G**ood **B**oy **D**oes **F**ine.”

*Letter names of the **spaces**:*

